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Resistance to change: A study of influences affecting the curriculum in selected Clarendon Schools in the mid-Victorian period

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PAGE NUMBERING AS ORIGINAL

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Brenda Stancer Ph. D Thesis 1978

Acknowledgements

This thesis would not have been completed without the encouragement, constructive criticism and advice of Dr. Marjorie Cruickshank, whose high academic standards acted as a stimulus throughout the research. In addition I should like to thank the staff of the Temple Library, Rugby School for their help, and also Mr. Lawson of the Shrewsbury School Library for his great assistance and interest. Finally, I should like to express my gratitude to my parents, Evelyn and Geoffrey Downes, and also to Cathy, Caroline and to John, for their considerable patience and encouragement.

Brenda Stancer December, 1978

Abstract

This thesis is concerned with an examination of the influences which affected the curricula of certain Clarendon schools during the mid-Victorian period.

The emphasis initially is on the development of the schools and the Christian classical tradition of education up to the time of the Clarendon Commission. The evidence of the Commission is examined in some detail with the object of determining the extent to which modern subjects had gained a place in the The conclusion of this part of the thesis is that despite individual differences the schools generally failed to modernise their curricula to any appreciable extent and several factors are considered in an attempt to account for this. The decision-making processes within the schools are examined in conjunction with the backgrounds and attitudes of the decision-In addition an attempt is made to assess the nature and extent of the influence exerted on the schools by the ancient universities and by the Established Church. A later chapter concentrates on the new proprietary schools and the differences between their curricula and those of the Clarendon schools. Educational demands made by parents are also considered, as well as those made by the old and new professions favoured as future careers by public school boys.

The final chapters of the thesis examine the curriculum changes which took place after the Clarendon Commission until the end of the century and attempt to assess the importance of the factors promoting curriculum change and those which inhibited

Introduction

Speaking at the 1974 Headmasters' Conference, Professor Steiner of Geneva University commented on the failure of the English education system to develop a scientific-technological alternative to the Christian classical tradition of education. Other countries had developed such alternatives but in England, even in the 1970s, there was no genuine counterpart to l'Ecole Polytechnique or M. I. T.

Corelli Barnett, (1) pursuing a similar theme, suggests that the failure to produce a style of education more in keeping with the needs of an industrial technological society has had serious consequences for Britain. While other nations developed both the essential skills for continuous technical advance and the requisite mental outlook, we did neither. We neglected and even scorned systematic training and research. During our Victorian heyday, Barnett argues, middle and upper class education was devoted to turning out Christian gentlemen. The Arnoldian public school, with its emphasis on the classics and its academicism, was complemented by Victorian Oxbridge, imitated by the grammar schools, and hardly conducive to industrial success.

Barnett argues that for at least a century Britain has suffered from having a national elite which has had little understanding of industrial operations and which is positively hostile towards industrialism in general. The bias continues to the present, running deep through British society. It is even reflected in the new universities by students' preference for the arts over science and technology and their aversion to careers in industry.

Thus, Barnett argues that 'the English disease' i.e. the pervasive inferiority of performance as an industrial society, can at least in part be explained by 'the values, aims and effectiveness of our education system' where the legacy of the past still weighs heavily upon us. He also argues

that to 'undervalue - or despise - industry and to starve it of the best of the national talent is among the most persistent and pernicious of British attitudes inherited from that era'. (2)

This thesis will examine the Christian classical tradition of education in the Clarendon public schools and its relationship with the so-called 'modern' subjects - in particular natural science. An attempt will be made to determine why the Christian classical tradition retained its pre-eminence despite the considerable pressures which existed for change. The period covered will extend from around 1760 to the end of the nineteenth century. These decades saw the emergence of Britain as the first industrial society and later the growing threat of the 'follower' countries - Germany, France, etc. - to Britain's position of dominance. Industrialisation in the follower countries produced new traditions of education in tune with the scientific and technological advances which were taking place. Within this period considerable emphasis will be placed on the years immediately before and after the Clarendon Commission Enquiry of 1864. This was the time when the classical tradition of education was most under attack, when unfavourable comparisons were constantly being made with other European countries and when curricular changes of a dramatic nature seemed just around the corner. It is therefore the period when the pressures for change and the forces for reaction, both within and outside the schools, were most sharply in conflict and can therefore be most clearly identified.

The Clarendon schools are the nine 'great' schools investigated by the Clarendon Commission which was set up in 1861 'to inquire into the revenues and management of certain colleges and schools and the studies pursued and instruction given therein'. The schools thus singled out were Eton, Harrow, Westminster, Shrewsbury, Rugby, Charterhouse,

Winchester, St. Paul's and Merchant Taylors and were regarded as in some sense special because they had all, at certain stages in their histories, achieved reputations as national institutions educating essentially the sons of the gentry and aristocracy. These schools - together with Oxford and Cambridge - represented the stronghold of the Christian classical tradition of education throughout the period to be covered.

It is one of the contentions of this thesis that the Clarendon schools exerted an influence on English society in general and on education in particular which was out of all proportion to their size. Their importance was widely recognised by contemporaries and indeed by the Commissioners, who believed that the welfare of the Empire itself depended to a considerable degree on the nine schools.

The seemingly disproportionate influence of the schools was based primarily on two factors: firstly, that they were widely imitated; and secondly, that they educated many of the future leaders of society.

To take the first point, the Clarendon Commission Report suggested that 'Public School Education' had been developed chiefly within the walls of these nine schools and that they had been much imitated by younger institutions. (3) Their curricula, internal organisation and aims were certainly emulated quite openly by the 'new' public schools which in the 1840s and 50s came into being to cater for the growing middle class demand. '... we may fairly take the nine schools... as supplying the general type of that class of schools to which most Englishmen of the higher class either send their sons or wish to send them... (4) commented the Report.

Worsley takes the argument a step further and suggests that the influence of the schools extended even outside the private sector. He suggests that

because of the 'national vice' - snobbery - 'the ideas and the ideals of the ruling class are imitated up and down society' and as a result the public schools had materially influenced the conduct of secondary education throughout the national system. (5)

Possibly the greater reason for the importance of the nine schools stemmed from what Worsley has called 'their social purpose' - namely 'to train an oligarchy of rulers'. (6) It is certainly true that throughout the nineteenth century their alumni filled many of the dominant positions in politics, the Church, the Civil Service and the armed forces. F.A.M. Webster puts it even higher when he argues that 'if a... history of all the public schools is ever written it will be, in reality, the history of England, since the British Empire has been in the main built up by the founders of the schools and the pupils who gained their knowledge and had their characters moulded in those institutions'. (7) The long-standing near monopoly of the products of the schools over certain key positions has been well documented by writers such as Guttsman (8) on the political elite - a work which seems to substantiate the Commissioners' claim that the schools 'have been the chief nurseries of our statesmen' (9) - and by Kelsall (10) in relation to higher civil servants. Eton alone has produced over one third of our Prime Ministers.

It is interesting to note that the hold of the schools over key positions has survived political and educational reform until well into the present century. Wilson and Lupton, writing in 1959, found that Eton alone produced 30% of Conservative ministers, of the directors of the large banks, of the directors of city firms and insurance companies. Eton and five other schools (Winchester, Harrow, Rugby, Charterhouse and Marlborough) produced between two-fifths and one-half of the holders of these posts. (11)

The assumption that the schools educate leaders can be seen in the comments made by two former Prime Ministers on their choices of colleagues - namely Baldwin's famous declaration that when he was called upon to form a government 'one of my first thoughts was that it should be a government of which Harrow should not be ashamed. I remembered how in previous governments there had been four or perhaps five Harrovians - and I determined to have six', (12) and - in similar vein - Harold Macmillan's remark that 'Mr. Attlee had three Etonians in his Cabinet. I have six. Things are twice as good under the Conservatives. (13) Both seem to be suggesting either that the status of old Harrovian or Etonian is more important than any qualification of political expertise or that having been to Harrow or Eton automatically confers such expertise.

The argument thus far is that because the schools produced a large proportion of the nineteenth century political, religious, military and civil service élite and because their aims, curricula and organisation were widely imitated, any consistent body of opinion they generated would be likely to gain wide acceptance in Victorian England and be carried into many of the key decision-making positions in society. Conversely, any view to which they were opposed would, in all probability, make little headway in the Victorian corridors of power. This alone makes the Clarendon schools worthy subjects for investigation.

One further point which is relevant when considering the impact of the schools is the suggestion - put forward by Wakeford in 'The Cloistered Elite' [14] and by others - that a boarding school can be viewed as an example of a total institution, the concept developed by Goffman in 'Asylums'. He defined 'total institution' as 'a place of residence and work where a large number of like-situated individuals, cut off from the wider

society for an appreciable period of time, together lead an enclosed formally administered round of life. (15) Every institution, Goffman argues, has encompassing tendencies in that it provides something of a world for its inmates. The institution's encompassing or total character is symbolised by the barrier to social intercourse with the outside and one 'frequent official objective is the reformation of inmates in the direction of some ideal standard'. (16) Any school, of course, can be viewed as a major agency of socialisation and cultural transmission, but some schools are more likely than others to achieve a high degree of socialisation - though different schools may well define their aims in this direction quite differently.

The case for the modern boarding school as a total institution has been examined by Wakeford and whilst it is outside the scope of this thesis to examine the case in detail with respect to the nineteenth century public school, it does not seem fanciful to suggest that there are certain similarities. The nineteenth century Clarendon schools did provide a total environment for a large part of the time a pupil spent in the school. As the Report commented, 'The school has absolute possession of the boy during four or five years'. (17) Contact with the outside world was minimal - probably far less than in the modern school described by Wakeford because the mass media were undeveloped, transport was limited, class barriers more rigidly maintained and discipline harsher. Another feature of the schools which encouraged separation from the outside world was the practice of selecting head and assistant masters either from old boys or from men educated at other Clarendon schools, many of whom had left school for Oxford or Cambridge and returned, often to spend the rest of their lives teaching in the school, having experienced little of the outside world and content to spend their lives passing on the learning and ideals which had been passed on to them. Bamford refers to the schools as

'closed worlds'. (18) Doubtless they provided a highly structured environment in which pupils could be subjected to social, moral and intellectual pressure.

Thus, although such adjectives as 'total' and 'people-changing' are probably too extreme, it does seem reasonable to suggest that values and attitudes proffered by the schools would have had a considerable impact on the recipients.

The two day schools - St. Paul's and Merchant Taylors - will be excluded from the thesis. In several important respects these schools are different from the others. As day schools they catered predominantly for a local demand and though recruiting some upper-class boys, they were principally middle-class schools. Secondly, the boarding element was relatively unimportant and their influence on pupils was therefore probably less. For these reasons one could argue that their impact on English society was not as great as that of the other schools.

Although the schools were very much individual institutions, each with its own peculiar set of traditions and values, it is possible to some extent to see them also as a unit. From the very first when Wayneflete was persuaded - along with five Fellows and thirty-five scholars - to move to Eton after eleven years as Master of Winchester, there has been a continuing interchange both of staff and ideas among the Clarendon schools. As time went on and the schools became subject to attack from many quarters they closed ranks and began to put forward a distinct public school 'line'. However, while regarding the schools as a system this thesis will take care not to overlook the very important individual

differences. Three schools - Rugby, Shrewsbury and Eton - will be selected for a more detailed examination than the remaining four. The reasons for this selection will emerge in the course of the thesis.

It is hoped that the thesis will prompt the posing of wider questions than those considered here. At a time when England was regarded as the industrial leader of the world it was a curious fact that the ruling class should almost entirely exclude from its education system the very subjects which had made its dominance possible. It would be a fascinating exercise to trace in detail the long-term, and even modern day, effects of this exclusion on Britain's political and economic wellbeing. It is hoped that this thesis will do something to prepare the ground for a consideration of such issues.

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- C. Barnett, Article in 'The Guardian' 14th July 1976.
- Public Schools Commission. Vol. I p. 3.
- ibid p. 11
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- ibid p. 13
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- W. L. Guttsman, 'The British Political Elite'.
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- 10. R. K. Kelsall, 'Higher Civil Servants in Britain'.
- 11. C. S. Wilson and T. Lupton, 'The Social Background and Connections of Top Decision Makers'. The Manchester School of Economic and Social Studies Vol. XXVII No. 1 January 1959.
- 12. Quoted in S. Haxey, 'Tory M. P. ' p. 180
- 13. Quoted in B. Gardner, 'The Public Schools' p. 35
- 14. J. Wakeford, 'The Cloistered Elite'15. E. Goffman, 'Asylums' p.11
- 16. ibid p. 73
- 17. P.S.C. 1 p. 31
- 18. T. W. Bamford, 'Rise of the Public Schools' p. xii

Chapter One

The first two chapters of this thesis will consider the origin and growth of the public school system up to the time of the Clarendon Commission and in particular the development of the Christian classical tradition of education. Although reference will of necessity be made to an earlier period the emphasis will be on the years which saw Britain emerge as the industrial leader of the world i.e. from around 1760 onwards. The ensuing decades witnessed marked social and economic change in England - the rise of capitalistic industry and the factory system, the growth of large towns and the appearance of a self-conscious middle class, already in 1760 beginning to question the monopoly of power and privilege held by the nobility. The two chapters will examine these changes insofar as they affected the public schools and the education they offered and will also identify the pressures which ultimately resulted in the formation of the Clarendon Commission. The emphasis throughout will be on curricula and related issues.

The seven schools with which this thesis is concerned were all founded in the 217 years from 1394 to 1611. With the exception of Winchester and Eton which shared certain unusual characteristics, there was little to distinguish the schools from many other local endowed grammar schools founded during this period. They owed their origin to pious founders who, for the benefit of children of a particular locality, endowed a school, often with grants of land.

The oldest of the seven, Winchester, was founded in 1394 by
William Wykeham, principally for the benefit of poor scholars. Eton owed
its foundation in 1440 to Henry VI and was intended for 70 'poor and needy
boys of good character'. (1) In both cases the intention seems to have been
that the poor scholars should be local boys.

These two oldest schools differed from the remaining five in that from the very beginning their statutes made provision for another kind of pupil besides the poor local boy. At Eton, in addition to the 70 scholars, the statutes stated that education should be provided for not more than 20 paying boys - 'The sons of noblemen and of special friends of the College'. (2) Similarly the statutes of Winchester in addition to the 'poor scholars' provided for the admission of ten sons of nobles. Canon Firth in his history of Winchester suggests that it is most probable that Wykeham in the main intended to create a ladder for poor boys, without excluding those whose parents were fairly well off. (3)

From their foundation Eton and Winchester have been boarding schools. Of the remaining five, Harrow, Rugby and Shrewsbury were originally town grammar schools which, for a variety of reasons, outgrew their original purely local associations.

Harrow, though dating back to an earlier ecclesiastical foundation, was refounded by John Lyon and received its Royal Charter in 1571. It was planned as a free grammar school for the children of local inhabitants and of the Founder's kin. Rugby - founded by Lawrence Sheriff in 1567 - was intended to cater for a local clientele. Shrewsbury, originally the Royal Free Grammar School of King Edward VI, was founded in 1552 principally for the free education of the poor of that particular locality.

Charterhouse, 1611, was originally a school and a hospital. The founder's will provided for the maintenance of 60 decayed gentlemen and 40 boys, 'the children of poor men who want means for bringing them up'. (4)

Westminster, evolving from a school attached to the Benedictine Monastery

of Westminster, and dating back to 1363, was refounded in 1560 by

Queen Elizabeth. The school was to consist of 40 scholars who were to
receive a free education in Latin. Greek and Hebrew.

The curriculum offered by grammar schools at this time was almost entirely classical - and thus almost entirely vocational. In the Middle Ages, as Barnard tells us, 'the power to write and speak Latin well was the most purely vocational and utilitarian equipment with which the grammar school could supply its pupils'. (5) Latin was learnt as a written and spoken language, in everyday use for most official and professional purposes.

Hollis reiterates the point: 'The Latin that they learnt... was a contemporary spoken language, used for strictly practical purposes. It was the language of the Church, the language of writing and the language of all international business. To the men of the Middle Ages' he continues, 'the glories of classical literature meant comparatively little. When they taught their pupils the dog Latin of the day, they thought of themselves as giving them in the strictest sense a vocational education... They were equipping them with the tool which they would need in order to earn their living as clerks'. (6) Maxwell Lyte, writing in the late nineteenth century, seems to have been singularly unimpressed by the standard of Latin versification at fifteenth century Eton. (7) Because of the scarcity of books, teaching was entirely oral and learning depended on dictation, repetition and memory.

Thus the schools were designed predominantly for the sons of the middle classes to furnish them with a clerical training. They provided the clerical class necessary to conduct the nation's business - a class which badly

needed recruitment after the devastation of the Black Death.

Going to school at this time was very much a bourgeois thing to do. Sons of the poor rarely obtained an education and the sons of the aristocracy seldomdesired one. They received their training in noblemen's houses and could rarely read.

The type of education to be offered by a grammar school was generally specified by the Founder. John Lyon envisaged education of a strictly classical nature for Harrow - no English book appearing in the detailed list he compiled. At Westminster the education was to be in Latin, Greek and Hebrew. At Charterhouse the lone voice of Bacon could be heard crying in the wilderness, opposing the foundation of the school and arguing that the money would be better spent if used to promote the study of 'science, philosophy, arts of speech and the mathematicks' at the universities. (8) A compromise was reached whereby the master was to teach only Latin and Greek but the usher was to teach 'the scholars to cypher and cast an account, especially those that are less capable of learning, and fittest to be put to trades! (9) - thus heralding an attitude which was to be reflected in the modern sides of the public schools 250 years later. Until the seventeenth century, then, the seven schools like other endowed grammar schools of the time, catered principally for the sons of the middle classes and offered them a practical, vocationallyoriented education. In both respects the schools were to change.

The late seventeenth century saw the beginning of a gradual change in aristocratic habits and the appearance of the practice of sending the sons of the nobility away to school, instead of having them educated by private tutors at home - though tutors often still accompanied them to school.

The change was not a rapid one and throughout the eighteenth century it was still quite common for the young aristocrat to be taught at home by a tutor, to proceed with a tutor to Oxford or Cambridge and then be sent on the Grand Tour. However, the late seventeenth and eighteenth centuries saw an increase in the number of aristocratic pupils at Eton, Winchester, Westminster and a few other schools. Why this change in habits should have occurred is far from clear as is the basis on which the aristocracy selected certain schools for their sons rather than others. Whatever the reasons, there is ample evidence that by the eighteenth century certain grammar schools were inhabited by the younger sons of the aristocracy, the sons of the landed gentry and professional classes with a small admixture of the new rising commercial classes, as well as boys from lower socio-economic groups.

The situation in the eighteenth century was fluid in that some schools became 'great' for a time but did not manage to remain so. As Ogilvie says 'Some floated up to the top for a while and then sank again'. (10) A school's success in attracting the nobility could depend on a variety of factors. In some cases it seems to have been largely the result of the ambition and foresight of individual headmasters who perhaps sought status and improved income from the new lucrative clientele. The rise of Harrow, according to Webster, (11) began with the active headmastership of Rev. William Horne who left Eton in 1669 for Harrow. He obtained the sanction of the governing body to his plans for attracting 'foreigners' as boarders from many of the leading families of England. The character of the school began to change but despite his efforts Harrow was not too well patronised by the nobility until early in the eighteenth century when another Etonian, Dr. Brian, made it clear that Jacobite opinions would not be tolerated at the school. According to Webster in these circumstances

many parents, fearful of the principles in vogue at Eton, transferred their sons to Harrow, whose numbers rose to 144 in 1721. Brian's successor nearly ruined the school then Thomas Thackeray, another Etonian, restored Harrow to its favoured position with the Whig aristocracy. (12) When Thackeray resigned, however, in 1760, the school had a bad name and its numbers were down to 80. Sumner, the new headmaster, and once again an Etonian, restored the numbers to 350 in 1803.

Winchester, which as we saw had always had provision for a few members of the nobility, had managed to attract many aristocratic pupils by the 1670s. Numbers, however, as at Harrow, were subject to chronic fluctuations. (13)

At Rugby it was Holyoake, headmaster in 1687, who first attracted members of the aristocracy from other counties to the school. It was left to Thomas James, an Etonian, however, to raise Rugby to the rank of a great school. He became head in 1778 when the school had about 80 boys. By 1790 numbers had risen to 240. (14) James borrowed extensively from Eton and also widened the Rugby curriculum to include mathematics, English history and English literature. According to Ogilvie (15) boys had a more serious upbringing at Rugby than at Eton 'but then the Rugbeians were not so lordly or so wealthy'.

Eton grew rapidly in the eighteenth century, though numbers fluctuated as they did elsewhere. With over 480 boys in 1766 it was easily the largest grammar school in the country. The aristocratic character of the school emerged earlier and more strongly than at other schools. Maxwell Lyte draws attention to a brass at Eton recording the death of Lord Richard Grey

in 1521 and to the fact that in the early seventeenth century it was reported that the school was 'very much thronged with young nobility'. (16) Under the headmastership of Barnard, who became head in 1754, the number of aristocratic pupils increased, though local tradesmens' sons were often to be found among the scholars and boys of a plebean origin were as common in the second half of the century as in the first. After 1760 the school's power to attract the gentry and nobility owed much to the personal interest of George III. Eton was at this stage the prototype of the upperclass boarding school and its aristocratic life-style set an ideal for other schools which hoped to attract an upper-class clientèle. Because of its prestige Eton had great influence on the other schools and, as we noted earlier, many of the early great headmasters were Etonians.

At Westminster an increase in aristocratic numbers took place under Busby, who was appointed headmaster in 1638, and Westminster became a fashionable school for the gentry. Following the appointment of Nicoll in 1733 the school entered a period of decline and by the end of the eighteenth century numbers were low. (17)

Charterhouse, never an aristocratic school, continued to serve the middle classes and kept an even if undistinguished keel throughout the period. (18) Shrewsbury, on the other hand, attracted upper-class pupils almost from its foundation. (19)

Other factors besides the influence of individual headmasters were important in the rise and decline of schools. Some were particularly fortunate in their original endowments - Rugby being one example. The property with which the school was endowed was in Gray's Inn Fields and was let on a building lease due to end in 1780. The land had become very

valuable and with the money from it the Trustees gave the school impressive new buildings. Physical location, too, was often important in the success or otherwise of a school. The development of communications favoured certain schools at the expense of others. Westminster and Charterhouse both had the initial advantage of being situated in London, but by the nineteenth century this had become their greatest handicap.

Whatever the reasons for the success of certain schools, the result during this period was the gradual development of a network of 'great' schools - some greater than others - but all catering for a national rather than a local intake and including aristocratic and upper middle class pupils among their numbers. The extent to which the school body was aristocratic was often exaggerated, for obvious reasons, and many of the schools strove to appear more aristocratic than in fact they were.

Parallel with this development and intricately involved in it was another. Up to the seventeenth century Latin was still a vocational subject, an essential for all those intending to enter the professions. In the eighteenth century it fell gradually into disuse as a means of communication and as a result the former vocational education, often stipulated by the statutes, became increasingly irrelevant to the future careers of those attending the grammar schools. Lack of local demand for the education offered led to falling numbers. In some schools, pupils disappeared entirely and the master drew the salary provided by the endowments and did no teaching.

The local endowed schools reacted to this change in their fortunes in three ways. Many - perhaps even the majority - entered a long period of decline leading in some cases to complete annihilation. Others

continued, often with only a handful of pupils, until the work of the Charity Commissioners rescued them from a purposeless existence and brought about a revival. In 1780 Shaftesbury Grammar School closed for want of pupils. In 1794 the Governors of Ashbourne Grammar School informed the bishop that 'the headmaster now has but one scholar, and has had but two or three for many years'. (20) Brian Gardner in his book 'The Public Schools' sums up the situation, 'With few exceptions, among them the Catholic schools, secondary education in England had reached such depths at the end of the eighteenth century that Lord Chief Justice Kenyon said, in 1795: "Whoever will examine the state of the grammar schools in different parts of the kingdom will see to what a lamentable condition most of them have been reduced...empty walls without scholars, and everything neglected, but the receipt of the salaries and emoluments. In some instances that have lately come within my knowledge, there was not a single scholar in the schools though there were very large endowments to them. "(21)

Some schools, with differing degrees of success, attempted to move with the times by introducing the new vocational subjects - arithmetic, modern languages, commercial subjects - and thus to continue their traditional role of catering for local middle-class demand. In some cases the transition took place smoothly. The classics generally remained predominant but other subjects were successfully introduced into the curriculum and the schools thrived. In other instances the pressure of local demand proved unavailing. Conservative interests prevailed and the curriculum remained entirely classical.

The conflicts over curricula which took place throughout this period can be highlighted by the case of Leeds Grammar School. The governing body of the school included local businessmen who wished to broaden the classical curriculum to include such subjects as arithmetic, writing and modern languages. The Master at Leeds refused and the matter was taken to the Court of Chancery. In 1805 Lord Chancellor Eldon, to wide-spread public disgust, ruled against curriculum reform on the grounds that the school had been established as a free grammar school and should therefore teach grammar i. e. the classical languages and nothing else. Any addition to the curriculum would involve a misapplication of the school's endowments and would therefore be illegal. This ruling was not overset until the Grammar School Act in 1840 legally entitled schools to teach modern subjects.

The Leeds judgement represented something of a test case - one of the early skirmishes between a business oriented middle-class just beginning to flex its political muscles and a landed upper-class which regarded 'trade' and those associated with it both as inferior and a potential threat. Eldon who embodied these attitudes was naturally concerned to maintain the established order and what had become one of its bulwarks - a classical education. The judgement implied that an endowed school could refuse to teach anything but Latin and Greek. Even if it had been founded as a free school the head could exact his own private fee for the teaching of any other subjects. Thus, many schools were given the official imprimatur for sticking to the classics entirely and many did just that often it seems because the master drew his salary regardless and could not be bothered to make the effort to move with the times. Decline and falling numbers often resulted. The curriculum could be broadened by employing tutors not regarded as regular members of staff and in this way in some schools extras such as arithmetic, history, geography and French were introduced, the master receiving additional payment from his pupils.

The most remarkable innovation was at Oundle, which introduced technical science.

Thus we have two methods of adaptation on the part of the endowed grammar schools to changing circumstances. Some refused to adapt and as a result declined - in some cases to the point of annihilation. Others responded by introducing new and more vocationally oriented subjects - thus continuing to cater for local middle class demand. Adamson tells us that the attitudes of the schools to the additional subjects resembled those found in present-day grammar schools to typing and shorthand.

The third group of schools responded not by changing their curricula but by changing their clientele. Motivated possibly by the fear of declining numbers and unwilling to depart from the classical curriculum, several headmasters, as we saw, made attempts to attract the nobility to their schools. Perhaps they took advantage of the change in aristocratic habits mentioned earlier and did what they could to make their schools attractive to aristocratic eyes. Perhaps in some way they prompted the change in the nobility's attitudes to their sons' education. The whole question awaits research.

Whatever the factors involved, the changes in clientèle can be seen from school records. Certain schools stuck to their classical guns - possibly an example of the power of vested interests, the masters after all knew little else - and managed to attract the upper classes. The nobility in such schools were generally very much in theminority but the schools nevertheless became recognised as upper class establishments and presumably attracted many pupils from a lower social stratum who wished to associate with the aristocracy.

One of the most fascinating changes which occured during this period was the transformation of the classics from vocational subjects into symbols of high social rank. Throughout the eighteenth century the classics became less and less relevant vocationally and more and more necessary as part of a gentleman's education. Ogilvie is one of many writers who comments on the strangeness of the situation. As he says, just when the type of education the grammar schools offered had become most conspicuously useless, the upper classes began to favour it. 'Just when the bulk of the grammar schools were falling into decay, the upper classes began to confer a cachet on a handful of them...the arid grammar school education in the classics which the middle classes were jettisoning became the vocational training of the governing class. Latin and Greek acquired social significance. It was rather like the fashion nowadays of buying, as antiques, the furniture, utensils and ornaments that humble folk have thrown out as of no further use. (22) Thus, knowledge of the classics became the mark of a gentleman, possibly because of their very uselessness. They were the 'outward and visible sign of his superiority over those who had neither time nor opportunity to acquire such graces'. The classics by their uselessness demonstrated the economic security of the gentleman . (23)

In itself the elevation of the classics may merely have been an expression of inertia, of vested interests which did not wish to change. The ancient universities, the endowed grammar schools, were staffed by people who had known only a classical education. If their positions were to remain secure the classics had to retain their place as the cornerstone of the English education system. This was achieved by 'selling' the classics to the aristocracy. Later, convincing justifications had to be found for the continuing dominance of the classics - one of the most popular being the much debated argument that the classics trained the mind.

The elevation of the classics was perhaps also an expression of the class conflict which was beginning to make its appearance in a society previously without it. It was the middle class, increasingly self-conscious and self-confident, which desired curricular reform in favour of commercial subjects, modern languages, arithmetic and the like. It was the landed upper classes who affected to regard such subjects with disdain because of their association with working for a living and therefore indicating someone of inferior station. The classics were, in a sense, part of the barricades which the landed aristocracy erected against the encroaching middle classes.

Thus, by the late eighteenth and early nineteenth centuries our seven schools were clearly distinguishable from the rest. They formed a network, catering for a national demand, offering an almost exclusively classical curriculum and were regarded, to differing extents, as places of education for the upper classes. Unlike many schools they had survived intact and unaltered in terms of curriculum and, if not exactly flourishing, were in no immediate danger of annihilation or of being changed by middle class pressure.

- 1. Quoted by C. Hollis, 'Eton', p. 7
- 2. ibid, p. 8
- 3. J. D'E. Firth, 'Winchester College'. Ch. 1
- 4. F.A.M. Webster, 'Our Great Public Schools'. p. 59
- 5. H. C. Barnard, 'A History of English Education'. p. 14
- 6. Hollis p. 27
- 7. H.C. Maxwell Lyte, 'A History of Eton College'. p. 76
- 8. Quoted in W. H. Brown, 'Charterhouse Past and Present'. pp. 98-9.
- 9. N. Carlisle, 'A Concise Description of the Endowed Grammar Schools in England and Wales'. II p. 9
- 10. V. Ogilvie, 'The English Public School'. p. 91
- 11. Webster p. 143
- 12. Ogilvie, p. 93
- 13. A. F. Leach, 'A History of Winchester College'.
- 14. H. C. Bradby, 'Rugby'. p. 35
- 15. Ogilvie, p.106
- 16. Maxwell Lyte, p. 221
- 17. F.H. Forshall, 'Westminster School'.
- 18. G.S. Davies, 'Charterhouse in London'.
- 19. J.B. Oldham, 'A History of Shrewsbury School'. Ch.1
- 20. Ogilvie, p. 97
- 21. B. Gardner, 'The Public Schools'. p. 146
- 22. Ogilvie, pp. 90-91
- 23. T.C. Worsley, 'Barbarians and Philistines'. p. 165

Chapter Two

Through the seventeenth century criticism of the seven schools is comparatively rare, yet throughout the eighteenth and early nineteenth centuries we see a mounting wave of criticism directed against all aspects of the schools - their living conditions, harsh punishments, curricula and general brutality. It does seem to be the case that the appearance of young nobility in the schools brought with it a decline in standards of behaviour, though this may have been a reflection of something which was happening in society at large. Alternatively the deterioration may have been due to aristocratic attitudes to education and in particular to schoolmasters at the time. Many of them were not gentlemen and they were treated with contempt by boys of a higher social standing.

Much of the criticism directed at the schools was stimulated by the school rebellions - some of them extremely violent - which were much in evidence between 1760 and 1820. Etonians, for example, revolted under the headmastership of Dr. Foster who became head in 1765. He suffered from the almost insurmountable handicap of being the son of a Windsor tradesman. Discipline became very lax towards the end of the century and another rebellion took place under the headship of Dr. Davies in 1783. Keate's reign from 1809 to 1834 witnessed at least one serious revolt in 1818. In one period of rioting detonating balls were thrown around and masters' windows smashed. Keate himself was pelted with rotten eggs. (1)

Other schools experienced similar outbreaks. Boys at Charterhouse mutinied in 1808⁽²⁾ and at Harrow there were several rebellions around 1805 when Butler was headmaster. ⁽³⁾ Wykehamists indulged in some particularly violent displays between 1775 and 1825. In 1793, for example, a rebellion lasting several days ended with the expulsion of 37 boys, including two future generals and a bishop. In 1818, under the headmastership of Gabell.

it became necessary to call out the militia to disarm the boys. (4) During a rebellion at Shrewsbury in the same year Butler, the headmaster, was obliged to seek police protection. (5) The severity of Henry Ingles, appointed head of Rugby in 1794, caused a rebellion there in 1797 when it is reported that the boys blew up the door of the headmaster's study with gunpowder. On this occasion too the military were called out and the Riot Act read. (6) A glimpse of the situation at Westminster in 1792 is given by John Smith, one of the masters. Referring to Clapham's (one of the larger houses) he speaks of 'Opposition and discontent on all sides', and records somewhat dispiritedly: 'At home all the Evening, and in the midst of destruction, noise, tumult and everything but rebellion'. (7) Carleton tells us that the 'state of near-rebellion in Clapham's was only part of the unrest in the school as a whole'. (8)

Such a state of affairs has been attributed to many factors. Carleton, for example, believes that the general unrest in England, caused by the upheaval of the French revolution, may well have been reflected in the schools. (9)

One possible reason has already been referred to, namely the low social standing of schoolmasters in the eighteenth and early nineteenth centuries. Hollis tells us that it was higher at Eton than at most schools but it could generally be taken for granted that masters were not gentlemen. (10) Their social status had been of little importance in the seventeenth and earlier centuries when at Eton and other schools pupils were for the most part middle class boys trying to better themselves. It was not in their tradition or their interest to rebel against authority and to ruin their careers by expulsion. The background of masters became important only with the appearance of the aristocracy in the schools. As Hollis points out, 'The aristocrat of the eighteenth century, taught by a master whom he did

not consider to be a gentleman, not thinking that his future in any way depended on his school record, was very different in his insolence towards authority. (11)

Yet another contributory factor may have been the internal organisation of the schools. Numbers of pupils were subject to violent fluctuations and this was no encouragement to take on extra staff who may well prove redundant within only a few months. Thus classes were often incredibly large by modern standards. Keate at Eton, for example, found himself responsible for a division of 170 boys. In 1820 he created a new Middle Division of the Fifth Form, but even so his own division still consisted of more than 100 boys. Teaching under such conditions must have been well nigh impossible and education an almost laughable matter. Discipline could be maintained only by harsh, even brutal punishments. Against this background, boy rebellions are more easily understood. Thus the schools at this time were virtually schoolboy republics. The few masters proved inadequate to maintain discipline even though flogging and more severe punishments were common. Keate in 1832 is said to have flogged 80 boys in one day.

The low social standing of schoolmasters has been mentioned but in addition to this disadvantage many were also of a very low calibre. Keate, on his arrival at Eton, had to work initially with inherited assistant masters who were hardly adequate to the task. Some were simply incompetent. One - William Heath - an opium eater, used to appear 'incapable and incoherent before the boys'. (12) (An interesting comment is made by Maxwell Lyte, relying on information from the Earl of Abingdon, and referring to the same master: he 'used to behave in an extraordinary way during lessons, talking to the boys about politics and the like. ') (13)

In view of this unhappy state of affairs it is hardly surprising that throughout these years the schools were constantly under attack. Harsh discipline and its apparent ineffectiveness were castigated as were the atrociously primitive living conditions and the bullying which seems to have been a feature of school life. Critics were numerous. Sydney Smith, in an essay published in 1808 argued that public schools 'only prevent men from being corrupted by the world, by corrupting them before their entry into the world'. (14) Gladstone - referring to his own schooldays from 1821-7 dubbed Eton 'the greatest pagan school in Christendom'. (15) The pride is unmistakeable.

The curriculum also came in for heavy attack. Barnard suggests that the course of study at the endowed grammar schools and public schools at the end of the eighteenth century was much the same as it had been at the time of the Renaissance, consisting almost entirely of Latin and Greek and taught by largely traditional methods. (16) Simon described public school education of the time as the 'continuous memorising of a series of classical texts whose content was rarely expounded or understood'. (17) By the end of the eighteenth century, according to Worsley, critics were beginning to complain that the drill in the syntax and vocabularies of the dead languages had become nothing but a lifeless routine. (18)

Sydney Smith was particularly vociferous in his criticism. In an article entitled 'Too Much Latin and Greek' in 1809 he argued that 'A young Englishman goes to school at six or seven years old; and he remains in a course of education till twenty-three or twenty-four years of age. In all that time, his sole and exclusive occupation is learning Latin and Greek; he has scarcely a notion that there is any other kind of excellence'. (19)

The Westminster, Edinburghand Quarterly Reviews kept up the attack over a period of several decades. The Westminster Review of July 1825 condemned the education system as useless and antiquated and referred to Westminster, Harrow, Winchester and Eton as 'seminaries for monks'. The Review objected to the classics 'forming part of the education of a very important part of the community, to whom, at least as it is at present communicated, experience proves it to be utterly useless'. The education commonly followed in the schools was described in the following terms: 'From six or eight, till sixteen or seventeen... in learning, or trying to learn, a little Latin and less Greek; in attempting, in fact, not to read and understand the matter of a classical author, to know the history, the poetry, the philosophy, the policy, the manners, and the opinions of Greece and Rome, but the grammar, the syntax, the parsing, the quantities, and the accents; not in learning to write and speak the languages, but in getting by rote a few scraps of poetry... In ten years of this labour, privation, punishment, slavery, and expense, what is gained even of this useless trash? Nothing. (20)

When no action was taken even after the 1832 Reform Act, the attack on classical teaching as irrelevant to the middle classes was pressed more aggressively. In the Quarterly Journal of April 1832 we read: 'Is it reasonable or creditable, or decent, that boys of fifteen years of age and more should know absolutely nothing of the simplest laws of mechanical philosophy? That they should know nothing of the growth, production and manufacture of the various objects which are daily subservient to their necessities and pleasures?... Is it reasonable that they should not even know arithmetic, or be able to write their own language with tolerable accuracy? Such are very common results of the education misnamed 'liberal'. And finally, is it reasonable that all this should be sacrificed to the supposed attainment of two dead languages?'. (21)

The severe and continuing criticism of almost every aspect of school life may well have been partly responsible for the tremendous fluctuations in pupil numbers which occurred throughout this period, although, as we have seen, fluctuations also occurred in the previous century. No school, even Eton, seemed immune, though fluctuations there were considerably less violent than in other schools. A few examples will serve to show the seriousness of the situation facing some schools.

When Keate became headmaster of Eton in 1809 the school had around 500 pupils. This number remained roughly constant for 14 years then increased to 627 in 1833. In 1834 numbers fell suddenly to 486 and during that year there was virtually no intake. Keate resigned and was succeeded by Hawtrey who carried out various reforms. In the years immediately after Keate's resignation numbers fell to 444 and then increased steadily until they reached 777 in 1844. At Harrow, the Whig school, numbers declined to 60 in 1844. The decline was then arrested by C. J. Vaughan (headmaster from 1845 to 1859) who had been a master at Rugby under Arnold. He remodelled Harrow on Rugby and when he left the school numbers were healthy once again with 469 boys in the school. Rugby suffered in a similar way. In 1821 there were about 300 Rugbeians. Six years later there were only 123. After Arnold's reign, numbers continued healthy. Samuel Butler on his arrival at Shrewsbury found only a handful of boys in 1798. There was an intake of only 9 in 1807 and although this had increased to 104 in 1826 the school was not tremendously successful until Moss transferred it to new buildings at Kingsland in 1872. Charterhouse experienced difficulty attracting pupils during the nineteenth century, possibly at least partly because of its situation in London. In spite of its five acres it was swamped on all sides and thus 'past redemption'. 'Nothing could make such surroundings a true haunt of the gentry'. (22) In 1816 only 37 boys entered the school and in

1832 only 17. The fortunes of Charterhouse revived dramatically after it moved to Godalming in 1872 and by 1873 there were 500 boys in the school. Westminster faced similar problems. In 1800 the school had been on the edge of the country but in the first quarter of the inineteenth century the opening of Vauxhall Bridge in 1816 and the rapid growth of London meant that the neighbourhood changed very much for the worse. The school was certainly at a low ebb through the early and mid-Victorian years no doubt largely as a result of its changed surroundings and the 'uncomfortable presence of the lower classes'. (23) Parents hesitated to place their sons in such a neighbourhood. Some were not afraid to make this clear. In the Clarendon Commission Report, Rev. C. B. Scott records parents' 'great objection to all the streets and courts around the school'. (24) In 1851 there were 137 pupils, after a decade of steady increase. An outbreak of scarlet fever, however, in 1853, was reported to be due to the school's unhealthy location and no further increase took place for some time. The Clarendon Commissioners certainly seemed to be of the opinion that the school's declining fortunes were due to its location but Carleton, the historian of Westminster, suggests that this was rather the reason for the lack of revival in the school's fortunes than for the actual decline. (25) Other factors could have contributed, such as the dilapidation of the buildings due to abuses of the school's revenues, which could not have encouraged parents to entrust their sons to Westminster.

Many suggestions have been put forward to account for the schools' fluctuating fortunes - the financial crisis of 1825, the fact that political and educational reform was in the air and public schools were seen by many as a bad legacy from the eighteenth century. Other factors may have been social unrest, the threat of the Napoleonic invasion, poor headmasters, inadequate buildings, cholera and disease. Bamford suggests that publicity

or lack of it, could bring about changes in the fortunes of a school. Whether it was adverse or not seemed to be beside the point. (26)

Bamford considers in some detail the part played by headmasters in the fluctuations and concludes that a good headmaster did not necessarily bring security to a school. Periods of decline were often evident during their reigns. The influence of a particular headmaster seemed to be a major factor only at Rugby and Harrow. Entrance figures jumped at Rugby after the appointments of Wooll, Ingles and Arnold. Harrow's bouts of prosperity seemed to be linked in part to the advent of Vaughan, Wordsworth and Longley. (27)

The pattern of fluctuations was unique to each school and in many cases individual factors were involved - Keate's reign at Eton, the location of Westminster and Charterhouse, and so on. Despite individual differences, however, the whole system was affected and all schools suffered from a common depression between 1832 and 1842. By 1845, though different schools took different lengths of time to recover, the common crisis was over.

Bamford believes that 'Uncertainty, and the corresponding nightmare of decline, dominated the life of all public schools until the final quarter of the century'. (28) Certainly the schools were far from complacent about the fluctuations, and considered and put into effect many reforms to keep their numbers healthy. As far as this thesis is concerned the interesting point here is that the reforms which were made had very little to do with changes in curricula. It seems likely that the schools, in spite of criticisms voiced in the reviews already referred to, did not see the classical curriculum as a problem as far as their clientèle were concerned. Certainly

numbers began to pick up long before any real inroads were made into classical teaching at the schools.

Reforms tended to concentrate on internal organisation and new buildings.

Hawtrey at Eton taught a smaller division and divided other boys in the

Upper School into regular divisions. This resulted in improved scholarship.

A school library and greatly improved buildings were additional important reforms. Hodgson introduced others and Goodford ended the longestablished tradition which dictated that assistant masters should be drawn only from collegers and Kingsmen.

The London schools, even early in the century, seemed to have recognised the site problem and to be considering more suitable locations. Other schools did what they could to create a 'landed estate' image and erected new and impressive buildings. Though such reforms did have some impact the most effective changes - in terms of bringing about a revival of numbers - were doubtless those carried out by Thomas Arnold, headmaster of Rugby from 1828 to 1842. His ideas transformed Rugby and in time the entire public school system. Reform along Arnoldian lines was in almost every case the prelude to renewed popularity and by the mid-century not only were most of the schools again full but new ones were everywhere springing up to cater for the demand. Arnold, like other headmasters of the period, seemed to consider radical changes in the curriculum of the schools to be both undesirable and unnecessary. In his view the two prime purposes of education were first religious and second moral training; intellectual training ran a very poor third. The formation of character was of greater importance than the acquisition of knowledge. Rugby was to be a 'school of Christian gentlemen'. (29)

Thus although Arnold 'was the first Englishman who drew attention in our public schools to the historical, political, and philosophical value of philology and of the ancient writers, as distinguished from the mere verbal criticism and elegant scholarship of the last century' (30), he made no dramatic changes in the content of the curriculum. 'The study of language' he said 'seems to me as if it was given for the very purpose of forming the human mind in youth; and the Greek and Latin languages, in themselves so perfect,... seem the very instruments, by which this is to be effected. (31)

Arnold could perhaps have made sweeping reforms in the curriculum and won the day, but instead he threw the whole weight of his influence into the opposite scale; the ancient system became more firmly established than ever. 'Under him' as Strachey says 'the public school remained, in essentials, a conventual establishment, devoted to the teaching of Greek and Latin grammar.' (32)

Thus, although many aspects of public school life had undergone reform, the schools had demonstrated, throughout their history, an extreme reluctance to depart from the classical curriculum. Throughout the middle decades of the nineteenth century, as science and technology advanced, and as fears about the continuance of Britain's industrial supremacy began to be voiced, criticism of the schools' classical bias mounted. It came from many sources - both within the schools and outside them. Eventually it culminated in the appointment of a Royal Commission.

Surely now, at last, after centuries of dominance, the classical curriculum was about to be superseded.

- 1. H. C. Maxwell Lyte, 'A History of Eton College'. pp. 377-8
- 2. G.S. Davies, 'Charterhouse in London'. p. 264
- 3. J. Fischer Williams, 'Harrow'. p. 78
- 4. A. F. Leach, 'A History of Winchester College'. pp. 418-20
- 5. J. B. Oldham, 'A History of Shrewsbury School'. p. 81
- 6. H.C. Bradby, 'Rugby'. pp. 44-46
- 7. John Smith. Diaries. Quoted by J. D. Carleton, 'Westminster School' p. 37
- 8. J.D. Carleton, 'Westminster School'. p. 38
- 9. ibid
- 10. C. Hollis, 'Eton'. p. 159
- 11. Hollis, p. 130
- 12. Hollis, p. 196
- 13. Maxwell Lyte, p. 402
- 14. S. Smith, 'Remarks on the System of Education in Public Schools', Edinburgh Review, August 1810. p. 333
- 15. Quoted in H. C. Barnard, 'A History of English Education'. p. 19
- 16. H.C. Barnard, 'A History of English Education'. pp. 14-15
- 17. B. Simon, 'Studies in the History of Education 1780-1870'. p. 98
- 18. T.C. Worsley, 'Barbarians and Philistines'. p. 167.
- 19. S. Smith, 'Too Much Latin and Greek', in ed. W. H. Auden, 'Selected Writings of Sydney Smith', p. 263
- 20. G. Jardine, Westminster Review, July 1825, p. 156.
- 21. Quarterly Journal of Education, Vol. III, No. 6, April 1832, pp. 268-9
- 22. T.W. Bamford, 'Rise of the Public Schools'. p. 13
- 23. ibid
- 24. Public Schools Commission, III p. 444
- 25. Carleton, p. 55
- 26. Bamford, p. 5
- 27. Bamford, p. 3
- 28. Bamford, pp. 5-6
- 29. A. P. Stanley, 'Life of Thomas Arnold'. p. 101
- 30. Stanley, p. 120
- 31. Stanley, p. 118
- 32. L. Strachey, 'Eminent Victorians'. p. 206

Chapter Three

The Clarendon Commission was appointed in 1861 to inquire into the revenues and management of certain colleges and schools and the studies pursued and instruction given therein. (1) Published in four volumes, it provides a mass of detailed evidence on almost every aspect of school life and is a unique source of information on the curriculum of the 'great schools'.

The Commission encountered some opposition from the headmasters of the schools concerned. Their views can best be seen in their responses to a letter, sent to each headmaster in November, 1862, in which it was proposed to examine the boys in order to ascertain their 'general proficiency' in the chief subjects studied at each school. (2)

The reply from Balston of Eton was short and to the point. He wrote that such 'interference with the authority and responsibility of the HeadMaster is calculated to produce serious evil' and added that such an examination would be unsatisfactory as a test of the general results of the education at Eton. The Secretary to the Commissioners wrote again asking politely for a more detailed explanation of his objections. Balston declined to reply. (3) The other headmasters reacted in similar vein. Moberly of Winchester strongly deprecated any such measure while Scott of Westminster found the proposal 'so seriously objectionable' that he had to decline to entertain it. (4) Elwyn of Charterhouse felt that such an examination would be of the masters rather than the boys and strongly objected. Butler of Harrow was unable to view favourably the proposal' because its results would be deficient in thoroughness and would in all probability lead to misunderstanding. (5) Only Temple of Rugby and Kennedy of Shrewsbury agreed, though both reluctantly.

In the face of such unwillingness on the part of the headmasters the Commissioners decided to pursue the subject no further. They were, in any event, able to gain considerable information as to the 'general proficiency' of the boys from other sources.

After accumulating a large quantity of written evidence and visiting the schools, the Commissioners began to take oral evidence in July 1862. Although interested in all nine schools, they were primarily concerned with Eton and this is reflected in the large amount of evidence on Eton compared with that on the other schools which is, in certain cases, tantalisingly scanty.

Written evidence had already demonstrated to the Commissioners that Eton was still principally a classical school and that even in recent years few concessions had been made to those who demanded a liberalisation of the curriculum. To be sure, the classical curriculum itself was much less narrow than fifty years before. There had been, for example, a greater infusion of Attic authors in the higher Divisions, but Homer, Virgil and Horace continued to form the staple of the teaching in the school. The non-classical curriculum was, to say the least, limited. As Mr. Thompson, one of the Commissioners, commented, mathematics had been neglected at Eton longer than at any other school. (6) Before 1836 there was no mathematical teaching. After that date mathematics was taught but as an optional subject. Rev. Stephen Hawtrey was questioned at some length by the Commissioners about the teaching of mathematics at Eton. (7) He began teaching mathematics there as a private tutor in 1836 and a few years later was allowed to take boys from any part of the school whose parents wished them to learn mathematics. The demand was quite high and about 200 boys studied the subject. Hawtrey was, at this stage in his career, an

extra master, not an assistant master. The distinction was important. His status within the school was greatly inferior to that of an assistant master. He was not, for example, even provided with a place in which to teach. In 1843 he took what can only be described as a gample and with the consent of the College built a mathematical school on college ground, entirely at his own expense. The authorities granted him a lease of 40 years with a recommendation to their successors to renew at the expiration of 14 years. The terms of the lease allowed that no use should be made of the building except for teaching mathematics and Hawtrey was given no power of appointment, which meant in effect he could never sublet.

Lord Clarendon, Chairman of the Commission, drew attention to Hawtrey's somewhat precarious position with the question 'Supposing you wished to retire, and that not being able to appoint your successor, that the Provost and Fellows did appoint your successor, and that that successor was not prepared to reimburse you for your outlay on the buildings, how should you proceed then?' 'I have nothing to do but to submit' replied Hawtrey 'I am quite in the power of the Provost and Fellows'. Later he added 'I do not think I have any security at all'. (8)

The mathematical school, however, prospered and was put on a much surer footing in 1851 when mathematics became an integral part of school-work. This resulted from King's College, Cambridge agreeing to send their men, for their first degree, into the University examinations. A degree could not be obtained without some mathematics and it was therefore considered necessary to introduce the subject into the curriculum at Eton. Thus, from 1851 mathematics became part of the regular curriculum of the school and every boy was obliged to study it. In acknowledgement of the new status of mathematics, Hawtrey was made mathematical assistant

master, that is, he was placed on the same level as the classical assistants. He must have been immensely relieved at this turn of events and celebrated the occasion by building on more classrooms to his school.

It is important to note that mathematics was introduced without any reduction in the amount of time devoted to classics. This was accomplished by doing away with whole holidays and diminishing the number of weekly half-holidays.

In 1862 boys received three hours instruction a week in mathematics. Some, in addition, paid ten guineas a year for private tuition and received almost as much teaching as they liked. Hawtrey had, at this time, seven assistants to teach the upper school and seven teachers of arithmetic, writing and dictation (not University men) for the lower school.

Boys admitted to Eton were placed according to both their classical and arithmetical proficiency. (9) On entry to the upper school boys were examined by both the Head Master and the mathematical master and were required to pass to the satisfaction of both before being placed. (10)

Referring to modern language teaching at Eton, Clarendon succinctly summed up the situation - 'No time given and no place allowed for the study of the modern languages in the timetable'. Although it was possible to learn French from the mid-eighteenth century, modern languages were extra subjects 'totally unconnected with the regular schoolwork'. (11) A boy who wished to learn French, German or Italian arranged a time with the master involved. This in practice meant giving up some of his play time. Boys paid ten guineas a year and received three lessons a week, two oral and one in composition. In 1862 75 boys were learning French and in 1860

20-25 studying German and 3 Italian. Oral evidence was taken only from Mr. Tarver, the French master. At the time evidence was given he was on his own, since the assistant French master had left at Easter. He had taught French at Eton for 20 years and had had temporary assistants for short periods, chiefly in summer as at this time of year all his boys tended to come to him at once. Numbers of boys wishing to study French fluctuated quite considerably, the maximum having been 130. Numbers had declined, he believed, after the Head Master, Dr. Goodford, appointed certain hours when those who learnt French were to attend. According to Tarver the boys 'found this was inconvenient, and the very next half-year... they began to drop off. (12)

In addition to Tarver's classes, Mr. Browning, one of the assistant classical masters, mentioned that several classical masters taught their pupils French. Some also set holiday tasks to be done in French. (13)

French, in common with the other languages, received a temporary boost when Dr. Goodford acting as he told Tarver 'upon the request of many persons, to introduce it somehow into the work', allowed boys to take a modern language paper in the fifth form trials if they so wished. Tarver said that Mr. Balston, who had succeeded Goodford as headmaster, had discontinued the practice. (14) It appeared, however, that only a small percentage of boys had been affected by Balston's ruling. The Rev. E. Coleridge pointed out that 'when the examinations for modern languages take place there are, perhaps, not more than four or five candidates for Italian, 20 for German, and 40 or 50 for French, in a school of more than 800 boys. (15)

Some encouragement had been given to the study of modern languages by

the Prince Consort, and his prizes apparently stimulated 60 or 70 boys to compete for them. Many of the competitors, however, had not attended the French Master, but had presumably studied French before coming to Eton.

To summarise, modern languages in 1862 were extra subjects which no boy was obliged to study and which, as a result of Mr. Balston's action, could no longer even count in a boy's promotion, and had therefore actually lost ground. Balston seems, as we shall see, to have been singularly opposed to the inclusion of modern languages in the Etonian curriculum. Hollis refers to him as a 'strong traditionalist, at any rate as far as matters of curriculum went - a great upholder of the classics'. (16)

The Commissioners also enquired into the teaching of history and geography at Eton. They found that in the lower part of the upper school modern history gave way to ancient and although lessons were set commonly in the Fourth Form and more rarely in the Remove, as soon as these forms were past, all direct instruction ceased. In the two highest Divisions of the school essays were occasionally set on historical subjects. They concluded that the subject, 'though not neglected, is neither regularly taught nor strongly encouraged'. (17) During the four years that a boy generally spent in the Fifth no geography was taught 'except where one or two names occur in the lesson which is being read'. (18) The consequence of this was that boys forgot any geography they had learnt in the lower Forms. There were no history or geography masters. The classics masters taught what was considered necessary as part of the classics lessons. One gains the impression that what was taught was left very much at the discretion of individual master.

A revealing comment was made by Rev. Durnford, Senior assistant classical master. He was asked by Clarendon if boys came to Eton ill-grounded in English history, English literature and grammar. 'I have no opportunity of judging of their knowledge of English history or English literature' he replied 'It is merely with respect to Greek and Latin grammar that they are tried in our pupil rooms. '(19) This statement seems to be somewhat at variance with that of the Rev. Carter, Lower Master, who said that all boys in the lower school had regular lessons in English history. (20)

In addition to such formal teaching as existed, some of the tutors occasionally read history with their pupils as 'private business' (i. e. a certain quantity of reading, independent of schoolwork).

The evidence suggests that history and geography were to a large extent seen as aids and adjuncts to what was after all the main purpose of an Eton education - to acquire a knowledge of the classics. Evidence, admittedly somewhat scanty, further suggests that these subjects were not particularly well-taught. The Provost himself, in response to a question from Lyttelton: 'Do you find when they get higher up in the school that they forget what they have been taught?' replied: 'I think they do forget it. I do not think that department is as efficient as it ought to be.' (21)

Rev. Wayte, an assistant classical master, agreed that 'boys not unfrequently leave Eton with a very defective knowledge of history and geography'. (22)

The Commissioners interviewed two ex-pupils and asked them about the teaching of history and geography. R.A.H. Mitchell, who was at Eton for 6 years and left in 1861, told the Commissioners that the history and

geography he knew had been acquired more from private reading and that he thought 'the system very deficient' with regard to those subjects. (23) Viscount Boringdon, who also left Eton in 1861 after 5 years, was more outspoken. When asked by Clarendon if he acquired the history and geography he possessed in the pupil-room or by private reading retorted: 'Certainly not from anything I did at Eton, either in pupil-room or school-room.' (24)

Hawtrey, in the written returns, had mentioned that Eton offered opportunities for boys to be initiated into physical science. During his oral evidence he said that lectures on physical science were delivered every Thursday during the two winter school-times by eminent scientists. The lectures were principally experimental and were listened to with attention, according to Hawtrey. He told the Commissioners that the lectures had 'led to the hunting up of a great deal of knowledge upon different matters'. Questions were given on the subject of the lectures and 10 to 20 boys gave in answers. Attendance was entirely voluntary. Lectures were held in the mathematical theatre and Hawtrey believed that about 100 boys of the upper school attended. He was of the opinion that interest was increasing: 'I think that the boys pick up a good deal of information at them. They talk of them and read books on the same subject as the lectures afterwards. (25) Needless to say, the lectures were not considered part of the general school arrangement and it was left to Hawtrey to select lectures and submit the name of the lecturer and the subject to the headmaster. If he approved then permission was given for the course to run.

Hawtrey was careful to ensure that subjects did not recur too often, a point acknowledged by the Commissioners in their Report. The subjects

'appear not to have been arranged in systematic courses, but to have covered a pretty extensive range, and embraced such portions of natural and experimental philosophy as were thought likely to be interesting to boys. '(26) Boys paid 2 shillings a lecture for the course and 3 shillings for a single lecture to cover the lecturer's charges and incidental expenses. Hawtrey believed that 'it is the habit of the same boys to attend one course after another'. (27)

Thus physical science was entirely optional and seemed to have received virtually no encouragement apart from Hawtrey's unfailing efforts to make Eton move with the times. W. Johnson remarked that 'Some few of them' (i. e. the boys) 'take great interest in the lectures and experiments, but the great bulk of them do not'. (28) Viscount Boringdon, asked about the lectures and experiments, said they were good but did not think that the boys attended much to them: 'a certain number do, but I think that most come a great deal for making a row.' Later he added that if the lectures were 'very interesting' the boys were quiet, but that sometimes 'there is a good deal of noise'. (29)

In such circumstances physical science was obviously not taught efficiently. In that subject, as in modern languages, boys received little encouragement to study and could only obtain instruction if prepared to pay extra and give up part of their playtime.

To summarise then, prior to 1851 Eton had been an exclusively classical school. After 1851 it was an exclusively classical and mathematical school. History and geography were taught, but by the classics masters as part of classics lessons, and not very systematically at that. Modern languages were optional extra subjects for which a boy had to pay and give up some

of his playtime. Natural science, entirely through Hawtrey's efforts, had gained a tenuous toe-hold at Eton, but was hardly encouraged. The great majority of boys left the school with only a rudimentary knowledge of history and geography and without having learnt a modern language or the elements of the natural sciences.

One of the most interesting points to emerge from the evidence and one of which the Commissioners made much, was the inferior status of mathematical masters at Eton. This was a most important part of their enquiry. Mathematics was the first new subject to be included in the Etonian curriculum for many years. Although in 1862 it had been part of the school business for 11 years it was still regarded by Hawtrey as being in a transition period 'a period which can hardly yet be said to have settled down into a 'normal state!'. (30) Certainly, although all those interviewed agreed that the status of mathematical masters over the period had improved considerably, it was also generally agreed that even in 1862 the mathematical masters fell well behind the classical in terms of income, status and privileges. Thus, the reception of mathematics and its gradual transformation - not then completed - into a respectable area of study, highlight many of the difficulties any new subject in the public school curriculum would have to surmount.

William Johnson, assistant classical master for 17 years, referred to the situation in the late '40s when the mathematical masters were 'mere lodgers in the town; they had no jurisdiction in the school... The mathematical master was merely a sort of contractor to teach mathematics... He had very little to do with the school, and was in point of fact not considered to belong to it. (31)

In 1851 Hawtrey, as we saw, was made Mathematical Assistant Master, on the same level as the classical assistants. His own assistants, however, did not share his elevation; they remained 'Assistants in the mathematical school' and occupied this position in 1862. In 1851 they had no share, as every Assistant classical master had, in the right and duty of maintaining discipline out of school; they could not be tutors; they were not allowed to wear academic dress, and could not send in complaints to the Head Master unless previously signed by Mr. Hawtrey. In 1862 many of the distinctions still persisted though some petty but annoying external marks of difference had been swept away. The mathematical masters were, for example, allowed to wear gowns, a concession which Dr. Hawtrey when Head Master, could not obtain for them from Provost Hodgson. However, they still had no authority out of school and were therefore not felt to be real Masters by the boys. They did not meet the Head Master at chambers and were not, as were the classical assistants, summoned by him to rare but occasional conferences. They had to wait much longer for boarding houses, were excluded from all but the inferior ones and were only permitted to charge at the same rate as the 'dames'. In addition, their income was slender and as it derived chiefly from private pupils, was liable to fluctuate. (32)

That the contrast between the two groups of masters was keenly felt by the Mathematical Assistants was clear from the evidence of Rev. Edward Hale, assistant mathematical master since 1850. He gave a graphic account of the position of a mathematical master at Eton and of the frustrations and humiliations involved. He agreed with Lord Clarendon that mathematical masters were not treated as gentlemen in the same position as the assistant classical masters and that the social distinctions in the school were of great importance. He also agreed that the treatment of

mathematical masters was prejudicial to the study of mathematics and said that it probably took him the first three years after mathematics was made part of the schoolwork to place himself in a proper position with the boys, i. e. to inspire respect for himself and his discipline. The mathematical masters had a great many meetings among themselves and after making representations to Dr. Goodford, certain modifications had been made. Further changes had taken place within the last two years, for example, the mathematical masters had gained permission to wear their gowns in chapel. Despite this, Hale never went to chapel, declaring 'I have always made it a point not to go there until I could go there with the same status as the other masters that is, with respect to having a desk and authority in the chapel. I have always gone to the Eton town church. (33)

Yet another keenly felt grievance had to do with religious instruction. Hale explained in some detail. 'There are certain questions given to the boys which are called Sunday questions at Eton. They are given to be done on the Sunday, and besides each boy is supposed to go to his tutor for an hour for private reading, probably in the Greek Testament, or in any book which the tutor may think proper; and besides this the tutor can enter into friendly conversation with him upon religious subjects. That is entirely done by the classical tutors, who also prepare the boys for confirmation, so that we, who are clergymen and have had perhaps parochial work, are debarred from giving a recognised teaching of that kind, notwithstanding that the boys are in our own houses.'

Clarendon drew him out further on this point 'So that because a young man not in orders, is a classical assistant master, he is assumed to have more authority, and to be more fit to give religious instruction to the boys than a mathematical assistant master, who is a clergyman in orders'. Hale agreed that this was the case. (34)

Grievances also emerged from Hawtrey's evidence, though he was much less outspoken than Hale. It is not difficult to suggest a reason for this. During his evidence he mentioned that the lease of his school was up for renewal. He had applied for such renewal four years previously and in 1861 was still awaiting a reply. To some extent this may account for an occasional reticence or even evasiveness on his part when answering some of the more probing questions put to him about, for example, the status of mathematical masters. As he said himself, he was at the mercy of the Provost and Fellows, his stake in the school was considerable and could be easily forfeited. No wonder that he seemed extremely reluctant to be drawn into making criticisms of the authorities at Eton.

For example, when questioned about capping (a very sore point with his colleagues) he first of all said that the boys made no difference in tokens of respect paid to mathematical and to classical masters. When questioned further, he answered 'capping is a matter which I do not much notice or think about, and therefore my testimony on the subject is not worth much. (35)

Hawtrey's reluctance to draw attention to Eton's deficiences may, however, have been due to another cause. It becomes clear from his evidence that he viewed Eton as an almost perfect institution. This is particularly apparent in his written evidence where he extols the college and its products and says virtually nothing about its problems and those of his mathematical assistants.

The mathematical masters laboured under other disadvantages, some of which, as we have seen, were pointed out by classical masters. Johnson, for example, was outspoken in both his written and oral evidence:

'... they cannot occupy a good house' he declared 'they have not the same income as the assistant classical masters; that is to say, their income cannot possibly rise to the level of the assistant classical master's income. They can hardly get a house at all, consequently they have to live for years in lodgings.' He added that although their position had improved 'they have nothing to marry on and keep an establishment, unless they can manage to get boarding-houses' and this was less likely than in the case of a classical master. (36) In 1862 the three senior mathematical assistants had boarding houses, the four junior had not. Hale had waited seven years for a house. A classical assistant waited, on average, two years. (37)

Even the Provost, Dr. Goodford, was forced to admit, after some initial evasiveness, that the position of the mathematical masters within the school left a lot to be desired and that their income was 'barely sufficient'. (38) In the Report, however, the Commissioners were able to record that the Provost considered the contrast between mathematical and classical masters to be 'disadvantageous' and added 'we believe that under his Head Mastership it was considerably diminished'. This was followed by the caustic remark that they 'were unable to discover that Mr. Balston's influence was likely to be exerted in the same direction'. (39)

In their Report, the Commissioners concluded that: 'The Mathematical Teachers at Eton appear to be able and assiduous,... but they feel that their own branch of study is depreciated and injured by the position assigned to it and to themselves in the school. The boys are encouraged..., to consider it of secondary importance, by seeing that it is so regarded by the authorities. The authority which the Mathematical Assistant has in school suffers from his having none out of school; his arrangements with his pupils must be made subservient to those of the Classical Tutor, and

the interruptions which arise from this cause are detrimental to steady progress'. (40)

A brief mention must be made of the teachers of mathematics in the lower school. Throughout the Enquiry they are hardly referred and it is Rev. Dupuis, one of the classical assistants, to whom we owe an outline of their position. 'The men who instruct the lower school in arithmetic' he commented 'are in so anomalous a position that their names do not even appear in the school list among those of the other masters; and they totally fail (and from their position in life must fail) to obtain the respect and attention from the boys which are necessary to satisfactory progress. '(41)

Another disadvantage under which mathematics laboured was noted by the Commissioners who recorded that: 'a boy's advance in the Mathematical school is regulated on the whole, though not exactly regulated, by his advance in the Classical school and... a good mathematician may be kept, during most of his time at school, in Mathematical classes much inferior to him, unless he happens also to be a good classic'.

In view of the low status of mathematics at Eton and of those who taught it one would expect that modern languages and the natural sciences suffered in this respect even more. Such expectations are amply borne out.

The Provost was questioned as to whether the French master had an assistant. It transpired that he did not know - and this was, to say the least surprising when, as Lord Devon said 'We have heard that nothing can take place in the school, not even a fresh book, without its coming to the Provost's knowledge and requiring his sanction. (42) A possible explanation for Dr. Goodford's ignorance was that he did not consider the matter to be

worthy of his attention.

On the question of modern language teaching it is, however, once again Balston who emerges as the hardliner. An interchange between Clarendon and Balston illustrates this. 'You would not consider it necessary to devote any part of the school time to its acquisition?' enquired Clarendon, referring to French. 'No, not a day', replied Balston. 'You do not intend to do so?' pursued Clarendon. 'No' was the uncompromising reply. (43)

Clearly then, Balston considered modern languages to be of no importance as compared with the classics, as evidenced by his retrograde ruling that languages should no longer count in fifth form trials. This attitude no doubt helps to explain some of the complaints Mr. Tarver voiced to the Commissioners. It appeared that if a boy neglected his work or failed to attend, Mr. Tarver's only remedy was to complain either to the Head Master or to the tutor. After hearing Balston's views it is hardly surprising that Tarver found that 'reports to him are unavailing' and that 'he does not appear to like to interfere'. (44)

Tarver's complaints are given weight by Brinsley-Richards' comment that 'During the summer half Mr. Henry Tarver's class-rooms were not assiduously frequented; but this popular gentleman being ill-supported by the authorities in his attempt to enforce regular attendance at his classes had to let his pupils take as many or as few lessons as they pleased'. In the circumstances it is not to be wondered at that 'Most of the extra masters went on the plan of not worrying their pupils'. According to Brinsley-Richards, the only extra master who attempted to be strict in requiring punctual attendance and hard work was Herr Schonestadt, the German master. The result of his conscientiousness was that 'extremely

little desire existed among the fellows to learn German'. (45)

Many of the assistant masters made clear their dissatisfaction with modern language teaching. The Commissioners commented: 'Of the Assistant Masters, the majority feel that the want of effective French teaching is a great defect, and that, if there are difficulties in the way of introducing it, they are difficulties which may be, and ought to be removed.' (46)

Mr. Tarver, however, seems to suggest that he received little support from the assistant classical masters. He complained that if he appealed to the tutors they either took no notice or contented themselves with pinning up his report on the pupil-room wall - apparently a most ineffective measure. (47) Certainly from the evidence the attitude of many of them to the teaching of modern languages emerges as rather ambivalent, though four or five of them did, as we saw, teach their pupils French.

In the highly unsatisfactory circumstances in which French was taught it is hardly surprising that Tarver confessed 'Boys do not stay with me very long; very often not more than a year'. (48) The Commissioners clearly had great sympathy for his difficulties and concluded 'That the boys should consider the study as of little importance in the eyes of the Head Master, and attention to it hardly a duty at all, - that they should be unscrupulous in shirking their lessons and regard anything as a sufficient excuse for missing them, are natural consequences of such a state of things as Mr. Tarver describes; and he reasonably considers the general scale of proficiency in French at Eton and the mode in which French can be taught there "very unsatisfactory indeed". (49)

The German and Italian masters were not interviewed but Signor Volpe,

the Italian master, sent an - in part passionate - letter to the Commissioners in which he complains of the lack of encouragement given to the study of Italian at Eton and also of his poor remuneration. A rather poignant passage serves to highlight his low-status position. 'The undersigned further takes the liberty' he wrote 'of soliciting a room in the College for lessons and himself, which concession might lead a greater number of the scholars to become his pupils, besides that a place of shelter is necessary to him when he comes from London, especially in bad weather and cold season.' (50)

To turn once again to natural science, we have seen that at Eton this came under the heading of entertainment. Modern languages were at least recognised by some members of the Eton community as being part of a gentleman's education, but physical science with very few exceptions, was regarded asquite beyond the pale.

There were, however, opportunities for boys to pursue subjects outside the formal curriculum, possibly even science, and these should not be overlooked. We have seen that in private business tutors could choose any subject they wished and some used the time to read French and modern history with their pupils. In addition boys were given a considerable amount of freedom at Eton and many used this time to pursue hobbies, some of which came under the heading of the natural sciences, for example, botany. (The Commissioners referred to less desirable pursuits - for example drinking in the local tavern.) Many masters mentioned Eton's library, with its fossils and manuscripts, while Hawtrey drew attention to his 'valuable oxy-hydrogen lantern, and sets of thebest astronomical slides to teach the boys the facts of astonomy' and 'some mechanical apparatus for teaching the principles of natural philosophy'. (51) Yet another avenue was offered by the debating society, for which boys did a

considerable amount of reading. Viscount Boringdon, however, informed the Commissioners that subjects debated were generally historical or concerned with the politics of the day.

The fact remains that all such activities were very much extra-curricula and depended entirely on the temperament of the boy involved. One-additional point here is that the accepted attitudes in the school, especially in an environment which had at least some of the characteristics of a total institution, may well have discouraged all but the most strong-minded of boys from pursuing certain activities even as hobbies. Brinsley Richards' reference to a boy called Croppie seems to suggest this. 'He could speak French, he knew all about the state of parties in Parliament; he read history for his own amusement, had a turn for archaeology... At any place except a public school he would have been accounted a boy of great promise; but at Eton he passed for a dunce because he had no liking for the classics.' (52)

With one exception the Commissioners found that no deviation from the regular work of the school was permitted. The exception was an Army Class, established in 1856 and not outstandingly successful. Boys whose parents desired it were allowed with their tutor's consent, to attend a separate class for instruction in history and geography twice a week (taken by a classical assistant) and to substitute three additional mathematical lessons during the week for three classical lessons. This plan was at first intended to apply only to the Fifth Form but lower boys were afterwards allowed to join the class. In practice it proved unsatisfactory. Boys who attended, most of them very young, were, we are told, generally among the idlest in the school, and lost what interest they had previously taken in their regular work. James evidently felt strongly about the matter:

'when the army class came up to me it was composed of the very idlest and most worthless boys that could be picked out and they had joined it for the purpose of shirking the work'. (53) A remonstrance was presented to the Head Master by about two thirds of the Assistants, which led to a regulation that no boy should join who was not in the Fifth and above 16, or who did not intend to remain at Eton until he went up for his examination; and that no boy attending it should be excused any of the regular school exercises nor attend the mathematical school at times when his division was doing classical lessons. This change appears to have effectually cured the evil complained of but the class after that time was very small, numbering three boys at most, sometimes none.

Perhaps the last word on Eton at this time should go to James, who with his many years experience of the school was well able to assess the final product of an Etonian education. Referring to a boy leaving Eton he commented: '...Iconsider that we send him out lamentably ignorant in many branches of knowledge, which if he does not speedily acquire for himself he can scarcely be said to be an educated gentleman, He knows nothing of history or chronology, whatever he has done in that subject having been got up as a matter of 'cram' and speedily forgotten. He has long forgotten all his geography, of which he went through a one year's course in the remove; he knows no French unless he has paid extra to be taught, and his mathematics are as a general rule very weak. (54)

The Commission's investigation into Winchester, unlike that at Eton, was

dominated by one 'shrewd, wary, outwardly benign and courteous' personality - the Head Master, George Moberly. Although admitting in his diary to the 'nervous dread' he felt when appearing before the Commissioners, his performance was assured and self-confident. He was 'fully armoured with arguments' and obviously sceptical of the value of the Commission's interference in the affairs of Winchester. (55)

Winchester, like Eton, was still in 1862 primarily a classical school, though more time was given in the curriculum to mathematics and in addition modern languages had gained some ground.

Both mathematics and arithmetic were taught in every division and the amount of time allotted to them, especially in the upper part of the school, was 'unusually great'. (56) In fact, 7 or 8 hours a week were given over to mathematics in the first three divisions and 3 or 4 hours in the rest of the school, the courses being compulsory. Marks given for mathematics were allowed to count for about one-fourth of the weekly total. There were two masters in mathematics and arithmetic.

In addition to classics and mathematics, modern languages also formed part of the regular curriculum. Every boy, during his whole time in the school, learned one modern language, either French or German, as the parents wished. In 1862 the number of boys learning German was about 40, chiefly older boys. During the 10 years up to 1862 there had been only one French master - possibly because of the diminished numbers of the school. In 1862 a second French master was appointed. Both were Frenchmen. Two lessons of threequarters of an hour each were given and M. Angoville, one of the masters, believed that each lesson would take an hour to prepare. He divided his pupils into classes of 22 to 24 boys.

As at Eton, the Commissioners found that neither history nor geography was systematically taught. Mr. Vaughan put the question to Moberly:
'It is not the habit I think, at Winchester, to teach modern or ancient history by set lessons'. 'No' replied Moberly 'I should not know how to do it. All I can do is to say, "We will examine in such a period at such an examination'". The boys were then expected to learn portions of history and were examined in them. 'I wish we could teach more history' added Moberly later, 'It is a subject which has become more the fashion of late'. (57) The historical Essay Prize of £5 a year stimulated many boys to read history. In addition, Moberly pointed out that he took every opportunity when he had a class before him 'of getting in all sorts of things that occur to me. For instance, if it is a question of a place mentioned in the lesson, I ask all that relates to it. (58)

Thus, neither ancient nor modern history, nor geography, were taught in set lessons at Winchester. Ancient history did not enter as a separate subject into any of the school examinations, though questions on English history were set in the general half-yearly examinations which had been recently introduced. Moberly himself had on occasion given short lectures on English history.

In his written evidence, Moberly made a reference to history and geography which showed clearly their role - as far as he was concerned - in the Winchester curriculum. '... into the system of weekly marking enter all the casual subjects, as of geography, history, etc., which are brought in as collateral to the classical lessons and illustrative of them'. (59)

The Commissioners devoted a considerable amount of time to finding out the exact position on the teaching of natural science at the school. The reason for their interest could be traced back to the activities of the Oxford University Commissioners some years before. In their original scheme for Winchester College, the Commissioners had proposed that three of the Fellowships should be filled by men eminent in one or more of the Natural Sciences and that they should give lectures to the boys. The Warden and Fellows of Winchester had taken only four days to reject this scheme, suggesting instead that they should 'engage from time to time the best lecturers of the day in the various branches of science, who should come to Winchester and give our scholars successive courses of lectures. '(60) This proposal had been accepted and the Ordinance finally framed by the Oxford Commissioners and accepted by the College, directed that 'in addition to the branches of instruction specifically mentioned in the Statutes, the Scholars and Exhibitionersshall be instructed in the mathematical and physical sciences, and such other branches of instruction as are proper to complete a liberal and religious education. '(61)

Six years later the Clarendon Commissioners set out to determine how far the Ordinance had been acted upon. Mr. Vaughan, former Professor of Modern History at Oxford and according to Dilke 'the most intelligent and unrelenting of the interrogators' (62) was responsible for much of the probing that was necessary before the Commissioners could reach a conclusion. They decided that 'less could hardly have been done consistently with the narrowest and most literal construction' of the Warden's proposal. (63) It transpired from the evidence that each year between Easter and the midsummer holiday there was a course of ten or twelve lectures given on some branch of natural science. Over five years the subjects had been chemistry, geology, electricity, heat and the constituents and properties of water and atmospheric air. There had been no examinations, no prizes or rewards for attention to or proficiency in the subject.

All the scholars were required to attend but attendance was not strictly enforced. Commoners attended the lectures only if their parents desired it and were willing to pay 10s. per quarter. Not a very large number of them did in fact attend.

This, then, was the extent of natural science teaching at Winchester in 1862. Moberly made it clear that the subject would receive little encouragement from him: 'for a school like this', he told the Commissioners 'I consider instruction in physical science, in the way in which we can give it, is worthless'. (64)

Thus, Winchester was, in 1862, primarily a classical school. As the Warden, Rev. Lee, pointed out 'This college... was founded principally for the priesthood, and so long as it is thought essential that the clergy should be a learned clergy, i. e. that they should have what is commonly called a classical education, I do not see how it is possible for us... to lose sight of that classical element as the chief element in education'. (65)

The curriculum had, however, advanced a little further than at Eton as we have seen. Modern languages were part of the regular course of study and mathematics were taught throughout the school. The Commissioners spent only a little time on the teaching of mathematics, seeming to consider it satisfactory. There is, regretfully, little reference to the status of mathematics or mathematical masters at Winchester.

Some evidence exists, however, to suggest that the teaching of the subject was less than satisfactory. Leach, for example, comments that mathematics 'were not conducted with the same seriousness as classics' and gives accounts of disorder in the classes. (66)

The Commissioners spent some time investigating the teaching of modern languages. Mr. Angoville, the French master, was examined though not at length. He was of the opinion that the study of French had advanced at Winchester in the ten years preceding the Commission's investigation and said that he had no difficulty in preserving order in his classes. (67) Leach, however, casts doubt on this claim by commenting that 'During French a general habit of fooling was traditional', and describing the 'not unknown practice' of fishing for Mr. Angoville's wig through the schoolroom window. The lessons were regarded as a 'pleasing interlude'. (68)

From Moberly's evidence it appeared that the French master did at least receive the headmaster's support. 'If the French master sends me a note and complains of a boy I treat it as a serious matter,' he informed the Commissioners, 'because I know if I did not, it would be a much more serious matter. The French master must be supported by me.' The French masters were not, however, on the same footing as the classics masters. They did not have the same power of discipline. As Moberly said 'they cannot do anything themselves, all they can do is to appeal to me. (69)

His support was, therefore, vital. Out of school the master had nothing to do with the boys. Moberly referred to 'the comparative inefficiency of the French classes' and believed that the German class went on much better 'because the German pupils are volunteers'. (70)

Mr. Fearon, an ex-pupil, who learnt French for three and a half years at the school when asked by Lord Clarendon 'Did you know any French when you went to Winchester' replied 'Yes; I do not think I knew so much when I came away'. He added 'I do not think the boys cared very much about it.

Very large classes used to go in at the same time to the French master and they were rather unmanageable.' (71)

History and geography, as we have seen, were not taught systematically. Neither were they entirely ignored. Fearon mentioned the Goddard scholarship in which 'there was always a portion of English history set, 100 years or so, and that was one of four papers that were set so that boys got up that period very carefully. A boy who was in the sixth form for three or four years probably had to get up for examination as many as 300 or 400 years of English history, but it was all private reading.' When asked about geography he said that 'through the lower parts of the school there was a map traced every Saturday which boys used to take a great deal of pains with.' He added that 'Dr. Moberly used certainly very often to talk a good deal about geography'. (72)

At Eton, a boy rose in the school chiefly by seniority. At Winchester his rate of progress was determined by his success in an incessant competition, in which every lesson and every exercise counted for a certain numerical value. At the end of every week and every month the marks gained for all the lessons were added up and this record of a boy's progress was called the 'classicus paper'. Marks given in the mathematical and modern language classes were limited to a maximum which was supposed to represent roughly the relative value of each of those studies as compared with the classics. 'It is difficult to state the exact proportion which these marks bear to those which are given on account of classical lessons and composition' wrote Moberly. 'Perhaps I might say, as an approximate estimate, that the mathematical marks amount to about a fourth, and the modern language marks to about an eighth of the weekly total'. (73) Thus, a boy's progress depended mainly upon his classical attainments. The subordination of the other subjects to the classics is further shown by another comment of Moberly: 'The classical arrangement of the boys in classes being the leading one the boys go to the mathematical and modern

language schools according to it. The masters in these schools can make a certain quantity of subordinate classification, subject to this general arrangement. (74)

As to the question of alternatives within the system of education at Winchester, Moberly stated: 'Our system of education is uniform and single; we have no separate departments. In special cases we should not disallow of a boy's paying particular attention to a particular subject, with such assistance as our own staff or the city of Winchester might furnish; and in very special cases we might commute some part of the classical work for mathematical or other work duly testified; but our school is not large enough to break up into subordinate schools.' (75) Such a commutation had been made in the case of one or two boys.

In answer to one of the Commission's written questions Moberly wrote that 'We have a good library in the college for the prefects to which the commoner prefects also have access. There is a smaller one belonging to the commoner prefects only'. Winchester had no natural history collection nor any apparatus for experiments in natural philosophy. (76) Unlike Eton there was no debating society.

At Westminster the teaching staff consisted only of the Head Master, under master, four classical assistants, two mathematical and one French. Numbers at the school had fluctuated considerably and were in 1862 unhealthily low. The reasons for this state of affairs occupied much of the Commission's time, and evidence dealing with status of subjects, views about natural science teaching, etc. is unfortunately fairly limited.

Originally the curriculum had consisted of Latin, Greek and Hebrew. In 1862 Hebrew was no longer taught and according to Rev. Scott, the Head Master, mathematics had been introduced into the regular curriculum, together with French, history and geography. Evidence from Mr. Phillimore, an old Westminster, indicated that mathematics teaching began in about 1828 although there was no mathematical master on the staff until 1846. (77)

A Mr. Thompson, at Westminster from 1851 to 1858 informed the Commissioners that in his time 'all the lower forms used to go two afternoons in the week to the arithmetical master... The upper forms used to go for about three or four hours a week to the mathematical master, who was usually a Cambridge graduate and used to do algebra and Euclid with him. (78)

French formed a part of the regular schoolwork, without any extra fee being charged. No other modern language was taught. According to Rev. Weare, Second master at Westminster for 20 years, there was no demand for German but French had been part of the ordinary schoolwork for some years. (79) Scott informed the Commissioners that 'Before 1826 French was never heard of in the school'. (80) In 1826 a French master was taken on as an extra master, French being offered to the boys as an extra subject. He was placed on the staff in 1846. In 1862 the French master, M. Dupont, came Il hours a week to Westminster. He had seven classes, of whom four came for two hours a week and three for one hour. The young boys who were learning French grammar for the first time were taught by one of the assistant masters. In addition to teaching in school there was also time for preparation in French, the exercises being done out of the school.

History and geography were taught but - as at Eton and Winchester - not systematically and teaching was by the classics masters. Thompson said he acquired his knowledge of history and geography from private reading at school and during the holidays - he did not feel indebted to Westminster for it. (81)

Removes were given mainly according to proficiency, estimated partly by the weekly marks for lessons and exercises and partly by examination. In estimating the relative value of different subjects, Scott believed that classics reckoned as fully two thirds of the whole, the remaining third being Greek Testament and scriptural subjects, history, geography and English. Interestingly, only in cases of marked proficiency was mathematics admitted as giving a claim to promotion.

Scott informed the Commissioners that changes were being introduced in relation to the position of mathematics. '... the marks for mathematics have not hitherto told directly upon the removes; this, however, will be altered in future. (82) This point was taken up by Lord Lyttelton: 'You said mathematics did not tell in the progress of the school'. 'Some change in that respect is going to be made' replied Scott, 'We have arranged to have a little examination, which we are going to throw into the form work; it would not make any material difference in the position of the boys, but it is much more easy to get the work done when they have an idea it would be tangibly paid for'. (83) One of the reasons for this minor deception was possibly Scott's comment that 'the management of a form is, in some ways, more difficult for the mathematical masters'.

Thus, promotion at Westminster depended very largely upon the classics.

In addition, Scott pointed out that the mathematical divisions of the school

were 'generally coincident with the classical, chiefly from the great practical difficulties of arrangement under any other system.' He continued 'If, however, a boy is so far advanced beyond his classmates as to make this a real injustice to him, his case is treated as an exception.' (84) He pointed out that the members of a mathematical class were not all necessarily working at the same subject, though they were with the master at the same time. He explained that 'one boy might be at trigonometry, another might be at conic sections, another at something else; all of them might, however, be referring to the master when they met with difficulties. So likewise in Euclid, a boy might be studying one theorem or problem, another boy another.' (85)

Mathematics did enter into the final examination for studentships and exhibitions, the subject's value being one-fourth of the whole. The importance of mathematics was also recognised in that every boy was examined on admission to the school in arithmetic, besides the elements of Latin and Greek.

Scott, in response to a question about the status of the mathematical master said that he was on the same footing as the assistant classical masters. He lived in lodgings close by and did 'a little other work'. (86) The arithmetical master, who took the lower part of the school was not regularly on the staff but only gave certain hours of his time - twelve in all. The two boarding houses at Westminster were kept by classical masters.

Though both the French and mathematical masters were placed on the staff in 1846, their status in 1862 was quite different. In Scott's evidence it was made clear that though the mathematical master was on the same footing

as the other assistant masters, the French master was not.'...he has authority in reference to some matters strictly within his own duties' explained Scott 'but he is not practically in the same position as the other masters, and takes no part in the management and discipline of the school'. (87)

Predictably, French teaching was not too successful at Westminster. Scott, for example, admitted that French instruction had been 'a failure'. He had frequently mentioned to the boys the value of French and believed that other masters did the same. However, the boys looked upon French with 'some dislike' as a subject which had been forced upon them and was not popular like Greek, Latin and mathematics. (88)

Clarendon asked Scott if the result of the annual examinations in French had been satisfactory. 'Have the boys shown as much proficiency as you could have reasonably expected?' Scott answered that they had not and said that the principal difficulty with the French class had been that the results of the examinations did not affect the elections. He had recently obtained permission from the electors to submit the results of the French examination to them and they had agreed to exercise their own discretion as to the amount of weight they would give to those results. (89) Prior to this French had not counted in promotion and had never entered into the final examination for studentships, exhibitions, etc.

Although mathematics did not count in promotion, except in extremely rare instances, the masters awarded a prize to the boy in the head place.

Clarendon asked if they had done anything similar for the French examination and was told they had not, though Scott gave prizes of books. (90)

To facilitate the teaching of French, the two highest forms in the school were put together and divided anew to form the French classes. The same was done with the lowest forms while the intermediate French classes were coincident with the forms. Scott did modify this system when necessary, that is to say where there was a 'manifest injustice in keeping one boy to a particular class'. (91)

Scott indicated that because of Westminster's narrow limits of space and small numbers it wasvery difficult to deal with exceptional cases of special bias or endowment. In the case of boys intended for the army or navy they were sometimes allowed to study Euclid or algebra instead of Greek. This was generally done in response to an application from a boy's parents and affected only about half a dozen boys - though Scott anticipated an increase as another master had been added to the staff. (92) Weare also mentioned special cases 'where a boy may be destined for engineering pursuits and who may be about to leave in a short time; in such cases permission is given that he should not study French and Greek, that all his time may be devoted to the study of mathematics. (93)

In a comment reminiscent of James at Eton, Scott declared that 'candidates for the army are usually amongst the most idle boys at a public school, and the spirit of indolence is confirmed by the persuasion common among them that a few months' work with a crammer is not only requisite, but sufficient to make up for all lost time'. (94)

Natural science was entirely ignored at Westminster. Thompson, when asked if there were any lectures or lessons in the subject answered 'When I first got into the sixth form we used to do some physical geography, but I think nothing more.' (95) According to Scott there were no appliances for

the study of natural science in the school. (96)

The school had several libraries, one of which covered almost all classes of literature.

Thus, Westminster was undeniably a classical school. Mathematics was taught, but occupied an inferior position in the curriculum while French suffered even greater disadvantages. Natural science had no place in the school.

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Chapter Four

Charterhouse, which warranted only twelve pages in the Commissioners' Report, had, in 1862 only about 125 pupils made up of 44 foundationers, 45 boarders and 30-35 day boys. (1) Numbers had fluctuated considerably and although the total number in the school had been limited to 200 by an order of the Governors, great difficulty had been experienced in achieving even this modest number. Charterhouse's situation was held to be at least partly responsible for this state of affairs. Rev. Elwyn, the Schoolmaster, spoke of the 'very strong feeling against London schools'. (2) The Commissioners noted that the school shared the disadvantages of other London schools, subject only to qualification upon two points 'that its playground is of considerable size and close to the School, and that the whole of the premises are surrounded by a wall and accessible only through one gate so that it is easy to prevent injurious intercourse with the streets outside'. (3) The question of the school's removal to the country was referred to in many parts of the Enquiry and the Commissioners came out in favour of this, concluding that the school 'would thrive much better if removed to some eligible site in the country'. (4) Some years later the premises were sold to Merchant Taylors and a new site of 70 acres was selected at Godalming.

At the time of the Enquiry the gratuitous education given to scholars consisted of classics, arithmetic and mathematics, French, German, (in the sixth form), history, geography and divinity. (5) In order to be appointed scholars boys had first to pass an examination in classics and arithmetic. The boarders and day boys studied classics, mathematics, writing, geography, history and divinity. Extra charges of two guineas per annum were made for French and for chemistry, which were voluntary. An extra charge of two guineas was also made for German which was voluntary except for boys in the sixth form.

According to Elwyn, there were six resident masters - the Schoolmaster i. e. headmaster (Elwyn himself), the usher i. e. second master, a mathematical master and an assistant master. The scholars had a French master and an arithmetic master. The resident mathematical master had been appointed in 1859 by the Governors at the request of the Schoolmaster. Up to that time a master had attended twice a week for the purpose of taking the highest class in mathematics.

In addition, instruction in French was given by two masters who attended twice a week for two hours on each occasion. There was also a German master who instructed the sixth form once a week for two hours. The chemical lecturer - who was also the writing and arithmetic master in school hours - had classes twice a week.

Thus, the curriculum at Charterhouse was relatively broad when compared with some of the other schools. Lyttelton commented that French and modern languages and mathematics was taught 'rather more in proportion at Charterhouse than at the other schools'. (6) The classics were, of course, still dominant, and rightly so in the opinion of Hale, Master of Charterhouse, who wrote that 'any change in the system and course of education which would diminish the amount of information in classical literature and cause the study of it to be less appreciated, would... be a public injury'. (7) However, in spite of the supremacy of the classics, every boy learned mathematics for five hours a week, excluding preparation. Each lesson was supposed to require about one hour of preparation. French was also required of all the scholars who did not learn German and was provided gratuitously by the Governors. Four hours a week were allotted to the subject. German was also provided at no cost for those foundation scholars who did not learn French.

The study of French was not absolutely required for non-foundationers, a state of affairs which prompted Clarendon to comment 'It appears to me that there is little or no stimulus or encouragement to learn French at Charter House. It not being absolutely required it is practically not learnt I should think.' Elwyn disagreed, pointing out that in practice very few boys did not learn French and only then from some special reason or by the express desire of their parents. (8) German was required of all boys in the sixth form. This had been introduced by Elwyn three years previously, believing that it would be a good thing that the sixth should study it.

Chemistry was optional but a 'considerable number of boys' received instruction in it - between 40 and 50 according to Elwyn. (9) It was taught by Mr. Stewart, who lectured at several schools, including the City of London School. He delivered lectures and conducted experiments at Charterhouse and seems to have had some success. 'The subject is decidedly popular, especially among the lower boys' commented Elwyn. (10) It was so entirely voluntary that he did not 'exercise any close superintendence over it. ' He also mentioned that though the subject was a great benefit in the winter time, it tended to flag during summer. This was hardly surprising as the time for it was taken out of playtime. At the beginning of each lecture boys were asked about the matter of the last lecture. Stewart examined the boys from time to time and gave prizes at the annual examination. In his evidence, Mr. Stewart mentioned that he had been instrumental in getting the subject taught when he first went to Charterhouse: 'I tried to introduce it there, and Mr. Elwyn... seemed quite agreeable to it, and, in fact, rather wished it, and the boys took the matter up, and it has kept on very successfully ever since. '

He made it clear, however, that he was reluctant to try to gain further

concessions. In answer to a question as to whether he had suggested the setting up of a laboratory at Charterhouse, he replied 'I am not exactly in the position to propose a thing of that sort. I thought it was rather an achievement to get experimental science taught at all, and therefore I have not tried to push it too fast for fear of upsetting it altogether. (11)

In the classical divisions the subjects taught included geography, history and divinity. Elwyn pointed out that: 'There is always in the lower forms a lesson in modern geography every Monday afternoon and in their classical work questions are asked of the boys as to the position of the places which occur; maps are often set by way of exercise, sometimes of ancient and sometimes of modern geography.' (12) In the lower forms modern history and geography were given together one afternoon every week. In the upper forms questions were set once a week on some portion of history and historical subjects were regularly set for essays. In addition Elwyn said that modern history was always one of the subjects at the examination and that high marks were awarded for it. In the lower forms holiday tasks generally consisted of history and geography.

The school was arranged into separate classical, mathematical and French divisions. The classical divisions formed the principal divisions and when a boy was said to be in the fourth form, the term implied the fourth classical form. Promotion from one form to another took place once a year and depended upon the annual examination, when all boys were examined in classics, divinity and mathematics. Those boys who learnt French, German, drawing or chemistry were also examined in these subjects. In promotion in the classical forms no weight was attached to French, promotion in the French department being entirely distinct and independent. As regards mathematics, Mr. Elwyn had introduced the practice of adding

a boy's weekly mathematical marks to his classical marks so as to affect his place in the classical form, though his position in the mathematical classes was distinct from his classical position.

At the annual examination, prizes were awarded in all the classical, mathematical, French and German divisions. Lyttelton asked if prizes given for French were on a level with the classical prizes. 'In point of value they are' replied Elwyn. 'Some of them are more valuable. That is left to the discretion of the teacher'. (13) In chemistry and drawing prizes were given by the respective teachers of those subjects.

Elwyn doubted 'if the progress in French and German can be said to be as great generally as in classics and mathematics' and suggested that one of the main reasons for this was that the two latter subjects were those for which rewards were given at the Universities. He also wrote that 'In chemistry, drawing and singing, which are voluntary subjects,... the progress is quite satisfactory.' (14) It is interesting and possibly instructive that chemistry is placed alongside singing and drawing.

Elwyn informed the Commissioners that every assistant master, including the French and the arithmetic master, had complete authority over his own form and division and all had exactly the same powers of maintaining discipline and order. The two French masters who attended twice a week also had full authority in their classes.

The Schoolmaster and second master were the only persons having boarding houses - with the exception of the chaplain who had a few private boarders.

The Schoolmaster's house was capable of containing comfortably at least 30 boys; that of the second master 40 to 50.

Elwyn made it clear that when a boy reached the fourth or any higher form and was 'desirous of entering into any profession for which special examinations have to be passed or for which the usual course of education in the school may not be specially adapted' he was allowed to leave off the study of Greek and verse composition and devote the time to mathematics, history, geography, etc. (15) The difficulties attending such special preparation arose from the smallness of numbers at Charterhouse, (16) though Elwyn admitted that such deviation from the general course of study was happening 'not unfrequently' and was in fact 'increasing in frequency'. (17) Rev. Williams, mathematical master, said that about ten or twelve boys were excused some part of their classical work. These were usually boys destined either for the army or for public offices. They spent about 18 hours a week on mathematics, inclusive of preparation. (18)

Charterhouse had no natural history collection but it had a collection of mechanical models (the screw, inclined plane, etc.), and in addition the lecturer in chemistry had an 'electrical machine' and other instruments of his own which he used during his lectures - though as we saw, no laboratory. As far as libraries were concerned, there was 'an excellent library of modern literature and works of reference' (19) in the house of the foundation scholars and in each of the boarders' houses. In addition there was a school library, consisting of philological and classical works, from which books could be taken by leave of a master.

Thus, Charterhouse too was a predominantly classical school. However, a considerable part of its curriculum was devoted to mathematics and in addition boys were given the opportunity of studying both chemistry and modern languages - which in the case of the latter meant German as well

as the more usual French.

In 1862 Harrow had 481 boys under the headmastership of H. M. Butler. In common with many of the other schools Harrow had suffered from severe fluctuations in pupil numbers during the preceding twenty years. There were 22 staff: the headmaster, lower master, 14 assistant classical masters, four assistant mathematical masters and two assistant masters in modern languages.

The course of study consisted of classics, arithmetic and mathematics, French and German - the classics being, of course, dominant. Mathematics was first made compulsory in 1837 and at the time of the Enquiry every boy learned the subject during the whole of his time at the school. Boys above the fourth form had three hours a week and boys in the fourth two hours. Preparation usually occupied them from two to three hours a week more. In addition any boy whose parents so wished could have private tuition in mathematics and two of the masters generally had about 20 private pupils each.

Mr. Middlemist, one of the mathematical masters, informed the Commissioners that the study of mathematics had advanced a great deal during his 17 years at Harrow. He believed that the instruction given in school and private tuition would, in many cases and if continued a reasonable time, fit a boy for the university and the competitive examinations. (20) Mr. Watson, another of the mathematical assistants, believed that some boys had private tuition to assist them in school, but in most cases it was for other purposes, possibly because they wished to go to Cambridge and

do well in mathematics there, or because they wished to prepare for the army entrance examination. Many boys destined for Woolwich went to a crammer after leaving Harrow. Watson in his oral evidence added that 'There are many schools with which we cannot compete in mathematics; many schools profess to give as much mathematical as classical education to a boy and the boys from these schools of course go up to Cambridge or elsewhere very much better prepared than from Harrow'. (21)

Mr. Butler, the headmaster, believed that the study of modern languages had been compulsory at Harrow since 1851. (22) (This is slightly at variance with Mr. Ruault's 1855) (23) Every boy below the fifth learned French. In the fifth, if he had become proficient in the subject he was transferred to German, unless his parents specially requested that he should continue with French. The time given to modern languages in every form but the lowest was two lesson-hours a week; in the lowest, an hour and a half; and each lesson-hour was considered to require an hour's preparation. There were 21 French and five German divisions. A small number of boys (16 or 17 in 1862) had private tuition which gave them two additional hours a week.

As to the results of language teaching at Harrow, Mr. Ruault believed that 'the result is very satisfactory. French and German are taught grammatically, and the boys leaving in the upper forms attain a very fair knowledge of those languages, sufficient to enable them to acquire afterwards, in a short time, what cannot be taught in a public school; that is, the power of speaking them fluently'. (24) The amount of attainment was less if a boy came to school, as some did, quite ignorant of French. Butler agreed that the power to converse in French or German could not be either acquired or kept up at Harrow. 'But, I think,' he added 'what we can do is to make them fairly conversant with the grammar of those languages, and to read books

in them so that if they have afterwards anything like energy, and address themselves to those subjects, they will have got a very useful basis for further study'. The study of modern languages, like that of mathematics, had risen very much within his experience and 'unquestionably occupies a much higher place in the estimation of the boys' than when he was himself at school. (25) He believed that the prejudice which always attended a new study and the negative tradition which told against it, were gradually overcome by time.

Lord Clarendon was quick to take Butler up on the adequacy of the teaching of modern languages at Harrow. Did the headmaster believe that two hours a week for modern languages was adequate? Butler replied that the difficulty was how far could modern languages be introduced without endangering the classics. 'Do you consider' answered Clarendon 'there can be no middle term between a thorough training and two hours a week, which is no training at all?'

'I am most decidedly convinced that we cannot give more hours in the week to modern languages' replied Butler 'without damage to the intellectual tone of the place, so long as we retain in its fulness our system of classical instruction. I believe, and have a very firm conviction, that we have pushed as far as it is wise to do the principle of subtracting from the time originally given to classics.' Clarendon replied with the comment 'Then one can hardly say there is any proficiency made here in modern languages at all'. Not surprisingly Butler disagreed with this, insisting that there had been a very marked improvement in modern languages at Harrow. He did, however, concede that it was possible for a boy to come to Harrow with a fair knowledge of French and totally forget it during his time there. (26)

History and geography were taught to a limited extent at Harrow. In the upper sixth boys gave one hour a week in school to some portion of ancient or modern history which they had read during the week. This practice had been introduced by Butler. In the other forms there were separate lessons in ancient history and up to the upper fifth in geography which took two or three hours each week. In his evidence, G. F. Harris, assistant master since 1837 said that boys had no geography at all in the sixth form but that up to the sixth form boys had geography once a week, taught by classical masters. (27) For the 'holiday-tasks' it had been usual to divide English history into three periods, extending from Saxon times to Waterloo. An examination was conducted on paper on the first day after the boys returned to school, each Master examining the boys of his own form. Prize books of small value, paid for by the parents of the recipients, were given to those who did best and those who failed to satisfy the examiners were not allowed to have an exeat i. e. a short holiday, during the quarter.

No branch of physical science formed part of the regular course of study at Harrow. However, in each of the school quarters, there was a voluntary examination, open to the whole school, in some one branch of this study. The boys who took first and second places were awarded prizes of books given by the Head Master. 'We have a considerable number of masters who are interested in physical science' Butler informed the Commissioners, and they advised interested boys on reading matter. He went on, 'at the end of each School quarter a subject is announced for examination in the course of the next quarter; a certain number of pages out of some elementary treatise is fixed; and in that elementary treatise the boys are examined on paper'. (28) The subjects during Butler's headmastership had been geology, botany, chemistry and electricity. The number of boys entering had fluctuated. Butler had been told that initially it was as high as

90, of late it had been about 20. As to the time devoted to the subject, Mr. Ridley, one of the assistant masters, said 'I have known some boys get first in an examination after a couple of nights' hard reading. In a general way, about three or four weeks would be devoted to it, at about one hour or an hour and a half a day'. (29) At Harrow, then, natural science had a similar status to any other serious hobby. There was no laboratory in the school.

The majority of promotions at Harrow were given by merit and the relative weight assigned to mathematics and modern languages as compared with classics were in the proportion of four to one, in the case of mathematics, and nine to one in the case of modern languages.

Boys took an entrance examination in Greek and Latin. At one time mathematics had formed part of this but had then been excluded as it was not thought desirable to lower a boy's place in the school because his proficiency in mathematics at the time of entry was poor. Clarendon took this point up with Butler, who explained that as the main study at Harrow was classical languages it seemed reasonable to test a boy only in these subjects.

Clarendon pressed him further: 'By simply requiring Latin and Greek you directly discourage and show the little importance you attach to anything else?' - 'I cannot admit that inference' replied Butler. (30)

Some deviations from the regular course of study were allowed, though, as one might expect, Butler had reservations about how far this practice should be allowed to go. 'If a boy shows a special aptitude for mathematics, rather than for classical studies' he wrote 'he would probably be advised to read mathematics privately with one of the mathematical masters; and in some few instances, with the approval of the head master, a boy would be excused

the whole or part of his verse composition in order to devote more time to mathematics.' This exemption, giving boys about three hours a week, would generally, though not exclusively, be granted to boys preparing for the Woolwich examinations. He added: 'Such cases of exemption, however, are very rare and are by no means recommended. It is found in practice that boys lose far more than they gain by being treated exceptionally'. (31) Butler believed that between 20 and 30 boys were so exempted, the majority being in the sixth and two upper divisions of the fifth. Exemption was discouraged for boys below the fifth. Those intended for the Indian and Civil Service examinations often left six months early in order to prepare for them. Butler also made it clear that a boy intended for Woolwich would be recommended by the school authorities to leave Harrow about a year before the ordinary time. However, he afterwards wrote to the Commissioners (in February 1863) modifying his views as to the necessity of this. In July 1862 a boy who had spent only two quarters in the Upper Sixth had come fourth in the competitive examination for Woolwich, although he had gone direct from Harrow. He had for some time been taking extra lessons in mathematics and was excused one verse exercise a week. The Commissioners in turn commented: 'It is evident that the large proportion of boys intended for the army, who now quit the School in order to 'cram' at a private tutor's, might, with very moderate pains, finish their education at Harrow. (32)

One point worth noting is that the time given to mathematics and modern languages was subtracted from the time previously given to classics - not added to it as was the case with mathematics at Eton. Excluding preparation time, these subjects were given about five hours a week and in addition, as we saw, contributed to promotion. They were therefore presumably taken seriously by both staff and boys. Indeed, Mr. Westcott, a classical

assistant, said somewhat disapprovingly that 'A boy may rise most rapidly into the Upper Sixth Form without being at any time distinguished for scholarship, by the help of modern languages and mathematics'. (33)

Thus, although Butler admitted that 'undoubtedly if the school be taken as a whole, the progress of the boys in these two subjects falls short of their progress in Greek and Latin'. (34) it is clear that the mathematical and modern language masters at Harrow suffered from considerably fewer disadvantages than their fellows at Eton. Mr. Mariller, senior mathematical master, confirmed that out of school his position was exactly the same as other masters. (35) Mr. Ruault also confirmed that he had the same authority over boys both in and out of school as the classical masters. (36) The privilege of keeping boarding houses was shared by both classical and mathematical masters. The modern language masters kept small houses intended for the temporary reception of boys destined to enter one of the regular boarding houses as soon as a vacancy could be found. Boys entering the house of a classical assistant became the pupils of that master. In the case of boys boarding in the houses of the headmaster or mathematical masters it was usual for the master of the house to suggest the name of some tutor among the classical masters having smaller houses. There is no evidence that this distinction rankled with the mathematical masters. The Report concluded that the amount they received from boarding houses, private tuition, etc., seemed to be 'quite adequate for their suitable remuneration', (37)

For mathematical instruction the fifth form - four classical divisions and about 144 boys - was redistributed into eight mathematical divisions. The remove and upper shell - 72 boys - were taught in four mathematical divisions and each of the lower classical divisions was broken into two

mathematical divisions. In all groups below the sixth form classification of the boys in mathematical divisions was governed by their proficiency in mathematics. In the sixth (about 60 boys) this, according to Mr. Middlemist, one of the mathematical masters, was found impracticable and the mathematics masters were therefore obliged to take the boys 'according to numbers, not proficiency.' (38) In effect this meant they were merely parcelled out among three of the four mathematical masters in convenient numbers, without reference to their attainments, each master generally taking such boys as had been under him in the fifth form.

There was a special voluntary examination once a year for four mathematical matical prizes. Three of these were given by the senior mathematical master, the fourth, a gold medal, by a late governor of the school. Numbers of competitors ranged from 12 to 40 or 50. The medal was a high distinction and said to be as much prized as any other in the School. Two prizes were also given annually for proficiency in modern languages. Lyttelton asked whether the French prizes were much valued and whether there was much competition for them. '... much less than I could desire to see', answered Butler. (39) He went on to say that only about 20 to 30 candidates presented themselves for French and even fewer for the German examination. However, he added that interest in the subjects could not be estimated in this way as only the best boys who had a chance of gaining prizes actually entered.

Overall, ten prizes were awarded annually in the classics, three for knowledge of the Holy Scriptures, four for mathematics, two for natural science, two for modern languages and two for English literature. (40)

In the answers to printed questions Butler informed the Commissioners

that there was a library called the 'monitors' library to which the monitors i. e. the 15 upper boys in the school, alone had access. A new and 'very much larger library' was in course of building. In addition many of the boarding houses had libraries attached to them. Harrow had no collection of natural history, or apparatus for experiments in natural philosophy. (41) Several houses had small debating societies, and there was also a general debating society with approximately 30 members at which political subjects were apparently popular. Boys in the upper part of the school had plenty of time to give to general literature if they so desired.

One further - and in many ways illuminating - facet of life at Harrow remains to be referred to, namely the English Form, initiated by Butler's predecessor, Dr. Vaughan. According to Butler, it occurred to Vaughan that it might be possible to provide for the education of the sons of the farmers and tradesmen of Harrow, by an arrangement which would be in accordance with the original intention of John Lyon, without compelling such boys to pass through the classical course which their parents felt to be unsuited for them. Accordingly he established the English Form, whose boys had no communication either in school, or chapel, or in the playing grounds with the boys of the great school. Their parents paid to the headmaster an annual fee of five pounds and the education they received did not include Greek or Latin verses but was rather of a 'commercial' or'modern' character.

To turn now to Shrewsbury, we are again confronted with a school which had difficulty attracting pupils. This had been a problem for many years and the Commissioners spent some time trying both to account for it and to solve it. When Kennedy became headmaster in 1836 there were 228 boys

in the school - a number which he considered to be 'ample for the satisfactory constitution of a classical school'. (42) During the six years following his appointment numbers declined but since then had been comparatively stationary, fluctuating between 80 and 130. At the time of the Commissioners' visit there were 70 boarders and about 60 day boys in the school.

Kennedy made his anxiety clear to the Commissioners. He was particularly concerned about 'the want of a sufficient supply of reading boys to keep the rate of scholarship in the sixth form as high as it was when the school numbered more than 200 boys. (43) Later he wrote that it had been a hard struggle to maintain the credit of the school as a training place for the universities with so small a total as 100 boys. (44)

In Kennedy's view, Shrewsbury's 'decline' was 'coincident with, and manifestly caused by the foundation of so many proprietary schools.' In addition he referred to the school's lack of influence, by which other schools were upheld and extended'. Shrewsbury relied on its own unassisted merits and these merits were - according to Kennedy - appealing to a portion of society which became smaller and smaller every year, 'those' he explained 'who still ascribe some value to a university education and to classical training'. (45) Another possible explanation he suggested, with some reluctance, was Shrewsbury's defective accommodation. He admitted that this was 'old, unattractive, and insome respects inconvenient and inadequate.' The Commissioners apparently agreed, commenting that 'the very bad condition of the buildings and the want of funds to place them in a proper state, operate more and more to deter parents from sending their sons as boarders. (46) They considered it 'essential to the well-being of Shrewsbury that a considerable sum should be expended without delay upon

the erection of new buildings. (47) Kennedy, in his written answers, also suggested that Shrewsbury suffered as a result of the prevalent misunder-standing regarding its title 'Free Grammar School' which he believed conveyed an impression of a school providing a free liberal education for a local middle class.

In 1862 the school had only eight masters, including the headmaster. Four were classical, one mathematical, one for French and German, one for writing and mapping and for accidence and one had been appointed as Tutor for all boys below the sixth, and was in addition charged with the direction of the studies of the 'non-collegiate' class - which we shall consider later. The latter master acted as general assistant to all the class masters below the sixth, so that whenever any master in class observed that a boy required special attention out of school, he could put his name down on a list of boys to be instructed by the Tutor in such department or departments of study as the master in class thought proper.

The subjects taught at Shrewsbury differed little from those at other schools. Mathematics and French formed part of the regular schoolwork. Kennedy had appointed a special master for mathematics about three years after becoming headmaster. Before that there had been no special master for mathematics and 'they were not essential'. (48) French had been incorporated into the curriculum in 1836. All boys did four hours a week mathematics except the lower sixth who had only three hours. Proficiency in mathematics was allowed to affect a boy's place in school, one sixth of the total marks in the examinations being awarded for the subject. French was taught for two hours a week and was compulsory for all but the praepostors i. e. the upper ten boys in the sixth form, who were allowed to discontinue French and devote themselves more entirely to classics. A

Mr. Graves, who had spent five years at Shrewsbury and left in 1858 for St. John's College, said that during his last three years at Shrewsbury he learnt French more at home than at school and said in fact that he 'did not do much French at Shrewsbury'. (49) French did not affect a boy's place in the school - 'if it did we should be frittering away our power', said Kennedy without explanation. (50) Clarendon pursued the point: 'French is not considered in the general examinations. I suppose that is not because you do not attach importance to it, but that there has not been time to attain proficiency?' - 'Partly on that ground and partly for reasons understood at the university,' replied the headmaster 'they desire to have those boys who are very strong in some one subject, as classics or mathematics, rather than those who have attained a moderate proficiency in several subjects. (51) Kennedy wrote that French was 'taken up earnestly by a few boys' but generally he regarded the French learnt in a public school as 'a small stock to be improved at a later time'.

In addition to French, he had made attempts to introduce German. On occasions when there had been a strong sixth form he had himself given them a few lessons in German. In addition, Mr. Bentley the French master, taught German to private pupils. Kennedy made it clear that Bentley, though not a university man, had the same status in the school as the other masters. '... we have so valued him from the time he came' said Kennedy 'I saw his value very soon, and we have always treated him as one of ourselves'. (52)

Modern as well as ancient history was taught at Shrewsbury, chiefly by the use of compendiums and abridgements; but the boys were encouraged to read larger works by themselves. Geography also formed part of the course of study. Natural science had no place at all in the curriculum of the school, though a letter in the library at Shrewsbury, dated ten years previously, indicates that an attempt was made to introduce the subject in that year. A proposition was put to the Governors by a classical master, Rev. Burbury, to establish a class for physical science and linear drawing. He wrote 'You are aware that we are trying the experiment of giving lectures to the boys on scientific and other subjects', and asked for financial help, '.. we could get a quite sufficient apparatus for lectures on electricity and galvanism' for from fifteen to twenty pounds. (53) This attempt to introduce natural science evidently met with little success.

Thus, in 1862, Shrewsbury was, like the other schools, predominantly classical and the Commissioners noted that 'the amount of classical work done and the number of books read in the ordinary divisions of the School' was very great. (54) Shrewsbury had, however, made a dramatic break with tradition when Kennedy had established a 'non-collegiate class' in which Greek and classical composition had been replaced by modern languages, history, English composition and some additional mathematics - though no natural science. Kennedy explained at some length his reasons for setting up the class. It was 'an attempt I have made of late years to satisfy that sort of call which exists, and not unnaturally exists, among the community, for an education which shall meet the wants of those classes who do not intend to send their sons to the universities. ' He admitted that the arrangements for the class were 'very incomplete', one of the main problems being the smallness of numbers. There were only 18 or 20 boys in the class and this did not allow the appointment of a master specially charged with its supervision. The boys were 'incorporated with the school generally; they take their status in the school according to Latin; they stand

in the form and do all the Latin lessons of the form in which they are placed; but when the Greek comes an arrangement has been made between the different masters so to order their lessons as that these boys when their own form is doing Greek shall go to the master of another form to do something else which is different i. e. not Greek'. (55) This could take place from a boy's first admission to the school.

The class had been in operation for five years and in it Kennedy believed boys had a 'fair education' though he was of the opinion that the class was too small to allow it to be judged as to adequacy. Boys not in the class were not necessarily destined for the universities, but their parents were 'willing or prefer they should follow the usual course'. (56)

Lyttelton was interested in the status of boys in the non-collegiate class in relation to the rest of the school. Kennedy assured him that they were not looked upon by their school-fellows as being in any way different. In spite of this assurance, Mr. Thompson established that non-collegiate boys could not be in the sixth form, could not exercise monitorial authority or in fact be praepostors, which does suggest that their status was in fact lower than that of the other boys. Kennedy was of the opinion that the school had not suffered in any way as a result of the introduction of the class. Although the arrangements were still very imperfect, he believed that the class would work well with adequate numbers and support from the public. Others did not entirely share his confidence. Some of the school's trustees, for example, feared that the class might have a tendency to convert a school for liberal education into a commercial school. (This was apparently a suggestion Kennedy abhorred 'I have never allowed the word 'commercial' to enter in among us' he stated in the evidence. (57) The trustees had. in fact, never sanctioned or prohibited the introduction of the class and some

had doubts about its legality. The Commissioners also expressed reservations about the class. To some extent Kennedy himself had given them grounds when he had pointed to the difficulties of finding a first class of 20 boys of tolerably equal ability in a school of only 130. The Commissioners suggested that this difficulty must surely be made more serious by the engrafting of the non-collegiate class upon the school, since 18 or 20 boys belonged to it and were not admissible to the Sixth Form.

Feeling about the class on the part of members of Kennedy's staff seems to have been at best luke-warm. Mr. Calvert, assistant master, who superintended the non-collegiate class, said that it had been formed to meet a 'kind of demand, which appeared pressing at that time, for a more commercial style of education'. He believed that the pressure came originally from the townspeople, but went on to say that 'as that was not at all, in our opinion, the object of the school, we thought it might be met by establishing a class which should prepare the pupil for such employment as did not require a classical i.e. a scholar-like classical education'. He confessed that 'I do not like the class myself...I think it tends to encourage indolence to a certain extent.' Almost his only positive comment was that boys in the class made more progress in modern history than in the regular school. (58) Bentley was also unimpressed by the class. Having said that boys in it had additional lessons in French, he then went on to say that they did not make more progress in modern languages than the others. (59)

The Commissioner's commented acidly in their Report that the non-collegiate class was evidently sought more as a refuge from work than on account of the facilities it afforded for particular kinds of work.

Kennedy wrote that at Shrewsbury a boy's promotion depended on his

proficiency. Age and standing in connection with character and conduct were sometimes referred to. He furnished a table of marks in a sixth form examination which he said could be taken as an index of the general valuation of studies. Out of a total of 3,000 marks, 600 were given for mathematics, 400 for history and geography, 300 for Divinity and the remainder for classics. In his written evidence, however, Kennedy stated that classics did not throw mathematics into the shade. (60)

As far as the lucrative practice of boarding was concerned, Kennedy enjoyed a virtual monopoly. Out of a total of 71 boarders, 64 resided in his house, five with the second master and two with Bentley. The second master's house held room for about 20 boys. The master of modern languages, in Kennedy's words, had 'of late years been allowed to receive four boarders. This' he added 'is not to be regarded as a right'. (61) The Commissioners concluded that at Shrewsbury 'The amount of remuneration received by the Masters is very moderate'. (62) This was, of course, especially so in the case of masters who did not take boarders.

As to deviations from the predominantly classical curriculum, besides the non-collegiate class extra private reading was sometimes allowed, designed to bring a boy forward in some subject which was of importance to him. Also, if a boy had decided powers in, and a taste for, mathematics and worked industriously, and no such taste for classics, Kennedy would excuse him from verse composition in order to do mathematical exercises instead. To boys who were going to be engineers or surveyors or even solicitors or surgeons, he had excused some work in order that they might attend the School of Design. Kennedy could not, however, recall any boy who had gone straight from Shrewsbury to a competitive examination and competed successfully. The five boys who had gained the Indian appointments in the late examinations all went to college first.

In the course of the year, 20 or more prizes were given. In the sixth form the two best classical scholars received prizes and in addition a Greek verse prize, a Latin verse prize and sometimes a Latin essay prize were awarded. The best mathematician in the sixth also gained a prize. In every form, the best classical scholar, best mathematician and best French scholar received a prize. Below the sixth the boy who had done best generally in conduct as well as work in each form was awarded an aggregate merit prize.

Kennedy wrote that the school had a library but added that 'The boys have not access to it'. He explained that 'They have access to it for the school work; they have not access to the books. They have not the use of the books in the library. (63) The head boys, however, had a library of their own, being a good classical and standard English library.

There were in the school some models, diagrams, etc. in natural philosophy, but no experimental apparatus. Kennedy feared there would hardly be time or staff to work this unless numbers increased considerably. By virtue of a gift from Kennedy the 12 head boys were ex officio members of the Natural History and Antiquarian Society which had a museum and a fair library.

Thus, Shrewsbury was undeniably a classical school. Although mathematics and modern languages were included in the curriculum, the time allotted to them was not generous and natural science had no place whatsoever in the school. However, Shrewsbury had introduced the non-collegiate class which, despite its apparently dubious status, offered something approaching a modern curriculum.

In 1862 there were 463 boys at Rugby of whom 61 were foundationers.

Numbers had been healthy for some decades. There were 19 masters including the headmaster, Dr. Temple, of whom 14 took classical forms (one of them also teaching mathematics), three mathematical (one also acting as tutor in natural philosophy) and two modern language masters.

The Commissioners wrote that 'They constitute a distinguished body of teachers, the members of which are often selected to fill educational posts of great importance throughout the country'. (64)

Rugby, for the purposes of instruction, was divided into four schools: the classical, mathematical, modern language and natural philosophy.

Classics, needless to say, took up the major part of the curriculum. The time which each boy spent on the classics during the week was, on the average, throughout the upper school somewhat more than 14 hours; throughout the middle school somewhat more than 12 hours; and through the lower school $18\frac{1}{2}$ hours, inclusive of the preparation which took place in school. As well as Latin and Greek, classical instruction included history (comprising the history of the Jews, Greece, Rome and England) and divinity. About one hour in the week was given to class instruction in history and geography; two hours to divinity except in the sixth form, where three hours were devoted to it; and the remainder to the classical languages. Divinity, history and geography were taught by the classics masters.

In addition to the classics each boy at Rugby spent, on average, about three hours a week in the mathematical classes. Boys also learned two modern languages, commencing the study of French on their admittance to the school and adding the study of German as soon as they had made sufficient progress in French. French works were occasionally also read in the classical school when the subjects falling within the range of classical

studies were best treated in some French author. Temple, for example, mentioned that the sixth form was reading for history De Tocqueville on America. (65) Modern language work done in class amounted to two hours per week, one and a half in some cases, exclusive of preparation. In addition, since the appointment of a second language master, 'conversation' classes had been instituted for the benefit of the more advanced boys. These were not compulsory. Boys in the sixth form could have the classes gratuitously if they applied. Two hours a week were given over to this, the time being abstracted from games and amusements.

Rugby was the only school among those investigated where natural science formed a regular part of the curriculum. It became a subject of instruction in 1849 when regular lectures were given by Dr. Sharp, a physician. He was succeeded by Rev. Henry Highton 'a first-rate electrician as well as a scholar', (66) who was in turn succeeded by J. M. Wilson. In 1859 the Trustees, with what the Commissioners called 'exemplary liberality', built a physical science lecture room and laboratory, and partially furnished both, at the cost of more than one thousand pounds. In 1862, natural science was regarded as an alternative to modern languages - a situation which Wilson regarded as 'ridiculous'. (68) It was permissible to take both and some boys chose to do this, but the practice was discouraged. The instruction given in the natural philosophy school during 1860-61 consisted of chemistry and electricity. Lectures were given twice in the week to each class. They were illustrated by experiments and diagrams, and notes taken at the time of the lecture were subsequently expanded into reports drawn up by the boys out of school. These were shown up once a fortnight at least, and were then corrected by the lecturer. At the close of every seventh lecture a paper of questions was set on the matter of that and the six previous lectures.

Private tuition in classics, for which the charge was ten guineas per annum, was nominally optional but in practice it was very difficult for any boy above the lower school and below the sixth form to decline it as the work done formed an important part of the school examinations. Private tuition in mathematics and modern languages was also available. In 1861 there were 106 boys having private tuition in mathematics at a cost of ten guineas per annum. The fee for private tuition in modern languages was six guineas. Every boy learning physical science could, if his parents so wished, become a private pupil. This cost a non-foundationer an extra fee of five guineas. The number of such pupils seemed to vary considerably. Between October and Christmas 1860 it was only two, between Christmas and June 1861 it rose to eight.

Rank in the school was, of course, determined primarily by a boy's performance in the classics. However, promotion in the classical school also depended upon performance in mathematics to the extent of twelve marks in the hundred, modern languages eight marks in the hundred, and physical science also eight marks in the hundred. A boy was in addition, required to bring up for examination in the classical school at least once a year one subject of history and one of geography, which he had mastered by his own reading in the holidays. Performance in this examination had 'a considerable effect' on each boy's promotion. (69)

The modern language and mathematical schools consisted of a series of divisions identical with those of the classical school, each of which was again broken up into a series of sets in which boys were arranged according to proficiency. Thus, every boy, however backward and low in the modern language and mathematics sets, moved up into a superior part of those schools so soon as he had gained promotion into the corresponding part of the classical school. Conversely, however high his position in the mathe-

matical and modern language sets, he could not advance into a higher part of these schools until his promotion into the corresponding part of the classical school permitted it. Similarly the main divisions of the school of natural philosophy corresponded with those of the classical school. The sub-schools, however, were few and comprehensive, being only two in number, one of which embraced the sixth form and whole upper school, the other the whole middle school. They were not subdivided into sets or classes as were the sub-schools in mathematics and modern languages. Each sub-school was taught together in one class in which the boys were arranged in order corresponding with their divisions or classes in the classical school. The single class of the sixth and upper school contained 29 boys; that of the middle school, twelve, including one boy from the Lower School, whose age and general intelligence seemed to qualify him for the study. The lecturer usually drafted off into the laboratory the most proficient boys without making any extra charge while the rest listened to lectures more suited to less advanced boys.

Thus, mathematics, modern languages and/or natural philosophy, formed part of Rugby's regular curriculum. Though in no sense on a par with the classics in terms of time allotted to them, promotion, etc. they were taken seriously by staff and presumably therefore by pupils. The Trustees commented that the mathematical masters ranked in all things as classical masters and in addition to teaching mathematics were also required to take part in the general schoolwork equally with the other masters. (70) Both mathematical and modern language masters were allowed to keep boarding-houses. In addition to Temple's house (70 boarders) there were seven others. They were assigned by the headmaster to masters in order of seniority. Each house contained accommodation for between 40 and 50 boys. Temple, in answer to a question from Vaughan, confirmed that he gave

mathematical and modern language masters houses just as he would the classical masters. (71) In addition, as we saw, all masters were allowed to take private pupils, though one important difference here was that this was virtually obligatory only in the case of classics.

It was the general opinion of the headmaster that the study of mathematics was prosecuted with as much success as that of classics, when the amount of time given to each was taken into account. (72) (When we bear in mind that this was on average three hours compared with 17, it represents quite a qualification)

Wilson, in his autobiography, presents a slightly less satisfactory picture of mathematics teaching at Rugby. 'I took the second mathematical set of the Sixth Form for three hours a week' he wrote. 'As far as I recollect no-one in the set wished to learn mathematics'. (73) Another glimpse comes later: 'In the Fifth Form, Monday and Friday mornings were given to Mathematics... The classroom was the cloakroom on the right hand side of the entrance to the Town Hall. It was completely unsuited for class teaching'. (74)

Of the two languages taught at Rugby, it was felt by Mr. Vecqueray, one of the modern language masters, that boys made greater progress in French than German, principally because the latter was commenced later and was in any case more difficult. Boys, however, rarely attained the art of speaking either French or German with facility and the facility gained even in reading was not very considerable. (75) In spite of these facts it was said to be the case that boys who learned French and German entirely at Rugby could read and speak fluently after a few weeks residence abroad. (76) Both modern language masters would have liked an extra hour a week given to their subjects.

The Commissioners seemed doubtful about the success of modern language teaching at Rugby. There were only 47 boys in the whole school who did not learn both French and German and the Report-commented that is was 'difficult to realise the fact, that all who now learn two languages in the School, can have attained much proficiency in either of them.' They suggested that a certain standard should be reached in the first before a second language was added, a standard which 'will admit of the preservation of the first in the memory without the devotion of much time to it, or much toil to its cultivation'. (77)

The teaching of natural philosophy caused the Commissioners even greater concern. As we saw, boys had to pay an extra fee for studying it and in parts of the evidence it is lumped with 'extra' subjects like music and drawing, for which a fee was also required. Wilson, in addition to natural science, also taught mathematics. Indeed, his degree, taken in 1859, had been in that subject. He informed the Commissioners that he 'had studied no physical science experimentally, but Dr. Temple said he supposed I could get it up sufficiently for the purpose; he wished me, therefore, to employ my intervening time' (i. e. February to August) 'in learning it. (78) In his autobiography he commented that Rugby was in severe straits to find anyone to teach science and admitted that he knew nothing of the subject. (79) He told the Commissioners that being a mathematician he grafted physical science on to mathematics. The Commissioners reported that 'considerably more than three-fourths of the time which he devotes to class teaching must be given to mathematics, and the remainder only is left for natural philosophy.' This also applied to the time Wilson gave to private tuition. (80)

Another point made by the Commissioners was that 'although the parent of any boy at Rugby School is permitted to make his choice between instruction

in modern languages and instruction in physical science, yet this alternative is in practice so presented to him as to divert his choice generally from natural philosophy.' One of the reasons for this was the extra fee which had to be paid by those wishing to study natural philosophy. Another was that it had almost become a rule that no boy in the lower school who did not show special aptitude for the study, or more than 'common maturity of mind', should be admitted as a student in the physical science school. Thus, all boys entering Rugby below the middle school, necessarily commenced their career in another branch. 'When, therefore, the option, under the disadvantage...of extra payment, is given to such on reaching the middle school, they must already have made some way in Modern Languages. To transfer themselves from a study in which progress has been made, is of course a waste of time in all points of view. ' The Report continued: 'It is possible that parents, under such circumstances, may elect to continue and carry out a course which they might not have elected to commence, and decline to commence a study which they would at an earlier hour have preferred to enter on'. (81) In fact only 41 out of 463 boys studied natural philosophy.

Yet another problem stemmed from the fact that, as we saw, the whole natural philosophy school was formed into two classes only, one consisting of all the boys of the upper school, the other of all the boys in the middle school. Amongst those in the former were some who were just commencing the study, and others who had been regular students in it for three years.

When asked about 'the state of the instruction and proficiency in physical science at Rugby' Wilson replied somewhat enigmatically: 'I think it is as satisfactory as anything else in the school'. (82) One interesting point is that Temple, in his evidence, several times omitted physical science when

referring to the subjects taught at Rugby, almost as if he had forgotten its existence. At one point he apologised for this. (83)

The Commissioners concluded that, as far as the physical science school was concerned: 'It is impossible to feel that the immediate results are as yet quite proportionate to the place which is now formally given to the study in the arrangement of the School, and to the expenditure which the Trustees have devoted to it. (84)

As regards prizes, Temple agreed with Lyttelton that the greatest number were given for classics, though the other subjects also offered prizes to successful pupils. The Commissioners had certain points to make here:

'While some encouragements are provided at the expense of the School funds in the shape of prizes for various kinds of excellence in the Classical School, all the rewards given throughout the year for successful study in the subsidiary branches are supplied by the teachers in those departments.'

The Commissioners believed that the encouragement represented by the prizes 'would be more effectual if given in part at least out of the funds of the School, and by the Trustees who are its Governors and representatives, than if bestowed solely from the private resources of the teachers. (85)

Nor did the Commissioners think that it would be always right that individual Masters should give as much as it might be right that the several subsidiary studies should receive in the form of reward.

Little mention was made of bifurcation. Those who intended to compete at Woolwich were obliged to leave Rugby for special preparation. Rev. Mayor, one of the mathematics masters, considered that the Woolwich standard was altogether above boys of 18 who had not studied in a special school for mathematics. (86) Boys who wished to cultivate mathematics to a higher

degree than their opportunities in class allowed them took private tuition.

If it was found necessary for the purpose of giving time but not otherwise,
boys were allowed to drop some of the work with their classical tutor, and
when above the fifth form to leave off all Latin versification with the consent
of the headmaster, form master and tutor.

According to Wilson, Rugby possessed a fair geological museum and several natural history collections. He gave a detailed description of the physical science lecture room and laboratory already referred to: 'There is a laboratory for practical analysis' he wrote 'fitted with all that is requisite for qualitative and quantitative inorganic analysis. It is fitted for five students only, but seven can work in it at once without much inconvenience. There is also apparatus for lectures in chemistry, diagrams illustrative of the principal chemical works, and a growing museum of chemical products. In other branches of natural philosophy the apparatus is less complete. There is sufficient, however, for elementary lectures on mechanics, pneumatics, hydrostatics, and heat; and a good collection of apparatus in electro-dynamics.' (87) In addition Wilson mentioned a library of reference books on natural philosophy, from which boys could borrow books on application to him.

There was also a 'tolerable library' into which the boys could go twice a week for an hour, and a library attached to each boarding house. Warner mentions a debating society which concentrated on historical and political topics.

Rugby, then, of all the Clarendon schools, offered the most up-to-date curriculum. Though the classics predominated, mathematics, French and German all formed part of the schoolwork and were taken seriously. In

addition natural science, depite difficulties associated with its teaching, was part of the regular curriculum.

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       PSC IV p. 7
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39.
      PSC IV p. 169
      PSC II p. 277
40.
41.
      PSC II p. 279
42.
      PSC II p. 328
43.
      PSC II p. 324
      PSC II p. 328
44.
45.
      PSC II p. 328
46.
      PSC I p. 306
47.
      PSC I p. 315
      PSC IV p. 321
48.
49.
      PSC IV p. 355
50.
      PSC IV p. 321
51.
      PSC IV pp. 331-2
52.
      PSC IV p. 319
53.
      Letter from Rev. Burbury dated 16.8.1852 (Bailiffes Bundle III)
54.
      PSC I p. 311
55.
      PSC IV p. 320
56.
      PSC IV p. 321
57.
      PSC IV p. 320
58.
      PSC IV p. 346
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59.
      PSC IV p. 349
      PSC II p. 325
60.
    PSC II p. 324
61.
      PSC I p. 321
62.
63.
      PSC IV p. 334
64.
      PSC I p. 233
65.
      PSC IV p. 260
      J. M. Wilson, 'An Autobiography 1836-1931' p. 59
66.
67.
      PSC I p. 252
68.
      PSC IV p. 283
69.
      PSC I p. 241
      PSC II p. 298
70.
71
      PSC IV p. 251
72.
      PSC I p. 249
73.
      Wilson p. 56
      Wilson, p. 57
PSC IV p. 284
PSC I p. 251
74.
75.
76.
77.
      PSC I p. 277
      PSC IV pp. 281-2
78.
79.
      Wilson, p. 49
80.
      PSC I p. 279
81
      PSC I p. 279
      PSC IV p. 283
PSC IV p. 261
82.
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84.
      PSC I p. 253
85.
      PSC I p. 280
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PSC I p. 249 PSC II p. 314

Chapter Five

After amassing the vast amount of evidence which appears in the volumes of the Enquiry the Commissioners came to certain conclusions. Before we examine these and the recommendations which the Commissioners made as a result, it would perhaps be as well to say a little about the Commissioners themselves. Who were they and what were their educational backgrounds? While it would be presumptuous to make assumptions about their attitudes and likely biases from such information, it should at least be available to anyone wishing to understand how their conclusions and recommendations were arrived at.

Alicia Percival comments: 'As a group they were well-chosen for carrying out their object'. (1) Taking into account the fact that part of their task was to examine the curriculum with a view to modernising it, it is difficult to agree with the claim that in this respect at least they were well-chosen. Although evidence was given by many eminent and distinguished scientists of the day, science was not represented in the peron of a single Commissioner. They were all classicists, with little understanding of the claims of modern subjects, particularly science, as instruments of education. In addition their connections with industry and commerce were scanty and it must therefore have been difficult for them to relate their recommendations to Britain's economic and industrial needs. One or more scientists or industrialists on the Commission would have given the investigation a perspective which it lacked.

In view of the nature of the Enquiry, it is perhaps also surprising that apart from Lord Clarendon and William Thompson, all the Commissioners were products of the schools under investigation. Clarendon, probably a private pupil at Christ's Hospital was, however, an aristocrat and the son

and nephew of Etonians. His own sons went to Harrow. Only

William Thompson was privately educated. Lord Lyttelton and

Sir Stafford Northcote were both politicians and Etonians. The

Hon. Edward Boyd Twistleton, a Civil Service Commissioner, was a

Wykehamist. Lord Devon was a Westminster. Henry Halford Vaughan, a

relative of Charles Vaughan, the reforming headmaster of Harrow, had

been to Rugby. Clarendon, incidentally, said of his colleagues: 'Devon is

weak, Northcote pedantic, Thompson idle, Twistleton quirky, Vaughan

mad' (2)

Lionel Cust in 'A History of Eton College' comments regretfully that 'only two of the Commissioners were Etonians⁽³⁾ and goes on to suggest that the Chairman, Lord Clarendon, was 'strongly prejudiced against Eton'. (4) There is certainly evidence to indicate that Clarendon had considerable reservations about public schools and the education they offered. In a letter to the Duchess of Manchester in 1862 he wrote of 'the deplorable neglect of physical science and natural history in our system of public education, and the national loss that is sustained by forcing all minds into the same groove and compelling everybody to study the classics, without a thought or a care whether there is any aptitude for such studies, and whether a natural taste for other, and equally, if not more, important studies is not thereby repressed and its development altogether crushed'. (5) He advocated reform, though his desire for this was apparently at least partly political in origin as he commented that the 'stick-in-the-mud'

attitudes of the schools placed the 'upper classes in a state of inferiority to the middle and lower'. (6)

With the possible exception of Clarendon, the Commission was undoubtedly made up of friends of the public schools. This was, of course, quite intentional. Gladstone stated in the House of Commons on May 6, 1864, that no-one appointed desired to destroy the essential character of the public schools or to encourage radical innovation. (7) As Simon says, the Commissioners 'ardently desired the maintenance and rehabilitation, rather than any radical reorientation of the public schools'. (8) They were anxious to preserve the public schools by bringing them up-to-date. They represented, according to Mack, 'a consensus of upper-class opinion, a compromise between educational ideas dominant among the mid-Victorian middle class and the aristocracy'. (9)

In his introduction to 'The Great Schools of England' Staunton, writing only a few years after the Enquiry, comments: 'The Members of the Commission were notable alike for integrity and intelligence'. He continued: 'Their prejudices - if prejudices they had - were all of a conservative kind. Eton and the other Schools were dear to them as the homes and sanctuaries of their boyhood. We are not, therefore, to deem their opinions, conclusions, and suggestions those of innovators, but the results of sound sense, and of enlightened experience, tempered by patriotic feeling'. (10) It is certainly the case that in the course of the

Enquiry, the Commissioners made many references to the obligations which England owed the schools, 'obligations which, were their defects far greater than they are, would entitle them to be treated with the utmost tenderness and respect'. (11)

Nevertheless, the 'homes and sanctuaries of their boyhood' came in for some extremely severe criticism from the Commissioners and it is to this which we now turn. Comments were made on individual schools, including conclusions and criticism, and a more general section dealt with the Clarendon schools as a group. It should be pointed out that some of the schools got off more lightly than others. Eton, for example, came in for some particularly severe criticism while Rugby, though criticised, was also much complimented.

The Commissioners were agreed that the course of teaching in the schools had 'remained substantially unaltered from a very early to a very late period'. The two classical languages, with a little ancient history and geography had held, until a relatively short time before the Enquiry not only a decided predominance but absolute and exclusive possession of the whole course of study at the schools. The Commissioners recognised, however, that more attention was paid than formerly to the substance and matter of the books construed and commented that this was undoubtedly a change for the better.

They explained that by 'course of study' they meant those subjects which a boy must necessarily learn during the whole or some part of his progress from the bottom of the school to the top. They pointed out that a subject may be included in the curriculum but not count in examinations and thus not contribute to promotion. On the other hand a subject may contribute to promotion if taken voluntarily. In the latter case little time would be given to it unless in exceptional circumstances; in the former the time given to it would probably be wasted, unless attention were stimulated by fear of punishment or by some form of reward. (12)

At the time of the Enquiry, as we saw, the course at every school included arithmetic and mathematics as well as classics. At every school except Eton it also included one modern language, either French or German. At Rugby (and practically at Charterhouse) it included both languages. At Rugby, however, boys had to make a choice between studying modern languages or natural science, though a very few did both. Lectures in natural science were given at Winchester and occasionally at Eton, attendance being at the former compulsory for only the foundation scholars and exhibitioners, and altogether optional at Eton. Chemistry lectures were given at Charterhouse for boys who wished to attend them and at Harrow there were periodical voluntary examinations in natural science.

The average number of school hours assigned weekly to arithmetic and

mathematics at Eton, Harrow, Rugby and Shrewsbury was three; at Westminster four; at Charterhouse five; at Winchester seven or eight in the upper part of the school and three in the lower. At Winchester, however, lessons were prepared as well as done in school whereas at the other schools each lesson was supposed to require about one hour of preparation.

At all the schools except Westminster, marks were given for mathematics which affected to different degrees a boy's rise in the classical forms of the school. At Westminster this was an advantage gained only by special proficiency in mathematics. The general, though not universal, principle of apportionment appeared to be that the weight given to the subject in promotion should correspond roughly with the time devoted to it.

In every school except Eton, two school hours a week, exclusive of preparation, were given to modern languages - apart from the case of boys opting for natural science instead of languages at Rugby. Marks for modern languages counted in promotion (on the same principle as mathematics) at Winchester, Harrow and Rugby, but not at the other schools. There were distinct prizes at all the schools for proficiency in mathematics and in modern languages.

Classification in the sub-schools of mathematics and modern languages (and natural science at Rugby) was made subordinate in all the schools,

to a more or less considerable extent, to that of the classical school. The boys in two or three consecutive classical forms or subdivisions of classical forms were released at the same time from their classical work and sent together to the sub-school where they were re-arranged according to their proficiency in the subjects taught there. A consequence of this was that the mathematical school, for example, instead of consisting of a regular series of ascending forms, ascending that is in proficiency and in the difficulty of the work done, consisted of a number of sets of boys in very different stages of advancement; a number, as it were, of miniature schools, each arranged and classified afresh by the mathematical masters. Each set, on the whole, was more advanced than the set below it, but individuals in each set could be much inferior to individuals in a lower set. Thus, a boy could not advance in one study much faster than in another and whatever his ability in French or mathematics he could never far outstrip in these studies those with whom he was on a par in classics. This method of arranging the school for non-classical lessons placed a check on rapid and sustained progress in these subjects and on occasion proved a serious hindrance to the mathematical and linguistic advancement of boys.

In addition, as a general rule the classical forms marked each boy's rank in the school, whilst the form or class in which he was placed in any other subject merely denoted his progress in that particular subject.

Referring to mathematics and modern languages (though the comments made could also have referred to natural science) the Report concluded:

'Both of these two branches of study share the disadvantage of being subordinate to the principal study, which is that of the classical languages.

The chief honours and distinctions of the schools are classical; their traditions are classical; the Head Master, and where the tutorial system exists the tutors, are men distinguished chiefly as classical scholars, and attached more or less ardently to classical learning. The path of promotion and the subjects on which the time and thoughts of the boys are employed are mainly classical'. (13)

The Report, however, goes on to argue that a distinction must be made in the case of mathematics which had established a title to respect as an instrument of mental discipline. The subject was recognised at the universities and it was easy to obtain mathematical masters of high ability. None of this applied to the study of modern languages, particularly the last point. The Commissioners commented that under such circumstances we are not surprised to find that the success with which these studies are pursued is, in different degrees, not answerable to the time spent in learning, and the pains and ability employed in teaching them...it is easier to be idle in the mathematical than in the classical school and easier still to avoid giving attention to French'. They continued '...we

has been a substantial benefit to the public schools, and has greatly improved the education which they afford, they are not pursued as effectively as they might be without any increase either of the time generally allotted to them or of the labour of their respective teachers. There is an especial deficiency, we believe, in arithmetic and in French... (14)

Turning to history and geography, the Commissioners commented that in general there was little systematic teaching of either. In the lower forms it was common to give lessons in the outlines of history and in geography; but, as a boy advanced in the school, it appeared to be generally considered that all which could be done for him in this particular was to set him a portion of history to get up by himself, to examine him in it and to encourage more extended study of the subject by means of prize essays. Where such special examinations in history were held they took place usually either at the end or at the beginning of the term, the portion set being in the latter case a 'holiday task'. At Harrow and Rugby a regular historical cycle had been constructed by which every boy was made to traverse the whole outline of classical, Biblical and English history in the course of his stay at school, assuming he remained there the average time and advanced at the average rate. At Rugby whilst a part of the historical reading was done as a holiday task, part was also done in the form of regular lessons. The practice of requiring all the upper boys to read history and examining them in it was by no means universal,

neither was that of setting prize essays on historical subjects. It was assumed everywhere that boys were asked such historical and geographical questions as were suggested by their daily construing-lessons, but this was left to the discretion of the form-master. At Eton, some of the tutors occasionally read history with their pupils as 'private business'.

The Report concluded that on the whole, and excepting Rugby and perhaps Harrow, little was done systematically either to awaken an intelligent interest in history or to secure the acquisition of that moderate knowledge of it which every young man leaving school should possess. Many boys of 18 left school very imperfectly informed as to the history of those nations whose literature they had been studying and almost a stranger to that of their own country. (15)

The Commissioners attempted to make some kind of assessment of the success of the schools in terms of one of their own stated educational aims i. e. preparation for the ancient universities. In order to do this they consulted many distinguished teachers at both Oxford and Cambridge. First of all, they examined the class-lists and lists of prize-men at the two universities, with the proviso that these would include only the abler and more industrious boys. Their conclusion here was that a fair proportion of classical honours at least was gained by the schools and that those who entered the universities from the highest forms of the schools were on the

whole well-taught classical scholars. (16) They added that these, however, notoriously formed only a small proportion of the boys who received a public school education and in order to uncover information about the educational attainments of boys of more average ability they went on to consult tutors and professors at Oxford and Cambridge. The opinions expressed were not uniform, which is hardly surprising as colleges were fed to differing extents by different schools. There was, however, a greater agreement than the Commissioners expected to find in persons of different experience and different ways of thinking who were consulted separately.

The opinions expressed were, with one or two exceptions, damning, and this applied almost as much to the subjects the schools professed to teach well as to the scorned 'extras'.

Indeed, on the evidence of a considerable number of eminent dons, the Commissioners were forced to the conclusion that the 'facts and figures do not indicate an average of classical attainment which can by any stretch of indulgence be deemed satisfactory. '(17) They also reported a great want of accurate grounding, apparent on occasion even in elegant scholars, and further that the knowledge of history and geography, though better than it had been, was still very meagre. Great deficiencies were also apparent in English composition, reading and spelling.

Many of the dons complained bitterly at the effect such low standards had on the universities. In the case of men not reading for honours the work of the first two years at the university was simply schoolwork, work more proper for the upper forms of a large school. The Report comments '... with a great mass of men, school education - and that education one which barely enables them at last to construe a Latin and Greek book, poet and orator, chosen by themselves, to master three books of Euclid, and solve a problem in quadratic equations - is prolonged to the age of 20 or 21'. (18) Many tutors felt that the result was that the whole university course suffered both in depth and width. 'Instead of making progress' said Mr. Hedley, late Fellow and Tutor of University College and Public Examiner 'a few years ago the University' (i.e. Oxford) 'had to make its course commence with more elementary teaching, and to insist on the rudiments of arithmetic and a more precise acquaintance with the elements of grammar. Tutors felt that it was degrading both to themselves and to the University to descend to such preliminary instruction, but the necessity of the case compelled them. (19)

Many unflattering comments were made by the dons on the study of mathematics at the schools. Mr. Price, Sedleian Professor of Natural

Philosophy at Oxford, wrote 'I do observe a very marked difference

between young men coming to this University from the great public schools

and from other schools or from private tutors, as to their mathematical

attainments. The young men from public schools are far worse prepared Whatever time they may have given to the subject, it does not appear to me that they have given that study the attention to it which has generally been so profitably bestowed elsewhere. ' He went on to give an example. There were two annual scholarships open to the whole university, he said. The junior scholarship was open for competition to young men up to nine terms standing, and not afterwards. The senior scholarship was open to Bachelors of Arts until the 26th term from matriculation inclusive. Both were awarded for proficiency in mathematical attainments. As the junior scholarship came early in the academical course of study the greater part of the knowledge which was the subject of examination had to be acquired at school. The knowledge necessary for the senior scholarship would be obtained at the university. Mr. Price said that the junior scholarship had never been gained by a young man from the great schools. The senior, on the other hand, had been gained three if not four times by Etonians and three times by Rugby men. He added that the public school candidates for matriculation 'who come under my view, can, in many cases, scarcely apply the rules of arithmetic, and generally egregiously fail in questions which require a little independent thought and common sense'. (20) Mr. Hammond, tutor of Trinity College, Cambridge, gave evidence to a similar effect. (21)

From the evidence provided by the ancient universities, the Commissioners

came to certain conclusions. Boys who had capacity and industry enough to work for distinction were on the whole well-taught in classical scholarship at the public schools, though occasionally they showed a want of accuracy in elementary knowledge, either from not having been well-grounded or because they had been allowed to forget what they had learnt. However, the average of classical knowledge among the young men leaving school for college was low and in arithmetic, mathematics, general information and English the average was lower still but was improving. Of the time spent at school by the generality of boys much was 'absolutely thrown away as regards intellectual progress' (22) either from ineffective teaching, from the continued teaching of subjects in which boys could not advance, or from idleness - or from a combination of these causes. In arithmetic and mathematics the public schools were found to be especially defective and to hold a 'position of marked inferiority'. (23)

The Commissioners, not surprisingly, also came to the conclusion that natural science was 'practically excluded from the education of the higher classes in England'. (24) They commented that in this respect education was narrower than three centuries earlier even though during the intervening period science had continued to extend its boundaries. This exclusion, they believed, was a plain defect and a great practical evil. It narrowed unduly and injuriously the mental training of the young, and the knowledge, interests and pursuits of men in maturer life. Of the large number of men

who had little aptitude or taste for literature, there were many with an aptitude for science, but the number of these could never be known as long as the only education given at the schools was purely literary.

The harshest comment on the schools is worth quoting in full. The Commissioners wrote: 'If a youth, after four or five years spent at school quits it at 19, unable to construe an easy bit of Latin or Greek without the help of a dictionary or to write Latin grammatically, almost ignorant of geography and of the history of his own country, unacquainted with any modern language but his own, and hardly competent to write English correctly, to do a simple sum, or stumble through an easy proposition of Euclid, a total stranger to the laws which govern the physical world and to its structure, with an eye and hand unpractised in drawing and without knowing a note of music, with an uncultivated mind and no taste for reading or observation, his intellectual education must certainly be accounted a failure, though there may be no fault to find with his principles, character, or manners. We by no means intend to represent this as a type of the ordinary product of English public school education; but speaking both from the evidence we have received and from opportunities of observations open to all, we must say that it is a type much more common than it ought to be, making ample allowance for the difficulties before referred to, and that the proportion of failures is therefore unduly large. (25)

After reading the Report it is no exaggeration to say that the criticisms made by the Commissioners are at least almost as severe as many of those we considered earlier from other sources and to a large extent vindicate the impassioned diatribes directed against the schools by earlier critics. The criticisms contained in the Report are all the more powerful when one bears in mind the vast amount of detailed information and observation on which they are based and also the background and standing of the men who made them.

- 1. Alicia Percival, 'Very Superior Men', p. 136
- 2. Sir Herbert Maxwell, 'Life and Letters of the Fourth Earl of Clarendon'. Vol II p. 295
- 3. Lionel Cust, 'A History of Eton College', p. 199
- 4. Cust p. 200
- 5. Letter from Lord Clarendon to the Duchess of Manchester, 20th November 1862, Maxwell, Vol II pp. 269-70
- 6.
- Maxwell, Vol II p. 270 Hansard, Vol 175 pp. 127-137 7.
- 8. B. Simon, 'Studies in the History of Education 1780-1870 p. 304
- R. C. Mack, 'Public Schools and British Opinion Since 1860' p. 29 H. Staunton, 'The Great Schools of England' pp. xvii xviii. 9.
- 10.
- 11. Public Schools Commission, I p. 56
- 12. **PSC I p. 13**
- 13. PSC I p. 15
- 14. PSC I p. 16
- 15. PSC I pp. 17-18
- 16. PSC I p. 23
- 17. PSC I p. 24
- PSC I p. 25 18.
- 19. PSC II p. 16
- 20. PSC II pp. 23-24
- 21. PSC II pp. 24-26
- PSC I p. 26 22.
- 23. ibid
- 24. PSC I p. 32
- 25. PSC I p. 31

Chapter Six

The first part of this thesis has been taken up with a brief history of the Clarendon schools and their responses to changes in their social and economic environment. The contention has been put forward that the schools were tremendously influential in nineteenth century England, firstly because they educated the personnel who took over the 'command posts' in society, and secondly because they were widely imitated by other educational institutions. The Clarendon Commission established beyond any reasonable doubt that the schools had failed to modernise their curricula to meet the demands of an industrial society, and remained firmly wedded to the classics. Modern subjects, especially natural science, were despised and given little encouragement. The next part of the thesis will attempt to discover why the schools clung so tenaciously to the classics and refused to make curricular concessions to the momentous changes which were taking place around them.

The ease with which it is possible to identify a public school 'line' on matters of curriculum should not lead us to overlook important individual differences between the schools. Some were considerably more backward than others, and it would perhaps be enlightening to establish a continuum of backwardness which may then help us to establish why the schools - some more than others - were so reluctant to move with the times.

One problem in attempting this, of course, is to establish a definition of 'backwardness'. This could be taken to mean several things, for example a high proportion of schoolwork devoted to the classics, lack of any kind of natural science in the curriculum, unfavourable attitudes towards 'modern' subjects, low status of modern versus classical masters, etc. Many definitions are possible and therefore any definition relying on a narrow set of criteria must be somewhat arbitrary. Our continuum will,

however, be constructed on the basis of whether mathematics, natural science and modern languages formed part of the regular curriculum, and how many hours were allotted to these subjects. In constructing such a continuum some help comes from the evidence of the dons who were not slow to cite the merits and faults of individual schools and make comparisons between them.

Whatever the problems involved it would surely be difficult to argue with the proposition that on any criterion Eton should be placed at the most backward point on the continuum. Several of the dons who gave the Commissioners the benefit of their experience of the schools made unflattering references to Eton. Rev. Kitchin of Christ Church, for example, commented that 'We have a vast number of young men from the upper forms of the public schools, especially from Eton...they come to us with very unawakened minds and habits of mental indolence and inaccuracy! (1) We have seen that mathematics was introduced later at Eton than at any other school and that the mathematics masters did not - even in 1862 - share the same status or emoluments as the classical masters. Boys received about three hours a week teaching in mathematics exclusive of preparation. Modern languages were an extra, not part of the regular curriculum, and as we saw, Balston had taken the retrograde step of no longer allowing them to count in trials, should a boy choose to be examined in them. Solely as a result of Hawtrey's efforts natural science was available but merely as a voluntary pastime. Clearly therefore Eton must be placed at the most backward point on the continuum.

Rugby, equally clearly, wins a place at the opposite end. Mathematics was given three hours a week on average, exclusive of preparation whilst every boy opting for modern languages rather than natural science, learnt two,

the time given being one and a half or two hours per week. Rugby scores most obviously in that it was the only school where physical science formed a regular part of the curriculum. It was, however, regarded as a substitute for modern languages and although a few boys studied both modern languages and science, this practice was not encouraged.

The school closest to Rugby would seem to be Charterhouse. Lyttleton commented that modern languages and mathematics were taught 'rather more in proportion at Charterhouse than at the other schools'. (2) In fact mathematics was compulsory for all foundationers and boarders and day boys, who received five hours a week, exclusive of preparation. French or German was compulsory on all foundationers and voluntary on day boys and boarders. Four hours a week were given to modern languages and although the study was voluntary, few boys exercised the option of not taking it. All boys in the sixth form learnt German. Chemistry was taught, but attendance was voluntary and fluctuated with the seasons as the time came out of boys' playtime.

The school which most closely approached Eton in backwardness was Westminster, although Harrow could make a good claim to this position. Westminster offered no natural science at all. French was compulsory but allotted only one and a half hours a week, exclusive of preparation. No other modern language was taught. Mathematics was compulsory and given three to four hours a week.

Mathematics was compulsory at Harrow and given just under three hours a week on average, exclusive of preparation. All boys below the fifth form learned French and, in the fifth form, those who had become proficient in French transferred to German. Two hours a week were given to modern

languages except for the lowest form where only one and a half hours were given. No physical science was taught, though boys could take a voluntary examination in some branch of it and were given advice on reading by masters. It was regarded as a serious hobby.

Shrewsbury is awarded the centre point on our continuum. There all boys studied mathematics for four hours a week, except in the lower sixth where they were given three hours. French was compulsory on all but the upper ten boys in the sixth form and was allotted two hours a week. No natural science at all was taught. Shrewsbury, however, had taken the quite revolutionary step of introducing a non-collegiate class where boys dropped some of their classical work and spent more time on modern languages and mathematics.

Winchester takes the remaining place. Mathematics and arithmetic were compulsory, the first three divisions in the school spending seven or eight hours on these subjects and the rest of the school three or four hours. French or German was compulsory for the whole time, one and a half hours exclusive of preparation being given to whichever language was chosen. Natural science, as we saw, had been forced on a reluctant Winchester by the Oxford University Commissioners. Each year ten or twelve lectures were given on the subject. Scholars were required to attend these, though attendance was not strictly enforced. Commoners could attend if they wished.

This examination of the Schools' curricula has produced the following continuum:

Eton Westminster Harrow Shrewsbury Winchester Charterhouse Rugby

most backward curriculum most progressive curriculum

and one interesting point becomes immediately evident. The curriculum, and the extent to which it was backward or progressive, seems to have had little to do with a school's success in terms of pupil numbers. Eton, Harrow, Winchester and Rugby were all numerically successful schools, whereas Westminster, Shrewsbury and Charterhouse were struggling. This point will be taken up later.

The following chapters will examine possible explanations for the general backwardness of the schools. The emphasis will be on trying to determine why they clung so fervently to the classics and why they were so reluctant to welcome modern subjects, particularly natural science, into the curriculum. Whilst the schools will be to some extent considered as a system their individual differences will not be forgotten and three schools will be singled out for more detailed examination than the rest. These will be Eton, Shrewsbury and Rugby, representing the most backward, the most progressive and the mid points on the continuum.

One explanation often put forward for the general backwardness of the schools is simply the 'weight of tradition' argument. The schools had all been established centuries earlier and had continued as places of education without serious breaks. In this they had differed from many schools which in 1862 were offering a more modern curriculum and had either been set

up in recent years or were virtually new schools based on old foundations. Certainly the schools were proud of their longevity and traditions. In 1908

The Wykehamist recorded: 'Winchester College is probably the most conservative institution in the world. Any change of any importance is made with immense difficulty, usually after a prodigious lapse of time, and in the teeth of furious opposition.' (3) - an observation which this thesis can only endorse.

School histories afford many examples of traditions whose raisons d'être had long since disappeared, but where great opposition existed to their abolition. The traditions had become part of the school. Even where a particular tradition was generally considered pointless and in some cases silly, there was an obvious reluctance on all sides to dispense with it and a feeling seemed to exist that this would in some way diminish the essential 'spirit' of the school in question. Thus, there was no doubt that tradition produced a certain amount of inertia, which may well have been reflected in a reluctance to tamper with the classical curriculum, but the 'weight of tradition' argument is essentially vague and unconvincing. Other long-established schools, presumably with their own traditions, had managed to change. Why had the Clarendon schools resisted? In addition, as we have seen, the 'weight of tradition' seemed to fall more heavily on some schools than others. Yet another factor, which will become evident, is that the schools were capable of quite dramatic changes in non-curricular matters when the situation demanded it. For all these reasons the 'weight of tradition' argument must be rejected.

One possibly important factor to which some consideration must be given is the question of how difficult it was to introduce reforms of the curriculum into the schools. Was this easier in some schools than others? Who actually made the decisions about what was taught? The seven schools showed important differences in this respect.

At Eton, the headmaster was subject to the authority of the Provost and could be removed by the Provost and Fellows. Staunton, writing shortly after the Enquiry, commented that the power of the headmaster was much less absolute than it appeared since he was always subject to the control of the Provost and that this control was applied not only to matters of real importance but was often exercised in very trivial cases. No alteration of school hours could be made, no new school-book, or even a new edition of an old one, introduced without the Provost's sanction. (4) In the answers to printed questions, Goodford confirmed that the final decision on points such as these and on modifications of the system and course of study rested with the Provost. (5)

The Vice-Provost and Fellows gave it as their opinion that this check upon the headmaster was 'invaluable if not necessary to the permanent interests of the school'. They continued: 'Though at times it may be thought to impede rather than to facilitate progress, it is calculated on the other hand to prevent ill-digested and inexpedient alterations and thus to save the school from the danger of being dependent for the time being upon the master alone. Practically it has been found to maintain a steady course of development and gradual improvement according to the circumstances and requirements of each succeeding age'. (6)

In answer to the question 'Have the assistant masters any voice, consultative or other, in the direction of the studies of the School?', Goodford replied:
'They have no power of voting that such and such schemes should be adopted or rejected but no important change would take place without their being

consulted, and they from time to time freely suggest alterations as they see them needed'. (7)

Thus, what we might call the 'official' version of decision making at Eton was of a benevolent Provost who, though having the ultimate say, was open to reason and whose sanction was, as a rule, readily given to any changes proposed and desired by the headmaster, which, after consideration, appeared likely to prove beneficial. In addition we are offered a picture of a body of assistant masters who were always consulted about important changes and whose opinions were taken into account and who, moreover, 'freely suggest alterations' in the system. (8) There is a great deal of evidence to suggest that the reality was somewhat less idyllic and harmonious.

Many of the assistant masters at Eton voiced considerable criticism of the power structure there. In particular they seemed to resent their own position in that structure and also believed that the headmaster should have more say in the running of the school. The comments of Rev. Kegan Paul are typical of the masters who expressed views on this subject. He wrote, 'The grand reason why Eton has ever come in a measure short of what is required by England, of a school in so high a position and possessing so great a name, is the fact that the working and governing body are not one and the same. The workers - the head, lower and assistant masters - are engaged in actual life: facing actual difficulties. The Governors, the Provost and Fellows, are men who are resting from their work, deeply imbued with the traditions of the past; conscious more than enough of the reforms it was given them to carry out, unable to see the need for fresh reform which arises from time to time. That the headmaster should be freed from the control of the Provost in all merely school questions, or that he and some of the senior

assistants should be also Fellows of the College, seem at present the main things needed to enable Eton to amend her system and introduce fresh studies and fresh methods of study. (9)

Oscar Browning, one of the classical assistant masters, wrote that the consent of the Provost to alterations in the studies of the school was not usually obtained. He believed it to be desirable, if not necessary, to the well-being of the school, that the headmaster should 'as at other places have sole authority over its discipline and studies, as he is wholly responsible for them to the world at large'. (10)

William Johnson, a master at Eton for 16 years, also felt that changes were necessary. He wrote: '... the Provost can, and does, from time to time, exercise a veto on the proposals made by the headmaster, whenever he is departing from routine with regard either to studies, or charges, or discipline, or holidays.' He believed that the headmaster was 'held by the world, and in particular by the parents of pupils, answerable for the maintenance of customs which he would, if he had full power, abolish, and for the refusal of improvements which he cannot get leave to adopt'. (11)

Similar sentiments were echoed by Rev. Charles Caldecott James who wrote that the headmaster could in no way modify the system and course of study even in the minutest particular without the Provost's consent. 'I have repeatedly known suggestions of alterations on the latter head' (i. e. books or editions used) 'negatived solely because this consent has been withheld, '(12) he informed the Commissioners.

In addition, there seemed to be considerable feeling on the part of many of the assistant masters that they should have at least some say in decisions affecting their teaching. Rev. Birch and Oscar Browning both agreed that the

assistant masters were totally without voice in the direction of the studies of the school. William Johnson wrote that the assistant masters as a body were very rarely consulted by the headmaster and never by the Provost. The headmaster often conferred with particular assistants and any assistant could obtain an audience with him on business - but not with the Provost, who of course held real power. (14) Rev. Stone believed that the Provost and headmaster were not sufficiently informed of the general working of the system to enable them to correct its errors. 'I would suggest' he went on that a council of the assistants should unite in deliberation with the present authorities, three, perhaps, or four, either succeeding by seniority, or chosen by the whole body to represent them. Much discontent and misunderstanding would thus be allayed'. (15) Rev. Snow suggested that '.. some alteration in the government of the school, which would place it in the hands of persons employed in teaching, would be highly beneficial'. (16) Rev. Hardisty agreed: 'Privately it is universally felt by us that we should have more voice, or rather, some voice, in matters that so greatly affect our time and labour in carrying on the institution and discipline of the school'. (17)

Rev. James gave an instance of the system in operation. 'Several, I believe almost the whole body of the assistant masters, joined, about last Easter, in requesting the headmaster, with the Provost, to appoint a committee of masters to consider what alterations should be suggested in the school books used, to make arrangements for the publisher with literary persons to re-edit such books as from time to time might require reprinting, and to consider generally what improvements might with advantage be introduced. In answer to this application, the headmaster informed us the Provost declined to acknowledge any committee of the assistants whatever on the subject, but that if we liked to appoint a committee of our body for this

purpose he (the headmaster) would undertake to give due weight to our recommendations, and if he approved of them, to urge them as his own upon the Provost. This is the state in which the matter stands at present: a committee has been nominated and has held a few meetings but has neither power nor responsibility. (18) James' evidence is illuminating in that it shows that even on such an apparently uncontentious matter as revision of textbooks, the Provost refused to recognise the legitimacy of those who were surely most qualified to advise on the subject. The headmaster agreed to take the recommendations of the assistants into account, but all concerned were aware that he had no real authority in the matter and that the ultimate decision rested with the Provost. Frustration at this state of affairs is apparent from much of the evidence. James, for example, goes on to say that the assistants were simply the lieutenants of the headmaster. 'I never remember during the seven years that I have been here as assistant, having been asked by the headmaster to give an opinion upon any point which I had not myself suggested. (19) He believed that the assistants should meet monthly to consider measures to be suggested to the headmaster and that a committee of assistant masters should form a body recognised by the other authorities for purposes of legislation.

Only one of the classical assistants expressed himself satisfied with the government of the school. 'The headmaster often consults with his assistants' commented Rev. F. Durnford 'but is, of course, supreme. The assistants are appointed by the headmaster, and are entirely his servants, and under authority, as is right.' (20)

The system of government at Eton, then, was autocratic. The Provost ruled supreme. He listened to advice from the headmaster, who might or might not have consulted his assistants, but was under no obligation to take it

and frequently, it seems, did not. The headmaster, in turn, was under no obligation to consult his assistants and, presumably, whether or not he did depended entirely on his personal attitudes. There is some evidence to suggest that Balston regarded such consultation as irrelevant. From evidence given by the assistants it is clear that they were unaware of Balston's decision to no longer allow boys to take modern languages as part of their examinations. It is also clear from the evidence that some of them would have disagreed with this step and regarded it as a retrograde measure. When asked by Clarendon about the discontent among his assistant masters on the subject of consultation, Balston replied 'I think the secret is that the Headmaster, from want of time, is really unable to have consultations'. (21)

The evidence from Eton has been considered in some depth because it seems to be so much in conflict with an assertion made by Bamford. In 'Rise of the Public Schools' he writes that the classical masters at the great schools (including Eton) 'had everything; and includes 'a real sense of participation'. The evidence shows that this was far from being the case. The assistant masters were, on the contrary, eager for reform of the system of government at Eton and very discontented at their almost non-existant role in it.

One of the assistants, Rev. Wayte, particularly mentioned the system of government in operation at Rugby and Harrow and said that he would like to see such a system at Eton. He commented that at these schools the head-master's powers were virtually absolute. He believed that if this became the case at Eton, the headmaster would 'be more open to receive suggestions from all quarters and improvements from time to time would be more freely introduced'. (23) Although information from the other schools is regrettably

not as detailed as that from Eton, it is at least clear that decision-making at the other schools was more diffuse, particularly at Harrow and Rugby.

At Harrow, the answers of the Governors included the following statement:

'The trustees or governors have the sole management of the lands, tenements, goods and possessions of the school, and the application of the revenue thereof according to the orders, statutes, and rules of the founder, and they have the appointment of the schoolmaster and usher in themselves, and the power of removal of the headmaster and usher for misconduct or incapacity; but in all other material respects the administration and government of the school for scholastic purposes rests with the headmaster and usher. (24)

Butler, headmaster of Harrow, commented that 'the headmaster at Harrow is completely unshackled by any superior administrative authority, and that consequently it is open to him, and must therefore be his duty, to make such changes from time to time as may appear to him at once desirable in themselves, and opportune in respect of circumstances. (25) In his oral evidence he stated the case even more plainly, saying that the headmaster was supreme in the administration of the school. Even if drastic changes were made in the curriculum he would not have to consult the Governors, but probably would as a matter of courtesy. (26)

According to Butler, masters met at least once a fortnight in the headmaster's house for business. Although 'The full responsibility of fixing and altering, if necessary, the studies of the boys rests with the headmaster' Butler made it clear that he would naturally attribute the very greatest importance to the opinions of his colleagues, whether expressed at their meetings or privately. He added that he was in 'most constant' communication with them all and had

on occasion formed committees of assistants to report on some proposed change. (27)

There is little direct evidence to confirm Butler's picture of the part played by assistant masters in the decision making process, though the Commissioners - who had of course visited the School - seemed to accept his assertions.

The government of Rugby was vested in 12 trustees who had full power to appoint and dismiss the headmaster and all the under-masters, and to make from time to time such rules and regulations for the government of the school as they thought proper. In practice however, it appeared that 'the whole internal management and government of the school is delegated by the trustees to the headmaster, who from time to time reports to the trustees at their annual meeting any changes which he may deem to be necessary'. (28) By virtue of the authority committed to him by the trustees, the headmaster was supreme within the school. He could act within the school without referring to them and it would then be for them to require him if they saw fit to rescind what he may have done.

Asked by Devon: 'Practically during the time you have been headmaster have you found the discretion which you had in the management of the School in any way interfered with?' Temple replied 'Not in the slightest degree'. (29) He added, however, that he would always consult the Trustees before introducing a new study as part of schoolwork.

The practice of meeting the assistants for consultation had been introduced at Rugby by Arnold and was carried on by Temple. All the assistant masters had a consultative voice in the direction of the studies of the school. It was

the practice for the headmaster to call them together on an average once a month when every rule or usage of the school could be discussed. Every assistant master had discretion in determing what books he would use in teaching his form. The assistants seemed to be satisfied with these arrangements. Mr. Mayor, a mathematical master, commented that Temple was always willing to listen to suggestions from his assistants. (30) Rev. Anstey and Rev. Buckoll attributed the harmonious working of the school to the monthly meetings between Temple and his assistants. It emerged from their evidence that Temple had communicated with the other masters about the printed questions sent by the Commissioners. 'Everything was considered at one of these meetings' said Buckoll. '... having been examined at such length he is in fact the spokesman of the rest?' enquired Clarendon, referring to Temple, and Buckoll replied that this was the case. (31)

Thus, at Rugby and Harrow the headmasters held power and consulted their Trustees and Governors only as a matter of courtesy. In addition the assistant masters had a real voice in decision making and at both schools it seems that their views were taken seriously and were often instrumental in bringing about change. The Commissioners commented in their Report: 'it is impossible to read the evidence which has been furnished to us from those schools' (i. e. Harrow and Rugby) 'and from Eton respectively, without perceiving that in the former the assistants have a thorough sense of co-operation with the Head Master and with each other, which is wanting in the latter'. (32)

To some extent, of course, the influence exerted by the assistants at Harrow and Rugby was determined by the personality of the headmaster, who had absolute power to act on or ignore their views. One wonders, for example,

how long the practice of consultation would have survived had Balston taken over the headship of Harrow or Rugby. On the other hand, at both schools consultation was long established and much valued. Even Balston might have had difficulty overcoming the opposition had he tried to discontinue it.

Shrewsbury can be regarded as an absolute monarchy, as power there rested entirely with Kennedy, the headmaster, and consultation, though practised, was not as institutionalised as at Rugby and Harrow. In the written answers the Governors and Trustees wrote that the headmaster had 'the management of the school'. (33) Kennedy confirmed this and also that the direction of the studies of the school rested absolutely with the headmaster. (34) There is no doubt that this was the case. When Kennedy took the really revolutionary step of introducing the non-collegiate class not an entirely popular move - he mentioned this only afterwards to the Trustees. Mr. Warter, one of them, explained that 'Dr. Kennedy started the non-collegiate class, and it afterwards struck him...that he had not authority and he applied to the trustees, and a committee was appointed. We had a great deal of discussion on that point...and... I think it resulted in our saying we would not give Dr. Kennedy authority for doing what he requested; but we did not take any proceedings to prevent him doing it or continuing what he had done. (35) When that statement was made the class had been in operation for five years.

On the question of consultation, Kennedy wrote that the assistant masters had no voice by right but considered that 'the headmaster would act most unwisely if he did not often consult them, not only for the benefit of their advice, but also with a view to secure their confidence and friendship'. (36) Asked by Lyttelton 'As to the undermasters, have you any definite system

with regard to consulting them as to the studies of the school?' Kennedy replied that he had not. 'if there be any occasion to consult them I do so' he added. 'We see each other in point of fact every morning. We go into a common room before we go into chapel and if we have anything to say to one another we do so.' He also pointed out that 'We meet for the purpose of consulting once a week. We consider that evening a meeting for consultation. We have a little time for supper: the ladies leave, and we have an hour afterwards.' (37)

Unhappily, the evidence includes no views of assistant masters on the subject.

Information on the remaining schools is also rather limited. Staunton described government at Westminster as an 'absolute monarchy' as government of the whole School was vested entirely in the hands of the headmaster. (38)

The Dean and Chapter could, if they thought proper, exercise a certain control in the case of the scholars on the foundation. Scott, in his written answers stated that 'The headmaster has power to regulate generally the course of study and books used, subject in the case of the Queen's scholars to his general subordination to the Dean'. In reply to the question on consultation he wrote 'I have been uniformly accustomed to consult such of my assistant masters as possessed sufficient experience to guide them in respect of the studies of the school'. (39)

Turning to Charterhouse, Archdeacon Hale, Master of the School, wrote that 'The Schoolmaster has supreme authority'. The Schoolmaster i. e. the headmaster, Elwyn, expanded this in his answers: 'The headmaster has power to modify the system and course of study within certain limits, but no substantial change can be made in the case of foundation scholars without

the sanction of the Governors'. (41) He modified this statement somewhat in his oral evidence when he said 'Practically I do have the control of the whole school'. (42)

Clarendon seemed to have doubts as to how seriously the Governors took their responsibilities. 'It does not look well' he remarked to Hale 'that the Governors are the only visitors, and they never visit, when they meet together do they not do what generally is done, that is, inquire into the well-being of the School, and whether any possible improvements could be made in it?' Hale replied that they did not and added 'they have always trusted their schoolmasters with regard to the whole course of education and discipline'. He confirmed that practically Elwyn was 'an independent man, without supervision'. Of his own role, Hale said '.. whatever the schoolmaster was to do in teaching I should not consider it my duty to interfere unless it were so improper that it ought to be brought to the notice of the Governors. Asked if he would interfere should the schoolmaster make Latin optional he replied that he would not. As far as he was concerned the schoolmaster was independent in the administration of the school. (43)

In answer to the written question about the role of assistant masters, Elwyn answered that they had 'a consultative voice in the direction of the studies of the school: and in all matters of importance connected with the school it is the custom of the headmaster to confer with them and to receive suggestions! (44) Questioned by Clarendon he admitted that 'There is nothing actually prescribed as to the position of the assistant masters with reference to the headmaster, but it is my invariable custom to mention to them any point which I consider of any importance to the school, and to ask their opinion'. He also admitted that there were no periodical meetings but added that 'Practically we meet every day in school; we stay till the boys have gone

out and if anything has occurred someone mentions it and if it is anything special it is discussed among us. (45) He did not think his assistants would shirk from making suggestions to him but agreed with Lyttelton that his own authority was complete. Once again there is no evidence from the assistants themselves.

At Winchester, the general government of the school was entrusted to the headmaster subject to the supreme control of the Warden and Fellows. In practice, however, he seems to have had much greater freedom of action than the resemblance with Eton suggests. Moberly, in his written answers, informed the Commissioners that 'In all matters within the school, I apprehend that the headmaster is supreme, there being at all times an appeal from him to the Warden, on any subject relating to the scholars, or any of the officials of the college'. (46) Moberly seems to have had virtually complete control over the direction of studies of the school though he remarked '...I should never think of doing anything remarkable without consulting the Warden, and ascertaining his wishes about it'. (47)

To the question dealing with the role of assistant masters, he replied 'No doubt the headmaster would always be anxious that the opinion of the under masters in charge of classes should have great weight in these matters. Practically, indeed, the under masters, under the control and sanction of the headmaster, arrange these things for their classes. '(48) Unfortunately, the opinions of the undermasters in question are not on record. Moberly dominated the written as he did the oral evidence. It does seem to be the case that no regular meetings were held between the headmaster and the assistants and we have only Moberly's word that the undermasters' views carried 'great weight'.

Thus, as we have seen there was considerable variation in decision-making in the seven schools. At Eton, power rested with the Provost, who listened to advice from the headmaster but was under no obligation to take it. The assistant masters had no say at all in the running of the school and frustration and discontent were apparent among them. The contrast with Rugby and Harrow is marked and impressed itself on the Commissioners. In both schools the headmasters ruled but held regular meetings with their staff, took note of their opinions and apparently acted on them. The masters at Rugby certainly felt they had an important part to play in decision-making. These were the two most democratic schools. Next to them was Shrewsbury where Kennedy ruled without check. He did, however, hold regular meetings with his assistants though these took place on social occasions, after 'supping' and when the ladies had left. At Winchester, power seemed to rest with the headmaster, though the Warden also exercised some degree of authority. There is no evidence to suggest that Moberly regularly consulted his staff. At Charterhouse and Westminster, the headmasters exercised almost absolute power, though both claimed to consult their staff and to value their opinions. Exactly what they meant by this is unclear and unsupported by evidence from the assistants themselves.

Such variations in the structure of decision-making suggest that at Harrow and Rugby any new ideas and proposals relating to the curriculum would at least be given an airing with a possiblity of adoption. At Eton, however, staff with advanced views (if this is not a contradiction in terms) had no way of making them known in the place which mattered - the inaccessible heights of the Provost's lodge.

The fact that some schools were governed more democratically than others and that in some the assistant masters had a certain amount of influence does

not, of course, mean that in those schools curricular changes in favour of modern subjects were necessarily made. The assistants and headmasters may well have desired no change and exercised their influence in this direction.

The next chapter will examine the backgrounds and educational views of some of the personnel of the schools in order to determine what pressures were likely to be exerted on the curriculum from that quarter.

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      PSC I p. 6
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      PSC II p. 321
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      PSC IV p. 330
38.
      Staunton p. 132
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      PSC II p. 201
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      PSC II p. 221
      PSC IV p. 19
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      PSC II p. 221
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      PSC IV p. 19
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46.
      PSC II p. 185
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      PSC III p. 335
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48.

PSC II p. 186

Chapter Seven

In the last chapter we saw that at all the schools, except Eton, power to revise the curriculum rested with the headmasters. At Eton it was in the hands of the Provost, though the headmaster was not without voice. The influence of assistant masters on curriculum change went from 'infinitesimal' at Eton to 'quite considerable' at Rugby and Harrow, with the others somewhere in between. In view of this it is important to consider in some detail the heads of schools together with the Provost of Eton. We need to know something of their educational backgrounds, their attitudes to modern versus classical subjects and their contact with and knowledge of what was happening in the wider society. To a lesser extent we need to consider the assistant masters and to determine the nature of the pressures they exerted. The emphasis, once again, will be on Eton, Shrewsbury and Rugby.

Decisions at Eton, as we saw, were taken by the Provost though in some cases no doubt the views of the headmaster did carry weight. The demotion of modern languages, for example, seems to have been to a large extent Balston's own decision. The assistant masters had no access to the Provost and had no way to even express their views to him let alone enforce them. The Provost, by the time he attained that office, was generally middle-aged, had been educated at Eton and King's and had usually been headmaster after spending some years as an assistant master. He had therefore received a classical education and his life had been centered on Eton. He was also no outspoken critic of Eton and its system of education, otherwise he would never have been elected Provost. As Provost he was remote from those actually engaged in teaching and learning.

It is instructive to consider the careers of Goodford and his three predecessors in the office of Provost. Joseph Goodall became Provost in 1809 after having spent eight years as headmaster. After his education at

Eton he had been elected to King's in 1778. In 1783 he became a Fellow of King's and an assistant master at Eton. His Provostship lasted from 1809 to 1840. Cust says of him, 'Dr. Goodall was the strongest of conservatives. To him the Eton system of education and living was the best possible, apart from it having been handed down by a tradition which it would be heretical to question. His whole life and soul was bound up in Eton, and every stone or pinnacle of the college was dear to his heart'. (1) Later he emphasises the point: 'To him and to his assistant Fellows, Eton College was a sacred institution, entrusted to their care, with which they had no right to interfere.' Benson confirms this image of Goodall as a rigid Tory who had little sympathy with educational development. It is hardly surprising therefore that no reform took place during his regime and that he 'used his autocratic power as Provost to cripple every attempt at reform made by Dr. Keate'. (3)

Goodall was followed in 1840 by Francis Hodgson and his election represented something of a break with tradition. The new Provost was 'a man whose connection with Eton, since he left it as a boy, had been of the slightest, and who had not therefore crystallised among Eton traditions, into Eton modes of thought'. (4) Hodgson went from Eton to King's in 1799 and in 1802 was elected Fellow of King's. In 1806 he spent one year at Eton as an assistant master and the following year became Tutor at King's and later Archdeacon of Derby. In 1840, on the suggestion of the reformist Prince Consort and very much against the wishes of the Fellows he was elected Provost. Cust says of him 'He came into his post with a mind trained and refined by contact with the outer world, without being steeped in the prejudices and traditions which not unnaturally encrusted the life of any one, whose sole progress in the world was that of Eton Colleger, scholar of King's, assistant-master, Headmaster and Provost of Eton'. (5)

As Provost, Hodgson gave Hawtrey, the headmaster, a relatively free hand to introduce reforms i. e. in comparison with former Provosts. Even so, he could hardly be classed as a revolutionary. He was obdurate when Hawtrey wished to abolish the necessity of filling up each vacant post among assistants from Fellows or scholars of King's College. (King's was at that time a College exclusively for Etonians - it 'lived its own sheltered, indolent life and was hardly, except in name, a part of the university at all. Its members did not come in contact either with the life or with the competition of Cambridge. (6) Some reforms were, however, carried out. Perhaps the most important from our point of view was the improved status given to mathematics as a result of the appointment of Hawtrey's cousin, Stephen Hawtrey, as mathematical master. The headmaster was, however, not sufficiently powerful to have mathematics introduced into the regular curriculum. It remained an extra.

Hawtrey became the next Provost in 1853. The Hawtreys were a family that had been connected with Eton from time immemorial. (7) Hawtrey followed the well trodden path of earlier Provosts, entering Eton in 1799, leaving it for King's in 1807. In 1810 he became a Fellow of King's and in 1814 an assistant master at Eton. He was appointed headmaster in 1834 and held this position for 19 years until his election as Provost. As we saw, his appointment as headmaster inaugurated a period of reform and Benson regards it as curious that '... an energetic reformer like Dr. Hawtrey should decline in his later years into the Toryism that had made his own early years as headmaster so painful...' (8) Cust comments: 'in most of the reforms introduced by Dr. Goodford, the Provost concurred gladly, but the corrupting atmosphere of the Provost's Lodge had already begun to influence his mind...'.He 'became almost as stiff and unbending an opponent of further reform as Provost Goodall had been'. (9)

Hawtrey, in turn, was succeeded by Charles Goodford in 1862. He went to Eton in 1825, thence to King's and returned as assistant master in 1835, becoming headmaster in 1853. He introduced the reform that assistant masters should no longer be drawn solely from collegers and Kingsmen. In addition, he started the army class, which, as we saw, was not a great success. Ainger, a boy and master at Eton, says of him that 'he did not love changes' (10), a view which is certainly supported by his evidence to the Commissioners. Tarver, the French master, asserted that Goodford attached no importance to the study of French at Eton and this seemed to be borne out in Goodford's comment that none of the existing work could be sacrificed to make room for modern languages.

The two headmasters during this period who did not become Provosts - John Keate and Edward Balston - had both followed the now familiar career pattern. Keate went from Eton to King's, returned as assistant master in 1795 and became headmaster in 1809. Balston, went to King's from Eton in 1836, became an assistant master at Eton and after twenty years was elected a Fellow. In 1862 he reluctantly accepted the headmastership and in this office confronted the Commissioners. His wife was the daughter of one of the Fellows, who became Vice Provost. Neither Keate nor Balston could by any stretch of the imagination be regarded as reformers. Indeed, Hollis, as we saw, referred to Balston as 'a strong traditionalist...a great upholder of the classics'. (11)

We have already seen from the oral evidence that Balston attached little importance to the study of modern languages at Eton. His views on the purpose of an Eton education can be seen most clearly in his answer to a question from Clarendon about how a boy would keep up his French assuming he came to the school with a fair knowledge of it. 'If you ask me my

opinion upon thematter it is this' replied Balston 'we are charged at

Eton with teaching what cannot be done except at school. There are some
things which boys will learn of themselves or at home, and French is one.

On the contrary, Latin and Greek, although of essential importance as the
basis of all education and mental training, are in themselves distasteful
to boys, and only with great difficulty, and after much laborious
perseverance win their way and gain a hold upon them. Our duty at Eton is
to encourage by every means in our power the study of these languages,
and to take care that for a certain period at any rate boys shall devote
their time and energies to such studies as shall insure their being well
grounded at first, and trained, if possible, to habits of hard work. The
ancient languages, as being the only study that accomplishes that result,
must be the main and essential work of the school, and anything which
interferes with that will be so far a hindrance to their advancement in a
good system of classical attainments'.

He conceded that when the teaching of classics had improved he would consider the place of modern languages in the curriculum, though Clarendon apparently found even this meagre assurance less than convincing. 'I think your mode, Mr. Balston, of speaking of modern languages does not give me much hope that it will engage your very serious attention', he commented. (12) An earlier exchange further illuminates Balston's views on modern language teaching. 'I learn from this return' pointed out Clarendon, 'that many masters are interesting themselves and teaching French themselves'. 'Amusing themselves, perhaps' put in Thompson. 'Yes, quite so' replied Balston. (13)

Brinsley-Richards gives us a boy's view of Balston. 'Mr. Balston did not believe in the universal smatter boy who passes from natural science to

French, from French to Greek and from Greek to Algebra all in a day', he wrote. 'He held that to master the two dead languages was to lay the surest, broadest foundation on which to build up other knowledge subsequently.' (14)

Unlike many members of his staff Balston had no adverse comment to make on the power of the Provost over Eton. On the contrary he believed that this was beneficial in that the Provost's long experience of the school resulted in his giving useful advice. Balston was characterised chiefly by his unquestioning acceptance of tradition and 'gladly left the carrying out of reform which he did not love, in other hands', when he resigned the headmastership in 1868. (15)

Turning to Shrewsbury, we need only consider two headmasters view of the longevity of both - Samuel Butler who reigned from 1798 to 1836 and his pupil Benjamin Hall Kennedy, who was headmaster from 1836 to 1866. Butler had been educated at Rugby and Cambridge. He was elected a Fellow of St. John's in 1797. During his headmastership it appears that he did not believe in widening the curriculum of the old schools, and told Lord Brougham that the old grammar schools were founded to teach 'learned languages' and not 'English reading, writing and accounts'. In his view, separate commercial schools should be founded for such purposes. It seems, however, that he later modified his views. In a letter dated 28th November, 1836, he wrote to the M.P., Edward Strutt, that the time had come for English public schools 'to pay attention to modern languages and modern history' in order to keep pace with the advancement of mankind. (16)

On his arrival at Shrewsbury he had found fewer than 20 boys. When he left there were well over 200 and the school had achieved a considerable

reputation for scholarship. A Salopian of the time declared that Butler made his pupils 'believe that Latin and Greek were the only things worth living for'. (17) Charles Darwin, who was at Shrewsbury during Butler's reign wrote of his time there 'Nothing could have been worse for the development of my mind than Doctor Butler's school'. (18)

On his retirement, Butler obtained the election of Benjamin Hall Kennedy who had been his pupil and was then teaching at Harrow, where he had been assistant master for six years. He was a considerable classicist and author of a famous Latin primer. Under him, Shrewsbury's high academic reputation was maintained, though this may have been achieved at considerable cost. Rev. W. Hedley, late Fellow and Tutor of University College, wrote: 'Shrewsbury sends out good scholars, but, as a rule, the boys know nothing more'. (19) In a letter to G. W. Fisher, Rev. Robert Burn, a pupil at Shrewsbury from 1842 to 1848, wrote that in Kennedy's time the love of classical learning was the pervading characteristic of the school. (20) Despite this. Kennedy did introduce both French and mathematics into the regular curriculum - partly as a result of Butler's advice but also because of his own wishes. However, in his evidence to the Commissioners Kennedy made it clear that he considered mathematics and modern languages as subsidiaries to Latin which was the proper basis of a public school liberal education. Asked about the natural sciences, he commented: 'I should think they would not furnish a basis for education at all; I should consider them as an assemblage of facts, not as supplying principles'. (21) If taught at all, natural science should be regarded only as an adjunct to a course of education. Thus, as far as Kennedy was concerned, natural science had little value when it came to furthering the aim of a public school education - the training of the mind.

In the course of the Enquiry this was to emerge as the almost unopposed Clarendon school line.

From 1828 to the Enquiry, Rugby had four headmasters: Thomas Arnold (1828-42), A. C. Tait (1842-50), E. M. Goulbourn (1850-58) and Dr. Temple, headmaster during the investigation, who reigned from 1858 to 1870. It was not customary to appoint Rugby headmasters from among old boys, though the vast majority had been educated at the Clarendon schools.

Arnold had been educated at Winchester and, as we saw, his ideas had a tremendous impact not only on Rugby, but on the public schools generally. For his time, he had advanced views on the curriculum. He brought a new approach to the classics, emphasising their relevance and value in nineteenth century England, and using ancient history to illuminate modern politics. He strengthened mathematics and in 1835 appointed a Frenchman to teach French. German was also taught. History was one of his great loves and his inaugural lecture on his appointment as Regius Professor of Modern History at Oxford in 1841 was a defence of the study. At that time at Oxford modern history was an extra-curricular subject. Thus, in comparison with the other 'great schools' in the 1830s, the curriculum at Rugby was unusually broad.

However, despite such 'radical' views, Arnold firmly believed that the classics should form the cornerstone of public school education. We have already noted his views: 'The study of language' he wrote 'seems to me as if it were given for the very purpose of forming the human mind in youth; and the Greek and Latin languages in themselves so perfect... seem the very instruments by which this is to be effected.' (22) Though personally interested in science, Arnold disapproved of it as a school subject, fearing

that it might cause a decline in other studies and feeling that it could not provide the moral lessons he looked for in all school subjects. He terminated the science lectures which had been given every three years at Rugby since 1776. In 1834, the lecturer, D. F. Walker, complained that Arnold was obstructive. When he next came in 1837, Arnold made his course of lectures virtually impossible to give by allowing them only on half-holidays when attendance for the majority of boys was impracticable. Walker abandoned them in disgust. (23)

Arnold's successor, A.C. Tait had been tutor of Balliol. He extended the study of mathematics and in 1849 appointed W. Sharp as tutor in natural philosophy. Sharp left in 1850 and little, if any, progress appears to have been made in the subject during his time at Rugby. Goulburn, an old Etonian, and the next headmaster, appointed Rev. Berdmore Compton the first teacher of natural science as a regular subject, if a very lowly one, in the Rugby curriculum. At the time of the Enquiry, Rugby, as we saw, was the only school which included natural science as part of its course of study. Temple, the headmaster, had been educated at Blundells and had gone on to take a double first in classics and mathematics at Balliol. He was very much interested in natural science and had read widely in biology, chemistry and physics. To the Commissioners he wrote: 'A boy ought not to be ignorant of this earth on which God has placed him, and ought, therefore, to be well acquainted with geography. He ought not to walk in the fields in total ignorance of what is growing under his very eyes and he ought therefore to learn botany. There is hardly an occupation in which he can be employed where he will not find chemistry of service to him'. Despite his apparently advanced views, however, Temple vigorously defended the place of classics as the essential foundation of public school education. He argued that 'the study of literature humanises, I mean that

it cultivates that part of our nature by which we are brought into contact with men and with moral agents.' The real defect of mathematics and physical science, according to Temple, as instruments of education, was that they had no tendency to humanise. 'Such studies do not make a man more human' he informed the Commissioners 'but simply more intelligent.' (24)

Five headmasters cover the relevant period at Harrow: G. Butler (1805-29), C. T. Longley (1829-1836), C. Wordsworth (1836-45), C. Vaughan (1845-59) and H. M. Butler.

G. Butler, a Cambridge man, was a distinguished mathematician who introduced a little Euclid 'lightly glanced at by the VI Form once a week' but algebra was unknown. (25) During his reign a 'lecturer in Natural and Experimental Philosophy' attended once every two or three years. Longley, (Oxford), who first introduced French as a compulsory subject was followed by Wordsworth of Trinity, Cambridge, and he, in turn, was succeeded by Vaughan, who had been a pupil of Arnold's at Rugby. The headmaster during the Enquiry, Butler, was of the opinion that 'classics should remain decidedly predominant' in the curriculum and continued: 'indeed I believe them to be a far more valuable instrument for training the minds of the majority of boys in school than any other single study'. He believed that because Harrow boys were able to carry on with education until 21 or 22, it was most important to train their minds. If Harrow educated boys from the middle ranks of society who would have to be introduced early into some trade or profession, he would then certainly not recommend that a boy should go on long with the classical system. In such a case a boy 'must sacrifice something from an ideally perfect system of intellectual education to the demands that were specially made upon him'. (26) He was 'most decidedly convinced that we cannot give more hours

in the week to modern languages without damage to the intellectual tone of the place..', and believed 'we have pushed as far as it is wise to do the principle of subtracting from the time originally given to classics'. 'We have to give the means of strengthening the mind', he said 'and it is comparatively less important that a boy should be able to express himself fluently and gracefully in French and German than that he should have something to say which is worth expressing'. (27) Predictably he saw no advantage in introducing physical science into Harrow's curriculum. He was of the opinion that it would be harmful to have too many collateral studies going on at once because it was impossible to extend with profit beyond a certain limit - and that a confined one - the intellectual exertions of the boys. He would not therefore recommend any major addition to Harrow's course of study.

George Moberly, headmaster of Winchester, had been preceded by
H. D. Gabell (1810-24) and D. Williams (1824-36). All were Wykhamists.
Indeed the first Headmaster not to be a Wykhamist since 1454 was not appointed until 1901. Asked if he were connected with the school before he was appointed master Moberly answered simply: 'I was bred here'. (28) He was not an assistant master but Fellow and tutor of Balliol for some years.
Dilke says of him: 'Moberly was not born to be an innovator. He was a moral Metternich, a rock of order in a time when values were changing with reckless speed'. (29) Certainly, his views on the teaching of natural science were entirely predictable. He told the Commissioners that instruction in physical sciences 'was, except for those who have a taste, and intended to pursue them as amateurs or professionally, practically worthless'.
Although every cultivated gentleman should know something of science, only a limited amount of time was available, and as the real purpose of education was to train the mind, no system of class instruction or examination in

physical science was likely to be useful. A scientific fact was simply a barren fact which led to nothing. It was 'knowledge which does not germinate or fructify in any other direction'. Classical learning, on the other hand, told on a man's speech, his writing, on his thoughts: '... and though the particular facts go, they leave behind a certain residuum of power'. Another argument against physical sciences was that 'They do not inherit all the world has had of knowledge and power for thousands and thousands of years; they are not the old world; they are not benefiting from the experience and the accumulated wisdom of the ages that have gone before'. (30) The man possessing classical learning, in Moberly's opinion, had gained 'a foundation of learning infinitely preferable... and applicable to a vastly greater extent, both of knowledge and cultivation of mind, than if he had bestowed the same time and attention on physical science'. (31)

A brief glance at the headmasters of Westminster and Charterhouse shows no break in the pattern. Three headmasters cover the relevant years at Westminster: R. Williamson (1828-1846), H.G. Liddell (1846-55), and C.B. Scott (1855-1883). Carleton mentions the 'startling innovation' of Liddell's appointment as headmaster. (32) He was the first non-Westminster head for 250 years and was in fact a Carthusian - though his father had been to Westminster. Liddell was followed by Scott, educated at Eton and Cambridge. All three headmasters were classicists. In his evidence, Scott made it clear that he did not think the study of mathematics should be placed on a par with Greek and Latin as a training for the mind, as mathematics was less efficient in this respect. He conceded that if numbers allowed he would introduce bifurcation and a class where no Greek at all was taught, though he would keep such a class in subordination to the other portion of the School. (33)

At Charterhouse A. P. Saunders (1832-53), Edward Elder (1853-58) and Richard Elwyn (1858-64) cover the period. Elwyn was himself at Charterhouse and then went on to become a Fellow of Trinity, Cambridge. He was a senior classicist, who afterwards studied law. There is little information on Elwyn's views. As we saw from the evidence of Mr. Stewart, the chemistry lecturer, it would seem that he was not unfavourably inclined towards the study of chemistry. 'I tried to introduce it' said Mr. Stewart, 'and Mr. Elwyn... seemed quite agreeable to it, and, in fact, rather wished it'. (34)

It is clear from the foregoing that the headmasters of the great schools, together with the Provost of Eton, were not notable for their revolutionary views on the curriculum. Some were more enthusiastic about modern languages than others, some placed a higher value on mathematics than their colleagues, but these are minor differences which pale into insignificance when we set them against the background of overall consensus. The headmasters believed that the twofold purpose of public school education was to train the mind and produce Christian gentlemen. The classics were the subjects which best achieved this end, and they should therefore form the foundation of public school education. Other subjects, though valuable in various ways, were regarded as adjuncts, as accessories - and despised ones at that. Repeated onslaughts by the Commissioners had no visible impact on this commonly held set of beliefs.

The headmasters and Provost were, as we saw, the power holders in the schools. In 1913, Leach wrote: 'there is probably no position in English civic life where a single individual exercises such uncontrolled power over others as does the headmaster of a successful Public School', (35) and this was probably even more the case fifty years earlier. Any change in a

school's curriculum, however minor, required the headmaster's sanction. In view of their educational backgrounds and views any drastic curriculum change which favoured modern subjects (especially natural science) at the expense of the classics was - to say the least - unlikely to receive such sanction.

Some of these autocrats, however, as we saw, were at least open to pressure from their assistant masters. It is difficult to determine exactly to what extent the assistant masters had real influence and to what extent the weekly/monthly meetings were simply exercises in good public relations. There can be no doubt, however, that assistant masters at Harrow and Rugby felt a real sense of participation in the decision-making processes of their schools just as there can be no doubt that their colleagues at Eton felt excluded. It is therefore important to consider the views of the assistant masters in an attempt to determine whether any influence they had would be used to bring about a modernisation of the curriculum. Bamford's table showing the educational backgrounds of assistants at Eton, Shrewsbury and Rugby is a useful starting point. (36)

Masters appointed to:

Shrewsbury 1801-1900 Eton 1801-62 Eton 55 6 1 Harrow 0 2 0 Rugby 0 35 2 6 21 Shrewsbury 0 St. Paul's 2 3 0 Winchester 8 0 Charterhouse 1 2 O Westminster 0 1 0

Table 1

Table 1 cont. Masters appointed to: Eton Rugby Shrewsbury 1801-1900 1801 - 621801-99 Other public schools 1 25 9 Grammars 6 21 10 Private schools and home 0 1 4 Elsewhere 0 O 0 Scotland, Ireland, abroad O 7 1 No information 12 10 26 8 Oxford 77 21 Cambridge 66 50 44 Other universities 0 2 1 No information 0 2 7 Total 74 79 125

It is clear from the table that all three schools depended heavily on the Clarendon schools for their staff, and in every case there is also a marked tendency to favour ex-pupils. This was particularly so at Eton where the vast majority of staff were old Etonians. The reasons for this policy will be considered later in the chapter. The figures given for Rugby and Shrewsbury extend to the end of the nineteenth century, and although both schools were more willing than Eton to take on staff not educated in Clarendon schools, this practice was largely confined to the later years of the century. The table also indicates the almost total reliance of the schools on Oxford and Cambridge as providers of staff. The considerable implications of this will be examined in chapter 8.

To turn now to the views of staff members at the time of the Enquiry,

evidence from Eton indicates, perhaps predictably, that assistant masters there were not as a body in favour of any dramatic revision of the curriculum. Rev. Edward Coleridge, a classics master for 32 years before becoming a Fellow, expressed views which were echoed in the evidence of many of his colleagues. He was of the opinion that more subjects had already been introduced into the Etonian curriculum than could be properly taught. He felt that subjects such as modern languages and history should be taught before a boy came to the School. Asked if he would include any branch of physical science in the regular work of the school he replied 'I should be very glad to do so but what are you to do? You cannot put more water into a bucket than it will hold'. (37) He had some sympathy with boys who were brilliant at mathematics and useless at classics and would make it easier for them to display their talents. Rev. Francis Durnford, a classics master for 23 years, shared the view that it would be impossible to introduce more work at Eton. (38) Both heand Coleridge displayed what turned out to be a common prejudice against Frenchmen teaching French in English schools. One of Durnford's objections to modern languages was that he would not like to introduce foreigners into Eton. They would not obtain the respect of the boys and yet parents would not like their sons taught foreign languages by Englishmen. (39) Tarver, the French master, commented that the masters at Eton did not support the French teachers and an additional sidelight is given by Brinsley-Richards who tells us that 'Some tutors looked with a positive aversion upon the learning of French, regarding it as an utter waste of time'. (40)

Some of the younger masters expressed rather more adventurous views than their older colleagues and, like Oscar Browning (classics master for two years) and Rev. C.C. James (classics master for seven and a half years), recognised the importance of modern languages, history and geography.

Both felt, however, that French would have to be taught by the classics masters as Frenchmen would not be able to keep order.

Though there is some indication that the younger masters at Eton were a little more forward-looking than their senior colleagues, they can hardly be regarded as revolutionaries. With one notable exception they were convinced classicists who believed that classics should dominate the public school curriculum. History, geography and modern languages should, at the most, be allotted only a tiny fraction of the available time. Natural science was not sufficiently important to merit even an hour. Brinsley-Richards refers to the attitudes of one of the assistant classics masters, Rev. J. E. Yonge, who was probably not untypical: 'knowing much of' Latin and Greek, but having a sovereign contempt for everything he did not know. Mathematics were in his eyes mere vanity, and French a language which could only engage the attention of a trifler.' (41) Natural science, we can only assume, was beneath contempt.

The notable exception was W. Johnson, Fellow of King's, Cambridge, and assistant master at Eton from 1845 to 1872. He contributed a rather poignant essay to 'Essays on a Liberal Education' in which he speaks of his yearning for a very different kind of knowledge' from the classics, (42) and criticises the 'lamentable gaps which a so-called liberal education has left' in the mind. (43) He displays a bitterness that his own education has meant that science is to a large extent closed to him. He determines to encourage boys who show an interest in the subject but continues: 'Ignorance and indifference.. cannot... be cured by the occasional propounding of scientific puzzles, by the display of scientific toys, by reproducing in talk what has been carried away from lectures'. (44) Ainger, writing of Johnson, tells us that he was deeply read in ancient and modern history and political economy and that in his

views on education and the training of the mind he was 'far in advance of those who were his colleagues at Eton'. (45)

The conservatism of Etonian assistant masters can be readily understood when we consider their educational background and experience. The classical assistants were all Etonians and only a few of the despised mathematical assistants came from other institutions. Neither Goodford nor Balston could be persuaded to see the desirability of any change in this respect. Goodford, when asked if the fact that a certain number of the mathematical assistants were not Etonians would interpose a difficulty in the way of putting them on the same level as the classical assistants replied: 'I think it would to a certain extent'. (46) He agreed that mathematical assistants should have the same powers of enforcing discipline as the classical masters both in and out of school - providing they were Etonians.

Goodford justified his preference for Etonians on the grounds that an Eton man would know more about the school and its traditions and the habits of the boys. This opinion seemed to be shared by certain assistant masters. Rev. Coleridge, for example, agreed that the choice of masters should be restricted to Eton men. 'It is strange' he argued 'to say that an Eton boy, the son of an English gentleman, should differ from the son of another English gentleman, but there is something about the Eton boy, whether derived from his associations, habits, or tone of feeling that arises from long connection with the place, that renders him, when a man, peculiarly fitted to fill the office of an assistant master; and I should consider that it would be quite a risk to take anybody else'. (47) Others took a different view.

J. T. Walford, a classics master for only two years, mentioned that some assistants would be happy to see non-Etonians appointed. One of these, as we might expect, was William Johnson, who added the stipulation, however,

that all masters must be men from the ancient universities.

One of the main advantages, according to Goodford, in appointing Etonians was that they were known. He told the Commissioners, 'I never appointed a single classical man whom I had not known personally before, and whose career I had not been able to trace from the time he left the school'.

Confronted with the fact that the other great schools recruited more widely, Goodford was unmoved and merely reiterated that he would prefer his assistants to be all Eton men. 'Do you not think' asked Vaughan 'that if you allowed as a principle a few masters not Etonians to be chosen it would be of advantage to the school...?' - 'I do not see how' replied Goodford. (48)

Balston's views were identical. Asked by Clarendon if there would not be advantages for Eton in selecting masters from a wider field he said 'My opinion is this, that you might perhaps get better men as regards university attainments or distinction, but you could not so safely appoint a stranger as you can appoint men after six or seven years knowledge whose character you have watched upon the foundation at Eton. (49) Vaughan moved once more into the attack: 'Should you not think there are some advantages, with regard particularly to the progressive improvement of the school, in taking occasionally, and even systematically as assistant masters a few of those who have been educated at other schools, and are consequently acquainted with the systems of other schools?' Balston answered 'I think we are progressive'. Thompson took up the point: 'As a matter of fact, have not the most progressive schools been generally manned in that way?'. Balston's reply is one of the gems in the Evidence: 'I should say that Eton is as progressive as any, if not the most progressive school in the country. (50) After such a statement the Commissioners could only change the subject.

On this point, then, both Goodford and Balston were adamant and no change seemed likely in the policy of appointing Etonians and where possible Kingsmen as classical assistants. In this respect two further points should be mentioned. Assistants were generally appointed very young, usually straight from university, and were therefore unlikely to come into contact with new ideas on the aims or content of education. In addition, as both the headmaster and Provost made clear, men were selected who had been on the foundation and whose character and views were well known. Assistants, quite clearly, would only be appointed whose attitudes were most in keeping with those of the Etonian establishment.

As we have already seen, assistant masters at Eton had no formal say in decision-making. Possibly they wielded some informal influence, though there is little indication of this. Perhaps, too, certain strong-minded individuals were able to make their views heard but even if this was the case such influence would surely be of a conservative kind. An Etonian classics master with progressive views on the curriculum would have been, as we have just seen, an extreme contradiction in terms.

One possible source of new and progressive ideas remains to be considered, namely the mathematics and modern language masters, some of whom were non-Etonians. These gentlemen, however, had low status embodied in all kinds of petty rulings, were regarded as inferior beings by the Etonian establishment and had an even smaller say in school affairs than the classics masters, having no access to even the headmaster. It is extremely unlikely, therefore, that any ideas they held about curriculum change and the like would even see the light of day.

We turn now to Rugby where, as we saw, assistant masters - both classical and non-classical - had at least some voice in decision-making. Regrettably

the Commissioners did not interview assistant masters at Rugby with the same thoroughness as at Eton, but there is nevertheless evidence both in the Report and elswhere to indicate that assistant masters at Rugby were somewhat less conservative than their fellows at Eton.

The Rev. C. Evans, assistant master for fourteen years, expressed views which in the context of the Clarendon schools can be regarded almost as revolutionary. He believed that by 16 some boys had reached the end of their classical tether and left school with stagnant and ill-formed minds. He was of the opinion that this applied to at least half the boys who left school above a certain age and believed in consequence that it was absolutely necessary to have distinct departments starting with the formation of a Woolwich class for boys who had reached at least the sixth form. He went on to make the point that he was advocating these changes 'not on the narrow ground of special professional training, but in the abstract, as a valuable liberal education. He suggested that having acquired a solid groundwork in Latin and Greek, boys might then be permitted to drop a certain portion of their classical work and devote the time to mathematics principally, to physical science, history and modern languages, care being taken to guard against superficial smattering. He believed that a combination of mathematics, physical science and a groundwork of the classics would afford a valuable mental education. He was also astute enough to realise that 'The sixth form in the new school must rank exactly on a level with the classical sixth form, or else we should be defeated'. (51) It was his view that such a course of education would exactly meet what he considered to be the requirements of the age. His progressive views, however, only went so far. He believed firmly that where successful, the classical system was really the higher form of education.

Though Mr. Mayor, mathematical master since 1845, was also in favour of a modern school being set up at Rugby, Evans' views were not typical of the other masters who, on the whole, wanted no radical change in the curriculum and were happy with the existing system. It seems clear that at Rugby, however, the classical masters accepted their fellows teaching non-classical subjects as valued colleagues who had an important role to play in the education offered by the school.

The most progressive member of staff was undoubtedly Wilson, mathematical master and teacher of physical science. Although a relative newcomer to Rugby (he had taken his degree in 1859 and been at the School only three years) he must have injected into the masters' meetings something of his own enthusiasm and respect for science. His views do not emerge clearly in the course of the Enquiry. Perhaps he felt himself too much of a newcomer to criticise Rugby to the Commissioners. Perhaps he held back out of loyalty to Temple, whose views on the classics must have been wellknown to his staff. Only a few guarded comments indicate that he was not entirely happy with the situation at Rugby or in the public schools generally. He did, at least, express views on the setting up of a modern school. If such a school were established, he believed that there was so great a pressure for the army that probably nearly half the school would be in it within a couple of years. 'At this moment I have 26 pupils' he commented, '10 are for Woolwich and they all will be obliged to leave Rugby because they cannot get into Woolwich from here. If there was a second school, they could remain here. (52)

His views on the teaching of science and classics emerged with full force a few years later in his contribution to 'Essays on a Liberal Education'.

'It needs no proof' he wrote 'that the present state of education into which

we have drifted is not satisfactory, and among its most marked defects is the neglect of science.' He went on to deplore the ignorance of boys nurtured entirely on the classics. 'And this is the less excusable because the experience of the best foreign schools is showing the advantage of introducing greater variety into the courses of study. A wider net is cast; fewer minds repose in unstirred apathy: there is less over-estimation of special branches of knowledge, and, what is more important, the variety seems itself to be a stimulus.' (53)

Rugby, as we saw, had a much more open recruitment policy than Eton. Although there was a tendency to recruit staff from old Rugbeians, the other Clarendon schools, lesser public schools and even grammar schools, provided a significant percentage of Rugby staff. Even the headmaster, as we saw, was a Blundells man. The willingness to take on staff who had been educated outside the Clarendon schools was, however, largely confined to the post 1850 period, only five out of 46 staff being appointed from non-Clarendon schools before that date.

The policy of wide selection was not applied when it came to higher education. Almost without exception, masters were recruited from those who had taken their degrees at Oxford or Cambridge, by far the larger number coming from Oxford.

Turning now to Shrewsbury, we find there is regrettably little evidence from assistant masters either in the Enquiry or elsewhere. Shrewsbury was, however, the school with the most impressive reputation for achieving high success in the classics and we may therefore assume that the teaching body was recruited with a view to maintaining this situation and not rocking the classical boat by bringing to Shrewbury dangerous

'progressive' ideas about modern subjects. None of the masters who gave their opinions were enthusiastic about the non-collegiate class. Mr. E. Calvert who had been an assistant master since 1852 with the exception of a short period in 1859, was superintendent of the class and confessed that he did not like it. 'I think' he said 'it tends to encourage indolence to a certain extent'. (54) T. A. Bentley, assistant master for 20 years and in charge of modern languages, seemed to share Calvert's sentiments. He told the Commissioners that the 'non-collegiates' did not make more progress in modern languages than the other boys, despite additional instruction, and said that they were 'originally the most illiterate of all.' (55)

As Bamford's table shows, Shrewsbury recruited staff from the other Clarendon schools, non-Clarendon public schools and grammar schools, though this practice, as at Rugby, was principally confined to the post 1850 period. The largest single source, however, was Shrewsbury itself and once again the vast majority of staff had taken their degrees at Oxford or Cambridge, this time Cambridge being the more favoured of the two.

A brief consideration of the remaining four schools - Winchester,
Westminster, Harrow and Charterhouse - shows little divergence from the
pattern established by Eton, Rugby and Shrewsbury. The assistant masters
shared the generally conservative views held by the majority of their
colleagues, though the few rebels must not be overlooked. Perhaps the
most notable was E. E. Bowen, late Fellow of Trinity College, Cambridge,
and assistant master at Harrow. In an essay entitled 'On Teaching by
Means of Grammar' he assumes that other subjects have 'at least as much
right as the classical languages to form the basis of modern training'. (56)
He felt that most boys gained very little from the knowledge of Greek and
Latin which they picked up at school. 'Consider the case of a stupid boy,

or an unclassical boy, at school' he wrote 'and the load of repulsive labour which we lay upon him'. He was also highly critical of the way in which classics were taught and commented: 'the work which the system... exacts is as cramping and distorting... as an ill-fitting boot to the foot'. (57) Needless to say, his views were not typical and no doubt outraged many of his colleagues.

Like Eton, Rugby and Shrewsbury, the other four schools recruited staff mainly from the Clarendon schools and demonstrated the same tendency to favour old boys. When it came to higher education, all the schools looked to Oxford and Cambridge, generally favouring one or the other. Moberly at Winchester clearly felt himself to be under an obligation to restrict the choice of staff to New College, Oxford. 'I have always felt it to be my duty' he commented 'to fill up the masterships that were in my patronage as far as I could from New College. The only excuse that would be felt to be adequate if I brought in another man was that I could not find one to suit me at New College'. Unlike the Provost and headmaster of Eton, however, he did not consider this to be necessarily a good thing: 'I have no hesitation in saying' he told the Commissioners 'that the consequence of restricting the choice of masters to any single college, cannot be to improve the quality of the teaching in a school'. (58)

Thus, the vast majority of the assistant masters in the Clarendon schools at the time of the Enquiry had received a classical education virtually undiluted by any other subjects. This was particularly true in the case of long-serving masters who had been educated in the 1820s and 30s when even mathematics was regarded as an educational frill. As for those educated outside the Clarendon schools - and their recruitment as we saw was very largely a post 1850 phenomenon - they had gone, with their future

colleagues, to colleges at Oxford or Cambridge which, as we shall see in the next chapter, were hardly hotbeds of educational reform.

The general conservatism of schoolmasters at the time was commented upon unflatteringly - and to some extent explained - by both Johnson and J. W. Hales, Late Fellow and Assistant Tutor of Christ's College, Cambridge. In an essay entitled 'The Teaching of English' Hales wrote: 'Schoolmasters as a race - whatever glorious exceptions there may be cannot be expected to embrace readily alteration and change; they have learnt their part once and for all, and will not usually be anxious to unlearn or relearn it. They have mastered more or less adequately one particular system of training, and do not care to modify or abandon it. (59) (This, incidentally, was also the feeling of the Commissioners, who wrote: 'a master can only teach what he has himself learnt, and he is naturally inclined to set the highest value on the studies to which his own life has been given'. (60) Hales continued 'if we consider how extensive the machinery of any established system - how endless its handbooks, how enormous the literature belonging to it - we shall see yet more fully what a supreme advantage possession is, and what powerful incentives there always are to conservatism in educational subjects (61)

Describing the type of man likely to take up schoolmastering and based on almost a quarter century of experience, Johnson was less charitable. 'Men of strong will do not so very often become schoolmasters' he wrote 'the work of schools must be done by men who have for the most part not enough energy for sustained inquiry: the classical teacher is generally a possible clergyman in his strength and in his weakness, not a lawyer, nor a man of science'. He goes on 'There is a great gulf between those who are satisfied with examining and renovating the mental products of past times...and

those who... are all the while straining beyond the duration of single lives towards the enlargement of fruitful knowledge and the progress of beloved mankind. (62) What Johnson seemed to regard as the natural conservatism of schoolmasters was increased by the situation in which they found themselves. 'According to the custom of certain public schools' he wrote, 'a classical teacher enters upon his duties as soon as he has taken his degree as a Bachelor of Arts...He is supposed to conform to the traditions of the establishment to which he attaches himself. He is fortunate if he has been kept waiting for a vacancy long enough to have spent a few months at Dresden, Rome or Tours'. (63) Later he speaks bitterly of the schoolmaster's 'servitude' amounting to fifty or sixty hours a week, which presumably left little time or mental energy for intellectual experiment. (64) After a young man left college and took a house in a school, little was added to his knowledge beyond 'a smattering of modern languages and dilettante culture'. (65)

Another important factor in explaining the conservatism of the assistants involves the selection procedures to which they were subjected. A prospective assistant was carefully scrutinised by the headmaster concerned, who either knew him personally or made detailed enquiries about him through friends and colleagues at Oxford and Cambridge. The schools were in a competitive market situation and masters had to be carefully vetted to ensure that they were acceptable to the upper class and upper middle class clientele who visited their sons and were entertained by their tutors. Even if this had not been the case, it would be difficult to imagine Moberly, Kennedy or any of the other headmasters, selecting a master who was not committed wholeheartedly to the view that the classics should dominate the public school curriculum - unless circumstances were unkind enough to dictate otherwise. This may have been the case over Wilson's appointment

at Rugby. Temple had had considerable difficulty finding anyone to teach science and quite possibly appointed Wilson, with his 'radical' views, as a last resort.

Even in the event of such dissidents slipping through the tightly woven selection net, once in situ there were considerable pressures on them to conform. Most Clarendon school masters viewed teaching as a career. The less ambitious were content with a comfortable niche in one of the more successful schools where emoluments were high. At Eton, Harrow and Rugby, 20, 30 and even 40 years continuous service were not uncommon. The more ambitious no doubt hoped eventually for the headmastership of a Clarendon school or one of the newer public schools. Rugby was outstandingly prolific in the production of such headmasters. Career prospects in either case depended on the favour of one's headmaster. Promotion within a school, the lucrative gift of a house, were his to confer. A better position in another school, a headmastership, were likewise dependent on his recommendation. This would hardly be forthcoming in the case of an assistant master who had shown himself to be out of sympathy with the aims and dominant views of a public school.

In conclusion, the evidence indicates that the real decision-makers in the schools - the headmasters and Provost of Eton - were without exception convinced classicists who wanted no revision of the curriculum in favour of modern subjects. In such circumstances our consideration of the views and backgrounds of the assistant masters could be regarded as an academic exercise, at least in the case of the majority of the schools, as there is little evidence that they had any real influence over the curriculum. However, the possibility does exist that at Rugby and Harrow their views carried some weight and even at Eton, the occasional informal murmur may have

permeated through to the Provost's Lodge. It is clear, however, that even if this were the case, any influence possessed by the assistants would not be exerted in the direction of introducing a more progressive course of study. With very few exceptions, their views on the curriculum differed little from those held by their senior colleagues.

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45.
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     PSC IV p. 281
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         op. cit., p. 243
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- 55. PSC IV p. 349
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- 59. J. W. Hales, 'The Teaching of English', in Farrar, op. cit., p. 298
- 60. PSC I p. 12
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- 62. Johnson, pp. 316-318
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- 64. Johnson, pp. 314-316
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Chapter Eight

In the course of this thesis the close connections between the Clarendon schools and the ancient universities have often been referred to. Certainly the historical development of the two sets of institutions has been strikingly similar. Like the Clarendon schools the ancient universities were originally centres of professional training, offering a largely vocational education based on the classics. They prepared men for careers as clerics, officials, administrators, lawyers, teachers, etc. and catered primarily for a middle class clientele. In the fifteenth and sixteenth centuries a small well-born minority - apparently with no serious vocational intent - made its appearance at Oxford and Cambridge. Throughout the sixteenth and seventeenth centuries, though the university and public school bodies were still socially mixed, well-born fee paying commoners became numerically dominant at a time when the classics were losing their vocational significance and acquiring a social one. During the eighteenth century the gap between studies considered suitable for gentlemen and the commercial and professional needs of the age widened and this century was a period of uncertainty and decline for both the universities and the schools. Both sets of institutions were the targets of mounting criticism during the eighteenth and nineteenth centuries and in both cases criticism culminated in Royal Commissions and reform - though of a limited nature.

There can be no doubt that the influence of the institutions on each other has been considerable - though it is principally the influence of the universities on the schools which concerns us here.

At the time of the Enquiry, information in the Report indicates that at Oxford about one third, and at Cambridge rather more than one fifth of the undergraduates came from the nine Clarendon schools. Nearly three-quarters of these came from Eton, Harrow and Rugby. (1) In addition, the

vast majority of the staff of the schools, as we have seen, had been educated in one of the two institutions. Links between schools and the universities could often be traced back to the original foundation and the succeeding centuries had seen a steady flow of boys from the schools to the universities and back again as staff members.

Bamford's table, already referred to on page 158, shows how complete was the reliance of Eton, Rugby and Shrewsbury on the ancient universities as sources of new staff. From 1801 to 1862, Eton's entire staff had been educated at Oxford and Cambridge, 66 out of 74 at the latter institution. At Rugby from 1801 to 1899, only two members of staff out of 125 came from other universities, while for two more, information is not available. At Shrewsbury, during a similar period, details are unfortunately not available for seven members of staff, while 71 out of 79 hailed from Oxford and Cambridge. Only one is known to have come from another university.

Boys often proceeded from school to university and back again as members of staff with little intervening experience. At Eton, at least, intervening experience was actually discouraged as it was felt that the best masters were those who proceeded from Eton to King's and on completion of their university education, back again.

Professor Seeley, Fellow of Christ's College, Cambridge and Professor of Latin in University College, London, wrote in 1867 of the influence exerted by the universities on schoolmasters' attitudes. 'Universities are...the places where our schoolmasters are trained', he wrote. 'The opinions about education which they imbibe there are the opinions upon which they act...The subjects they will consider most important in education will be, as a rule, the subjects which were most in repute at

College when they were there'. He continued: 'A schoolmaster may discover by trial a better way of teaching a subject than the way he began with, but it will not so readily occur to him to doubt the expediency of teaching a particular subject at all. A master's faith in the Eton Grammar breaks down long before his faith in Latin itself is even shaken, and this profound faith in Latin depends ultimately upon the value which is attached to it at the Universities.'(2)

Links between the two sets of institutions were close in other ways.

Heads of colleges applied to school headmasters for reports on prospective students and staff. In return they gave information on possible recruits to school staffs. It was not unknown for ex-masters and headmasters to obtain appointments at the universities after a period of service with a particular school, or even during it, Thomas Arnold being an example. The two universities - as one would expect - in turn relied heavily on the schools for their supply of dons.

One fact which emerges clearly from the evidence given to the

Commissioners is that the staff of the schools saw their primary

function as that of preparing boys for entry to one of the ancient

universities and concentrated their efforts in this direction. The

Report commented: 'The great schools.....have always educated

principally with a view to the Universities'. (3) Masters interviewed

by the Commissioners seemed to have little knowledge of or interest

in any other destination - this attitude, predictably, being most

noticeable at Eton. The interesting thing to note, however,

in this connection is that the majority of boys did not, in fact,

proceed to the ancient universities. Figures obtained by the Commissioners

clearly illustrate that this was the case. (4) Those for Eton are incomplete
though the tendency is unmistakeable. Balston, taking the opportunity to

demonstrate his dislike of the Enquiry and his unwillingness to co-operate with the Commissioners stated that he kept no account and did not know whither the boys who left during the first half year of his headmastership went on leaving school.

During the year which ended at summer holidays 1862

	Total no. of boys who left	No. of these who went to		Total going to
		Oxford	Cambridge	Oxbridge
Eton	22	6	2	8
Winchester	31	13	-	13
Westminster	27	3	7	10
Charterhouse	27	4	1	5
Harrow	105	20	18	38
Rugby	140	19	20	39
Shrewsbury	39	7	7	14

The Commissioners commented: 'not one of these nine schools sends as many as half of its boys to the universities, and...in the case of most of them the proportion is much less than one half. Taking them altogether, it appears to be about one-third.' (5)

In spite of this, the masters clearly saw their task as that of preparation for the ancient universities and equally clearly considered these to be the most desirable destinations for their boys. In view of the backgrounds of most of them, and their collective lack of experience of life outside the classical confines of the schools and universities, it is surely only to be expected that such an emphasis should exist.

The Commissioners, recognising the importance of the relationship between the two sets of institutions, asked dons for their opinions as to the extent of the influence of the universities on the public school curriculum and vice versa. The complex question put to them was: 'It having been suggested that the greater prominence given to classics and mathematics, as opening the only roads to high University distinctions, tends to limit the studies of the Public Schools to those two branches of education, and to render difficult the successful prosecution of other subjects which it is desirable to introduce, your opinion is requested as to the correctness of this view. If the Universities act thus upon the Public Schools, do the Public schools in their turn react upon the Universities? Do you think that the earnest prosecution at the Public Schools of what are called modern subjects would tend to give a higher value at the Universities to honours taken in those subjects?' The opinions given cannot unfortunately be regarded as representative of the whole body of dons as those who chose to reply to the Commissioners must be seen as a self-selected sample.

Chase, Principal of St. Mary Hall, expressed what seemed to be a general view when he stated that the universities acted upon the schools but that the schools did not to any appreciable extent act upon the universities. (6) Rawlinson, Camden Professor of Ancient History, believed that the emphasis placed on classics and mathematics at Oxford and Cambridge gave those subjects a more decided prominence than they would otherwise have had at the public schools, although he did not think that this prevented the prosecution of other studies to 'as great an extent as is desirable'. (7) Rev. R. Scott, Master of Balliol, agreed that the opinions held at Oxford probably affected the schools. He believed that when history and natural science were valued as much as classics and mathematics at Oxford, the study of those subjects would be stimulated at both the university and the schools. Rev. J. R. T. Eaton, Fellow and Tutor of Merton College, felt that the influence was largely one-way and suggested that the foundation of

scholarships or fellowships in modern subjects at the university would tend to encourage such subjects at the schools. Scott was of the opinion that the schools acted on the universities only in the sense that they could raise or lower the standard in the several departments, according to the amount and quality of preparation, and that they had little influence in altering the relative importance assigned to this and that department of study. (8) Rev. Ridding, Tutor of Exeter College, believed that the schools had some influence in the sense that as men came up interested in other subjects, and so raised the standard of them in the university, they would gradually be brought into greater prominence. Colleges, in their desire to get the best men, would make their scholarship examinations test the points which would show the men to advantage, that is, those in which they had been educated. Thus a general change in studies at the schools, would, though perhaps not directly, act on the universities. He did make the point, however, that single schools which began such a change would, during the process, be likely to suffer so much in university position that it would be unreasonable to expect it of them. (9) Wilson, in his essay 'On Teaching Natural Science in Schools', made this point in relation to science: 'there is at present so slight a recognition of science in schools on the part of the Universities' he wrote 'that any public school which gave up much time to science would be hopelessly out of the race at the Universities'. (10)

Views expressed by the Cambridge dons differed little from those at Oxford. Lempriere Hammond, Fellow and Tutor of Trinity, did not believe that changing the public school curriculum to include modern subjects would have any effect on the universities. (11) G.D. Liveing, Professor of Chemistry, was of the opinion that if modern subjects were pursued more at school, this would tend to increase the value of the honours given to them at the universities, but he also felt that the prominence given to classics and

mathematics at the universities very much affected the education of the higher forms at the schools. (12) Rev. J. B. Mayor, Fellow and Tutor of St. John's College, believed that when the new triposes at Cambridge became better known they would perhaps lead to increased study of the natural sciences in the schools. (13)

Professor Seeley, in the essay already referred to, argued that 'In the leading schools it does not rest simply with the Headmaster to decide what the higher forms shall study. The College authorities at Oxford and Cambridge take this question very much out of his hands by their examinations for entrance exhibitions, and the University authorities by their degree examinations.' He continued: 'Education in fact, in England, is what the Universities choose to make it. This seems to me too great a power to be possessed by two corporations...' (44)

The dons, then, seemed to agree that the influence of the universities on the curriculum of the schools was considerable, but that the influence of the schools on the universities was very small. They were, however, asked to consider only the impact of curriculum changes. Even though in the latter case this influence may well have been slight, the public schools had had considerable impact on the universities in other ways. Corelli Barnett, for example, suggests that the ideal of a Christian education, developed at Rugby and other newly reformed schools, went on to capture the universities. (15) In addition we must not forget that the schools had educated many of the personnel at the universities in their formative years, in situations which at least approximated to those characteristic of total institutions. University staff were often appointed on the recommendations of headmasters and we have seen that they would be unlikely to recommend anyone out of sympathy with the public school line on what constituted a

desirable education.

Thus, it would seem that the influence of the institutions on each other was considerable. Probably the influence of the universities on the schools was the more direct and easily discernible but the influence of the schools on the universities was by no means negligible.

We shall now move on to consider the nature of the influence exerted by the universities. Were they, if not progressive institutions, at least more progressive than the schools? Were they more aware and responsive to the changing needs of society and prepared to modify their curricula accordingly?

The evidence indicates that until at least the mid nineteenth century and, some would argue, for a great deal longer than that, the ancient universities were principally purveyors and champions of classical learning. This is not to say that other subjects were entirely ignored or that there were not important differences between the two institutions. Cambridge for example, largely due to the influence of Isaac Newton, at Trinity from 1661 to 1696 and occupying the chair of mathematics from 1669, gave more encouragement to the study of mathematics. Even in the late fifteenth century at Cambridge there had been considerable interest in practical mathematics though this was, in the main, confined to individual enthusiasts and it was even at that time considered an inappropriate study for gentlemen. John Wallis, Savilian Professor of Geometry at Oxford, recalled that during his undergraduate days at Cambridge in the 1630s 'Mathematics... were scarce looked upon as Academical Studies, but rather Mechanical; as the business of Traders, Merchants, Seamen, Carpenters, Surveyors of Lands, or the like'. (16) However, through Newton's influence mathematics became an important study at Cambridge and eventually dominated

the arts course.

The seventeenth century also witnessed considerable interest in science which affected both universities. In 1619 chairs were founded in geometry, astronomy and natural philosophy and in 1622 in anatomy though it must be emphasised that these subjects had little relevance for undergraduate studies.* The chief characteristic of science at this time was its concern with experimentation and practical application in the Baconian tradition. In 1683 the Ashmolean Museum of natural history was opened at Oxford to serve as a centre for experimental science. Medical studies based on empirical observation also attracted serious attention. An unprecedented amount of scientific investigation and publication between 1660 and 1690 was the work mainly of university educated scientists. Another fruitful area at this time was the study of history, particularly the development of historical research. Although history formed no part of official university studies, the scholars who distinguish this period were all university men. Much of this scholarship and research, however, took place outside the official studies of the universities and had little effect on undergraduate studies.

By the end of the seventeenth century scientific interest was on the wane. At both universities the new interests of the Restoration period, especially experimental science and medieval research, died out and classical and scholastic learning reasserted themselves. Isolated and self-contained, both universities failed to respond to new national needs in an age of commercial and industrial expansion. Newman in fact described the universities' eighteenth century history as 'a century of inactivity'.(17)

^{*}V.H.H. Green 'The Universities' p.227

During this period the great majority of students read for the BA and in practice this was the only degree for which instruction was provided. At Oxford the substance of the course was still Latin and Greek grammar and literature with some rhetoric, logic and scholastic philosophy. At Cambridge, as we saw, the tradition of Sir Isaac Newton had gradually made mathematics of primary importance, although V. H. H. Green believes that the university suffered from an over-emphasis on the subject. (18)

Ashby argues that the mathematics and mechanics courses at Cambridge had not taken any account of advances in knowledge and were suffering from 'a sort of Newtonian scholasticism'. (19)

Prior to 1747 the examination system at Cambridge had been generally regarded as something of a farce, but in that year the mathematical tripos was established. As the oldest honours degree examination this embraced 'Arithmetic, Algebra, Fluxions, the Doctrine of Infinitesimals and Increments, Geometry, Trigonometry, Mechanics, Hydrostatics, Optics, and Astronomy in all their various gradations', and was considered at the time a very searching test. (20) It was more than fifty years later before Oxford set her examination house in order by passing in 1800 the Public Examination Statute which, in the opinion of the Oxford University Commissioners, first raised the studies of the university from their former 'abject state'. The Examination Statutes gave rise after a few years to an appreciable Honours School which was divided in 1808 into three classes and in 1831 into four. Mansbridge comments: 'A certain, if minute, degree of proficiency was required for a 'pass degree'. (21) The two original honours schools, Literae Humaniores (Greats) which was mainly classical, and Disciplinae Mathematicae et Physicae (Mathematics), remained as the only schools until 1850 when two new schools, Law and Modern History, and Physical Science, were authorised. In 1851 Cambridge introduced the Natural Science

Tripos and Moral Science Tripos. The latter embraced moral philosophy, political economy, modern history, general jurisprudence and the laws of England, and was criticised by many dons as fostering a 'shabby superficiality of knowledge'. It attracted little support but in 1868 gave birth to the Law and History Tripos. Prior to this, a Classical Tripos had been instituted in 1824 but until 1857 no honours candidates except noblemen were permitted to sit the examination without having first taken the mathematics honours. Ashby comments: 'In justice to Cambridge it should not be forgotten that the judges, statesmen and bishops of that day who graduated in classics were more familiar with such concepts as mass, velocity and inertia than most modern classicists are'. (22) However, while mathematics dominated university examinations, classics were important in college competitions, especially at King's.

Outside the statutory degree studies there were lectures on a wide variety of subjects given by the university professors. During the eighteenth century the number of chairs increased in such diverse subjects as poetry, Anglo-Saxon, chemistry, astronomy, botany, geology and modern history. The traditional systems of study, however, had become so ossified that no room could be found for these subjects and if professors started by giving lectures they soon stopped because no-one went to hear them. The first two Woodwardian professors of geology at Cambridge each gave an inaugural lecture and then continued silent, the second occupant of the chair throughout the 28 years of his tenure. (23) There were professors who lectured, but they were exceptional and, since their lectures had no connection with degree courses and exercises, audiences were probably confined to the casually interested. In time professorships became sinecures, often held in plurality with others in the church, requiring no special knowledge or competence and incurring few academic responsibilities. A man passed

over for the chair in one subject might get one in another if he could collect sufficient support. If he had a conscience he would read up the subject afterwards though this was by no means obligatory. In 1726, an Oxford satirist commented: 'I have known a profligate debauchee chosen professor of moral philosophy and a fellow, who never looked upon the stars soberly in his life, professor of astronomy'. (24) Mansbridge's summation of the situation seems accurate: 'Oxford in 1800 reveals an inert, almost moribund professoriate'. (25)

It is scarcely surprising in such circumstances that throughout most of the eighteenth century the universities were at a low ebb. However, from about 1780 admissions slowly increased as some colleges began to look to their educational responsibilities and attempted to improve their teaching. The holders of certain chairs which had earlier been regarded as sinecures began to take their research and lecturing seriously. Though important, these were, however, exceptions and in spite of minor reforms Oxford and Cambridge remained little changed during the first half of the nineteenth century. When Baden Powell was appointed Savilian Professor of Geometry in 1827 he was advised it would be useless for him to lecture as he would not get an audience. As late as 1852 the Regius Professor of Medicine reported that he had discontinued his lectures as he had only four students a year. Professors were poorly paid and often had to teach in ill-equipped rooms. The professor of chemistry at Oxford was allocated in 1817 the lower room of the Ashmolean Museum and when he asked for more accommodation was offered a share of the Keeper's Kitchen. (26) Over thirty years later Rev. J. Cumming, Professor of Chemistry at Cambridge University informed the Cambridge University Commissioners: 'There is no residence, museum, library, collection, or apparatus attached to the Professorship. The apparatus is the private property of the

Professor and there are no funds for this purpose. There are no opportunities afforded to students for instruction in the actual manipulation of instruments, as there is only one room appropriated to the Chemical Professor, and there is no apparatus for the use of students'. He continued: 'Hitherto the study of chemistry had not only been neglected but discouraged in the University, as diverting the attention of pupils from what have been considered their proper academical studies'. (27) The Commissioners commented that no provision was made 'for the instruction of students in chemical manipulation and experiments, without which all chemical instruction must be necessarily imperfect'. (28) From the evidence given, it seemed that the situation in other sciences was not much better. Apart from astronomy only one scientific subject in Cambridge had caught the enthusiasm of the age, and that was geology. Two of the professional schools in Oxford - law and medicine - had atrophied, lawyers going instead to London and medical men to Edinburgh, Leyden or to one of the hospital schools in London. Advanced study and research had no official encouragement. If at all they were pursued by dons as hobbies. Predictably during this period the ancient universities attracted at least as much criticism as the public schools.

The outdated curriculum was one of the primary targets. Articles by Sidney Smith and associates published in the Edinburgh Review between 1808 and 1810 commented, for example, on the extravagant attachment of the universities to classical knowledge and its effect in producing narrow and limited beings. Edgeworth criticised classical learning on the grounds that scholars had come to love 'not what may be read in Greek, but Greek itself', and commented: 'An infinite quantity of talent is annually destroyed in the Universities of England'. (29) Criticism from within the universities was also making itself heard. In 1832 Baden Powell, Professor of Geometry at Oxford, said that not more than two or three Oxford degree candidates

could add vulgar fractions, tell the cause of day or night or the principle of the pump - and he went on to make a plea for the inclusion of science and mathematics in the basic core of education. (30) By the 1830s all middle class publications were in full cry against the state of university learning, especially at Oxford.

Nor was it only the curriculum which was subjected to criticism. Teaching in the colleges was poor. Fellowships were in many cases awarded by patronage and often restricted to a particular school, county or even family. Intellectual qualifications or scholastic achievements were seldom involved. Where election to fellowships did depend upon intellectual qualifications they were qualifications in the classics and mathematics. The calibre of students also attracted adverse comment. At Cambridge the majority of undergraduates were poll or passmen. This survived from the time when, for most undergraduates, the formal course of studies was a minor element in their lives and serious 'honours' courses were the concern of only a small proportion of students. Before 1851 only two honours subjects existed, both highly specialised. Ambitious students preparing for high office invariably read for honours. The great bishops and public school headmasters, for example, had taken honours degrees. Many pollmen however, the sons of noblemen and gentry, intended to take holy orders and aspired to nothing more than a country rectory. Kearney makes an analogy between the leisurely, gentlemanly life in some colleges and that in London clubs. Despite reforms, the tradition of the gentleman survived. In 1900 the number of pass men at Cambridge was still half the undergraduate population. (31)

The close identification of both universities with the Established Church also led to criticism. Even in the nineteenth century both universities were very

much concerned with training clergy for the ministry of the Church of England. 413 of the 1,239 undergraduates who matriculated at Trinity, Cambridge, between 1831 and 1840 were to be ordained. Of 1,388 who matriculated between 1853 and 1862, 496 took holy orders. (32) At Oxford all students were required to subscribe to the Thirty-nine Articles before taking up residence and had to subscribe again before taking a degree. No subscription was required on entry to Cambridge but a student, before taking a degree, had to declare himself a member of the Church of England. Clergymen dominated Convocation at Oxford and Senate at Cambridge.

Critics drew attention to the extreme difficulty of inaugurating internal reform at the ancient universities and this was one of the arguments used to reinforce the continuing demand for external reform. Executive control belonged to a small oligarchy in which the college heads - generally elderly and unfriendly towards innovation- predominated; at Oxford the Hebdomadal Board and at Cambridge the Caput Senatus. The legislative assemblies, Convocation at Oxford and Senate at Cambridge, consisted of the general body of full graduates, but they could only accept or reject proposals sent to them, and here too majority opinion tended to be strongly conservative. James Mill wrote that the universities were so constituted that they could make no provision for change and had developed 'a strong spirit of resistance to all improvement, a passion of adherence to whatever was established in a dark age', and a hatred of those who advocated change. He commented: 'An institution for education which is hostile to progression is, therefore, the most preposterous, and vicious thing, which the mind of man can conceive. (33) The extreme conservatism of the power holders at Oxford was demonstrated in 1833 when a group of Oxford M. A. c. put up a scheme for including some mathematics and science in the degree

course. This was rejected on the grounds that 'physical knowledge neither is nor ought to be an essential part of a liberal education'.

The Westminster and Edinburgh Reviews together with the Quarterly Journal followed this rejection with still more critical articles, demanding the end of the power of the Church over the universities and their reestablishment as national institutions. The reform party within the universities continued to press for change and in the early decades of the century certain reforms were carried out - some of which have already been referred to. A syndicate set up by the Senate at Cambridge in 1848 conceded that while its members admitted the 'superiority of the study of Mathematics and Classics over all others as the basis of General Education' they believed that other branches of science and learning should also be encouraged. (34) Perhaps the most important area of change before 1850 was in the role of the tutor, through whom the reformers hoped moral and intellectual improvement would come. Mark Pattison at Oxford in the 1840s was the model of the new tutor and the new don. According to Green in 'Oxford Common Room', the academic reputation of Lincoln College was 'mainly the fruit of Pattison's work as tutor'. Green points out, however, that '...the College was itself changing, elections to fellowships had at last brought a nucleus of real learning and conscientious teaching capacity to the common room! (35) Thus, reforms were being made but all farreaching progressive proposals were consistently blocked by the country clergy who voted en masse in Convocation and Senate against any fundamental change in the government or curricula of the universities. Modern subjects, including science, continued to be largely extra-curricular.

Continuing criticism and the ineffectiveness of internal reform resulted in the establishment of a Royal Commission on Oxford and Cambridge in 1850 'with a view to assist in the adaptation of those important institutions to the requirements of modern times'. Like the Clarendon schools a decade later, both universities, especially Oxford, objected most strongly, insisting that they were quite capable of putting their own houses in order and had indeed been doing so. The Commissioners encountered fierce resistance from the colleges but co-operation from many of the professorial staff who had long favoured reform.

The Reports in 1852 recommended broadening the base of university government especially by the inclusion of the professoriate and also recommended a strengthening of the universities vis-a-vis the colleges, notably by building up a core of university teachers. They also recommended a transformation of the content of education to allow for a certain degree of specialisation, including mathematics and science, and called for better facilities for the teaching of these subjects. The Enquiry was followed in 1854 by the Oxford University Bill and in 1856 by the Cambridge University Bill. Simon has called the Royal Commission and its aftermath a 'quiet revolution'. (36) The University Acts were the first steps towards removing the stranglehold of ecclesiastical control and gave the universities scope for development as educational institutions.

Men at both universities were ready to take advantage of the new opportunities and hastened to make changes which, in Simon's view, allowed the institutions to serve the needs of the new upper middle class. (37) According to Simon, tutors like Jowett at Oxford and Oscar Browning at Cambridge set about making colleges centres for the formation of a gentlemanly ruling class. There was a barely concealed desire to 'civilise' the higher bourgeoisie. In its Report on Oxford the Commission wrote: 'It is certainly desirable that the manufacturing and mercantile,

which has arisen by the side of the landed aristocracy, and which is exercising a great influence on the public counsels, should seek to have its sons brought up where so many eminent statesmen of past and present times have been trained; and that the Universities should not cease to send forth a succession of persons qualified to serve God in the State as well as the Church'. (38)

Arthur Clough, late Fellow and Tutor of Oriel and one of Arnold's pupils at Rugby, in his evidence to the Oxford Commissioners urged that 'More and more young men, sons of the more affluent parents, destined for business', should be 'brought under the influence of the ancient national education'. At the same time, however, he voiced certain misgivings as to the possible outcome of this policy. '... is it certain' he asked, 'that such an indiscriminate admission would not destroy the subtle superiority which it is the object to communicate? Do we not run the risk of debasing and vulgarising the very means we wish to use for elevating and purifying? (39)

To sum up: prior to 1850, in spite of minor reforms, it is fair to say that the ancient universities were out of touch not only with developments in science but also with the latest developments in their own fields. They had contributed virtually nothing to the Industrial Revolution which had gone on around them for the most part unnoticed. As Ashby puts it in Technology and the Academics, the scientific revolution had occurred not through but in spite of the English universities. (40) After the work of the Royal Commission reforms were made but progress was painfully slow. It was not until 1865, for example, that science formed part of the course for the ordinary degree at Cambridge. The Natural Science Tripos, instituted in 1851, did not lead to the B. A. and Honours until 1861, when it was taken by only three men. It was not until 1875 that Cambridge produced more

than twenty names for the examination. Almost a decade after the Royal Commission, in 1861, when Liveing was appointed to the Chair of Chemistry, he had two small rooms, devoid of apparatus, assigned to him as a laboratory. A separate home for natural science was found in the New Museums buildings finished in 1864-5. The Cavendish laboratory started in 1873 and new buildings were constructed for the study of physiology and zoology in 1876-9. The election of a scientist to a fellowship at one of the smaller colleges, Downing, in 1867, was the first of many that followed in somewhat sporadic succession- though most fellowships continued to go to those excelling in mathematics or classics. Throughout the century new professorships were added, for example experimental physics in 1871 and mechanical and applied science in 1875 - over a century after the start of the Industrial Revolution.

Oxford made even slower headway. Its interests long continued to be predominantly classical, philosophical and historical rather than scientific. Mark Pattison, a member of the reform party at Oxford, writing of the 1850s in his Memoirs, commented 'We were startled when we came to reflect that the vast domain of physical science had been hitherto wholly excluded from our programme. The great discoveries of the last half century in chemistry, physiology, etc. were not even known by report to any of us.' (41) The serious development of science at Oxford dates from the erection of the University Museum 1855-60, though the development was hardly rapid.

In 1867 Wilson referred to the complete inadequacy of the provision of scholarships for natural science at both universities and commented: 'Hence all the abler boys at school are in fact heavily bribed to study either classics or mathematics'. He felt that Cambridge in particular

'must undergo a great change of disposition, and therefore of its institutions, before science will flourish there'. (42) Certainly, with reference to the 1860s and 70s it is difficult not to agree with T. H. Huxley's views on contemporary university education given to the Select Committee on Scientific Instruction in 1868. Without mincing words he told the Commissioners 'I think that the spirit of the teaching at our older universities is entirely opposed to the spirit of scientific thought. At present they are hardly to be trusted with scientific education', and later, 'the universities make literature and grammar the basis of education; and they actually plume themselves upon their liberality when they stick a few bits of science on the outside of the fabric'. When one of the Commissioners put it to him that the universities were giving opportunities for scientific instruction Huxley replied sarcastically: 'Yes, undoubtedly, if a man does not want any of the higher rewards of the universities, and chooses to go out of his way...' (43)

More than ten years after the Royal Commission on Oxford and Cambridge the Clarendon Commissioners questioned dons about their views on the value of 'modern subjects'. The views expressed at both universities were very similar, though once again care must be taken not to generalise as we are still dealing with a self-selected sample. Rev. Rawlinson, Camden Professor of Ancient History at Oxford, expressed what seemed to be the general view. 'The most valuable men for almost all purposes' he wrote, 'seem to me to be formed by the full classical system of our existing public schools and Universities, or by that system combined with a certain amount - not a very high amount - of mathematics.' He added that he would not 'give to modern languages, English literature or English history any greater prominence than they at present possess in our system of education', and continued, 'I think that in education their right position

is one of subordination, since they are far less fitted to improve the powers of the mind - which is the true (intellectual) end of education - than the two great subjects of classics and mathematics. (44)

The vast majority of dons who gave their opinions on the teaching of natural science believed it was not a suitable subject for inclusion in the school curriculum. Although Rev. Kitchin, Junior Censor of Christ Church, could see advantages in acquiring knowledge about the physical sciences, he told the Commissioners that 'a thorough course of physics incorporated into the body of public school work would demand too much time, and would require arrangements which must prove very complicated and difficult to work'. (45) Rev. G. Ridding, Tutor of Exeter College - as might be expected from Moberly's son-in-law and his successor as headmaster of Winchester - was not in favour of teaching natural science in schools. 'It is so much less possible to consult several idiosyncrasies at school' he commented 'that I do not believe it would be possible to make natural science a main branch of education in schools without an entire revolution, except in those which are large enough to make a distinct department for it. The cases in which it could be more than an amusement are so few, that to make it compulsory would be much more harm to the many, to whom it would be no education, than gain to the few. (46) Rev. D. P. Chase, Principal of St. Mary Hall and Tutor of Oriel, saw no reason why boys should not 'be led to take an interest in or made to learn the ascertained facts of any branch of natural science...' He continued '... compulsory attention to modern subjects in our schools... will often do good - by awakening tastes and indicating capacities which... might be wholly dormant or unsuspected by their possessors'. These apparently progressive views were put into perspective when Chase outlined his overall philosophy of education. '...classics and mathematics' he wrote 'have

established their right to prominence as instruments of education, that is, as means of training and developing the powers of the mind. And that until it can be shown that, for the large mass of minds, there is any other of equal efficacy, they must open the only roads to high University distinctions. When the mind has been trained and disciplined, then, but not before, special subjects can be prosecuted with success. $^{(47)}$ Rev. H. Latham, Fellow and Tutor of Trinity Hall, Cambridge also believed that classics and mathematics should form the staple of education since they were for the majority of boys the best instruments for intellectual development. As for the natural sciences, Latham suggested that 'it would be sufficient if boys who had a taste for such pursuits were given instruction enough in them at school to keep their interest alive, as there is time enough for the scientific prosecution of such studies at the Universities! (48) Rev. Arthur Faber, Fellow and Tutor of New College, Oxford was 'strongly of the opinion that other subjects might be more recognised at public schools than they are now'. This, however, conflicted with his wish that the value of such subjects should not be increased at Oxford for, as we saw, most dons believed that until modern subjects came to be valued at Oxford and Cambridge their status in public schools would remain low.

Rev. R. Scott, Master of Balliol, believed that the general opinion at Oxford was that honours in the schools of history and natural science were not equal evidence of mental power and acquirements with those in classics and mathematics. He commented: 'It is generally thought that the highest honours in these schools are attainable at a cost of less time and labour, and they are, at present, less valued'. In similar vein he wrote of modern languages: 'no-one can think them equal to the classical languages as instruments of education'. (49) Ridding indicates his view

of natural science in a few eloquent sentences 'We have two or three men at a time who turn their attention to physical science, most commonly with a view to future professional use, and who do so with advantage. A few also pass in that school as the easiest, or from liking it. Unless a man had a personal liking for that branch of study we should not turn him from others to it... '(50) Lempriere Hammond, referring to the moral and natural sciences triposes at Cambridge, informed the Commissioners that 'very eminent success in the studies included under the new triposes should be and is now more likely to be rewarded at Cambridge.' However, he continued 'Moderate success... such as would insure a middling or low place in the first class of these triposes, will not and, in my opinion, should not be rewarded to the same extent as a corresponding success in the old studies: for it does not represent equal intellectual ability or equal training.'(51)

Certainly the majority of dons who gave evidence to the Clarendon Commissioners expressed a view with which we are already familiar that the classics and to a lesser extent mathematics should form the staple of education because they trained the mind. Other subjects should be included in the curricula of the schools and universities but only as accessories. These 'other subjects' generally included history, geography, modern languages, etc., but most dons felt that natural science should not be taught in any serious way at school. The dons' views as to the relative values of classics and modern subjects are illustrated by a suggestion from Lempriere Hammond: '... if at the age of 14 a boy is entirely ignorant of these languages' (i. e. Latin and Greek) 'or wholly unable to master the first principles of the grammar, his attention should then be directed to other subjects, such as modern languages, history and mathematics. For this purpose it would be desirable to have in every large public school a modern department from which Greek would be excluded, and in which the study of Latin (if admitted) would be confined within very narrow limits'. (52) The implication is obvious. Modern departments within public schools

should be the refuges of the intellectually inferior, those incapable of understanding the intricacies of Latin and Greek but able to cope with less demanding subjects like French, mathematics, geography, etc.

This attitude calls to mind many parallels from the public schools - masters' disparaging comments on the modern department at Shrewsbury, references to the unsuccessful army class at Eton.

In view of such evidence from Oxford and Cambridge, it would seem reasonable to assume that at least until the 1870s, the ancient universities paid only reluctant lip-service to the value of modern subjects, particularly natural science. Even by the 1870s there was little sign of any fundamental change or even desire for fundamental change. Clearly, entrenched and strongly held views about the value of certain subjects as opposed to others were not to be changed overnight.

There were dons who favoured the introduction of modern subjects into the public school and university courses and they should not be forgotten.

C. S. Parker, Fellow of University College, Oxford and Henry Sidgwick,
Fellow of Trinity College, Cambridge, both contributed to 'Essays on a

Liberal Education' and advocated that more time and money should be devoted to modern subjects at the Universities. Both were extremely critical of the existing state of affairs and the continuing dominance of the classics. Parker, for example, wrote: 'The Natural Sciences have a good staff of professors, a museum and library, and an honour-list of their own, with such crumbs of endowment as may fall from the richly furnished tables of the classics. But narrow classical scholars have been disposed to regard the new studies with indifference, if not with jealousy'. (53)

Sidgwick carried the war into the enemy's camp and denounced the high value set on the classics: '... the very exclusions and limitations that make

the study of language a better gymnastic than physical science'he wrote 'make it, on the other hand, so obviously inferior as a preparation for the business of life, that its present position in education seems, on this ground alone, absolutely untenable'. (54) He believed that without a considerable modification of the curriculum, the interests of boys in public and grammar schools 'even if the recommendations of the Public School Commissioners be carried into effect generally, will still be sacrificed to the supposed interests of the future clergy and literary men - a great clear loss for a very illusory gain'. (55) Dons holding such views were, needless to say, in the minority.

Thus, over a decade after the Royal Commission had attempted to improve the status of natural science and other 'modern' subjects at Oxford and Cambridge, it was clear that the battle was far from won. After ten years of the 'quiet revolution' the course followed by about three-quarters of Oxford undergraduates consisted of a small amount of logic and mathematics, portions of three Greek and three Latin authors, the grammars of each language and translation from English into Latin Prose. To this each candidate was required to add either some mathematics, or a slight amount of natural science, or a little law or political economy with modern history. And this at one of the two leading universities in a country which had been experiencing an industrial revolution for a century.

Clough told the Oxford University Commissioners that the ancient universities were 'simply finishing schools for the higher classes', (56) and a decade later Chase wrote that they were mainly 'places of preparation for the ministry of the Established Church'. (57) As Barnett comments: 'Neither the dons nor the courses of study were likely to bring the nine-teenth or early twentieth centuries to the close attention of undergraduates'. (58)

The gradual progress of science at Oxford and Cambridge continued through the remaining decades of the century. More chairs were established, facilities and endowments for scientific work were increased. Yet, most authorities on the universities seem to agree that science was not established firmly until at least the end of the century. The Royal Commission on Technical Instruction in 1884 commented: 'Natural Science is finding its way surely, though slowly, into the curriculum of our older English universities', (59) and remarked that at Oxford, students of science were 'not numerous'. (60) The Commissioners also made the following reference to Cambridge: 'The college tutors, whose business it is to advise the freshman, and inform him of how he is to get his teaching, have, as a rule, been ignorant of science, and even of the facilities which Cambridge possesses for carrying on a scientific education'. (61) A proposal made in the 1880s that prospective chemists might be allowed into Oxford without a knowledge of Greek showed how entrenched were the old attitudes. The Professor of Chemistry refused to endorse the scheme until the university as a whole publicly admitted that a complete liberal education could be obtained without studying Greek. Such agreement was not forthcoming until the next century. Even in the honours courses, prestige through the nineteenth century rested with classics at Oxford and pure mathematics and classics at Cambridge.

Ashby argues that one of the obstacles to the progress of science in English education was the preoccupation with the utility of science. Scientific education was often urged upon schools and universities, not because science was in the mainstream of European thought, but because it would improve the efficiency of industry. Ashby suggests that one consequence of 'this narrowly pragmatic attitude to science was that scientific education tended to be regarded as more suitable for artisans

and the lower middle classes than for the governing classes'. Since Oxford and Cambridge were the preserve of gentlemen 'here was a suitable excuse for continuing to neglect science'. (62)

This disparaging attitude to science in general was in time eroded by the idea that experimental science was more than a useful tool for trade: it was an intellectual adventure without precedent in the world's history. This view owed much to the German concept of Wissenschaft which dominated German universities - the objective and critical approach to all knowledge and devotion to the advancement of knowledge for its own sake without regard for its practical applications. British scientists of the 1880s often completed their education by attending a German university, as Germany led the world in scientific research, and many of them were much influenced by the concept of Wissenschaft.

Thus, science only became respectable in English universities when it had been shorn of its sordid practical applications and could be viewed as an intellectual adventure, a discipline which trained the mind. According to Ashby, this somewhat schizophrenic approach to science still bedevils English universities. He writes: 'It was difficult enough for British universities to adapt themselves to scientific thought; it is proving much more difficult for them to adapt themselves to technological thought. For pure scientific research is akin to other kinds of scholarship: it is disinterested, pursued for its own sake, undeterred by practical considerations...the traditional don is not yet willing to admit that technologists may have anything intrinsic to contribute to academic life'. (63) Rothblatt makes a similar point in 'Revolution of the Dons'. Referring to late nineteenth century Cambridge he writes: 'So deeply rooted was the disdain for commerce and industry, for the values which

they were supposed to represent, that numerous dons and non-resident M. A. s decided the worth of an academic subject by its usefulness to commerce and industry. In their view almost no subject which could be turned to the benefit of business deserved university recognition. Even French and German could not be instruments of humane learning like Greek and Latin, because they were useful in international trade. (64)

Thus, prestige continued to attach to disciplines without any direct practical significance and both universities fostered a much greater respect for the 'pure' than for the 'applied' scientist. Wissenschaft, however, gave pure science at least a much needed filip and by the end of the century it had been accepted at both universities though possibly more fully at Cambridge. The classics, however, retained their importance. It was taken for granted that Latin and Greek were necessary for admission and it was not until 1919 that Greek was abolished as a condition of matriculation at Cambridge, followed a year later by Oxford. In addition, as Ogilvie points out, the two universities continued to offer more scholarships in classics than in any other field and as the attainment of scholarships provided schools with a major source of prestige, the universities thus continued to influence public school curricula away from science. (65) Wilson, as we saw, had made the same complaint in 1867, '...all the abler boys at school are in fact heavily bribed to study either classics or mathematics', he wrote, 'even though their genius is for natural science'. (66) There seems little reason to doubt the views of both Mansbridge and Bamford, who agree that there was no real growth in science at either university until at least the latter part of the nineteenth century.

In conclusion, it is only too apparent that little pressure for change would

be exerted on the Clarendon schools by the ancient universities. They were cast largely in the same mould, staffed by men with similar backgrounds and attitudes who shared a strongly held belief in the value of the classics as opposed to the intellectually less valuable 'modern subjects'. Reform, in both cases, came only after decades of severe criticism and was strongly resisted. Even after the Royal Commission which investigated the universities, progress, as we saw, was painfully slow, one of the reasons no doubt being that Oxford and Cambridge were 'fortified by endowments against all modern influences, good or bad'. (67) Both institutions saw their major role as the preparation of a ruling elite composed of traditional 'landed' elements and 'civilised' members of the bourgeoisie. The dominant educational characteristic of this elite should be that its members had well-trained minds.

The public schools and ancient universities were influenced to a considerable extent by the same forces. Arnold with his ideas of a ruling class composed of Christian gentlemen, had a tremendous impact on both, defining their aims for decades to come. Progressive royal commissions helped to shape both, one of their aims being to preserve the pre-eminence of the ruling class. The Clarendon schools and ancient universities, instead of bringing about necessary changes in each other, rather tended to reinforce commonly held attitudes as to the value of the classics, the comparative irrelevance and inferiority of most other subjects and the importance of religion in the educative process.

Bamford suggests that after 1850 the headmasters of the schools were 'thrown on the defensive' because their senior colleagues at the universities had accepted science. He comments: 'those public schools who denied these studies to their boys were denying something which their senior colleagues

had accepted'. (68) Certainly, the fact that the sciences grew a little more respectable at Oxford and Cambridge had an impact on the schools. Wilson mentioned the added incentive felt by Rugby boys to study science after the changes at the universities. However, in view of Wilson's comments, the comments of the dons to the Clarendon Commissioners, and the views of dons expressed elsewhere, Bamford does seem to be overstating the case. Natural science was still very much a poor relation at Oxford and Cambridge. The headmasters' senior colleagues had not 'accepted' science, as he claims, it had been forced upon them and apparently without bringing about any change in the traditional university and public school view that science, if taught at all, should be regarded as an accessory to the two main subjects and had little value in training the mind. It is difficult to see the changes which took place at the ancient universities as a process of growing enlightenment and awareness of the value of modern subjects which was passed on to the schools. The colleges had change forced upon them and accepted it with the greatest possible reluctance. Attitudes to science and other modern subjects showed no dramatic change. They were for decades to come regarded as despised and inferior alternatives to the classics.

The schools and ancient universities can be viewed almost as a single entity, reinforcing each other's traditionalism and opposition to change. In certain cases, change was forced on one or the other of them, usually as a result of external pressure and, where this happened, the other tended to fall in line with the change. But apart from such instances they were both reactionary institutions in matters of curricula, both dominated to a considerable extent by the Established Church and both following almost parallel courses of development. The conclusion of this chapter must be that the ancient universities undoubtedly exerted considerable influence on the curricula of the Clarendon schools - but influence only in the

sense that they reinforced and sanctified existing attitudes and values which were, in any event, common to both.

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Chapter Nine

In considering the views expressed by dons and public school masters on the curriculum, we have seen that the vast majority of these gentlemen believed that classics and to a lesser extent mathematics, should continue to dominate the courses of study at the public schools and universities. An interesting point to note, however, is that while many of them were willing to admit some modern subjects into the curriculum - albeit as comparatively unimportant accessories to the two main disciplines - they were extremely reluctant to include natural science. This apparently quite general dislike of natural science may have owed something to the view, expressed by Jowett and others, that science was antagonistic to religion. If widely held in public school and university circles such a belief would clearly have considerable repercussions. The aim of this chapter is to attempt to assess both the general influence of religion on the public schools and in addition the impact of the developing, and often uneasy, relationship between science and the Established Church.

The influence of religion on the schools was both direct and indirect, and is certainly the most complex factor to assess, since alongside its obvious impact it also shaped the minds and attitudes of those involved with the schools and was, in many cases, the mainspring of their actions. An additional complicating factor is that attitudes to religion and what constituted religious certainty changed over the period under discussion and even varied from faction to faction within the Church of England.

In the last chapter we examined the very close interrelationships between the ancient universities and the schools. As we saw, school staffs were almost entirely educated at Oxford or Cambridge and the schools' curricula owed much to views current at the universities. For this reason, it would be unrealistic to consider the impact of religion on the public school

curriculum without also looking at the role of religion in the nineteenth century universities. Many of the religious opinions which affected attitudes to science were formed or at least hardened during university days. Thus, although the emphasis in this chapter will be on the schools, the universities will also be considered where this illuminates the role of religion in the development of the public school curriculum.

Ensor writes: 'No-one will ever understand Victorian England who does not appreciate that among highly civilised... countries it was one of the most religious that the world had known'. (1) It is perhaps difficult for a member of such a secularised society as our own to appreciate the importance of religion in the life of the Victorian middle classes. Biographies and autobiographies of the time show the tremendous part it played in family life. The vast majority of the Victorian middle classes went to church on Sundays, said regular family prayers, sang hymns on Sunday evenings and strove to base their lives on the teachings of the Church. As Faber says in Jowett 'the countryside swarmed with educated gentlemen in Anglican orders'. (2) religious pamphlets and tracts sold to an avid public, and religious controversies made the headlines, generating considerable popular feeling. The famous Essays and Reviews, for example, published in 1860 caused a storm which was not confined only to religious circles. After the primate's decision to condemn it, 137,000 lay members of the Church of England presented an address supporting the decision.

Religion, too, had immense political significance in the sense that it was seen as a major bulwark against social unrest and even revolution, perhaps the most important pressure for the maintenance of the status quo. Middle class advocates of working class education often based their arguments on

the importance of the working classes becoming Christianised and being taught the Christian virtues, in the hope that they would then accept their lowly lot without question.

A national survey of religious attendance in 1851 found that one person in three who could do so attended a place of worship on an average Sunday. Horace Mann, who conducted it, concluded that the middle classes had augmented rather than diminished their attendance and that amongst the upper classes 'a regular church-attendance is now ranked amongst the recognised proprieties of life'. (3) The number of non-attendants, regarded by Mann as 'alarming' seemed to be made up principally of labour in cities and large towns. Mann observed that this segment of the population was thoroughly estranged from religious institutions, a view borne out by Frederick Engels who noticed in the 1840s that 'among the masses there prevails almost universally a total indifference to religion'. (4)

Thus, the national picture in the 1850s was one in which the urban labouring classes were largely untouched by religion, the upper classes had returned to the church and the expanding middle classes continued their religious habits 'shared by the thickening social stratum of the lower middle classes with some of the superior, more respectable and individualistic of the artisan class'. Wickham emphasises that 'different denominations corresponded to different shades in this middling section of the social spectrum'. (5)

Middle class church attendance began to wane around the turn of the century though Wickham argues that this was preceded by a much earlier weakening of faith. (6) Even as late as 1875, a keen social observer like Matthew Arnold could write of the 'grave beliefs of the religious middle

class', though perhaps even then a secular wind was blowing, for he went on to say, somewhat enigmatically, that such beliefs 'will be impossible soon'. A change may well have occurred by that stage in the upper echelons of society as he compared middle class religiosity with the scepticism of 'the more educated class above it'. (7) Certainly, by this time, agnosticism was becoming fashionable at Oxford and Cambridge. By 1909 changing habits among the middle classes had become much more apparent and C. F. G. Masterman wrote 'It is the middle class which is losing its religion; which is slowly or suddenly discovering that it no longer believes in the existence of the God of its fathers, or a life beyond the grave. (8)

It is clear that forces were at work in Victorian society which had the ultimate effect of weakening religious belief and changing patterns of attendance among the middle and upper classes. The changes, however, were not cataclysmic but very gradual. Certainly in the 1850s and 1860s religion was still one of the most profound influences on middle and upper class life.

At the time of the Clarendon Commission the schools were dominated by the Established Church and wedded firmly to the objective of developing in their alumni what Newsome has termed 'godliness and good learning'. As we saw, the schools had gone through a low period in the late eighteenth and early nineteenth centuries when numbers fluctuated frighteningly and it seemed as if certain schools might even pass out of existence. According to Newsome, one of the main reasons for this state of affairs was that the schools failed to reflect any of the ideas of the age. 'There was wanting an ideal', he wrote 'and to save the public schools from the wholesale desertion of the middle class, this ideal had exactly to express the wishes

and sentiments of the parents whose sons the schools needed to retain and attract. (9) At a time when England was undergoing an evangelical revival, the way was clearly indicated. The ideal, the guiding principle for the schools should be the alliance of godliness and good learning and it was perfectly expressed in Thomas Arnold. As far as Arnold was concerned, education and religion were really two aspects of the same thing - a system of instruction towards moral perfection. His views were made clear when he resigned from the governing body of the new London University because religion was not to be a compulsory examination subject. 'An University that conceived of education as not involving in it the principles of moral truth, would be an evil' he wrote. (10) and on another occasion affirmed; 'Surely the one thing needed for a Christian and an Englishman to study is Christian and moral and political philosophy'. (11) The principal aim of the public school system, then, should be to produce Christian gentlemen through the medium of godliness and good learning. As Newsome points out, the ideal was not new, but simply experiencing a re-birth after a long period of torpor. The Church had, from time immemorial dominated education in England and the commitment to godliness and good learning had existed long before Arnold was born.

It followed from this line of reasoning that a public school master should be a clergyman and this was certainly Arnold' view. This was important because of the religious nature of education and because the schoolmaster was entrusted with the care of 'boy-souls'. Arnold's successor at Rugby, A. C. Tait, argued that the schoolmaster's calling was quite 'a proper profession for a clergyman' and that there was 'no situation of so directly pastoral a nature as mine'. (12) Benson, headmaster of Wellington, also 'had a natural leaning towards the ordained, and believed that a tutor not in orders could not fully carry out his responsibilities'. (13) Certainly up

to the mid-nineteenth century the staffs of the schools were dominated by clergymen. In Arnold's Rugby, the only master outside the ministry was Bonamy Price. The other Clarendon schools were similar in this respect and it was not until the 1850s and 1860s that Eton, Harrow and Rugby made a significant number of lay appointments. In 1860 at Rugby 14 of the 18 members of staff were clergymen. By 1903, of 38 staff only the headmaster, chaplain and two others were in orders. The transformation did not begin at Shrewsbury until the 1870s, and even then in 1877 three out of eight masters were in orders, six out of 15 in 1888 and five out of 20 in 1897. In the case of each school, according to Bamford, the change appears to have occurred quite suddenly, as though owing to a change of policy. (14) It was, however, a decade or so before the number of clergymen began to thin out, though by the last quarter of the century the situation was very much changed. By the 1880s teaching in good schools was ceasing to be a parson's monopoly, though as late as 1898 20% of public school masters were in holy orders. A.C. Ainger, writing of his experiences at Eton in the 1850s, comments that the office of schoolmaster was then almost entirely in clerical hands but by the twentieth century it had almost entirely ceased to be so. (15) Like Bamford, he believes that this change began somewhat abruptly around 1860, but unfortunately suggests no possible explanation for what was a quite dramatic volte face on the part of the schools.

More time had to pass before the change affected headmasters, and a layman headmaster of a public school was unknown before the 1890s. A writer in the Saturday Review in 1880 gave some indication of popular feeling over the issue: 'even in smaller and inferior schools' he wrote 'the change from a clerical to a lay headmaster almost always indicates a decline in the reputation and character of the school... Parents, as a

rule, prefer entrusting their children to clerical educators, and the really flourishing schools are accordingly conducted on this principle. (16)

Another reason for appointing clergymen, shrewdly recognised by Arnold, was that being a clergyman raised the somewhat dubious status of schoolmastering and gave the occupation a social respectability it otherwise did not have. Arnold wrote in 1839 that the position of schoolmaster in society had not yet obtained that respect in England as to be able to stand by itself in public opinion as a liberal profession: 'it owes the rank which it holds to its connection with the profession of clergyman...' (17) Perhaps by 1860, this was no longer the case and a master in one of the Clarendon schools was regarded as a member of a respected profession. If such an improvement in occupational status had taken place, this would perhaps help to account for the willingness of school authorities to appoint non-clerical staff.

Arnold and his fellow clerical headmasters established the chapel as the heart of the 'closed community of the public school'. (18) School histories and memoirs of the period attest that this was the case and that it continued to be so for many decades. Religion undoubtedly made a considerable impact on many boys. Not all were Stanleys - perhaps fortunately - but the constant emphasis on chapel-going, prayers, sermons, Christian principles and the state of one's soul, undoubtedly left its mark. Certainly prayers and chapel services were everyday occurrences. The Sunday timetable for Wellington (much influenced by Rugby) was not unusual:

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8.00
        Breakfast
9.00
        Chapel
After Chapel learn verses from Bible
10.30
        Say verses
11.45
        Chapel
1.30
        Dinner
After Dinner prepare verses of the Bible
3.30
        Say chapters
5.30
        Tea
6.30
        Chapel
7.30-8.30 Preparation
8.30
        Supper
9.00
        Dormitory Prayers (19)
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One of the many reasons why the Prince Consort so much disliked English public schools as centres of education was because of the excessively ecclesiastical slant to their training and organisation.

According to Newsome, he tried, on several occasions, to influence Benson on the question of 'overmuch Chapel-Going' on Sundays. (20)

In another sense, too, religion was an important factor in school life.

Many of the boys came from clerical backgrounds and a large number of them were destined to pursue clerical careers. In addition staff and headmasters of the Clarendon schools often went on to occupy senior positions in the Church of England.

The ancient universities, as we saw, were also very much dominated by the Church of England, though Oxford was perhaps more closely identified with the Established Church than was Cambridge. At least until the 1850s the ecclesiastical character of Oxford and Cambridge was their determining feature. (21) The Oxford colleges were ecclesiastical foundations, 'legally and actually, clerical incubators'. (22) Oxford and Cambridge produced many of the town and country clergy as well as all the higher dignitaries of the Church. With a few exceptions, more common at Cambridge than Oxford, only those already in orders or intending to

take them were allowed to hold fellowships. The majority of dons were therefore already in holy orders and most of their pupils were intending to take them. Well might Faber write of the ancient universities that 'the hand of the Church was closed with a death-like grip' around them. (23) After the mid-century reforms, the grip began to weaken, but slowly, and the clerical monopoly in the universities was not effectively challenged until the later decades of the century.

Day-to-day life in the colleges also had an unmistakeable religious flavour. Every college had its chapel where daily prayers were said. The Sunday sermons at the university church were part of the established ritual, attended in large numbers by senior and junior members alike. (24) Nor were these empty observances. Faber writes that theology and the practice of religion, and the bearing of politics upon the Church and the universities were, outside the studies of the schools, the 'all-absorbing interests of thoughtful young men at Oxford and Cambridge. (25)

Disputations in theology were a regular feature of college life. Religious issues formed a vital part of everyday discussions and both universities were shaken by religious controversy. Green believes that 'It was impossible for an undergraduate to remain unaffected by this atmosphere'. (26)

Thus, religion was one of the most vital forces in Victorian middle and upper class life, influencing men's thoughts and actions. As we saw, the Clarendon schools were very closely associated with the Established Church, drawing many of their pupils from clerical backgrounds, employing clerical staff, and most important of all having a religious purpose - the production of Christian gentlemen. The next question to consider is the impact on the public school curriculum of this tremendous emphasis on religion.

The first proposition advanced is that certainly during the early part of the century, and perhaps for longer, the universities, especially Oxford were much too deeply involved in theological controversy to have any time for or interest in curricular reform. Green suggests that the universities' failure to move with the times, (and as we saw in the last chapter, this must also to some extent mean the schools' failure), was due to one factor 'which more than any other explains their resistance to reform; they were constantly bedevilled by religious controversy'. (27)

Two long-drawn out controversies in particular generated high feeling and deflected energy and interest away from academic reform. These were the Tractarian movement, which started in 1833, and led to an ecclesiastical civil war which was the paramount issue for at least the next ten years, and the prolonged campaign to admit Dissenters. Such movements affected the public schools, though less directly. Arnold's very personal confrontation with Newman was possibly unusual in its intensity but many other members of school staffs were deeply involved in the religious debates.

Thus, for many years, religious controversy occupied men's minds almost to the exclusion of any other issue and reform of the curriculum attracted little interest. At Oxford Pattison expressed what must have been a commonly felt sense of release over the defection of Newman and the resultant decline of the Oxford Movement, since it provided the opportunity to return to the 'real business' of the university.

The second proposition concerns the debate over Dissenters. The dominance of the Church of England had led to the exclusion from the established system of education of a group of people who had long recognised the

value of the so-called modern subjects, and were the greatest enthusiasts for science and technology. The Dissenters had a long tradition of science teaching in the Dissenting academies and schools and were to a large extent responsible for the fact that the first Industrial Revolution took place in Britain. Certainly the public schools and ancient universities could make no claim to even a share in this achievement. Because of their unwillingness to subscribe to the Thirty-nine Articles of the Church of England Dissenters were excluded from the ancient universities or at best not allowed to take a degree, Cambridge being a little less prejudiced against them than Oxford. The English universities were thus 'closed shops for the Church of England', (28) completely insulated against influences from Dissenting groups with their positive, progressive attitudes towards science. The Dissenting view of science seemed to be that increased knowledge of the natural world and its workings could only enhance one's realisation of the omnipotence and wonder of God and lead to His greater glorification. There seemed to be little fear of science undermining religion. This, as we shall see, contrasted very sharply with the attitude of the Established Church. A further point in this connection is that possibly science laboured under a serious disadvantage and was slow to gain social acceptability because of its association with an 'outcast' group.

Possibly as toleration for Dissent increased and Dissenters were given access to the ancient universities, science itself became more respectable. It would be interesting to attempt a correlation between the gains made by science at the universities and the acceptance of Dissenters and their opinions.

Thus, by diverting attention from reform and encouraging the exclusion

of progressive groups from the education system, religion worked indirectly against the inclusion of modern subjects, particularly science, in the public school and university curricula. We shall now consider the argument that the curriculum was much more directly influenced by the Established Church's considerable hostility to natural science.

We have already noted Arnold's opinions about the purpose of education. In his view, and the views of perhaps the majority of school staffs until late in the century, the primary role of public school education was to produce certain moral qualities in the educated. Aware of the deep social conflicts in society and afraid of revolution. Arnold hoped that his Christian gentlemen would help bring about a just and stable society. It is doubtful whether Balston, Moberly or even Temple had such an exalted purpose in mind, but to them also the development of young men with certain moral characteristics and Christian virtues was the primary aim of education. Training the mind, though important, was minimised in comparison with character training. Winchester might not turn out the best scholars or 'essay writers' commented Moberly, somewhat disparagingly, but boys did learn 'a modesty, a practical good sense, and a strong religious feeling; that religious feeling being of a very moderate, traditional and sober kind'. (29) To the classically-trained Churchmen who dominated the Clarendon schools, both purposes of education were more than adequately accomplished by the classics. They believed fervently that the classics trained the mind and that the acquisition of all other subjects - including science - was made easy by seven or eight years of classical study. This argument is put forward time and time again in the evidence presented to the Clarendon Commissioners and the opposing views of the Faradays and Wilsons were at that time so many voices crying in the wilderness. One or two of the

more enlightened members of staffs conceded that natural science had some educative value but very few public school men would have maintained that science trained the mind as effectively as a study of the classics. To a considerable extent, however, this whole debate is something of a red herring. Even if it could have been conclusively demonstrated that science trained the mind to a greater degree than the classics, it is unlikely that the curriculum would have been greatly modified for the simple reason that training the mind was only the secondary purpose of education. The classics and the classics alone could fulfil the major aim of education. Gladstone in a letter to the Commissioners in 1861 argued that the true position of natural science, languages and history to the classics was ancillary. Classical training should be paramount because 'modern European civilisation from the middle age downwards is the compound of two great factors, the Christian religion for the spirit of man, and the Greek (and in a secondary degree the Roman) discipline for his mind and intellect'. He continued, 'The place... of Aristotle and Plato in Christian education is not arbitrary, nor in principle mutable. The materials of what we call classical training were prepared, and we have a right to say were advisedly and providentially prepared, in order that it might become, not a mere adjunct, but 'in mathematical phrase! the complement of Christianity in its application to the culture of the human being, as a being formed both for this world and for the world to come. (30) The classics, then, had been the lay discipline of western civilisation, the alter ego of Christianity. Thus, so long as it was felt that the primary purpose of education was the inculcation of Christian morals and virtues, science, which could lay no claim at all to achieving this end, would continue to be denied a respected place in the curriculum. Arnold wrote of science: 'rather than have it the principal thing in my son's mind, I would gladly have him think that the sun went round the earth,

and that the stars were so many spangles set in the bright blue firmament'. (31) The argument can, however, be taken very much further than this. It was becoming increasingly apparent that the Established Church and natural science presented conflicting world-views and that already science was threatening to undermine religion. Science, if seen as a threat to Christianity and the way of life associated with it, could not fail to meet with formidable opposition in the schools and universities.

The fear of natural science, very prevalent in the 1860s, was apparent even in Arnold's writing. One of the reasons why he did not encourage science at Rugby was his concern that scientific knowledge might not remain in subordination to the boys' knowledge of moral subjects. The possible implications for religion of the expansion of scientific knowledge and areas of enquiry were also realised by Newman and the Oxford Movement. Newman opposed liberalism and with it the values which allowed science to flourish. 'Liberalism' he wrote 'is the mistake of subjecting to human judgment those revealed doctrines which are in their nature beyond and independent of it, and of claiming to determine on intrinsic grounds the truth and value of propositions which rest for their reception simply on the external authority of the Divine Word'. (32) Thus, Newman claimed revealed truth to be absolute and all other truth to be relative, a proposition which, according to Pattison, 'will not stand analysis, but which sufficiently conveys the feelings of the theologians towards science. ' This outlook, wrote Pattison, also found expression in abject deference to authority, a standpoint 'incompatible with the free play of intellect which enlarges knowledge, creates science and makes progress possible. (33) The Oxford Movement stood for faith before reason, authority as against democracy and its members were united in

hatred of 'heresy, insubordination, resistance to things established... innovation, a critical, censorious spirit.' (34) Newman and the Oxford Movement had a profound influence on the universities which began to wane after 1845 when Newman joined the Roman Catholic Church. Pattison writes that 'from that moment dates the regeneration of the university'. (35)

It is important, however, to realise that the struggle between the reformers and traditionalists cannot be equated with the struggle between those in favour of science and those against it. Certainly the reformers favoured bringing about an intellectual climate which would favour the development of science - but this was by no means their primary aim. Any benefits to science were unintended consequences of their actions. This is made clear when one remembers that the conflict between the traditionalists and reformers was epitomised by the confrontation between Newman and Arnold and Arnold, as we saw, had considerable misgivings and reservations about the growth of science. He was not alone in this. Other reformers, among them Jowett and Pattison himself, were no ardent devotees. Jowett showed a contemptuous ignorance of the whole field and in common with many of his colleagues believed that science menaced 'the higher conception of knowledge and the mind' and was antagonistic to'morals and religion and philosophy and history and language', (36)

Thus, the fortunes of the liberal party in the universities were important for the growth of science but only incidentally. The Established Church during this period, whether conservative or liberal, was to different degrees hostile to science. Pattison attributed Oxford's ignorance of important scientific discoveries at least in part to the theologians who had

placed science under a ban, instinctively feeling that it was 'fatal to their speculations'. (37) And with good reason! The deep divisions opening between science and religion were visible by the 1840s but had become much more apparent by the 1860s and much more a matter of public debate and concern - as the reception of the famous 'Essays and Reviews' bears witness. This volume, published in 1860 comprised seven essays, the authors of which were all men of standing. Between them they covered almost the whole range of the then existing controversies between Anglican churchmen of differing persuasions and between religion and science. Although the issues examined now seem strangely innocuous and of little relevance, the Essays, when they appeared, represented a bolder attack by clergymen on religious orthodoxy than before witnessed and raised the greatest religious storm of the century. The furore was not confined to ecclesiastical circles. As clerical agitation around the book grew it was more and more widely read and attracted considerable lay support as well as condemnation.

Temple, headmaster of Rugby, contributed the opening essay 'The Education of the World' in which he advocated fearless Biblical study. He wrote: 'If geology proves to us that we must not interpret the first chapters of Genesis literally... the results should still be welcome.' (38) Quite how revolutionary this view was becomes clear when it is compared with Adam Sedgwick's views in 1837 that he regarded his geological researches merely as an elucidation of scriptural truths and who stated that if he ever found his science 'interfere in any of its tenets with the representations or doctrines of scripture he would dash it to the ground'. (39)

The fifth essay by Charles Goodwin, a Cambridge all-rounder, and the only lay contributor, pursued a similar theme. In 'On the Mosaic

Cosmogony' he argued that if the geologists were right, and it was increasingly apparent that they were it was impossible to maintain belief in the Biblical story of creation, however ingeniously it might be interpreted. '... if modern research now shows it to be physically untenable', he wrote, 'our respect for the narrative which has played so important a part in the culture of our race need be in nowise diminished'. The Bible was 'not an authentic utterance of Divine Knowledge, but a human utterance, which it has pleased Providence to use in a special way for the education of mankind'. (40)

Geology was, in fact, the first organised body of scientific knowledge which seriously menaced belief in the literal truth of the Bible. Many of the more conservative theologians found it almost impossible to come to terms with its findings. Faber writes that it was 'distressing to watch Pusey's childish attempts to cope with this problem...he clung to the hope that the geologists were all wrong and that their theories belonged to a realm of fancy, incapable of proof'. (41) The same dilemma faced many other fundamentalists. Some writers made crude and even desperate attempts to reconcile Genesis and Geology. Rev. Buckland, an Oxford geologist, for example, had suggested that each 'day' of creation really meant 'an age or immense geological period'. Goodwin disposed of this by asking whether there were also enormous intervals of total darkness which would have destroyed the whole vegetable creation.

The third essay, by Baden Powell, Savilian Professor of Geometry at Oxford, was entitled 'On the Study of the Evidences of Christianity'. He was a clerical scientist and in his essay rejected the miraculous 'evidences' of Christianity. The final essay, Jowett's, 'On the Interpretation of Scripture' embodied a plea for the use of reason in the inter-

pretation of scripture, and insisted that the scripture should be interpreted 'like any other book'. (42)

Such topics in the 1860s were explosive and the violence of the reaction to the Essays surprised even the contributors. The propositions put forward were widely considered to be heretical and Archdeacon Denison spoke of 'the young, who are tainted and corrupted and thrust almost to Hell by the action of this Book'. (43) The 'semi-infidel' Essays were synodically condemned in 1864 and Stanley believed that an attempt was being made to drive such men as Jowett, Temple and Pattison out of the Church of England because of their involvement with them. For some months it seemed as if Temple might be forced to resign his head-mastership. Pusey was instrumental in drafting a declaration which was eventually presented to the Archbishop and signed by 11 or 12,000 'presbyters and deacons in holy orders of the Church of England' and which affirmed that their Church 'maintains without reserve or qualification the inspiration and Divine authority of the whole canonical Scriptures, as not only containing, but being, the Word of God. (44)

It must once again be emphasised that the Broad Churchmen, the liberals, were not particularly in favour of science, but they did share a conviction that the Church could not afford to silence truth and must somehow absorb the implications of new scientific discoveries, however unpalatable. They stood for the application of reason to the Scriptures and the free play of intellect. In mid-century, the number of Broad Churchmen was small and few held positions of influence. Indeed at one point the liberal church party seemed in danger of annihilation but the 'fog of unreason' as Faber calls it began to clear. By 1866 more than half the fellows of Balliol were of Jowett's party. Over the ensuing decades the

Liberal Church party became the medium through which the Church gradually regained contact with the modern world. This was by no means a comfortable process, however, and there are many who would argue that the Church took too long about it and as a result became increasingly irrelevant in industrial society.

The critical, secular, scientific surge, of which Darwinism and positivism were a part, was an increasingly important feature of Victorian England. Despite powerful opposition it brought about a dramatic. though gradual, revision of the concept of truth. There was a shift away from the view that truth consisted of a fixed body of knowledge which was handed down unchanged from generation to generation towards the view that truth was not absolute, revealed and sacrosanct; it was on the contrary tentative, constantly undergoing modification and enlargement as a result of critical enquiry and a willingness to widen the field of man's understanding. The aim of scholarship in almost every branch of academic study was changing. The objective was no longer to demonstrate the truths of Christianity but to seek out truth, however unacceptable and however inimical to deeply cherished beliefs. To Huxley it was 'intellectual $degradation'^{(45)}$ to do otherwise, but to many theologians it was sacrilege to expose so-called religious 'truths' to scientific enquiry. Thus the conservatives within the church feared science and the scientific spirit of enquiry which subjected 'absolute truths' to the merciless probe of reason. Scientific training led inexorably to a questioning of whatever was insusceptible of proof or demonstration. As some witnesses told a Royal Commission in 1852, research could only propagate infidelity and scepticism. Many of the most eminent scientists of the day were professed agnostics or even atheists and this did nothing to allay the fears of many ecclesia stics.

Thus, although as we have seen, the staff of the Clarendon schools put much store on the argument that classics trained the mind and science did not, the opposition to science was much more fundamental in origin than this. The schools were closely bound to the Church of England. They 'defended a mainstream of moral faith, a 'gentilised' version of Evangelicalism' (46) which was at least partially upheld by the classical curriculum. Science threatened to undermine the whole edifice. to question truths which could not be questioned. The conflict therefore was not so much between the rival merits of two systems of education but between two world views which were coming more and more into opposition. The first clash was represented by the inability to reconcile the traditional Biblical view of Providence with scientific discovery and method. According to Wickham, scientific developments demanded from the Church a complete change of strategy which would allow the entire Church to become more consciously exposed to the external forces of the age. The Church, however, responded to this challenge by fighting a bitter rearguard action, refusing to make any concession to changing circumstances or to consider any theological reinterpretation. Yet however vigorously the Church defended literalism against the scientists and other critics, the new scientific discoveries and assumptions gradually undermined its position and inexorably worked themselves into widespread acceptance. As Wickham writes '... no part of society could remain permanently insulated from the new ideas at work...and before the end of the century even the stolid, uncritical middle classes, suburban and industrialised, the 'philistines'...., were under its influence'. (47) As we saw, the growth of middle class scepticism was reflected in changing patterns of religious attendance.

The whole conflict is crystallised in Wilson's superb essay 'On Teaching

Natural Science in Schools'. Wilson, an energetic advocate of the inclusion of natural science in the public school curriculum examined the familiar arguments against this reform. He concentrated however on the relationship between religion and science which he suggested was one of secret if not avowed hostility and at best a distrustful toleration. He went on to make an impassioned plea for religion and science to work together and argued, though rather unconvincingly, that they could harmonise. 'Does it seem strange' he enquired'to hail as a friend to religion that scientific spirit so often denounced as hostile? Yet how can it be otherwise? 'Are God and nature then at strife' indeed? ... To endeavour not to see the results and tendencies of modern science is folly in the highest degree. The study and knowledge of the seen is sure to react on the study of the unseen; and he will entertain these studies in perfect harmony, and he only, in whom the scientific and religious ideas are allowed to grow up, not in antagonism, but fearlesssly and freely side by side... To think otherwise is to think that half the world is God's and the other half the devil's'. He continued 'It cannot long be possible for us...to turn out men into the world totally unprepared to meet the problems which will necessarily force themselves on their notice;... totally unfurnished with true scientific method and knowledge, totally unable to meet the shallowest arguments from a false philosophy of nature brought on the side of materialism or atheism'. (48)

This courageous demand for religion to accept scientific discoveries and to co-operate actively and harmoniously with science in the pursuit of a truth which could only benefit both, ends on a rather poignant note: 'To later generations it is reserved to bridge the chasm that may now seem to separate truths from truths;' wrote Wilson, 'and to find a higher and profounder unity than we can yet imagine'. (49) To accept that this was

possible was an act of considerable faith to which many of Wilson's more conservative colleagues were unable to commit themselves.

Despite Wilson's pleas, the teachings of the Church of England and the discoveries of science continued to come into often bitter conflict and there was little evidence of the unity of religious and scientific ideas which he, and many of his fellows, must have longed for.

Thus, as long as the schools and universities remained closely associated with the Church of England, and as long as the main aim of the schools was to produce Christian gentlemen, science would make little progress in the curriculum. It was in conflicting views about man's right to question and not arguments about educational advantages, that the real opposition to science lay. Until the Church moved in the direction indicated by Wilson, or until the public schools and universities broke away from its grasp and developed new educational aims, that fundamental opposition would remain.

As we saw, the grasp did weaken and as it weakened science gained a toe-hold and then a foot-hold in the curriculum. But progress was very slow though Newsome suggests that even as early as the 1860s 'godliness was veering towards manliness' - in other words the schools were even then beginning to show signs of re-defining their educational aim. He goes on to say that the dissolution of godliness and good learning was inevitable when 'new enthusiasms arose to capture the imagination of the public and when the attention of scholars became increasingly pre-occupied with studies which were not only non-religious but also menacing to the time-honoured teaching of the Christian church'. (50)

It is important to note, however, that the primary purpose of education

was still to produce certain moral characteristics in the educated, though the ideal was now of a more secular nature - manliness instead of godliness. This shift of ground was not particularly favourable to science as science could make no claim to produce the qualities associated with manliness. This was best achieved through a combination of classics and games.

Thus, the secularisation which was going on outside the schools also took place, though more slowly, within them. Gradually the Established Church lost its centuries-long hold and the purpose of education itself became secularised - first being redefined in terms of manliness - still a moral but no longer Christian aim - and finally becoming fully secularised in the ideal of intellectual excellence. These changes took decades and the acceptance of science by the schools had to wait on their accomplishment.

- 1. R. C. K. Ensor 'England 1870-1914' p. 137
- 2. G. Faber, 'Jowett' p. 123
- 3. Quoted in E.R. Wickham 'Church and People in an Industrial City' p. 109
- 4. F. Engels 'The Condition of the Working Class in England' p. 126
- 5. Wickham p. 119
- 6. ibid p. 179
- 7. M. Arnold 'God and the Bible' p. xv
- 8. C. F. G. Masterman 'The Condition of England' p. 14
- 9. D. Newsome 'Godliness and Good Learning' p. 4
- 10. A. P. Stanley 'Life and Correspondence of Thomas Arnold' p. 311
- 11. ibid p. 276
- 12. R. T. Davidson and W. Benham 'Life of A. C. Tait.' I p. 121
- 13. D. Newsome 'A History of Wellington College' p. 153
- 14. T. W. Bamford 'Rise of the Public Schools' pp. 54-5
- 15. A.C. Ainger 'Eton Sixty Years Ago' p. 241
- 16. Saturday Review 17 vii 80 p. 70
- 17. Stanley p. 350
- 18. C. Barnett 'The Collapse of British Power' p. 33
- 19. Newsome pp. 118-9
- 20. ibid p. 68
- 21. V.H.H. Green 'The Universities' p. 265
- 22. Faber p. 108
- 23. ibid p. 27
- 24. Green p. 265
- 25. Faber p. 123
- 26. Green p. 266
- 27. ibid p. 62
- 28. E. Ashby 'Technology and the Academics' p. 15
- 29. Public Schools Commission III p. 360
- 30. PSC II pp. 42-3
- 31. Stanley p. 276
- 32. J.H. Newman 'Apologia Pro Vita Sua' p. 288
- 33. M. Pattison 'Memoirs' p. 238
- 34. Newman p. 290
- 35. Pattison p. 237
- 36. R. L. Archer 'Secondary Education in the Nineteenth Century' p. 42
- 37. Pattison p. 236
- 38. F. Temple 'The Education of the World' in 'Essays and Reviews' p. 236
- 39. A. W. Benn 'History of English Rationalism in the Nineteenth Century' p. 372
- 40. C. Goodwin 'On the Mosaic Cosmogony' in 'Essays and Reviews' p. 253
- 41. Faber p. 243
- 42. B. Jowett 'On the Interpretation of Scripture' in 'Essays and Reviews' p. 373
- 43. Faber p. 262
- 44. ibid p. 278
- 45. H. Grisewood, ed. 'Ideas and Beliefs of the Victorians' p. 167
- 46. R. Wilkinson 'The Prefects' p. 21
- 47. Wickham p. 185
- 48. J. M. Wilson 'On Teaching Natural Science in Schools' in F. W. Farrar ed. 'Essays on a Liberal Education' pp. 290-1
- 49. ibid p. 291
- 50. D. Newsome 'Godliness and Good Learning p. 228

Chapter Ten

Some factors which may help to account for the Clarendon schools' curricular backwardness have been examined in the foregoing chapters. In this chapter we shall consider to what extent the schools were encouraged to persist in clinging almost exclusively to the classical curriculum by the fact that they faced little in the way of competition. The real question here is: to what extent, if any, were they under pressure from institutions attempting to attract a similar upper middle class clientele, but offering an up-dated curriculum? In particular, did the 'modern sides' set up by many of the new proprietary schools account for their undeniable success and for the precarious state of affairs which, as we saw, existed in some of the older foundations?

Any generalisations about education during this period must be made with the greatest care. During the nineteenth century there existed in Britain a bewildering variety of schools and colleges, some providing a classical education, some offering a predominantly modern curriculum and others providing a mixture of both. Many of these were new foundations, some were older foundations recently revived. They came into being by and large to cater for the rapidly growing middle class demand - though 'middle class' is, of course, a term which included very many different groups, with different aspirations, different requirements and hence different educational demands. Schools sprang up or were modified in considerable profusion to cater for these demands and the result was a hotch-potch of educational establishments much too diverse to be contained by the phrase 'education system'. Institutions were founded as a result of the work of the Charity Commissioners; other by individuals eager to test out a particular educational theory. In some cases profit was the driving force, in othersreligious conviction led to a new foundation.

In certain areas, the failure of a local grammar school to rid itself of abuses and to offer an education which people wanted, led to the setting up of an alternative institution. As we saw earlier, the old grammar schools which had wished to adapt to a changing world and introduce 'modern' subjects into their curricula, had found this very difficult to achieve. Eldon's judgement against the introduction of new subjects into the grammar school curriculum gave schools which did not wish to change a legal justification for their conservatism. It was 1840 before the old grammar schools were legally entitled to teach modern subjects - though of course many had done so before this under the guise of 'extra' subjects. During the nineteenth century, according to Brian Gardner in 'The Public Schools', the old grammar schools gradually broke away from the 'classical confines that were killing them'. (1)

Gardner gives many examples illustrative of the tremendous variety of educational establishments which existed at the time. There were the Nonconformist schools, which themselves did not conform to a single pattern but included institutions offering both traditional and modern courses of study but with more emphasis on the modern side.

The Rev. Nathaniel Woodard had been, like many educationists of the time, much influenced by the ideas of Thomas Arnold. Obsessed with the theory and practice of Anglican public school education he founded numerous schools, such as Lancing and Hurstpierpoint, which offered more modern curricula than the traditional schools. (It must not be assumed in such cases, however, that modern subjects necessarily enjoyed higher status than in the great schools. Handford, for example, says of the modern side at Lancing: it 'consisted at first of one despised form, the members of which were debarred from entering the sixth...

It existed. No-one had the least wish for it to exist and it was a sort of parasite. (2)

Other schools offering a more up-dated course of study included King's College School, which opened its doors in 1831 and offered a modern as well as classical curriculum. It prepared for all the universities, the services and the Civil Service, and in 1862 had more than 400 boys, almost equally divided between the two sides. University College School was founded in 1830 'exclusively for secular instruction' as an adjunct of the college. Forest School, 1834, claimed to provide a modern education with the classics taking second place. In 1837, the City of London School, a middle class day school, opened with 'a curriculum as progressive as any in England'. (3) Twenty-five years later the Clarendon Commissioners received a letter from Rev. Dr. Mortimer, the headmaster, describing the organisation and aims of the school. He informed the Commissioners that it had been intended to accommodate about 600 boys, but, at the time of the Enquiry, there were 626. There was a Lower or English School (about 250 boys) and an Upper or Grammar School (about 380 boys), In the Lower School, the subjects taught included reading, spelling, writing, arithmetic, grammar, English history and geography, and Scripture. In the Upper School: arithmetic, mathematics, Latin, Greek, French, physical geography, history, writing and book-keeping, natural philosophy and elementary chemistry with special reference to its use in arts and manufactures. The two latter subjects were taught in every class by a professor who gave a weekly lecture illustrated by experiments. German was optional, but was learnt by about 100 boys. (4) The School, which had introduced natural science into its curriculum in 1847, had been along with Manchester Grammar and University College School, among the first in England to do so.

Many of these schools soon became known at the universities. In 1861, for example, the four chief honours at Cambridge were gained by young men educated at the City of London School. (5) In the course of giving evidence to the Clarendon Commissioners several dons referred to the academic achievements at the universities of boys from certain day schools. Rev. Mayor. Fellow and Tutor of St. John's College, for example, singled out Birmingham and City of London Schools, believing that they prepared their boys well in both classics and mathematics. In addition, he pointed out that such schools were 'also frequently connected with modern or English schools, and thus the boys educated there have generally a fair acquaintance with modern subjects'. (6) Rev. Kitchin. Junior Censor of Christ Church, believed that the 'better grammar schools' took great pains with their boys and that some of the best mathematicians came from King's College School. (7) Rev. Price, Sedleian Professor of Natural Philosophy, in the course of making unfavourable comparisons between the 'great schools' and others as regards mathematics, said of the 'others' that their boys 'have gone through a sound course of geometry; which I take to be a most excellent disciplinary exercise and have often well studied the principles of the modern analytical methods. This is frequently the case with young men who come from the Universities and schools of Scotland, and from schools in England of the class just below the large public schools'. (8)

It is clear, then, that many of these schools - though by no means all - were offering a wide curriculum, often including natural science, at a time when the great schools had hardly recognised the existence of any subjects other than the classics and mathematics.

It is important to realise, however, that such schools catered for the

lower and middle sections of the middle classes, as opposed to the upper middle classes whose needs were supplied by the public schools. The impetus for much of the educational change in this sector no doubt came from the increasing demands of the occupations into which these middle class sons would go - trade, commerce, clerical work, book-keeping, etc. Such schools were not, therefore, in competition with the great schools and, in any event, as was indicated by the case of Lancing, the process of modernisation in this area must not be over-emphasised. Many schools still continued to regard themselves as primarily classical establishments. Even those offering modern sides often also had a classical side. Referring to City of London School, certainly one of the most progressive, the Clarendon Report commented: 'although an opportunity is afforded to the boys of branching off at a certain stage in their career into a class where they are not required to learn Greek, very few are found to avail themselves of it. Parents who must be supposed to have at least as strong reasons for desiring a good practical education for their sons as the parents of young Etonians or Harrovians can have, are content that they should follow a course of instruction in classics... (9) As regards the teaching of natural science, though the subject was often included in the curriculum of the grammar schools, it was very much a poor relation, often struggling under the disadvantages of poor facilities and a very limited allocation of time. In 1875 the Devonshire Commission confirmed that natural science had hardly improved its position in this sector of education.

The variety of schools, particularly at this end of the market, however, the mixes of subjects offered, the wide variety of educational, social and religious aims involved, make generalisation well-nigh impossible. The extreme complexity of society at this time, the fact that it was undergoing

dramatic changes, are reflected in the unco-ordinated, haphazard nature of educational provision.

As we move up the social scale, the picture becomes clearer. The 1840s and 50s saw the creation of a large number of new foundations catering for the upper middle classes. Often these schools aimed principally at one section of this group - for example, Cheltenham which attracted the sons of retired colonial servants, Marlborough - the sons of clergy and professional men, and Wellington, of course, army sons. According to Bamford, the fact that many of the Clarendon schools had places vacant and were not continuously prosperous for another 20 or 30 years, indicates that these schools and the newer public schools were not competing for the same boys. (10) His argument is not entirely convincing. If we compare the Clarendon schools with the top-flight proprietary schools, such as Marlborough and Wellington, it is certainly true that the aristocratic element is more evident in the former, though confined almost entirely to Eton and Harrow. Apart from this, however, both sets of schools drew their clientele from the upper middle classes - from the professions, from military and clerical backgrounds and from the industrial and commercial higher middle classes. This was particularly the case if one compares the less successful Clarendon schools, i.e. Westminster, Charterhouse and Shrewsbury, with the newer establishments. The argument to be examined here and in the following chapter is that their upper middle class clientele made certain demands upon both sets of schools, and a school's success or lack of it, was related to its ability to fulfil these demands. What we shall now attempt to establish is the extent to which the success of the new proprietary schools was associated with a modernised curriculum.

As part of their Enquiry, the Clarendon Commissioners interviewed the headmasters of the three upper middle class proprietary schools already referred to - Marlborough, Wellington and Cheltenham.

Marlborough, founded in 1843, was under the headmastership of Rev. G. G. Bradley, who had been educated at Rugby and served there as an assistant master from 1846 to 1858. Asked about the curriculum at Marlborough, he informed the Commissioners that there were many points of similarity between the courses of instruction at the two schools. Unlike Rugby, however, Marlborough was divided into three divisions: the upper school (315 boys), the modern school (62 boys) and the lower school (73 boys). Besides the headmaster there were 25 assistant masters and a resident physician who filled the office of medical officer and also that of lecturer in chemistry. The time devoted to mathematics and arithmetic in both the upper and lower schools was four hours per week and to French two hours. German was taught without extra charge but was not part of the regular schoolwork. The modern school at Marlborough was seen as experimental and was being constantly modified as staff gained experience. No boy was allowed to join it until he had reached the fourth form in the classical department. The objectives of the modern school were twofold: to prepare boys for definite examinations in which they would not succeed if they competed direct from the classical school, and to attempt to solve in some degree the question often asked: 'How far is it possible to give a really good public school education on any other basis than that of instruction in the dead languages? (11)

Rev. J. F. Bright, in charge of the modern school at Marlborough, drew attention to the great variety of objects which induced boys to enter the school. (12) He mentioned the desire of some boys to enter public offices,

commercial life, Woolwich and - in certain cases - Cambridge. The modern school had, in his opinion, initially been a refuge for the idle but this was no longer the case.

Cheltenham College, founded in 1841, and whose main outlets were the army, civil service, the law and the church, was divided similarly into three departments under the Principal, Rev. A. Barry. The classical department offered the traditional public school curriculum whereas the modern (or military and civil) concentrated on mathematics. In the latter department, Latin was kept up to a certain extent though Greek was entirely omitted. Natural science was taught and stress was laid on the study of modern languages. The third department was the juvenile department, which catered for boys between the ages of 8 and 13 and prepared them for both the classical and modern departments. The classical department had 286 boys, the modern 276, and the juvenile 65. The work of the higher classes in the modern department was guided in the main by the Woolwich and Sandhurst examinations which were to that department what the university course was to a high classical school. The department was intended for boys entering the army, adopting the engineering or other scientific professions, or destined for commercial life. According to Barry, it had reached a position of complete equality in rank with the classical department. He believed that the experiment of introducing a modern department had been fairly tried with such a measure of success as to justify much confidence in its value. (13)

Rev. T.A. Southwood, in charge of the modern school at Cheltenham, listed the subjects which were taught. They included mathematics, Latin, English, history, geography, French, German, Hindustani, English language and literature, physical science, drawing, fortification and

surveying. In addition, there were special classes, for example, the Sandhurst and Direct Commissions classes, which catered for backward boys requiring much individual teaching and destined for Sandhurst or the line. The civil class catered for boys destined for Government offices or a commercial line of life. (14)

The third school, Wellington, provides an interesting study from our point of view. Originally established with hopes, certainly on the part of the Prince Consort, that it would pioneer a more modern type of education, Wellington shows only too clearly the tremendous influence exerted by the great schools, in this case once again principally Rugby, and the pressures which existed to retain the classics as the mainspring of education.

Wellington, established in 1859, initially embodied many of the Prince Consort's hopes about the future of English education. As Newsome tells us, the Prince 'had little regard for the current system of education at the public schools'. (15) He disliked their classical bias, their lack of appreciation of the study of history, (the rising faculty in German universities), and their complete disregard of the natural sciences. As Chancellor at Cambridge, to which office he had been elected only after considerable opposition, he deplored the narrowness of the curriculum, the relative unimportance of professors and tried to promote science and encourage history as a serious university course. (16)

At Wellington, he was in favour of including in the course of study such subjects as engineering and chemical arts. The Committee responsible for founding the college informed the subscribers that the curriculum should include:-

- 1. A good English and Classical education.
- 2. Those branches of scientific knowledge which have a special application to the Arts, Commerce and Industry of the Country.
- 3. The Modern Languages.

According to Newsome, the second item bears the Prince's peculiar mark as did also the belief that success or otherwise depended upon the education Wellington provided. (17)

The first headmaster, Benson, had very different ideas from the Prince Consort as to what constituted a good education. He was in fact a typical product of the Clarendon schools and ancient universities, and a classicist to the tips of his fingers. A Fellow of Trinity, he had been teaching sixth form classics on Goulburn's staff at Rugby when Temple's recommendation had been instrumental in his being offered the headmastership of the newly established College. Benson became headmaster in 1858 and was hardly the man to usher in a new era. Newsome writes that from the first his aim was indisputable - to bring Rugby to Wellington, and many of the staff he appointed were Rugbeians. (18) His attitude towards the modern subjects so strongly favoured by the Prince was one of 'patronising endurance'. (19)

It is hardly surprising that the ideas of the Prince Consort and Benson should come into conflict - albeit polite and respectful conflict. T. H. Warren believed that 'The genuine interest of Prince Albert in education, his desire to give England what she needed and still needs, ideas, science, culture, was little understood by Englishmen', and continued 'If however, in its earliest days Wellington College had about it a dash of the Lycée or Gymnasium, the dominant and drastic energy of Dr. Benson... was devoted to making it a genuine English Public School'. (20)

The Prince's disquiet was evident only a year after Wellington's foundation. In a letter to Benson, Sir Charles Phipps, the Prince's Private Secretary, wrote: 'The Prince, on looking over the examination papers of the Wellington College, thought that the mathematical requirements were hardly so high a proportion as the classical, and has desired me again... to suggest to you to maintain fully the intention of making the education at the College a step in advance, in points of practical utility, of the ordinary Academical teaching. It would have hardly been worth while to establish another public school, in competition with those already existing, unless advantages were taken of the absence of old customs and prestige to establish a system more in accordance with the requirements of the present day. There are two important branches of practical knowledge which appear to have at present but little weight attached to them at the College - and to be but little cultivated. I allude to history - particularly modern history - and geography, and yet it is impossible to name two more important branches of knowledge for men in every profession and every branch of life. (21)

Benson found it difficult to advance his own plans while the Prince watched so closely over the College. In 1861, however, the Prince died, and from that time Benson had a much freer hand. Certainly, the course of study he described when interviewed by the Clarendon Commissioners was very different from that envisaged by the Prince. The main body of education at Wellington consisted of classical teaching onto which all other parts had been engrafted, though these were not provided as or considered extras, but as integral parts of schoolwork. In each form, from the sixth to the second division of the upper middle included, there were a certain number of boys who chose to do less classics and more modern work; these were called the mathematical divisions of forms or

mathematical forms. Benson commented acidly that no boy had been placed in a mathematical form 'from a conviction of the superiority of this mode of education' but simply in order to pass examinations. (22) In 1862, the number of boys in the mathematical divisions was 23, or rather more than ten per cent of the school. (23) French. German and (depending on proficiency) arithmetic or mathematics, formed part of the course of instruction, four hours a week being assigned to mathematics, two to French and two to German. Chemistry was taught to all the mathematical forms and to volunteers from the classical forms. Every form master was engaged in teaching at least one modern subject. The mode of teaching, the text books, the plan of examinations, and various general arrangements were, in most respects, according to Benson, the same as those of Rugby. His method of teaching classics, incidentally was 'of the old fashioned kind, very close analysis of words and the drawing out of shades of meaning'. (24) The headmaster referred to the first six months of the school's existence when working hours were divided into four equal portions - classics, mathematics, modern languages and one devoted to historical work, chemistry and drawing. The result had been despair among the masters and no progress for the boys. At the end of the six months, the system was changed to that described above. (25)

Clearly, Benson was no enthusiast for modern subjects, natural science in particular. His attitude towards Dr. Barford - the doctor who attended the College and taught a little science, and who wrote to the Governors asking that the teaching of chemistry be improved - was unfriendly and petty. It mattered little to Benson, comments Newsome, that a subject in which, at the Prince's wish, Wellington should have been a pioneer among schools, was by 1867 sadly neglected. (26)

Benson was, however, unable to realise his ambitions completely. By 1870 he had not succeeded in making the education at Wellington as fully classical as he had wished. Although Greek had been introduced into the curriculum in his first year, 'he could not escape the fact that the majority of the boys who came to Wellington had a military background. and many of them... wished to follow the profession of their fathers'. (27) Indeed, by 1879, out of 1,849 Wellingtonians, over half were the sons of officers (i. e. 992) and 755 had chosen the Army as a career. Many parents, therefore, not unnaturally wished their sons to be prepared in the subjects necessary for the Woolwich and Sandhurst examinations. Thus, in 1866 Benson was obliged to rearrange the whole structure of the teaching programme to cater for the increased number of boys who wished to become soldiers, and to conform to new regulations laid down by the Army Examiners. He created, with great reluctance, a modern department, running parallel to the classical school and put in charge of it Mr. H. W. Eve. Fellow of Trinity, Cambridge, who had taken high honours in classics, mathematics and science and was proficient in French and German, the two subjects he usually taught at Wellington. Ian Hamilton, a Wellingtonian, suggested that Benson always felt that boys who chose the Army Side were 'deserters' of the cause. (28)

In conclusion, the new proprietary schools which came into being during the 1840s and 50s seemed, at first sight, to be of a different, more modern stamp than the Clarendon schools. As the Report of the Taunton Commission noted, all the great schools of late foundation have added modern departments'. (29) On closer inspection, however, it becomes apparent that - with the possible exception of Cheltenham - the commitment to modern subjects was not much greater in the new than in the old foundations. This is particularly the case when the new proprietary

schools are compared with Rugby. Indeed, we have seen that many of the new schools looked to Rugby for an example and that a surprising number of the new headmasters and teaching staff came from that institution, for example, Dr. Cotton and G.G. Bradley of Marlborough, Butler of Haileybury, Percival of Clifton, Benson of Wellington, Jex-Blake of Cheltenham. Although the newer schools had introduced modern classes or departments, the modern subjects taught were often regarded as inferior necessities by the headmasters - Benson's attitude being not at all untypical. Thring's opinion of modern subjects is revealed in his comment that 'the most backward in Classical knowledge can take refuge' in them. (30) At both Cheltenham and Marlborough, the classification in the schools of mathematics and modern languages was made subordinate to that in classics. The headmaster of Cheltenham informed the Commissioners that this was a serious hindrance to the mathematical advancement of the boys. (31) Natural science, as in the Clarendon schools seemed to be very much bottom of the league and ten years after the Public Schools Commission, the Devonshire Report, which commented unfavourably on science teaching in England, was forced to include Wellington, Cheltenham and Marlborough in its findings.

The new institutions were, on the whole, extremely successful in attracting clientele, but it would appear that their success owed little to any modernisation of the curriculum. Where modern departments were provided, the vast majority of parents still preferred the classical. This had evidently come as something of a surprise to Benson who told the Clarendon Commissioners that at Wellington's formation he believed 'candidates for a modern school would be far more numerous than they are. '(32) Similarly, the Taunton Commissioners found that modern

departments were not always what parents wanted. 'They think it excellent that the modern department should be provided;' commented the Report, 'they take considerable interest in it: but they are very generally not willing to put their own boys into it. '(33) Added weight is given to the proposition that parents were not attracted by a modern curriculum by a comment from the headmaster of Rossall who, when asked by the Devonshire Commission what departments of science were preferred by parents, replied: 'Parents exhibit complete indifference to the whole subject, with the exception that they occasionally object to their sons devoting any time at all to it'. (34) These findings are very much in line with those from the Clarendon schools. We discovered earlier that the most progressive of these were not the most successful, nor were the most backward schools the least successful. Shrewsbury, which alone offered a modern side, was as we saw, in desperate straits.

Thus, it would seem that an updated curriculum had little to do with whether a school appealed to the upper middle classes. The explanation for a school's success or failure must be sought elsewhere - and some attempt will be made to locate relevant factors in the next chapter. The conclusion of this chapter must be that the Clarendon schools were not subject to pressure for curriculum change from the new public schools. The pressure, as we have seen, tended to be exerted in the other direction.

- 1. B. Gardner 'The Public Schools' p. 147
- 2. B. W. T. Handford 'A History of SS Mary and Nicholas College, Lancing' p. 142
- 3. Gardner p. 147
- 4. Public Schools Commission II p. 579
- 5. PSC I p. 37
- 6. PSC II p. 27
- 7. PSC II p. 12
- 8. PSC II p. 23
- 9. PSC I p. 37
- 10. T. W. Bamford 'Rise of the Public Schools' p. 17
- 11. PSC II pp. 509-512
- 12. PSC II p. 513
- 13. PSC II pp. 546-549
- 14. PSC II pp. 549-550
- 15. D. Newsome 'A History of Wellington College' p. 70
- 16. R. Fulford 'The Prince Consort' Ch. 8
- 17. Newsome p. 31
- 18. Newsome p. 78
- 19. Newsome p. 135
- 20. T.H. Warren 'Christian Victor: The Story of a Young Soldier' pp. 23-4
- 21. Newsome pp. 117-8
- 22. W.J. Reader 'Professional Men' p. 111
- 23. PSC I p. 37
- 24. A.C. Benson 'The Life of Edward White Benson' Vol I pp. 37-8
- 25. PSC II pp. 532-535
- 26. Newsome p. 135
- 27. Newsome p. 134
- 28. I. Hamilton 'When I was a Boy' pp. 169-70
- 29. Schools Enquiry Commission, Report, p. 16
- 30. Reader p. 108
- 31. PSC I p. 15
- 32. PSC II p. 534
- 33. SEC Report p. 16
- 34. Commission of Scientific Instruction and the Advancement of Science Sixth Report 1875 (Devonshire Report) p. 137

Chapter Eleven

We have seen that the evidence suggests that a school's success in attracting pupils had little to do with whether it offered a modern curriculum. This certainly applied to the Clarendon schools and in the last chapter we discovered that it was also the case with the new proprietary schools. If parents were not greatly interested in a modern curriculum, the question arises - what did they want from the schools? In this chapter and the next we shall attempt to analyse the demands they made, particularly those which related to the curriculum. The views of parents in this context have often been overlooked, yet their importance was considerable. The schools were, after all, in a situation of supply and demand. In the last analysis, whatever the views of their staffs about the desirability of teaching certain subjects rather than others, the schools had to supply what their clientele demanded, or see them look elsewhere. It will be argued here that the demands made on the schools by the Victorian upper and upper middle classes fall into two categories - those related to occupational choice and those related to status anxiety, both sets of demands having implications for the curriculum. It will further be argued that the schools did in fact respond to these demands and, as far as possible, supplied what was required of them. The schools once again emerge not as institutions incapable of reform, offering an outdated curriculum which no-one wanted, but as eminently adaptable places of education with headmasters shrewd enough to read demand and cater for it - though some were more adept at doing this than others - and also, as we shall see, in a situation where they could the more freely make the necessary manoevres. This chapter will consider the 'non-occupational' demands.

Bamford argues that in the 1860s, boys entering the public schools came from aristocratic, gentry or near-gentry homes, with minor additions

from the clergy, and even less from the armed forces and other professional groups'. (1) His conclusions are based on a detailed study of school records and, as he himself points out, their reliability leaves a lot to be desired. In many cases they are incomplete, sometimes even lost, and in addition, the occupational categories used are often too unspecific to be of much use. A large unclassifiable residue of 'others' remained even after Bamford's painstaking investigation. There are additional reasons why conclusions based on school records must be treated with caution. In Victorian England occupations in manufacture and industry, even at the highest levels, carried little status, while anyone involved in trade was quite beyond the pale. Corelli Barnett suggests that imperial or public service, or the professions (presumably liberal professions) were the only acceptable occupations. He comments 'Manipulating money in the City was just about fit for a gentleman; but trade was 'low' and productive industry lower still'. (2) Such attitudes were apparent in the evidence of at least two of the Clarendon school headmasters. Vaughan of Harrow, for example, emphasised to the Commissioners that 'in no instance is any son of a Harrow tradesman now a member of the great school', (3) and we recall also Kennedy's dislike of the word 'commercial'. It is possible, therefore, that many parents in such unfortunate categories were either deliberately vague or actually misleading about their work. In many cases successful industrialists purchased landed estates and thus moved thankfully into the 'gentry' category. It is also possible that in order to emphasise their aristocratic, or at least upper class, nature, the schools themselves upgraded some of their parents into more socially acceptable categories. Hollis, referring to Eton, argues that 'as in all English schools at all times, there was a conspiracy between the authorities and the boys to pretend that the boys were in general of nobler birth than was in reality

the case. ⁽⁴⁾ A possible reason for such a deception was that some parents sent their sons to the schools to make useful connections for the future. In an age when qualifications were often less important than who one knew, and when patronage was a fact of life, this made considerable sense. The schools, which must have been aware that this was one of their attractions, would thus have a powerful incentive for emphasising the high social status of their boys and not drawing attention to those from more dubious backgrounds. The large number of boys for whom 'no information is available' may well have been from such backgrounds and this very familiar tag in school records was perhaps used to camouflage the fact.

At the very least, then, there would seem to be a possibility that the schools understated the number of boys from industrial and commercial backgrounds (i. e. from the higher bourgeoisie) and even those from the new professions, which at that time were struggling for social recognition. There is no doubt that the groups mentioned by Bamford - the clergy, the ancient liberal professions, the gentry and aristocracy - continued to patronise the schools in considerable numbers, but it is also likely that some of the 25% of boys classified as 'others', as well as some of those in the gentry group, came from bourgeoisie and new professional backgrounds.

There is certainly evidence from other sources besides school records that such parents sent their sons to the Clarendon schools. Commentators of the time attest that this was the case. Staunton, for example, writing in the 1860s, remarked that 'the aristocracy, the country gentry, the more wealthy of the commercial class... will continue to prefer Eton and Harrow' for their sons. (5) Coleridge referred to the 'new rich' who

patronised the public schools and Lord Houghton, writing in the 1860s commented on the young manufacturers and bankers who were rubbing shoulders with the 'titled and opulent' at the schools. (6) The Report of the Schools Enquiry Commission listed the clientele of the Clarendon schools as 'men with considerable incomes independent of their own exertions, or professional men, and men in business, whose profits put them on the same level'. (7) Charlotte Erickson's detailed study of British industrialists yields some valuable information on the education of nineteenth century steel manufacturers. She dicovered that one of the most significant trends in their education was 'an increasing gravitation to the particular schools which are today recognised as public schools, ' and commented, 'The trend had already begun among the second-generation leaders who were being educated in the middle of the nineteenth century. (8) Roberts in 'The Paterfamilias of the Victorian Governing Classes' also gives examples of 'urban fathers' engaged in manufacture and commerce who 'aped the aristocracy in sending their sons to boarding schools'. He adds, however, that 'they departed from aristocratic ways in welcoming them back to the business at age fifteen or sixteen'. (9)

To select classics-dominated boarding schools for the education of their sons seems a remarkable course of action on the part of men involved directly in commerce, industry and manufacture, many of whom had been educated in a very different tradition which had prepared them for their future role in an industrial society. One might have expected them to generate a new stream of education more in keeping with their own economic and industrial positions. Indeed, it seemed, earlier in the century, that this was about to happen. Much of the radical middle class criticism directed at the ancient universities and public schools was

constructive in that alternatives types of education, more in accord with the new industrial age, were proposed. Bentham's projected Chrestomathic school, where science and technology were at the core of the educational process, is only one example. Nor did the middle classes content themselves merely with theorising. Schools and academies came into being to put the new ideas into practice, many of them run by non-conformists and offering a wide range of subjects. University College, London, the prototype for the universities to be founded in the latter half of the century, was part of the same movement. The new educational institutions were supported by members of the new industrial middle classes, the men actively engaged in developing industry and technology. Thus, in the early nineteenth century, the bourgeoisie seemed set fair to develop a new tradition of education in which science and technology played an important, if not dominant, role - the scientific-technological tradition of education referred to by Steiner. Thomas Wyse, an educational reformer, believed that in the 1830s two different systems of education stood opposed, 'the education of the past age, and the education of the coming age: one with the object of holding back, or keeping still, the eternally moving man; the other of moving onward with him, of accompanying, and in some instances of moving beyond him in the course'. (10) Yet in spite of such promising beginnings, the new ideas lost impetus, gaining ground only very slowly, and the Christian classical tradition maintained its dominance for decades to come. Indeed, as we saw earlier, it is Professor Steiner's view that this tradition is still dominant in English education.

Thus, the buoyant self-confidence of the early industrialists - so characteristic of the men involved in the Lunar Society - seemed to evaporate. Their educational ideals, their plans for a new type of

education to complement the new age, did not fulfil their early promise. With some exceptions, but not many, the higher bourgeoisie turned its back on the modern subjects which had made its rise to power possible and began to learn Latin and Greek. The practical, scientific model of education pioneered in the dissenting academies was now ignored by many sections of the middle class. Some attempt must be made to explain such a surprising volte face and such an unexpected loss of scientific nerve.

Loss of nerve also characterised the political scene. In the 1840s the bourgeoisie seemed poised to wrest leadership from the aristocracy indeed, Cobden believed this was happening. By the 1850s he was forced to admit they had lost their change. The passage of the 1832 Reform Bill, which gave the industrial capitalists the vote, and the abolition of the Corn Laws in 1846, showed how close were the bourgeoisie to political power. As Best comments: 'The great 'middle class' movement - mainly urban, commercial and Nonconformist...could...have stayed in being after 1846 and gone on to other landlord-lowering objects.' The league's leaders tried but failed. 'The middle classes became either deferential or noticeably more deferential than they had recently been'. (11) From Cobden's viewpoint, the middle classes had sold out to the aristocracy. In 1857 he said: 'During my experience the Higher classes never stood so high in relative social and political rank, as compared with the other classes, as at present', and in despair he commented 'The more contempt a man like Palmerston... heaped upon them the more they cheered him!. (12) Part of the explanation for the bourgeoisie's capitulation to the aristocracy may well lie in Bagehot's analysis of Victorian society in 'The English Constitution'. As far as he was concerned, one of the outstanding characteristics of the period was deference, i.e. the willing acceptance of hierarchy. Perhaps, as Best believes, the middle classes were 'For

all their bluster...toadies at heart'. (13) Yet such attitudes on the part of the industrial higher middle class themselves require explanation, contrasting so sharply as they do with the earlier self-confidence.

Perhaps part of the explanation lies in the increasing ugliness of the industrial revolution. Possibly as the industrial Utopia envisaged by early industrialists like Wedgwood seemed more and more remote, as the threat of working class revolution grew, the bourgeoisie recoiled from the Leviathan it had created and sought security in traditional aristocratic standards and ways of life.

Writing on the failure of the bourgeoisie to wrest political power from the aristocracy, Karl Marx suggested that one of the reasons for this was that in every violent movement the bourgeoisie were obliged to appeal to the working class. 'And if the aristocracy is their vanishing opponent' he wrote 'the working class is their arising enemy. They prefer to compromise with the vanishing opponent rather than to strengthen the arising enemy... Therefore, they strive to avoid every forcible collision with the aristocracy.' (14)

The industrial middle class, however, did much more than merely avoid collision with the aristocracy. It embraced the aristocratic way of life with almost hysterical fervour, and nowhere is this more clearly seen than in its relinquishment of its earlier educational ideals and its acceptance of an unprogressive, undeniably aristocratic style of education.

Perhaps part of the explanation, too, for the bourgeoisie's change of heart lies in the fact that it became increasingly involved in what can

best be described as an identity crisis. During the early decades of the industrial revolution the new bourgeoisie had had an identity and a cohesion based often on nonconformity and a common resentment of the landowning aristocratic ruling class. By the 1840s, the bourgeoisie was fast becoming a huge amorphous group made up of many subgroups and with no clear identity. According to Best, the internal structuring of the middle class over this period became increasingly complicated. He writes that in traditional elite circles' men connected with factories, banks and warehouses - let alone shops! - were generically suspect, clouded by the imputation of vulgarity'. They reacted to this situation by establishing sub-hierarchies among themselves and the result was 'multilayered snobbery'. (15) Unsure of its place in the hierarchical structure of society, lacking the self-confidence to be content with simply being middle class or to develop a new set of values according to which society should be structured, and as we saw subject to an increasing fear of the working class, the bourgeoisie accepted aristocratic assessments of social worth and became involved in an almost frantic scramble for status. It is in this connection that we now move on to consider the 'gentleman' ideal. The argument put forward is that the acute status anxiety which many middle class groups experienced during the fluid uncertainty of Victorian England could be allayed by the public schools and their ability to turn a middle class boy from a dubious background into a gentleman.

Best argues that prior to the public school 'boom' the approved, virtually the only, means of entry for very rich and socially ambitious outsiders into the elite had been to buy a country estate and hope for social acceptance sooner or later, if not for themselves then for their heirs. In the early Victorian period that procedure was being superseded by another

which, by the 1860s, was well established. The new route was the public school. Prior to this, 'gentleman' had been a worryingly vague term. A member of the bourgeoisie may be quite unsure as to whether or not he was one. After the 1830s, the definition gradually became clearer. Anyone who had been to a public school was a gentleman. Thus, as Best puts it, education became 'a trump card in this great class competition' (16) and it was accepted that a public school education was the only proper one for those who wanted to maintain or attain an irreproachable social position. The public schools thus exercised a magic which the socially aspiring middle classes found increasingly magnetic. 'Men who grew rich out of industry and commerce' suggests Newsome, 'desired institutions in which to civilise their sons and to bring them into contact with the sons of upper-class and noble families, thereby raising their own families higher in the social scale'. (17) A similar point is made by Charlotte Erickson who argues that the trend to public schools in the steel industry was 'at least in part the result of a search by the businessmen fathers of some of our subjects for a higher social status for their sons'. (18)

Matthew Arnold referred to the ancient public schools and the growing throng of imitators by which alone it was possible to pass, or to persuade others one had passed, from the middle to the upper class. (19) Other commentators of the time noted, and in some cases, deplored, the influence of the gentleman ideal on the bourgeoisie. Lord Houghton, in an essay entitled 'On the Present Social Results of Classical Education', argued that it was 'precisely this class which is the most palpable sufferer under the present system...' From his education, the young manufacturer or banker retained 'little beyond some tastes in which only the idle or the independent can indulge with impunity, and a certain dim conceit of his own superiority over his fellows, who have only received a 'commercial'

training'. As far as Lord Houghton was concerned, the chief impediment to change was 'the extreme self-satisfaction with which not only our national pride, but the authority of our public institutions, regards the character of the present English gentleman. He is exhibited to us as an ideal of humanity which it is almost sinful to desire to improve or transcend; and it is, if not asserted, continually implied that if he in his youth were taught more or otherwise than he learns at present, some mysterious degradation would inevitably ensue'. (20) It seemed to Houghton that any attempt to remedy these deficiencies in education would be regarded as little less than revolutionary.

In providing the upper middle classes with an entrée into the elite and a recognised stamp of social respectability, the public schools did a great deal more than merely allay their status anxiety. They made possible the peaceful fusion of two potentially hostile groups in Victorian society - the bourgeoisie and the aristocracy. The struggle for political power between these groups ended not with the victory of one class over the other, as had been the case in other European countries, but with the gradual merging of the two classes into one, a process virtually completed by the seventies and eighties and a process during which many traditional aristocratic attitudes and values were absorbed by the new industrial middle classes. Worsley says of the bourgeoisie: 'In England it did not seize power and set up its own rule. It used the more modern technique of infiltration, and in the process, it got tarred with the old brush'. (21) Clark sees the process as more of a take-over than a fusion. He points out that despite all the changes, the old governing class was still, in mid-nineteenth century England, in firm control. 'The political system was still to a remarkable extent the plaything of the nobility and gentry' he writes 'and in particular of the hereditary owners of the great estates'. (22) It is certainly the case that 'acquiescence in the aristocracy's political as well as social ascendancy was dominant among the middle classes in the sixties and seventies.' (23)

Perhaps, in the long run, the aristocracy's survival can be traced to its ability to absorb successfully the leaders and accommodate the demands of powerful 'rising' groups outside its own preserves. In Best's opinion, no hereditary aristocracy in Europe ever showed anything like the same sense for survival. (24) Marx expressed the opinion that the more a ruling class was able to assimilate the most prominent men of the dominated classes, the more stable and dangerous its rule. (25) The absorption, the creaming off procedure, was institutionalised in the public schools. As the procedure came into being, so the early antagonism between the two groups waned. Had the traditional ruling class closed ranks and refused to admit the newcomers, perhaps nineteenth century history would have been considerably more turbulent than it was. The growth of deference, then, on the part of the bourgeoisie, may well have been a function of the openness of the elite as expressed in the accessibility of a public school education.

Simon considers the implications for educational reform of the middle class change of heart. He suggests that though by mid-century great differences still existed between the middle classes and the aristocracy on particular policies, there was no longer the same fundamental opposition of interest and outlook. As he puts it: 'The easy access to great wealth, and growing power, rapidly tamed men who had once rebelled against an aristocracy which appeared as the stumbling block to middle-class initiative.....in place of former conflict, there was a new conjunction of interest, even a fusion between former opponents.

So the wealthier industrialists of this age cease to scorn aristocratic pretensions; individuals seek rather to learn the arts and graces of social superiority to add to the realities of political power, and to climb into the ranks of the aristocracy themselves. (26)

Thus, the middle class demands for drastic changes in the public schools and ancient universities became increasingly less radical as the century progressed and by the time they were taken up in the 1850s and '60s it was, according to Simon, in a new spirit of compromise. There was no longer the same desire to build on radically new lines, but more a desire to take over and remodel institutions with a recognised status in order, while removing the most glaring faults, to secure a share in the benefits they could confer. Of the Royal Commissions which investigated the ancient universities, the public and grammar schools, Simon writes: the 'measures adopted hardly followed the lines envisaged by James Mill and his colleagues, who had pressed exclusively the outlook and educational needs of the enlightened middle class of an earlier age - not least the claims of science - as against aristocratic culture and pretensions'. (27)

The bourgeoisie, then, after promising beginnings, never generated class-consciousness. Perhaps it would be more exact to say it never developed its own class-consciousness. Class-awareness it had in plenty, but this awareness centred on the possibility of moving into a higher class and having once achieved that - of staying there. In order to achieve this most desirable end, the higher bourgeoisie was prepared to sacrifice a great deal but was not prepared to surrender unconditionally. Its members made demands on the schools which involved an extension and clarification of the gentleman ideal and which, writes Best, 'represented

the striking of a kind of bargain and modus vivendi between the traditional ruling class and their potential rivals'. (28) The 'gentleman' ideal was not entirely foisted upon the middle classes, they helped fashion it, though it is arguable that they conceded considerably more than they gained. Their demands involved the schools in considerable reforms, though, surprisingly, no dramatic revision of the curriculum, and it is to these which we now turn.

Prior to the 1830s, the Clarendon schools, as we saw, were 'barbarian' dominated in that the morality and standards of behaviour were very much those of the upper classes, as opposed to the middle classes. The schools were brutal and, despite their aristocratic associations, were too pagan and undisciplined to appeal to the middle classes. The higher bourgeoisie's minimum demand in this respect was that the schools be made more respectable and it was Thomas Arnold who effected the transformation. As Worsley puts it: he infused 'into the Barbarian wildness of organisation a stern admixture' of his own middle class morality - he made the schools fit for Christian gentlemen. (29) This, then, was the first step in the fashioning of the new style of gentleman. He had to be a Christian, or at least pay lip service to Christian virtues and values as interpreted by the middle classes. Against the background of nineteenth century history, we can only agree with Worsley that Arnold's reforms were of crucial importance. They were part of a long process of accommodation which, as we saw, eventually made possible the peaceful fusion of two potentially warring classes.

The second middle class demand - or package of demands - was for high social status, a certain and unassailable position at the top of the Victorian status hierarchy. As a first step to this, the higher bourgeoisie

required an irreproachable clientele in the schools to which they committed their sons and their social ambitions, i.e. a school body which consisted entirely of aristocratic, gentry and upper middle class pupils. There is considerable evidence to suggest that the middle classes in the nineteenth century Clarendon schools were much more classconscious than ever the aristocracy had been. Hollis argues that in the eighteenth century 'class distinctions were so clearly established in society that it was not thought that the nobleman's son could be in any way contaminated or his prestige put in jeopardy if he had to spend his school days...with a tradesman's son'. He continues, 'It was the middle class after their victory in 1832 which brought in this notion of personal segregation - of the class school. It was the manufacturers who had recently raised themselves from the ranks who did not feel confident that their children would preserve their refinement if they were educated alongside tougher and poorer boys. It was in the second half of the nineteenth century that there appeared for the first time the notion of a school to which only the sons of gentlemen should be admitted. (30)

The Clarendon schools were not slow to rise to the occasion. Once again they showed themselves capable of rapid reform when necessary. The forties, fifties and sixties witnessed the deliberate and in many ways dishonourable exclusion from the schools of the few remaining local boys for whom, after all, the majority of the schools had originally been intended. Different headmasters used different - and often unsavoury methods - to rid their schools of the embarrassing presence of local boys in order to render the schools fit for the status-conscious bourgeoisie. Arnold's methods are well-documented. (31) Vaughan, headmaster of Harrow, had, as we saw, instituted a day school for the children of 'the humble parishioners of Harrow'. This school was

designated the English Form but its members had no communication with the boys of the great school, either in school, chapel or the playing fields. This exclusion policy received something of an offical imprimateur with the publication of the Clarendon Commission's recommendations.

Fear of contamination by social inferiors was also in evidence lower down the status hierarchy. The Schools Enquiry Commission found that 'Private schools...find it difficult, in some cases impossible, to resist the class-feeling which compels the exclusion of boys of a lower rank than the rest... A boy of superior talents is not allowed, even if he be able to pay the school fees, to enter a school attended by children above him in the social scale. The parents threaten to withdraw their children, unless the social distinction is rigidly maintained'. (32)

The second component of the middle class demand for high social status involved what we might call the aristocratic image. Many of the schools deliberately created a landed estate image, for example, Rugby - no small feat in the middle of what was becoming a busy town. Some schools, through lack of funds, or geographical position, had considerable difficulty in meeting this requirement. Bamford, as we recall, said of Charterhouse that its five acres 'were swamped on all sides...It was past redemption. Nothing could make such surroundings a true haunt of the gentry. (33) Or even less so, one could add, of the higher bourgeoisie. It is interesting to note that Charterhouse's removal to Godalming in 1872 resulted in a dramatic increase in numbers. In 1873 there were 268 boys in the school; in 1876 there were 500. Shrewsbury also found it easier to attract pupils after Moss transferred the school to new buildings in 1882. Westminster as we saw, found it extremely difficult to keep up its numbers and one of the accepted reasons for this was the cramped quarters of the school and

the therefore unfortunate proximity of the lower orders. After several decades of heart-searching, Westminster finally decided to remain in London and by then the school was showing healthy numbers. Westminster's position was somewhat different from the other schools in that its unfortunate site was to some extent compensated for by its local and historical associations, and also by the privileges granted to its boys.

Other factors were no doubt involved in the growing importance of the 'landed' school. New ideas about what constituted the 'healthy' life were coming into vogue and the landed school was generally the healthy school. Some of the cramped schools were unlucky enough to suffer outbreaks of various diseases e.g. scarlet fever at Westminster, and these no doubt played a part in discouraging potential demand for school places. This point must not be over-emphasised, however. In his evidence to the Commissioners, Rev. Weare of Westminster, pointed out that the school had had only one outbreak, caused by the opening of some drains. He contrasted this situation with that at Eton, Winchester (both successful schools) and 'other schools where unhappily periodical fevers have prevailed of a typhoid character'. (34)

Although other factors were no doubt involved, there can be little doubt that some of the responsibility at least for the difficulties of Charterhouse, Westminster and Shrewsbury stemmed from their inability to foster the landed estate image. The other schools either already possessed such an image - like Eton - or went to considerable lengths and expense to create one. This applied to many of the new schools and one recalls the example of Wellington which had originally 132 acres. To this in 1863 was added 150 acres and in 1871 another 130, making a total of 412 acres. (35) The success of the 'landed schools', the fact that they were often sited well

away from industrial areas, can be seen as another example of the bourgeoisie turning its back on industrial society and attempting to imitate the traditional landed upper class way of life.

For our purposes perhaps the most interesting demand made by the bourgeoisie was that the classics should continue to dominate the public school curriculum. The classics were as much part of the aristocratic way of life as the landed estate. Their very uselessness, in a vocational sense, carried an implication of high social status, indicating as it did the lack of necessity of being concerned with earning a living. Kearney, writing in 'Scholars and Gentlemen' comments that 'A classical education... served to mark off the ruling elite from those below it. The classical tag was a class shibboleth of unerring simplicity'. (36) Thus, the gentleman could be identified by his familiarity with the classics and his unfamiliarity with practically everything else.

It seems likely, therefore, that despite their early criticisms, the higher bourgeoisie was not interested in drastically revising the public school curriculum. The Schools Enquiry Commission suggested that some of the other groups which made up the clientele of the schools had no wish to depart from the existing curriculum. Certainly, as we have already seen, the most successful schools were not those which offered the most up-to-date curriculum. There seems, in fact, to be almost no correlation between the two characteristics.

Thus, the evidence would seem to indicate that the clientele of the schools was happy with the classical curriculum because of its association with high social status. We would also suggest that parents were not too concerned with the level of classical attainment reached by their offspring.

Shrewsbury, for example, academically speaking, was probably the most successful school and had achieved an outstanding reputation for university success. Eton, on the other hand, was equally well-known for turning out badly-taught boys who knew very little of even the classics - a fact remarked by the Commissioners. Shrewsbury, however, found it almost impossible to attract pupils while Eton was markedly successful in this respect. Thus, the gentleman had to have received a classical education, but a smattering would suffice. The parents who patronised the schools were, it seems, more than willing to subordinate educational to social requirements.

Referring to 'the great majority of professional men, especially the clergy, medical men, and lawyers' and the poorer gentry, the Report commented, 'they value classics and mathematics highly for their own sake, and perhaps even more for the value at present assigned to them... They have nothing to look to but education to keep their sons on a high social level. And they would not wish to have what might be more readily converted into money, if in any degree it tended to let their children sink in the social scale'. (37)

These, then, were the middle class demands. Schools reacted to them in different ways. Arnold's 'Christian gentleman' originated at Rugby but gradually spread - often through an interchange of staff - to the other schools. As we saw, some schools were more able than others to meet the 'landed school' demand. As for getting rid of local boys, Harrow and Rugby, which were compelled by their statutes to take them, very rapidly shed this obligation. Shrewsbury was unable to do this until the Clarendon Commission took a hand. The School was, in fact, subject to considerable local pressure - of which we are given a glimpse in the Evidence, when a

delegation of local people pressed the Commissioners for a wider and more vocationally useful curriculum at Shrewsbury. Kennedy had already submitted to such pressure by allowing the formation of the 'non-collegiate' class. As we saw, he hastened to assure the Commissioners that it had no relation to commerce, but it was sailing close to the wind and possibly the presence of such a class was one of the factors which frightened off the higher bourgeoisie.

The importance of meeting the demands can, to some extent be seen from the example of Harrow, which, up to Vaughan's headship (1845-59), fulfilled only two of the increasingly important demands i. e. it was a 'landed' school and its curriculum was classical. However, it was not until Vaughan - previously a master under Arnold - imported the concept of the 'Christian gentleman' from Rugby, and took steps to rid the school of local boys, that Harrow's decline was arrested and numbers climbed steadily from the dangerously low 60 of 1844.

Perhaps, then, we must agree with Clark that the process of accommodation between the two classes was not so much a fusion as a take-over. Certainly, this is Worsley's view. The Barbarians sacrificed little - simply shedding some of their rougher characteristics. The Philistines, on the other hand, were taken over 'lock stock and barrel', they swallowed the Barbarian bait - the 'seductive offering' - and accepted with it many Barbarian values. Probably the most momentous in its long-term effects, argues Worsley, was the view that manufacture, trade and applied science were vulgar. As a result, the reconstituted ruling class 'rejected trade and industry and in so doing they rejected the world they lived in'. (38) He goes on to say that all that was best in the rising bourgeoisie was henceforward excluded completely from the elite educational system. In

exchange, the bourgeoisie received the doubtful privilege of having their sons educated alongside the gentry and in due course being called gentlemen themselves. And it seemed to them worth it. Worsley believes that it was not until the Great War that the blank in the public schoolboy's whole tradition came to light - namely his ignorance of, 'amounting almost to contempt for', the realities of the Industrial Age in which he lived. (39)

The take-over took many decades to complete, perhaps starting early in the century as manufacturers tentatively began to send their sons to certain schools. Some schools took a greater part in the accommodation process than others. In many ways Rugby led the field, making the necessary adjustments, working out the blueprint and then passing it on - often through Rugby trained headmasters - to other schools. Perhaps significantly, one of the earliest records of manufacturers' sons going to the schools, refers to Rugby. The September 26th, 1806, entry in Joseph Farington's diary, mentions the sons of manufacturers from Birmingham, Woverhampton, etc. at the school. (40)

The argument put forward in this chapter may also be extended to explain the phenomenal growth and success of the Anglican boarding schools which we referred to in the previous chapter. Demand for middle class education was growing rapidly. Early in Victoria's reign, new professions came into being. Membership of the older professions grew rapidly, for example the law, the church and the army. The civil service expanded. Bamford gives the example of the combined law and medical groups which doubled their membership in the sixty years from the turn of the century to 40,000 in England and Wales. The clergy too had increased to over 16,000 by 1861. (41) In addition, the growth of

industry and manufacture had seen a corresponding growth in the bourgeoisie. At the higher levels this demand was catered for by the Clarendon schools and by the mushrooming Anglican boarding schools. Such schools as Marlborough, Cheltenham and Wellington found little difficulty, as we saw, in attracting pupils, even though many of the older Clarendon schools at the time had places vacant. Why should the parents involved choose Marlborough or Wellington instead of, say, Charterhouse or Shrewsbury? No doubt many factors were involved. We have referred already to Charterhouse's site problem and Shrewsbury was notorious for its bad accommodation. For some parents the deciding factor may possibly have been the curriculum. Professional men may well have had to ensure that their sons received some kind of vocational training which was available at some of the newer schools. This factor must not, however, be over-emphasised. The new schools, as we saw, were not noticeably more modern than the old. Even where modern classes were offered many pupils - the vast majority in some schools - still preferred the classical side and received in effect a traditional classical public school education which was not remotely vocational. Shrewsbury, as we saw, offered a modern side but its numbers were often disastrously low. Why, then, did these parents prefer the new schools to the old?

The argument suggested here is that by the middle decades of the century the higher bourgeoisie and the new professional groups had worked out what they wanted from education. The blueprint, as we saw, was Rugby, and it was enthusiastically carried to the new schools by a succession of Rugby-trained or educated headmasters. The new schools were more fortunate than many of the old. They could work to the blueprint unhampered by unattractive sites and embarrassing statutes about local

boys. Sites could be chosen to fulfil the 'landed school' criterion.

Careful selection procedures could ensure the necessary irreproachable clientele. Thus, the new schools were able to follow Rugby's example and amply meet what had become general educational requirements for the upper middle classes. They claimed to produce Christian gentlemen, they offered in most cases a classical education, they cultivated a landed estate image and had a most carefully screened clientele, generally fairly narrow in origin and excluding any of inferior status.

This burst of emulation led to an interesting problem. If large sections of the middle classes were able to send their sons to classical landed schools with irreproachable clienteles, then the social objective of the schools became self-defeating. There was little point in being a gentleman if everyone else was one too. And so, gradations had to be introduced. The schools themselves became involved in the national scramble for status. Schools became extremely wary as to whom they played games with, lest they be tainted by contact with an inferior school. The editorial in The Meteor, March 18, 1869, gives a fascinating insight into what a problem this could be. The heart-searching centred on whether Rugby should continue to play Marlborough at cricket and thus sacrifice the chance of a Harrow match. It was notorious, commented the unknown Rugbeian of over 100 years ago, 'that the real reason which prompts Harrow to keep us out of the Public Schools Cricket is now merely the fear that we may wish to drag our poor relations into their august society'. He continues 'The objection that Harrow does not know where Rugby is must have disappeared since the last Public School Commission. Surely those Harrovians who value cricket are not content with only the Eton match... If the nation has recognised us as one of the seven schools, it is impossible for us to take our stand among the remaining 3,000'. (42) In 1866, Westminster refused

to play Shrewsbury, administering the following 'haughty snub': 'The captain of the Westminster Eleven is sorry to disappoint Shrewsbury, but Westminster plays no schools except Public Schools...' A few years later, Mill Hill, on requesting a match with Harrow, received the following reply on a post card: 'Eton we know, and Rugby we know, but who are ye?' (43)

In conclusion, one of the most important explanations of the Clarendon schools inertia over curricular matters lies with the demands made on them by their clientele - the aristocracy, gentry, clergy, old professions and the higher sections of the new industrial middle classes. The more traditional clientele required no change in the curriculum - modern subjects would be of little use to the clergy, to the landowning aristocracy and gentry. As for those who knew the value of modern subjects, who had probably had an education which included them, they were quite happy to sacrifice a wide curriculum for their own children for the sake of something they considered much more valuable - a secure social position. The classics conferred high social status and in an age when rigid class barriers were blurring and breaking down, when new social groups were emerging, when few were any longer secure in their social position - status became an all-important consideration.

The argument, as we have seen, applies also to the new Anglican boarding schools. Though possibly more concessions were made by these institutions to the demands of the new industrial society, to the need to prepare for examinations, the concessions were of a minimal kind.

There was no whole-hearted attempt to embrace the new subjects, to see their educational worth and give them a valued place in the curriculum. The enthusiastic middle class approach of earlier decades was as little

in evidence in the new schools as in the old.

For those members of the middle classes who were loyal to their own traditions and advocated a wider more vocationally-oriented curriculum, and for those who perhaps had qualms about future industrialists being educated in almost total ignorance of natural science, technical subjects, modern languages, etc., the schools - with a stroke of genius - came up with the answer. The classics were vocational subjects par excellence, because they trained the mind and thus made easy the acquisition of all other knowledge, even scientific - a proposition incidentally on which Faraday poured scorn. Thus, even those destined for occupations in industry, commerce, or for government posts involving decisions about industry, could rest easy, secure in the knowledge that the real need of the administrator was a well-trained mind - and that this was provided in full by a classical education.

There is no doubt, of course, that the headmasters themselves believed fervently in the value of the classics. One has only to read Moberly's impassioned arguments or Temple's carefully reasoned defence to see that this was the case. As Bamford says, every Anglican headmaster of any significance, except perhaps Wilson, up to the 1890s, believed in the classics as the basis of education. (44)

Thus, the nineteenth century was a period when two potentially antagonistic classes confronted each other. The antagonism was resolved in a compromise, when demands were made and concessions given, though as we saw one class conceded considerably more than the other. The compromise was to a large extent worked out in the Clarendon schools and resulted in a blueprint, acceptable to a large body of parents, which was

enthusiastically adopted by the mushrooming new schools. The process took several decades. Some schools did not or could not get the blue-print quite right and suffered in consequence. In the process, education became hopelessly entangled with the jockeying for position of different groups in society. Education as something valuable in itself, or education as something which could benefit society, became an irrelevance. Its major function had somehow become to distinguish between the sheep and the goats. Thus, the classics survived and even extended their domain. They survived because the fragmented and insecure middle classes of industrial society did not have the courage of their early educational convictions.

Throughout the period the Clarendon schools once again showed themselves to be eminently adaptable institutions, capable of rapid internal reform when the need arose. As we have seen, curricular reform was not considered necessary. After a period of adjustment the schools continued to educate the ruling class - albeit a very different one - for leadership of a transformed society. The education, however, remained virtually unchanged.

- 1. T. W. Bamford 'Rise of the Public Schools' p. 7 (Bamford's generalisation would appear to be only partly applicable to Winchester if we accept Moberly's statement that: 'Boys here are sons of the clergy, a large proportion, and professional men...from a distance. Some few are the sons of country gentlemen but not so many'. (PSC III p. 353))
- 2. C. Barnett, 'The Collapse of British Power' p. 96
- 3. Public Schools Commission IV p. 159
- 4. C. Hollis 'Eton' p. 254
- 5. H. Staunton 'The Great Schools of England' p. xxvi
- 6. Lord Houghton 'On the Present Social Results of Classical Education' in 'Essays on a Liberal Education' ed. F.W. Farrar p. 377
- 7. Schools Enquiry Commission, Report Vol. 1 p. 16
- 8. C. Erickson 'British Industrialists: Steel and Hosiery 1850-1950' p. 34
- 9. D. Roberts 'The Paterfamilias of the Victorian Governing Classes' in 'The Victorian Family' ed. A.S. Wohl, p. 67
- 10. Quoted in B. Simon 'Studies in the History of Education 1780-1870' p. 125
- 11. G. Best 'Mid-Victorian Britain' p. 239
- 12. N. McCord 'Cobden and Bright in Politics' in 'Ideas and Institutions of Victorian Britain' ed. R. Robson p. 113
- 13. Best p. 239
- 14. Quoted in T. B. Bottomore and M. Rubel (eds.) 'Karl Marx:
 Selected Writings in Sociology and Social Philosophy' p. 206
- 15. Best p. 250
- 16. ibid p. 150
- 17. D. Newsome 'A History of Wellington College' p. 2
- 18. Erickson p. 37
- 19. Quoted in W. J. Reader 'Professional Men' p. 114
- 20. Houghton pp. 377-8
- 21. T.C. Worsley 'Barbarians and Philistines' p. 68
- 22. G. K. Clark 'The Making of Victorian England' p. 214
- 23. Best p. 242
- 24. ibid
- 25. Bottomore and Rubel pp. 197-8
- 26. Simon p. 279
- 27. ibid p. 279
- 28. Best p. 254
- 29. Worsley p. 37
- 30. Hollis p. 290
- 31. T. W. Bamford 'Thomas Arnold' Ch. XII
- 32. SEC Report Vol 1 p. 655
- 33. T. W. Bamford 'Rise of the Public Schools' pp. 12-13
- 34. Public Schools Commission III p. 403
- 35. Newsome p. 165
- 36. H. Kearney 'Scholars and Gentlemen' p. 118
- 37. SEC Report Vol 1 pp. 17-18
- 38. Worsley pp. 34-5
- 39. ibid p. 126
- 40. T. W. Bamford 'Public Schools and Social Class' British Journal of Sociology September 1961 p. 227
- 41. T. W. Bamford 'Rise of the Public Schools' pp. 17-19
- 42. The Meteor Editorial 18. 3. 1869
- 43. V. Ogilvie 'The English Public School' p. 168
- 44. Bamford op. cit. p. 91

Chapter Twelve

In the last chapter we considered the demands made on the public schools by their clientèle. We concluded that, motivated by acute status anxiety, many members of the bourgeoisie and new professional groups sought a secure social position for their sons. The schools supplied this by conferring the title of 'gentleman' on their alumni, one of the most important defining characteristics of this desirable state being a knowledge of the classics.

The demands made on the schools, however, cannot all be seen as responses to status anxiety. At the end of their schooldays, the vast majority of boys had to embark upon a career and this chapter will attempt to identify the demands made on the schools' curricula by the most favoured future occupations.

Victorian England saw considerable changes taking place in the occupational structure. Economic change, the development of a more complex and diversified society, brought with them a proliferation of new occupations. Advances in all fields of knowledge also led to the development of new occupations and the fragmentation of existing ones. Qualifications became increasingly important in many areas of occupational life, even in the ancient liberal professions of medicine and law. In addition, patronage came under increasingly heavy attack, especially from the radical middle class who gained little advantage from it. It was not, however, until the 1850s that people seriously began to take steps to get rid of patronage, and one of its strongholds - the Civil Service - submitted over the next two decades. Similarly, the long-established practice of purchasing commissions in the army gave way to middle class pressure and in both the army and Civil Service new selection procedures based on impartially assessed entrance examinations

were introduced.

It would seem reasonable to assume that such fundamental changes would have a considerable impact on the public school curriculum. Many of the schools' progeny, after all, took up civil service posts, army commissions or one of the liberal professions. Surely the pressure to modernise their curricula in the face of the new demands for qualifications would prove irresistible?

The argument put forward here is that the schools, to a surprising extent, resisted this pressure and made only very limited concessions to it. The scramble for qualifications and for professional status left the classical curriculum, in essence, virtually untouched. Once again the schools demonstrated their ability to respond to social and economic change around them but without making any fundamental revision either in their curricula or their idea of what constituted a 'good' education.

Despite considerable pressure for reform towards a competitive system of entry, even as late as mid-century virtually every Civil Service post was in some politician's gift. Change came first in the Indian Civil Service when in 1853 the principle of competitive entry passed into law in the Government of India Act. A committee was set up to work out regulations for the competition under the chairmanship of T. B. Macaulay. Benjamin Jowett was one of the members and his influence was to be considerable for many years. In their Report on the Indian Civil Service in 1854, Macaulay and his committee explained the reasoning behind the regulations for the newly devised competition. (1) The examination should centre on the mastery of English, the committee believing that English subjects, in which they included history as well as literature, were the

essential basis of the kind of general education they sought. This revolutionary claim was not, however, entirely reflected in the mark scheme as considerable emphasis was also placed on the classics. A choice of subjects was offered, none of which was compulsory. With maximum possible marks these were as follows:-

English language, literature and history	1, 500	
Greek	750	
Latin	750	
French	375	
German	375	
Italian	375	
Mathematics	1, 000	
Natural sciences	500	
Moral sciences	500	
Sanskrit,	375	
Arabic	375	(2)

Thus, the classics were given as much weight as English and considerably more than any other subject. The competition required no particular course of special studies and 'any one well prepared to take high honours at any of the principal English or Irish Universities has a good chance of success'. (3) Competition from the first was open.

The Northcote-Trevelyan Report in 1854 recommended the adoption of the same principles of entry for the Home Civil Service after first denouncing the evils of patronage. The Report was given added weight soon after its publication as the first winter of the Crimean War began to reveal appalling official incompetence, both civilian and military. The demands for reform became irresistible. In 1855 a Commission was set up to examine candidates, but change was much slower coming than in

India. The Commission was not empowered to bring in a competitive system immediately and apply it to the whole of the public service.

Instead, responsibility for appointing staff still lay with the heads of each of the departments. The primary task of the Commission was to test candidates who were nominated and if they passed, to certify that they were fit to be appointed. To some departments it was laid down that entry should be by limited competition, i. e. the patrons who had the right to nominate candidates would continue to do so but they would now nominate more than there were vacancies for. The Civil Service

Commissioners would then run competitions to determine who should be appointed. This was still a long way from what the Commissioners really wanted, namely open competition, but at least it was no longer undiluted patronage.

The success of the new system, especially within the Indian Civil Service, was infectious and in the 1860s more and more departments of the Home Civil Service accepted the principle of competitive entry. In 1870, open competition was laid down by Gladstone as the method of entry to nearly all branches of the service, though the Foreign Office retained a system of limited competition for manyyears longer than any other department. The examination for the first-class clerkships corresponded to the examination for the Indian Civil Service though more weight was given to mathematics and natural science, and both political economy and jurisprudence were included.

It is important to note that the men responsible for setting up the Civil Service examination system had been throughout men brought up in the old classical and mathematical liberal education tradition. Almost all were men from the ancient universities. They distrusted specialised

training and favoured a competitive test in subjects of general education - not a qualifying examination in technical specialities. Roach gives us an insight into the motivation of the administrative reformers. They lived, he suggests, at a time when social distinctions were taken very seriously and it was generally agreed that it was desirable to maintain class divisions in society and government. It was felt that those who directed the administration should be men of an equal or superior social status to that of those with whom they were brought into contact. It was felt that the idea of the 'gentleman' needed to be updated. 'In a more competitive world' writes Roach, 'he clearly needed qualifications...But, however much it might be modernised, the concept of gentility was a constant to which nearly all the Victorians paid tribute. It remained the gentleman's role to be a leader and inspirer of other men'. (4) The concept of 'gentleman' was inseparable from the concept of 'liberal education'. Thus, the reformers had in mind the public schools and ancient universities as the main recruiting ground for the new breed of civil servant and their ideal for the first class clerkships remained the public school/university man. Accordingly, entrance examinations were based to a considerable extent on the public school and university curricula.

This bias was made explicit on many occasions. In 1866, for example, the Commissioners claimed that success in the Indian examinations was not to be gained by taking up a large number of subjects and concentrating on those not taught at the public schools and universities. They argued that the basic subjects of the public school course were those to which were allotted the highest total of marks. Out of the whole aggregate of marks obtained by the 52 successful candidates in 1865, 82% were due 'to the subjects included in the ordinary curriculum of a public school'. (5) They

continued '... this percentage is somewhat increased since the year 1855, when it was 81; which could hardly have been the case if these examinations had the tendency which is sometimes attributed to them, to encourage the study of new subjects at the expense of the old. 'In 1870 the possible marks for Greek or Roman studies were still twice the totals for French or German studies or political economy, and taken together a third more than allotted to the entire field of science. No paper on current affairs was offered. (6) By 1895 the supremacy of the classics had been only slightly eroded and the relative importance of modern studies only slightly enhanced.

Thus, in spite of being wider than the conventional public school and university curriculum of the day the Civil Service examination requirements were clearly biased towards the education offered in those institutions, and gave considerable weight to the classics. The reformers had themselves been educated in the classical tradition and valued it. They wanted their higher civil servants to be men of high academic distinction (not necessarily the case in the era of patronage) but at the same time they wanted them to be gentlemen - and in Victorian England this term was synonymous with a liberal education. Jowett and his fellow reformers sought to strengthen the links between the ancient universities and the higher Civil Service and to develop in potential recruits the ethic of service. Between 1855 and 1864 of 458 successful candidates in the examinations, 101 had been educated at Oxford and 80 at Cambridge. (Of the remaining 277, 37 had been to the University of London, 27 to Edinburgh University, 76 to Trinity College, Dublin, 58 to other universities and 77 to other institutions or private tutors.) (7) Of the 11 men who were successful in the last separate Home competition in 1895 five had been to Clarendon Schools and one each to Sedbergh,

Marlborough, Clifton, Sherborne, City of London and Kingswood. Ten of them had been to Oxford and one to Cambridge. (8)

Gladstone believed that the change from patronage to open competition could only strengthen the ties between the higher classes and the possession of administrative power. In this he was proved right. The disappearance of patronage and its replacement by a competitive examination system at the higher levels of the Civil Service provided the upper classes with a reinforcement of their traditional power - but only because the examinations were, to a large extent, based on the subjects which were included in a gentleman's education.

Thus, the change to open competition in the Civil Service had little impact on the schools' courses of study. The influence was rather the other way: the public school curriculum was allowed to determine the structure of the examinations by Oxford and Cambridge educated reformers who believed firmly in the excellence of a liberal education and the importance of attracting gentlemen into the Service.

The possibility of obtaining an Indian post, in particular, long remained an important factor in the calculations of British parents, much more so than a Home Civil Service post of which far fewer were available. In the Report for 1895 the Commissioners gave the total number of first-class clerkships filled by open competition since 1870 as 232 i. e. an annual average of ten. This was very substantially less than the number of Indian appointments.

To turn now to the army, the abolition of patronage and the purchase of commissions opened a much wider gateway to talent than changes in the

Civil Service, for the number of commissions granted each year ran into hundreds and increased as time went on. Fighting, especially on land, was regarded as the most gentlemanly occupation of all and the army had long been a favourite career for public school products. This was particularly true of boys from Eton, Harrow and Rugby, (9) and Best in fact refers to: 'the exceptional part played by Eton throughout the nineteenth century in providing a much larger number of officers for the army than any other school'. (10) It is clear, therefore, that demands made by the Army examinations would have to be taken seriously by the public schools. The first step towards the introduction of a competitive examination was taken in 1849. From this time no-one was allowed to purchase a commission without first passing an examination in English. history, geography, arithmetic, algebra, fortification and a language. The examination, however, was oral and in cases where the Deputy-Governor and professors (of the Royal Military College, Sandhurst) were of the opinion that the candidate had had 'the education of a gentleman', although he may have failed in some particular branch, their opinion was made known to the Commander-in-Chief by a special mark which, as Reader says 'looks like a fairly clear indication that no-one expected too much, intellectually, of the Commander-in-Chief's nominees'. (11)

The Crimean war revealed military incompetence on a spectacular scale and gave ammunition to those who had long been demanding reform. In 1857 there was an official enquiry into the purchase of commissions in the army. It was reckoned that in peace-time about three quarters of all first commissions were purchased. Just as in the older professions of the Bar and Church, a young man was admitted into the army first and received training afterwards. The Report concluded that the purchase system deprived the country of the services of a whole class of able men.

As Sir Charles Trevelyan put it in his evidence: the middle class...'a class between the clergy and the legal and medical professions and the higher merchants on one side, and the work people on the other, has no place in the British army under the present system'. And this was 'the great middle class, who carry on all our great industrial and marine operations'. (12)

Commissions were not bought in the artillery, engineers or marines largely, no doubt, because in the case of the first two anyone prepared to take the trouble to acquire the necessary technical knowledge was not likely to be rich enough to afford the purchase system. The Royal Military Academy, Woolwich, one of the very few establishments in England which gave anything like a serious scientific or technical education, trained artillery and engineer officers who were a socially inferior group to the line officers of the infantry and cavalry. Entry was by nomination until 1857 when competition, by means of an extremely severe examination placing great emphasis on mathematics, was introduced. The Woolwich examination demanded evidence of a respectable general education but was aimed at men with a scientific rather than literary cast of mind. It required a marked leaning towards science and mathematics which placed it much farther beyond the range of a conventional liberal education than the Indian Civil Service examination. It was necessary to have at least a little trigonometry to be a reasonable engineer and some elementary physics etc. to be an efficient artillery officer. In 1857, the subjects offered and the marks that could be gained were:

Pure and mixed mathematics i. e. statics,
dynamics, hydrostatics
English language, literature, composition,
history, geography

3.500

1,250

Language, literature, history, geography of: Ancient Greece and Rome France Germany	1,750 1,000 750
Experimental sciences (Chemistry, heat, electricity including magnetism)	1,000
Natural sciences, mineralogy, geology	750
Drawing (mainly technical)	1,000
Moral and political sciences	1. 000

Mathematics was compulsory and candidates were permitted to take up to four more subjects.

In 1862 significant changes in the conditions of the examinations for admission to Woolwich were made. The changes are described in a memorandum dated March 1863 (addressed to the Clarendon Commissioners) from the Council of Military Education and their general effect was to improve the relative position of Latin and Greek which from May 1862 together counted 3,000 marks. The Report commented that the change 'diminishes the amount of mathematical attainment required, and allows greater weight to classical scholarship'. (15) In rather more detail, the Commissioners wrote: 'The qualifying examination for Woolwich appears, before 1862, to have required an amount of mathematical knowledge difficult of attainment for a boy educated at a public school; but it underwent in that year some changes which have made it easier for candidates who have not received a special training. The obligatory mathematics do not now go beyond plane trigonometry; and a candidate need not obtain in them, to qualify, more than 700 marks out of 3,500; with this minimum, and with a fair proficiency in Latin, Greek, French, and geometrical drawing, he is entitled to enter into the competition. This standard is certainly not so high as to be inaccessible to a boy educated at a good public school..., (16) This would seem to have been the Council's intention as they commented: 'The Council cannot but hope that under the

conditions of the system as now modified the public schools will before long send candidates direct to these examinations who will obtain the success which may be expected from a sound course of education and training. (17)

A tabular statement was attached to the memorandum showing the subjects in which the successful competitors in the examination of January 1863 for admission to Woolwich principally distinguished themselves. Eleven out of the 20 distinguished themselves in classics, 15 in mathematics, 11 in French, 1 in geography and none in natural science. (18)

One interesting comment made by the Commissioners refers to the Modern Departments at Cheltenham and Marlborough which, the Commissioners believed, 'would not have been what they are had the old Woolwich standard, which is stated to have influenced them so strongly, been the same as the present; and probable also that they will hereafter feel the effects of the change which has been made in it.'

A cadet of the Royal Military College, Sandhurst got his first commission for nothing, but before 1870 not many officers went through Sandhurst - generally only those who could not afford to purchase a commission. Before this practice was abolished, only a proportion of infantry and cavalry entered the army through its professional military institution, the rest going direct from school or perhaps from a 'crammer'. The Commissioners commented 'The scheme of examinations for direct commissions, framed to meet the suggestions of the Head Masters of public schools, is simple and easy, and requires nothing that is beyond the reach of any boy of moderate industry and ordinary capacity; and it

is clear that no boy, who will give himself a little trouble, needs to forego the wholesome influences of a great school for the sake of being 'crammed' in the house of a tutor. The Sandhurst examination also is evidently within reach of the schools'. (19)

The examinations for direct commissions gave the same weighting - 3,600 marks - to the classics and to mathematics. Other subjects were almost all given 1,200 marks including natural sciences and experimental sciences (1,200 each). The elementary branches of mathematics and English language were obligatory. The examinations for Sandhurst were virtually identical.

Of the 18 successful candidates from the Clarendon schools who were examined for admission to Sandhurst between December 1859 and June 1862 18 took mathematics, 16 took Latin, 13 took Greek, 16 took French, 3 took German, 3 took experimental sciences and 1 took natural sciences. (20)

In 1870 the Civil Service Commissioners were asked to conduct the entrance examinations for Woolwich and Sandhurst and those for admission into the army by Direct Commissions. This policy had been recommended by the Royal Commission on Military Education of 1868 which had been anxious to base the competition on a liberal education of the kind obtainable in the public schools, and which had expressed the view that 'an officer should have received the ordinary education of an English gentleman.' It was said of the Royal Commission that its members 'leaned towards favouring the great public schools somewhat at the expense of general education.' (21) After December 1876 candidates for first appointments in the cavalry and infantry had to pass

a preliminary examination and an examination in not less than two nor more than four among the following subjects: mathematics, English composition, literature and history, Latin, Greek, French, German, experimental sciences, geography and geology, freehand drawing.

In 1871 the Army Regulation Bill, designed to end the purchase of commissions came into law. It was opposed by the Tories who argued that the purchase system kept officering an occupation for gentlemen and its abolition would reduce the army to a trade for professional men. They need not have worried. Those who planned the army examinations showed the same anxiety to attract gentlemen into the profession as we saw in the case of the Civil Service, and the examinations throughout were therefore closely related to the curricula of the public schools.

Although the number of public school boys entering the Navy was considerably smaller than those taking up commissions in the Army, some mention must be made at this stage of the system of appointment which applied to naval officers. Commissions were not purchased; appointment was strictly by patronage. The Admiralty made only one limited concession to the reformers. After 1851 it became a requirement that a patron's nominees must show they could write English from dictation - usually a page from the Spectator - and that they were acquainted with the first four rules of arithmetic, reduction and the rule of three. Needless to say, this 'reform' had no effect on the public school curriculum.

Thus, two of the most revolutionary reforms of the century, the abolition of the purchase of commissions in the army and patronage in the Civil Service, led to only minor modifications in the public school

curriculum, and no change at all in the basic philosophy of the aim of a public school education. We have seen how the Civil Service Commissioners favoured a general education and put little store on specialisation. Similarly, the value of specialised training to the 'profession of arms' was considered virtually nil. As Reader writes: 'The notion that an officer should be a professional soldier, qualified by technical knowledge as well as by the traditional virtues of a gentleman, was derided and looked down upon, except in the engineers and artillery, two corps which were only rather doubtfully fit for gentlemen to serve in. ' He continues: 'The disasters of the Crimea... and the alarming triumphs of Prussia...gradually persuaded some of the more alert British officers of the necessity of professionalism, but a great many - perhaps the majority - remained unconvinced right up to 1914. (And perhaps for even longer - see Conclusion page 351) Here, as in other departments of the national life, amateurism was apt to be regarded as gentlemanly and high technical skill as rather degrading'. (22)

The reforms, then, did make demands on the public schools but demands which they were well fitted to fulfil without any fundamental change on their part. In both the Civil Service and the Army the introduction of competition led to fears that both professions may be invaded by the socially inferior. By basing the new examinations on the public school curriculum this fear would prove groundless. Entry would still very largely be restricted to gentlemen - the only difference now was that after the reforms they would be academically sound gentlemen, and it was here that some concession had to be made by the schools. Partly as a result of the demands made on them by the new examinations, it became increasingly clear that the education offered at certain of the great schools was not of a sufficiently high standard. This was made abundantly

clear in the Clarendon Report, despite outraged denials on the part of the headmasters. Mathematics which was an integral part of the new examination requirements was particularly badly taught. Though an accepted part of the public school curriculum it was allotted only a very minor role, and we have seen some of the disadvantages under which it laboured at Eton and other schools. The new examination requirements undoubtedly exerted pressure that what was taught by the schools should be properly taught. Over the next few decades improvements were made, particularly in the teaching of mathematics, though the curriculum remained little changed, and gentlemen - now more sound academically began to leave the great schools. Thus, the Army and Civil Service cannot be regarded as pressuring the reluctant public schools into drastic modifications of their curricula. The only pressurising was to improve the education offered, not to change it, because it served the vital function of preserving the higher Civil Service and Army as the occupations of gentlemen. In the face of the new examination requirements, then, the schools steadfastly continued to argue that their task was to produce Christian gentlemen, and that a classical education was best suited to achieve this end. It would seem that the Civil Service Commissioners agreed with them. It was certainly generally accepted that any demands made by the examination requirements which the public schools did not cater for could be more than adequately covered by cramming, and deficiencies in mathematics teaching were often made up in this way. Heads of the great schools advised parents to take their boys away and send them to a crammer if they wanted them to do well in the Indian Civil Service or Woolwich examinations. Cramming thus made up the shortcomings of the schools and twelve months or so at a 'crammer' became an accepted episode in the education of a Victorian gentleman.

We have already examined in some detail the attitudes of the heads of the Clarendon schools to curriculum modernisation. Even Temple, who was no reactionary, was pleased with the existing course of study and not in favour of change. Rugby, regarded as exceptionally advanced in the early 1860s, expected its boys to spend on average 17 hours out of 22 on the classics, leaving 3 for mathematics and 2 for modern languages or natural philosophy. The dominant attitude seemed to be that modern studies or anything in the nature of professional training were for the less intelligent who were unable to cope with the classics. The Saturday Review complained of the public schoolmaster's view of his job which displayed to an extreme degree that contempt for specialised training which was characteristic of the Victorian upper classes'. (23) Certainly. most headmasters agreed that preparation for qualifying or competitive examinations was not a proper function for an English public school, and they made virtually no concessions to the reforms which were taking place. The fiasco of Eton's army class which failed dismally demonstrates what seemed to be a fairly consistent set of attitudes on the part of Clarendon school staff. It is important to realise, however, that despite such attitudes, if the Civil Service Commissioners, responsible for Civil Service and Army reform, had based their examinations to a greater extent on subjects such as modern languages and natural science, the schools would ultimately have had to give way and make drastic changes in their courses of study. Fortunately for the schools, the reformers to a very large extent shared their attitudes and were, as we saw, even prepared to downgrade modern subjects to make the army examinations more attractive to public school products. What they wanted from the schools were future civil servants and army officers who had undergone an efficiently taught liberal education, including mathematics, and were unmistakeably gentlemen.

We shall now turn to changes in the structure of the professions and attempt to assess their impact on the schools. For those having a claim to be considered gentlemen, choice of occupation in the 1860s was relatively limited and had to be made with great care. Trade in any form was out of the question. Science and technology provided interesting diversions for the gentry but any occupation which relied on such knowledge was not considered suitable for a gentleman. Apart from government, the Home and Indian Civil Services and the armed forces. the only really acceptable occupations were the ancient liberal professions of 'divinity, physic and law'. Of the three, divinity was the most prestigious and provided a livelihood for a large number of public school men, though law, too, was a popular choice. Another reason why it is important to consider entry into the three liberal professions in some detail is that to a large extent they became the blueprint for the scores of old and new occupations which throughout the century sought, and in many cases, achieved, some degree of professional status.

The two essential qualifications of entry into one of the liberal professions were, firstly, the education of a gentleman i.e. a liberal education at an accepted school, as opposed to the education of a trader or artisan and, secondly, acceptance by the body concerned - which again implied gentleman status. In the case of the clergy, patronage was also important. Any necessary specialised knowledge would be acquired later and it was of course assumed that a classical education facilitated such acquisition. As Reader comments 'it was taken for granted that anyone entering a liberal profession would have had a liberal education... it was fair to suppose that anyone who had mastered the classical languages and perhaps sharpened his wits on mathematics could also master, if he chose to be a clergyman, theology; if a physician, the writings of

Hippocrates, Celsus, Sydenham and Harvey; if a barrister, the voluminous authorities of the English law. (24) Even in the 1830s physicians prided themselves on being learned men, but not especially in the field of medicine. This may have been because medical knowledge was in its infancy but it was also doubtless due to the fact that specialised learning, as we saw, was regarded as much less valuable than liberal learning, and in a sense even degrading. Until well into the nineteenth century, qualifications in specialised medical and legal knowledge were of little importance and the ancient liberal professions consequently had no use for examinations. As Reader says 'what the older professions seem to have conceived of themselves as doing, when they let in new members, was admitting educated gentlemen to small, self-governing groups of their social equals, to whom they would be personally known and by whom their fitness would be judged'. (25)

Pressure for change came eventually from the lower reaches of medicine and law. In the early nineteenth century, medical men were divided into three orders: physicians, surgeons and apothecaries. Only the physicians ranked as a learned profession, while surgeons were regarded as skilled craftsmen and apothecaries as tradesmen. Law was similarly divided into two branches: the Bar - a gentleman's occupation - and attorneys who ranked alongside skilled craftsmen. The training for both these lower branches was generally apprenticeship, not a liberal education. In the early nineteenth century, the middle classes who occupied these lower branches began to seek equal status with the upper branches and it was here that the demand arose for universally recognised, impartially assessed formal qualifications in law and medicine, and in addition an elaborate code of professional conduct - both of which would elevate the particular occupation well above skilled trade and a long way along the

road to full professional status.

Another source of pressure came from the tremendous growth of numbers in the 'lower branches' of law and medicine. More numerous and more scattered than the ancient professions, it was difficult for members to know each other personally and protect themselves against unqualified practice and unsuitable people, both of which it was necessary to do if professional status was to be achieved. Formal specialised examinations and membership of an Institute would ensure protection. Accordingly, in 1825, the professional association which became The Law Society was set up. A succession of Solicitors Acts effectively organised the increasingly respectable profession of Solicitors which had developed from the earlier despised attorneys. The evolving medical profession was controlled by the Medical Act of 1858. A registered medical practitioner had to satisfy one or more of 21 existing licensing bodies, after examination, that he was fit to practice. Thus by the 1860s the General Practitioners and attorneys were well in the lead over all other occupations in the march towards full professional status, helped no doubt by their claim to belong to the ancient liberal professions of medicine and law.

Apart from medicine and law most professions, however, were not defended by recognised qualifying examinations until much later in the century. Where examinations were introduced a period of apprenticeship or pupilage was often required in addition. Only in medicine did apprenticeship disappear to be replaced in the mid-seventies by full-time studentships. Professions like the Bar and architecture got on with a system of pupilage combined with voluntary examinations. Compulsory examinations for membership of the Royal Institute of British

Architects started in 1882, but apprenticeship, more or less unregulated continued to be a sufficient ground for qualification throughout the century. Civil Engineers did not start qualifying examinations until 1898 and apprenticeship remained the sole method of entry for many years. Anyone hoping to enter a profession had to find someone to teach it to him, normally an established practitioner. Eminent professional men were therefore much sought after to take pupils and the principal's name and reputation were of the utmost importance when the pupil came to look for employment or to set up in practice. Professional education was very expensive and with this system of entry it was possible to keep out unsuitable people.

The new professions occupations seeking public recognition and unquestionable professional status not surprisingly looked to the traditional ancient liberal professions which had these two characteristics in abundance. They provided the blueprint to which many of the aspiring professions worked. One of the key characteristics of the blueprint was the very close link between professional status and gentlemanly status. Gentlemanly status in turn was synonymous with liberal education - and so the way was clear. For social, not educational, reasons the all-but indispensable foundation for a professional career became a public school education. The correlation between professional man, gentleman and liberal education, according to Reader, explains 'the readiness with which the new professional men took to it, in spite of the fact that it was very ill-adapted to their bread-and-butter needs'. (26) As time went on it became increasingly fashionable to add three or four years at Oxford or Cambridge, not for any direct professional training but rather as a highly desirable finishing school.

As early as 1866 Matthew Arnold underlined the dangers of the route professional education was taking, though his views had little impact. As Assistant Commissioner to the Schools Enquiry Commission he was sent to examine upper and middle class education in France, Germany, Italy and Switzerland. In his Report he drew attention to the sharp contrasts which existed between England and the Continental countries. He argued that in England a few famous schools, combined with Oxford and Cambridge, gave'a training, a stamp, a cast of ideas, which make a sort of association of all those who share them, and this association is the upper class'. Except by going to one of these educational institutions, an Englishman could not become a 'vital part of this association, for he does not bring with him the cast of ideas in which its bond of union lies. He continued: 'This cast of ideas is naturally for the most part that of the most powerful and prominent part of the association, the aristocracy.' According to Arnold there was no other country in Europe where the professions so thoroughly shared the outlook of the upper class as in England. The cast of ideas, aristocratic not professional was 'characterised by its indisposition and incapacity for science, for systematic knowledge'. For this reason, the English professions were not - as they were on the Continent - 'the stronghold of science and systematic knowledge! (28)

The educational compromise thus achieved by the professional classes, apparently largely for reasons of retaining or improving social status, was not, as Reader argues 'altogether favourable to the development of professional and technological skill'. (29) Professional men reserved all their enthusiasm for a system of education which was openly contemptuous of anything with a practical bent and biased heavily towards the social and sporting side of life'. Thus, a traditional, classical, anti-scientific

style of education had become the hallmark of the Victorian professional man.

By the later part of the nineteenth century, the term 'profession' applied to considerably more occupations than at an earlier stage. They were, however, ranked in terms of status. Unquestionably at the top were the ancient liberal professions and those which could claim some connection with them. At the bottom were groups like engineers who did not stand very high in English professional society but hovered on the outskirts. They had no connections with the ancient liberal professions and dealt with scientific and technological subjects. If, as Arnold says, the professions were characterised by the aristocratic cast of mind (30) which despised such subjects, the reasons for the continued low status of engineers become apparent. Certainly even in the late century, the Clarendon schools sent very few boys into engineering and technological occupations.

Of the situation in general, Reader comments: 'Parents of boys intended for the reformed professions and for the new public service soon found that the examiners were making demands which mid-Victorian schools, especially the most respected, were ill-fitted to supply'. (31) This would seem to be overstating the case. As we saw, the Civil Service and army reforms, and the changes in the professions, made relatively limited demands on the public schools, and demands which they were well able to satisfy without any major revisions of the curriculum. At a time when the appearance of examinations and the rapid growth of professions brought about the worrying possibility that non-gentlemen might gain entry, the Civil Service, army and professions wanted above all else to ensure that these posts were held by gentlemen. They desired some distinguishing mark which would sort out the sheep from the goats and

avert any possible loss of status - the nightmare of the Victorian middle classes. This must have applied in particular to the new professions which were still suffering from their earlier connections with skilled trade. An expensive, socially exclusive, liberal education, provided the answer. Thus, it can be argued that the changes, at least initially, actually consolidated the importance of the classics. The new examinations were geared to the public school curriculum; the professions - both old and new - favoured those with a public school education.

Best, writing of the gradual disappearance of patronage and nepotism says that 'A new age of reform opened, dedicated to the principles of entry and promotion by examinations' - the revolutionary principle of 'la carrière ouverte aux talents'. However, he goes on: 'The extreme traditionality of the criteria by which those talents were to be assessed... and the resourceful gearing of the best parts of the school and university system to helping the sons of the better-off to show such talents, remind us that the degree of social revolution accompanying these new principles was less than Napoleonic'. (32)

Thus, we must conclude that as a result of changes in the Victorian occupational structure and an increasing reliance on examinations, pressures were exerted on the public schools but only to ensure that the existing curriculum was well taught and that the gentlemen produced were academically sound. The changes which took place did little to stimulate the growth in importance of the so-called 'modern' subjects and, on the contrary, in many ways actually encouraged the continuance of a situation in which the classics formed the cornerstone of a gentleman's education.

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31.

Chapter Thirteen

In the preceding chapters we have examined in some detail the curricula of the Clarendon schools and suggested several possible factors which help to explain the continuing dominance of the classics, despite considerable pressures for change in favour of modern subjects, particularly science, which existed in Victorian England. In this final chapter and in the conclusion, we shall examine the changes which took place in the schools' curricula after the publication of the Clarendon Report and its recommendations. Did the decades after the Enquiry produce the long-awaited modernisation of the curriculum? Was change - or the lack of it - related to any of the factors identified in earlier chapters?

The recommendations made by the Commissioners after their lengthy investigations can be classified under five main headings: those relating to

- the constitution, functions and powers of the governing bodies
 of the schools.
- 2. rights of foundationers,
- 3. endowments of the schools at the schools or at the universities,
- 4. management of the schools,
- 5. courses of instruction.

The recommendations put forward cover many pages, some referring to the schools in general, others only to particular schools. In this chapter we shall consider only those which bore directly or indirectly on the content of the curriculum.

Perhaps the most important single recommendation from our point of view was that the classical languages and literature should continue to hold pride of place in the course of study. (1) The Commissioners in fact suggested that the classics, in which they included history and

divinity, should be allotted just over half the total time i. e. ll out of 20 hours of classroom work. Preparation would require ten additional hours. (This recommendation was perhaps to be expected in view of comments made by the Commissioners throughout the investigation, for example that among the services which the schools had rendered was 'undoubtedly to be reckoned the maintenance of classical literature as the staple of English education, a service which far outweighs the error of having clung to these studies too exclusively'. (2) The Commissioners, however, were of the opinion that more attention should be paid to the content of the classical works studied and less to grammar and philology.

Although they were in general satisfied that the public school course of study in its main elements was 'sound and valuable', the Commissioners also believed that it was 'wanting in breadth and flexibility' - defects which, in their judgement, destroyed in many cases and impaired in all, its value as an education of the mind. Such defects were made more prominent at that time by the extension of knowledge in various directions and by the multiplied requirements of modern life. (3) Accordingly, they went on to make recommendations which, if implemented, would have had the effect of broadening the curriculum of most schools and improving both the content and status of the non-classical subjects.

The Commissioners recommended that, in addition to the study of classics and divinity, every boy should receive instruction in arithmetic and mathematics, in one modern language at least, (which should be either French or German), and in some one branch at least of natural science. Care should also be taken to ensure that boys

acquired a good knowledge of geography and ancient history, some acquaintance with modern history and a command of pure grammatical English. The teaching of classics, mathematics and divinity should continue during the whole time that a boy stayed at school, subject to Recommendation XIII, (see page 302). The study of modern languages and natural science should continue during the whole or a substantial part of the time a boy spent at school. Arithmetic and mathematics were to be allotted three hours out of the 20 available. The ordinary arithmetical and mathematical course should include arithmetic, so taught as to make every boy thoroughly familiar with it, and the elements of geometry, algebra and plane trigonometry. In the case of the more advanced students, the course should comprise also an introduction to applied mathematics and especially to the elements of mechanics. Modern languages were given two hours out of the 20 and the lessons should 'be such as to demand for preparation...at least two additional hours in the course of the week'.

The Commissioners professed themselves 'convinced that the introduction of the elements of natural science into the regular course of study is desirable', and summarily dismissed many of the headmasters' objections to it with the comment: 'we see no sufficient reason to doubt that it is practicable'. They continued, however, 'we do not desire...that natural science should occupy a large space in general education'...'class-teaching for an hour or two in the week, properly seconded, will be found to produce substantial fruits'. (4) Accordingly, they allotted natural science two hours (the same as modern languages, and also as music or drawing) with at least two additional hours in the course of the week for preparation. The teaching of natural science should, wherever possible, include two main branches, one comprising chemistry and physics, the

other comparative physiology and natural history, both animal and vegetable.

A series of recommendations was designed to improve the status of these other subjects vis-à-vis the classics. For instruction in mathematics, modern languages and natural science, the schools should be redistributed into a series of classes or divisions wholly independent of the classical forms. Boys would be promoted from division to division in each subject according to their progress in that subject, irrespective of their progress in any other. The promotion of boys from one classical form to another and the places assigned to them in such promotion would depend upon their progress not only in classics but also in mathematics, modern languages and natural science. The governing body, in communication with the headmaster, should settle a scale of marks for this purpose and the scale should be so framed as to give substantial weight and encouragement to the non-classical studies. The Commissioners suggested the following weighting of subjects for promotion:

Classics, with history a	and divinity - not less than	⁴ / ₈
	not more than	⁵ / ₈
Mathematics	- not less than	1/8 2/8
	not more than	² / ₈
Modern languages	- not less than	¹ / ₈
	not more than	² / ₈
Natural Science	- not less than	¹ / ₈
	not more than	² / ₈
The three non-classical s	⁴ / ₈ (s)	

In order to encourage industry in the branches of study in which promotion from division to division was rewarded by no school

privileges, and conferred less distinction than was gained by promotion in the classical school, the Commissioners felt that prizes and distinctions should be given in those areas. Prizes should also be given for essays in English on subjects taken from modern history. The school list, issued periodically, should contain the names of all boys separately arranged in order of merit in the classical school and also, once at least in the year, separately arranged in order of merit and place in the schools of mathematics, modern languages and natural science.

The Commissioners felt that some attempt must be made to 'meet the case of that large class of boys, who are not for the universities, but for early professional life', and were therefore in favour of some element of choice being allowed. They rejected the idea of a 'modern' side, parallel to the classical, on the grounds that modern sides were too experimental and would divide the school. They argued instead that in what were essentially classical schools some deviation from the course should be allowed in certain cases. Accordingly, Recommendation XIII suggested that arrangements should be made for allowing boys, after arriving at a certain place in the school, and upon the request of their parents or guardians, to drop some portion of their classical work (for example Latin verse and Greek composition) in order to devote more time to mathematics, modern languages or natural science; or, on the other hand, to discontinue wholly or in part natural science, modern languages or mathematics in order to give more time to classics or some other study. The suspicion that anyone opting for the former may well be a shirker, possibly implanted by head and assistant masters, clearly lingered, and the Commissioners insisted that care must be taken lest this privilege be abused and used as a cover for idleness. (6)

In addition to suggesting modifications of the curriculum, the Commissioners also recommended changes in the authority structure of the schools. They regarded it as of great importance 'that the future government of the schools shall be lodged in competent and enlightened hands'. (7) Thus, their first recommendation was that the governing bodies of the schools should be reformed, 'in order to render them thoroughly suitable and efficient for the purposes and duties which they are designed to fulfil'. (8) The new governing bodies of which some members should be selected with special reference to their attainment in literature or science, would be empowered to make regulations on the introduction of new branches of study and the suppression of old ones and the relative importance to be assigned to each. They should, however, consider attentively any representations addressed to them by the headmaster and should consult him in such a manner as to give ample opportunity for expression of his views. In turn, the headmaster should have the uncontrolled power of selecting and dismissing assistant masters; of regulating the arrangement of the school in classes or divisions, the hours of schoolwork, the holidays and half holidays during the schooltime; of appointing and changing the books and editions of books to be used in the school and the course and methods of study (subject to all regulations made by the governors as to the introduction, suppression or relative weight of studies); of maintaining discipline, prescribing bounds and laying down other rules for the government of the boys: of administering punishment and of expulsion.

The Commissioners also recommended the establishment of school councils which would meet not less often than once a month. The council would be made up of the assistant masters, or a selected

number of them representing the whole body. Mathematical, modern language and natural science masters, as well as classical, should be represented. The council would consider and discuss any matter which may be brought before it by the headmaster, or any member of the council, concerning the teaching or discipline of the school, and it would be entitled to advise the headmaster, but not to bind or control him in any way. The council should have the right of addressing the governing body whenever a majority of its members thought fit.

Noting the tendency displayed by many schools to select staff from ex-pupils, the Commissioners recommended that in the selection of the headmaster and other masters, the field of choice should in no case be confined, either by rule or by usage equivalent to a rule, to persons educated at the school. This was necessary in order to secure competent specialists and the Report commented: '..a school which is debarred, or which debars itself, by a restriction of this kind, from taking the best man that can be had, must necessarily suffer from it to a greater or less degree; and it must be disadvantageous also for any school to be officered exclusively by men brought up within its walls, all imbued with its peculiar prejudices and opinions, and without experience of any system or any methods but its own'. (9)

A further recommendation related to foundationers. As we saw, some of the schools were bound by statutes which obliged them to admit local boys to the foundation. This practice had become increasingly embarrassing with the growing upper middle class prejudice (which we examined in Chapter 11) against allowing its sons to be educated with boys from inferior backgrounds. The Commissioners recommended that entrance to the foundations of all the schools be made a matter

of competitive examination thus inevitably favouring boys from preparatory schools and thereby defining the schools clearly as upper class institutions. This recommendation had little relevance for Eton as the poor had not been going there for many years and Eton had anyway already installed a competitive scheme of entry to its foundation - as had Winchester in 1854. It must have come as something of a relief, however, to Rugby, Harrow and Shrewsbury. The Harrow foundation, like the foundations at other schools, was eventually closed to all but the few residents who could win exhibitions or scholarships. This recommendation, unlike many of the others, was quickly adopted by the schools.

Certain recommendations were made applicable only to individual schools. With respect to Eton, (10) the Commissioners felt that the Provost should be a graduate of Oxford or Cambridge and, though a member of the Established Church, not necessarily in holy orders. Nor should he have necessarily been educated at Eton. In addition, they recommended that the period during which each boy studied natural science as a regular part of schoolwork should, at the least, not be less than the interval between admission to the lower fifth and admission to the upper fifth. Any boy studying French should be allowed, if he chose, to take up German as an additional subject at trials and vice versa. The same liberty should also be allowed with respect to Italian and to natual science in parts of the school where this did not enter into the regular schoolwork. Marks obtained for any additional subject so taken up should be allowed to count in determining a boy's place in his remove. Permission to discontinue some part of the schoolwork in order to devote more time to some other part of it should not be given until a boy reached the upper

fifth form.

Measures were also suggested to improve the lowly status of mathematical assistants at Eton. In future they should be mathematical assistant masters, on a footing of equality with the classical assistants as regards the assignment of boarding houses, authority to enforce discipline out of school, arrangements in Chapel and, as far as practicable, in all other respects. In addition, every mathematical master should be considered the tutor for general superintendence of all boys in his boarding-house.

The Commissioners also recommended the foundation of at least 20 exhibitions, to be competed for by boys under 16 and tenable as long as the holder remained at school. These should be attainable by superior merit in any of the branches of instruction forming part of the regular course of study, though not less than half should be reserved for classics. In addition, in the competitive examinations for scholarships and exhibitions at Eton and scholarships at the universities, both classical and non-classical subjects taught in the school should affect the success of candidates in the same manner in which they were allowed to affect the places of boys in the school examinations.

Regarding Winchester, the Commissioners recommended that the Warden should not necessarily be in Holy orders and that the Warden and Fellows should be members of the Established Church, but not necessarily educated at Winchester. Permission to discontinue some part of the course in order to give more time to some other part should not be granted to any boy who had not reached the senior

division of the Fifth Form. (11)

The Commissioners felt that Westminster required an additional building as a matter of urgency and it was recommended that this should include, amongst other things, a large room for the teaching of natural science, music and drawing. (12) (The juxtaposition of subjects here is interesting.)

At Harrow, recommendations included that the study of natural science should form part of the regular schoolwork of each boy from his admission until he reached the second division of the fifth form. Permission to discontinue some part of the schoolwork in order to devote more time to some other part should not be given until a boy reached this position in the school. (13)

At Rugby, it was recommended that two teachers should be employed to teach physical science, one being a teacher of chemistry and physics; the other a teacher of physiology and natural history. No boy should be permitted at any time to omit or discontinue the study of more than one of the three subsidiary studies: mathematics, modern languages and physical science. (14)

Many of the additional recommendations made with reference to Shrewsbury involved the non-collegiate class, for example, that immediate steps should be taken to appoint a natural science master to instruct the class. The following scale of work was suggested:

Classics (including divinity, ancient history

and geography)

6 hrs. per week

6

Mathematics

Modern Languages	6
Natural Science	4
Modern History and Geography	2
Music or Drawing	2
•	26 (15)

One thing which emerges clearly from the Report and recommendations is that the Commissioners had no wish to disturb the essential structure of the schools. They were happy with many features of school life - and indeed with many aspects of the curriculum. There are indications throughout the Enquiry that they had considerable sympathy with the public school line which took for granted the inferiority of all subjects to the classics. Their recommendations represented the 'striking of the bargain' between the Victorian upper middle class and aristocracy already considered in Chapter II. Their aim was to preserve the schools by making the minimum necessary reforms. As we saw, they ceded the central position in the curriculum to the classics and gave only a small proportion of the time available to modern subjects. However, in spite of this, there is no doubt that their recommendations, if fully implemented, would have led to some widening of the curriculum and considerably improved the status of mathematics, modern languages and natural science, as well as facilities for the instruction of the latter.

The Commissioners submitted their Report and recommendations in 1864 and the Public Schools Bill was enacted four years later after considerable controversy. The Bill ensured the appointment by Parliament

of an executive commission empowered to ensure that the schools created a new system for securing governing bodies, and to create that system if the schools did not. This was the essential first step i.e. the transformation of the governing bodies of the schools into impartial and efficient hands, if the reforms recommended by the Commissioners were to be put into effect. It was 1870 before all the schools had new governing bodies, only Winchester and Eton themselves arranging for these. The new bodies were to be appointed partly by the existing governors, partly by bodies like the Hebdomadal Council at Oxford, the Senate of Cambridge, the Senate of the University of London and partly by individuals like the Lord Chancellor and the heads of the various schools. Under the supervision of the executive commission, the new governing bodies made new statutes embodying the recommendations of the Clarendon Commission.

Curricula reform in some schools began even before the Commissioners had reported. In others, modernisation had to wait on the setting up of the new governing bodies and in some cases until many years later. Thus reform proceeded at different speeds within the different schools and it is to the individual schools which we now turn - though emphasis will once again be placed on Eton, Rugby and Shrewsbury.

At Eton, Balston, who had been a somewhat unwilling headmaster, resigned in 1868 and was replaced by J. J. Hornby. For Eton, his appointment was a radical departure from tradition as he was neither a scholar, a Kingsman, nor an assistant master. He had, in fact, been an oppidan and came to Eton from the second mastership of Winchester. He was, however, a classicist and a conservative in matters educational. It was this latter characteristic which had

ensured his appointment. The 'Old Eton' party amongst the Fellows was determined that Balston's successor should be a 'safe' man, and that the young masters who had given awkward evidence to the Commissioners should be kept in their place. (16) Hornby's views on modernisation of the curriculum became apparent during his argument with Oscar Browning over the latter's teaching of history. Hornby was of the opinion that Browning chose periods much too near his own time; he himself preferring the remote past. (17)

Thus, as one might expect, curricular reform at Eton following the Enquiry was hardly rapid. However, certain changes were put into effect following the Commissioners' recommendations. In 1868 the situation of mathematics masters was much improved when they became assistants, not to Stephen Hawtrey, but like their classical colleagues, to the headmaster. Many of the Commissioners' other recommendations designed to improve their status were also implemented. Assistants teaching French and physical science benefitted from these changes, as they too were placed on the same footing as the classical masters empowered to exercise authority out of school as well as in. (18)

After the Public Schools' Act, the curriculum at Eton was modified to the extent that 'extra studies' were introduced which meant, in effect, that every boy had to devote a few hours a week to subjects outside the normal curriculum - to a modern language, science, literature or some classical author not normally read in school. However, although prizes were given for success in these subjects, the divisions of the school continued to be made with reference to classical work only. A letter from Hornby to the Devonshire Commission in 1871 described the teaching of 'extra studies' in some detail. (19) The upper boys at Eton

i.e. the fifth and sixth forms (about 450 boys) were divided into three groups: Group A which comprised the first 100 boys in the school and Groups B and C, made up of the rest of the fifth form. An average boy got into the fifth form (i.e. the lower part of C division) from 14 to 15. He took between two and a half to three years to pass through the C and B divisions into A division. During his time in B and C divisions he was obliged to take two lessons a week in some branch of physical science, and had questions to answer or notes or short essays to write out of school. On reaching A division a boy had to devote four hours a week to two of the following subjects: modern languages, modern history, extra classics, extra mathematics and science. Boys below the fifth were not taught science until 1875 when, despite internal resistance, it was introduced for the remove. The study of geography, formerly confined to the remove, was extended to the lower division of the fifth form, and greatly extended in scope. (20)

In 'Eton Medley', B. J. W. Hill comments that '... in the ten years between 1865 and 1875 the timetable shows greater changes than in the previous hundred years'. (21) This may well be true, but the changes during the decade can be easily exaggerated. Eton remained a classical school. Science and modern languages were included in the curriculum, but given a very small proportion of the time available. In 1873 Eton had 28 classical assistants, ten mathematical, three French, one German, one Italian, one chemistry, one drawing and one music. (22) Such a distribution must surely indicate that 'modern' subjects had made little real headway against the hegemony of the classics. Science in terms of staff, numerically on a par with drawing and music, had made only minimal gains.

The Public Schools Act had produced a new constitution for Eton which gave one seat on its governing body to a nominee of the Royal Society and the position of science was somewhat improved following the appointment of T. H. Huxley in 1879. The Devonshire Report had referred to Eton's Literary and Scientific Society to which outside speakers occasionally gave lectures and to the school's observatory and laboratories. In Huxley's opinion, many of the existing buildings in 1879 were unfit and he recommended the construction of a new science block. In 1880, annual prizes were instituted for biology and within another three years it was resolved that modern sciences should be placed on the same footing as classics and mathematics in the examinations for scholarships to the sister foundation at Cambridge. Huxley resigned in 1888. (23) In spite of such advances, however, there are indications that science still had a long way to go in terms of academic respectability at Eton. Hollis mentions the Rev. T.C. Porter, who became science master at the school in 1885. He refers to him as an amicable buffoon, generally considered as a paid charlatan who was employed to entertain the boys by his absurdities. (24) L. E. Jones in 'A Victorian Boyhood' and at Eton in the 1890s, refers to science under Doctor Porter as 'good fun', with experiments and explosions. He comments that it was strictly confined to chemistry...'we were taught nothing of biology, nothing of physics... (25)

By this stage, Warre had become headmaster of Eton. Appointed in 1884, he had been an assistant master there for 24 years and had little understanding of or interest in modern science. Thus, even at the end of the century, Eton was essentially still a classical school. Jones comments of his schooldays in the 1890s 'Latin and Greek were our main subjects'. (26) and indicates that other disciplines still suffered

from serious handicaps. As he says: '...unless you were prepared to give up Greek, the hours spent on German were too few to count. And Greek, for those destined for Oxford or Cambridge, could not be given up. French, except for those ambitious enough to sit for the Prince Consort's Prizes, was taught us as a dead language; there was composition, but no conversation. English was not taught at all until a boy's last year, when a few essays might be written.' (27) In 1886, Warre placed four divisions of the Fifth Form in a special category called the 'Army Class', with a special scheme of lessons. This became in effect the 'modern side' and later boys were allowed to drop Greek and concentrate to a greater degree on 'modern' subjects.

It would appear from Jones' reminiscences that even the Commissioners' recommendations concerning classics teaching had not been put into effect. 'We parsed and conjugated and declined', he wrote, 'and left Eton with only the barest notion of the content, or the living, moving form, of the two great classic literatures... We spent many hours a week learning by heart. But what we got by heart were chunks of Ovid and Horace and Virgil and Homer, most of it by rote, since the meaning was unclear to us'. (28)

Thus, even at this late stage, the classics still dominated the Etonian curriculum. Although modern languages and science were now included in the course of study, the time allotted to them was minimal, and classical assistants continued to very much outnumber those engaged to teach 'modern' subjects. In addition, contrary to the Clarendon Commission's recommendations, masters were still selected exclusively from old Etonians. This applied also, of course, to the selection of headmasters; with the exception of the very earliest heads the first non-

Etonian was not appointed to this office until 1915 when Alington, a Marlburian, came to Eton from the headmastership of Shrewsbury.

Rugby, although the most advanced of the seven schools, very quickly introduced further reform of the curriculum following the recommendations of the Commissioners. 'New arrangements' came into being in January, 1865. For the first half year natural science was taught to every boy in the middle and lower school, the sixth and upper school being allowed to choose between German and natural science. After six months, it was decided to drop science in the lower school as the boys appeared hardly equal to the work, though every boy in the middle school continued to learn some branch of the subject. The sixth and upper school continued to be given the choice between German and natural science, and according to T. N. Hutchinson, a natural science master at Rugby, the division was generally more or less equally made. (29) The Devonshire Report found that in 1870 about 360 boys out of 500 at Rugby were being taught natural science. The Meteor of February 26, 1867, expressed itself in favour of the inclusion of the subject in the curriculum, believing that the gain was a wider field of study. The writer claimed that the classics masters shared this sentiment. (31) This was apparently Wilson's view; in 1866 he wrote that no master would wish to give up natural science and return to the old curriculum at Rugby. (32)

In 1870 Hutchinson wrote that the staff of natural science masters had been increased to five, though four of these were mathematical masters who also taught science. In addition, a laboratory assistant had been engaged, part of his duties being to superintend the boys at certain hours when working at practical chemistry. Hutchinson described in some detail the new natural science school, which had been only recently

completed. It consisted of a large working laboratory for 30 boys, a private laboratory for the chemical lecturer, a chemical lecture theatre with raised seats for 50, a similar but still larger theatre for physical science and geology, and an apparatus room with means and appliances for instrumental work of various kinds. The regular scientific subjects of instruction at this time were botany, (which Hutchinson believed was the best introductory subject), physical geography, astronomy, geology, mechanics and mechanism, chemistry and electricity including magnetism. Heat, hydrostatics and pneumatics were also occasionally taught in lieu of other subjects. Boys were divided into 'sets', each set having two hourly lectures a week. Lectures were fully illustrated and in addition to attendance at them boys were expected either to show up note books from time to time or to make work examples - so as in every case to give evidence of having intelligently followed the Lecturer. (33) Boys also did practical work. Examinations were held from time to time in natural science and the results were embodied in the monthly characters sent to parents. The Devonshire Commission referred to Rugby's flourishing Natural History Society. In 1872 this comprised nearly one fifth of the School. It had been established in 1867 under the presidency of Mr. F. E. Kitchener, an assistant master. At the first few meetings about 25 persons attended. It met once a fortnight when papers were read and objects of interest in any branch of natural history exhibited and explained. Reports were published each year containing the more important papers and observations. The society flourished and by 1898 the number of members and associates was 365, the society having at that time seven sections: meteorological, entomological, botanical, zoological, architectural, geological and photographic. An annual essay prize was given. In addition, boys were encouraged to make collections of wild flowers,

fossils or insects and prizes were given to the most deserving.

Marks were assigned to natural science and to the other modern subjects in determining the place of each boy at the end of the term, a subject being marked in proportion to the time devoted to it. However, as can be seen from the table below, a boy's position in the school was almost entirely dependent on his performance in classics.

	. Upper School		. Upper School			Middle School	
	Term Mark	Exam Mark		Term Mark	Exam Mark		
Classics & English	39	33		36	33		
Mathematics	6	6		6	5		
German or N. S.	3	3	Natural Science	4	2		
French	2	2	French & Germa	n 4	3 (34)		

A comment in the Meteor, June 13, 1867, suggests that the boys may not have been entirely happy with the weighting of subjects. '...a fellow in the first set of Mathematics and perhaps also good at Natural Science, being superannuated for not being good at Classics is scarcely fair', commented the writer who went on to ask if the rule could not be changed. (35) The order of each modern subject set was published in the school 'list' at Christmas and Midsummer and numerous prizes were given for success in mathematics, modern languages and science.

In the higher part of the School, a boy who showed ability would perhaps be allowed to drop verses together with a certain amount of general classical work, and devote the extra time to mathematics or natural science. The Devonshire Commission commented that by doing this a boy did not lower his position in the school or lessen his chance of future promotion, as he received a full equivalent of marks for actual work.

However, despite the emphasis placed on modern subjects and the encouragement given to them, it is clear that classics still dominated the Rugby curriculum in the 1870s. The timetable for 1870 shows that mathematics was allotted only about three hours a week, modern languages about the same, and natural science - when taught - about two hours. Classics were given generally fifteen or sixteen hours a week. The status of the most respected non-classical subject - mathematics - even at Rugby seems to have been ambiguous. An editorial comment in The Meteor June 13, 1867, throws some light on the boys' attitudes towards the subject. The editorial refers to a letter in the previous issue signed 'A mathematical swell' and remarks: '... we must not accuse him of conceit, for Mathematics are not held in such high honour here as to make the claim to being a mathematical swell a very conceited one'. (36)

A modern side was introduced at Rugby in 1886. This gave a general education of a literary character to boys who did not intend to go to the universities. The curriculum differed from the classical side chiefly in the absence of Greek. Latin formed part of the regular work and the time gained from the abolition of Greek was devoted chiefly to French but more time was given than on the classical side to English subjects and natural science and, in the upper forms, to German. The classical side attracted more boys than the modern.

Bradby gives details of the school course around 1900. (37) It was still mainly classical, two thirds of the boys being on the classical side, which aimed in the main at preparation for the universities. On this side in the upper school modern languages and natural science were still alternative subjects. An army class, in which mathematical subjects were prominent,

prepared boys for certain examinations, such as Woolwich, Sandhurst and the Indian Woods and Forests. The numbers in the class were limited to about 50 and no boy was admitted until he reached the top form of the middle school. A charge of five guineas a term was made. In addition, there was a class for boys desiring to specialise in mathematics or natural science with a view to university scholarships in these subjects. No boy was admitted until he reached the upper school and there were generally about 15 such boys. They devoted most of their time to mathematics or natural science or both and were taught classics and English subjects in a form by themselves.

At Rugby then, as at Eton, modern subjects were very much poor relations to the classics, even at the end of the century. The time allotted to them and their weighting in promotion were only a fraction when compared with the classics.

At Shrewsbury, the recommendations of the Clarendon Report had little immediate impact. This is particularly evident in the case of natural science. In 1870, Moss, the headmaster, informed the Devonshire Commission that no scientific class existed at Shrewsbury. (38) The School Lists for 1873 refer to the subjects taught as classics, mathematics, and French. On the occasion of the opening of the school's new site in 1882, one of the speakers, Sir James Paget, pleaded for the introduction of natural science into Shrewsbury's course of study. A natural science master first appeared at Shrewsbury in 1883, almost 20 years after the Public Schools Commission, when W. S. Ingrams, from Exeter College, Oxford, joined the staff. No science prizes were given in that year or the next, but in the 1885 School List two prizes for chemistry were mentioned. In 1887, C. J. Baker, of Merton College Oxford, joined Ingrams as

natural science master. He was a man with a considerable reputation in scientific research. Shrewsbury thus had two natural science masters and one modern language master. In 1884 a modern division appeared, to be called the modern side two years later, made up of upper and lower divisions. As for the non-collegiate class, to which many of the Commissioner's comments and recommendations were directed, it survived only a short time after the Enquiry and never had more than 20 boys. (39)

Insights into teaching at Shrewsbury in the 1870s are provided by Henry Woodd Nevinson who was at the school at that time. $^{(40)}$ He wrote that Shrewsbury 'breathed Greek'. Masters were content to teach what they themselves had learnt. Most of them had been at Shrewsbury themselves and because Greek had been taught there for more than three centuries they taught Greek. He added: 'Of course we had Latin too, and up to the Sixth Form our time was equally divided between the two languages: but Latin, as being easier and rather more connected with modern life, never ranked so high...' He continued: 'it was the unconscious rule of our ancient tradition that of two subjects the more difficult was the better worth learning, provided always that both were entirely useless'. Nevinson dismissed the French teacher as 'an aged Englishman'...'nobody learnt French of him'. Of mathematics, he wrote that the subject was 'held in scarcely less contempt than French. We had two wranglers to teach us, but they never taught anyone. Their appearance in form was hailed with indecent joy. As one of the classical masters said, it was like the 'Cease Fire' on a field-day, and the whole body of boys abandoned themselves at once to relaxation'. In the lower forms this apparently meant dart-throwing, whilst in the upper, boys discussed the steeplechase or did Greek verses.

It would seem that Shrewsbury in the 1870s was as much a classical school as in the 1860s, and that modern subjects had made very little, if any, headway. Science had made none at all. In 'A Salopian Anthology' Cowburn sums up the situation with the comment that 'Serious education at Shrewsbury in the 1870s was still classical'. (41)

Moss, headmaster from 1866 to 1908, and an old Salopian, was himself evidently aware of the need for change. In a letter published in 1873 he pointed out that in order to keep abreast of other schools, an almost exclusive devotion to the classics would not suffice and that it was quite possible that before many years the universities would 'give less weight than heretofore to that exactness and elegance of scholarship which has long been regarded as the peculiar characteristic of a Shrewsbury training'. In the same letter he mentioned mathematics, modern languages and natural science as subjects in which Shrewsbury must be prepared to compete with other schools. (42) These sentiments were not. however, entirely reflected in his actions. Although he appointed mathematicians of distinction (who no doubt endured the difficulties described by Nevinson), he was in less of a hurry to provide adequately for the teaching of other subjects, natural science, as we saw, not being introduced until 1883. It was 1900 before a history master was appointed and until Moss' last four years at Shrewsbury, only makeshift laboratories existed. (43) (This is somewhat at variance with the statement in the 1889 School List that the school had an excellent laboratory for the study of practical chemistry.)

The modern side in 1889 consisted of three forms only and was 'intended to supply a liberal education based on Modern Subjects'. (44)

Greek was not taught and the time thus saved was given to mathematics,

natural science and modern languages. On the classical side (upper third, lower fourth, upper fourth, shell form, fifth form, lower sixth and remove, upper and middle sixth) natural science was taught only to the shell, though voluntary classes were open to all boys on the classical side. In addition, a special science form established in 1889, catered for boys who intended to compete for science scholarships or who wished to devote their attention mainly to scientific studies. Oldhamcomments (45) that 1889 at Shrewsbury was the year in which subjects other than classics began to be regarded as no longer merely eccentric sidelines twenty-five years after the Clarendon Commission. In that year there were 222 boys on the classical side compared with only 71 on the modern side and 13 in the special science form. An army class was started in 1890 'to enable boys to pass into Woolwich or Sandhurst straight from school'. $^{(46)}$ In 1890 there were ll boys in the class. As one would expect, distinctions obtained by old Salopians at the ancient universities during this period were still very largely in the classics.

The Headmaster's Report for 1903, in the school library, shows that the vast majority of boys at Shrewsbury - those on the classical side - had little contact with science. Elementary chemistry and physics were taught to the shell for only one hour a week. Boys on the modern side had around two hours a week science teaching. The few who opted for the special science form or the army class were given up to seven hours a week. (47) As late as 1910, natural science was still very much a poor relation. A Report from the Oxford and Cambridge Examiners Board to the Chairman of the Governing Body of Shrewsbury in that year makes this clear. They wrote that until January 1910 natural science had been taught only to the science form, to the five modern forms and to the classical shell. In order to extend science teaching to include all boys on the

classical side in forms below the fifth, the work on the classical and modern sides had been re-arranged in January of that year. They wrote 'Such a change was urgently needed as under the old system a large number of boys passed through their School career without learning any natural science...' (48)

Shrewsbury then, was particularly slow to modify its curriculum in favour of modern subjects. It was twenty years after the Public Schools Commission before natural science appeared in the course of study. Even then, only a derisory amount of time was allocated to it and the majority of boys passed through the school without any serious contact with the subject. The other modern subjects also made little headway and the classics continued to dominate the curriculum. One could even argue, with some justification, that Shrewsbury actually took a step backwards when the non-collegiate class was discontinued.

The remaining four schools, which we shall now briefly consider, showed a similar reluctance to concede much ground to modern subjects, especially natural science. At Harrow, a modern side (for those deficient in the classics), was started in 1869. Bowen - one of the contributors to 'Essays on a Liberal Education', and an enthusiastic advocate of modern subjects - was placed in charge of it. Greek and drawing on the classical side were replaced on the modern by higher mathematics, English, chemistry and book-keeping. In addition, the new governing body of the school insisted on natural science, French and German being compulsory subjects on the classical side.

A letter from G. Griffiths, natural science master at Harrow, to the Devonshire Commission in 1871 (49) gives details of science teaching at

the school. In 1867 a master had been appointed to give systematic instruction in the subject, and it was made part of the ordinary schoolwork in a certain number of forms, which at that time included nearly 200 out of the 500 boys at Harrow. In 1871, all boys in the fifth form on the classical side and the whole of the modern side received instruction in experimental physics. Those on the classical side - about 140 boys attended one lecture a week. The modern side at this time consisted of about 40 boys, who were taught in two divisions, their places in these being determined by proficiency in mathematics. Each division attended three natural science classes a week. Boys in the sixth and forms below the fifth on the classical side were not taught natural science, though they could take private lessons. 'A few only' did so. Butler wrote to the Devonshire Commission (50) that 'no practical work, worthy of the name, is now attempted. However, the Commission referred to the then recent erection of chemical and physical laboratories. Harrow also had a flourishing natural history society, which had been founded in 1865, under the presidency of Rev. F. W. Farrar, editor of the 'Essays'. Prizes were given annually for non-classical subjects and in working out a boy's place in the school the importance of a subject was determined by the time given it. This, in effect, meant that promotion was almost entirely dependent on success in the classics.

Fischer Williams, writing about Harrow in 1892, commented that boys entered the school on the classical or modern side, though the classical, with 370 boys, was still considerably more popular than the modern, with only 170. He noted that of eight boys going to Harrow, only five received the traditional classical training, and referred to this as 'a most astonishing development'. (51) The modern side, at that time, differed from the classical in that German had been substituted for Greek, less

emphasis was placed on Latin and much more on French and mathematics. In the modern side timetable divinity was given two hours, Latin between four and six. French between four and six. German about three, history (English, ancient and a little European) two hours, English one, and mathematics about six, though in some cases as much as eight and a half. As for natural science, even on the modern side the four lowest forms received no teaching in the subject. The others were given one to two hours a week, though a few boys received as much as five. On the classical side French and mathematics were taught as well as classics and in the middle of the school natural science was taught as a form subject, being allotted one and a half hours a week. Above the upper remove, only boys wishing it were taught natural science and were given between two and three hours. To a considerable extent the teaching was classical and the higher the form the more pronounced was the classical colour. In addition to the two 'sides' there were two special classes which prepared about 50 boys for the army examinations.

At Charterhouse, the headmastership passed in 1863 to Dr. Haig Brown who held the post until 1897. E. M. Jameson, a master at Charterhouse, wrote of him that he 'believed that for all boys the Classics provided the best basis for clear thought, and the soundest preparation for other studies'. (52) Following the Public Schools Commission, the new governing body decreed that all boys in their progress through the school should be taught religious knowledge, classics, arithmetic, mathematics, natural science, history, geography, English and either French or German. Those who taught mathematics or science were to receive only two thirds of the salary of the classical masters. Jameson commented that 'this arrangement would fairly summarise the actual character of education under Dr. Haig Brown'. He continued: the 'general impression would be

not only in the Under but in the Upper School, that these other '
(non-classical) 'subjects did not matter... The higher forms in Classics
found in some of them a well-earned and sometimes comic relief: the
lower forms had these subjects dove-tailed in at odd hours according to
the caprice of individual form masters or else taught by divisional
masters who had not as a rule the same powers of discipline'. (53)

The Devonshire Commission found that science formed a part of the obligatory school course from the sixth form to the under third inclusive, the first and second forms only being excluded. Science was given two hours a week but no practical work was mentioned. With reference to promotion the Report stated that 'At Charterhouse School it is considered that the amount of acquirement would not at present justify any weight being assigned to scientific attainments for determining the position in the school'. (54)

Jameson refers to the erection in 1874 of a block of classrooms called C block where the C divisions of forms went for their work. A and B were the classical divisions of forms, whereas the C divisions prepared for the army entrance examinations. An army class was officially instituted in 1877. The C divisions led in time to the development of a modern side which dates officially from 1906. (55) Needless to say, the classical side continued to be the more popular.

At Westminster after the Public Schools Act, a new governing body was established in place of the Dean and Chapter and to it was transferred all the buildings and ground in possession of the school, except certain areas to which the school got the right of user. In addition, the school was to receive from the Ecclesiastical Commission an annual income and a

capital sum. No immediate revision of the curriculum took place. however, and this was once again particularly evident in the case of natural science. A letter from Scott in 1870 to the Devonshire Commissioners informed them that 'no systematic teaching of natural science has been possible'. (56) By the 1880s a modern class was in existence where mathematics, French, German, English, Latin, science, geography and geometrical drawing were taught. This class was, in the main, composed of boys wishing to compete for Woolwich and Sandhurst and the work was arranged with these examinations in mind, to enable a boy to pass them direct from the school, without recourse to a private tutor. As no boy was allowed by the War Office regulations to take up more than four subjects, boys selected four out of the first six in the list. Geography and geometrical drawing were taught as they were required for the preliminary examinations for Woolwich and Sandhurst. The importance of the modern class must not, however, be over-emphasised. In 1883 there were only 8 boys in the class out of a total of 233 in the school, (57) and of these only 4 chose to do chemistry and one German. (58) School regulations at this time allowed any boy above the remove, who so desired, to have an opportunity to study natural science and use the small chemical laboratory which had been set up.

Turning now to Winchester, Moberly left in 1866 and was replaced by his son-in-law, the Rev. George Ridding, who was himself a Wykehamist. After Balliol, where he took second class in mathematics, Ridding became a Fellow and Tutor of Exeter College. He went from Oxford to Winchester to take up the second mastership, a post which had been held by his father. As headmaster Ridding found himself facing criticism from two sides: from the reformed governing body (including

Sir Stafford Northcote) which favoured change, and traditional Wykehamists who wanted only the minimum of change.

Although Dilke claims that Ridding 'awakened Winchester from its medieval sleep! (59) this would seem to refer to his extra-curricula activities as the curriculum under his headmastership remained predominantly classical. Ridding did, however, introduce the reading of English classics, such as Chaucer, and history was studied in a more systematic manner during his reign. In addition, a little more time was given to modern languages, mathematics, and natural science, though A. F. Leach, who left Winchester in 1869, made it clear that 'modern' subjects during the early years of Ridding's rule still laboured under considerable disadvantages. Firth writes that they were viewed as extras and soft options. (60) After the Public Schools Commission there was a science lecture once a week, Winchester sharing a lecturer with Harrow. An examination in the subject at the end of term was 'a pure farce' and Leach wrote: 'I obtained eight marks out of a hundred and was never a word the worse'. He also commented that English history at that time was wholly ignored and that the French lessons were a waste of time. His remarks on M. Angoville, the French master who gave evidence before the Clarendon Commissioners, suggest that in some cases witnesses perhaps described situations as they would have liked them to be rather than as they actually were. M. Angoville had expressed himself satisfied with the progress the upper boys made. Leach remarked: 'The poor man must have been very easily satisfied.' According to the evidence of the French master, boys had two lessons of three quarters of an hour twice a week, each lesson requiring 'one hour at least' preparation. Leach commented: 'It would surprise me to hear that anyone had ever given five minutes to it'. In his view, Winchester was

first and foremost a classical school and he referred to the 'practical exclusion of all other subjects but Latin and Greek from the curriculum.' 'Classics' he wrote 'were the be-all and the end-all of our education', and even mathematics, though more seriously studied, were not conducted with the 'same seriousness as classics'. (61)

In 1870 Ridding wrote to the Devonshire Commission with details of science teaching at the school. (62) He referred to the appointment of George Richardson as resident natural science master and the developments in the teaching of the subject which followed. Since Richardson's appointment, there had always been three science classes having two lectures a week, one taught geology, the other two having lectures in botany, mechanics and physical geography. All boys in the second main division of the school - about 100 boys - attended these lectures as part of regular work. A boy generally stayed about two years in this division. When he passed from it into the sixth it was optional whether he learned physical science, about one quarter of the boys choosing to go on with it. Ridding informed the Commissioners that he had latterly engaged another master to teach physical science two hours a week to a class of boys who were never likely to reach the division in which science was regularly taught and who formed a 'modern class' of about 25 boys. Prizes were given twice a year for natural science and the weight assigned to scientific instruction in determining a boy's position in the school was about one tenth of the whole marks in classwork and examinations. At this time Winchester had a natural history society but no laboratory and science-teaching therefore involved no practical work.

Ridding was replaced in 1884 by W. A. Fearon, who had been a master

at Winchester. He reigned until 1901, at which time Winchester was still, according to D'E. Firth 'in reality a fully classical school'. (63)

In conclusion, despite individual differences, the evidence indicates a reluctance on the part of all the schools to give encouragement to modern subjects at the expense of the classics. This unwillingness was to continue at least until the turn of the century. In every school the classics continued to dominate the curriculum. The majority of prizes were given for classics and promotion was to a very large extent determined by performance in them - though in the majority of schools the modern subjects carried some weight, generally proportional to the teaching-time allotted to them. One of the conclusions in a Report of the Committee on the Position of Modern Languages in the Educational System sums up the situation in the public schools: 'For the classical boys were reserved a chief part of the scholarships, prizes, and distinctions..'. The date of the Report is 1916. (64)

Following the Public Schools Commission, modern subjects in many cases were allotted an increased share of the time available and in some schools natural science was introduced into the course of study. As we saw, however, this was by no means always an immediate result of the Commissioners' recommendations, Shrewsbury having to wait twenty years for this particular addition to the curriculum. In any event the increases in allotted time for the non-classical subjects were often only marginal and the subjects in many cases were not taught throughout the school. Indisputably they remained 'poor relations' and it is clear from comments of successive generations of boys that the schoolbody, and many of the classical masters, continued to regard them as such.

Some schools introduced 'modern sides' on which a certain amount of classical work was sacrificed to provide more time for modern subjects. The Report on modern languages mentioned earlier commented that these 'were regarded too often both by masters and by boys as the refuge of the intellectually destitute'. (65) Certainly, able boys were encouraged to stay with the classical sides, and, at least until the end of the century, the modern sides were numerically very much inferior to the classical. In 1918, a Report of the Committee on the Position of Natural Sciences in the Educational System of Great Britain remarked that '... the establishment of modern sides had the unforeseen result of providing an excuse for the neglect of science on the classical sides'. (66) This finding may well have referred also to other modern subjects.

As we have seen, natural science was the poorest of the poor relations, and long continued to be so. The Royal Commission on Scientific Instruction and the Advancement of Science, 1875, included the Clarendon Schools in its investigations. It found that even where science was taught and generally this was only to certain classes - one to two hours a week was the usual time given to it. In addition the teaching facilities were in many cases poor, and in all the schools the 'tone' was 'distinctly against science'. (67)

The Commission also noted that in many of the larger schools the number of science masters was totally inadequate. Until this state of affairs was remedied, no considerable improvement could be expected in the standard of scientific education. The Report commented: 'We fear that the fewness of the Science Masters in the great Public Schools, and the slowness with which their number is allowed to increase must, to a certain extent, be attributed to an inadequate appreciation, on the part of the Authorities of

those Institutions, of the importance of the place which Science ought to occupy, and which the country desires it should occupy, in School Education. (68) The Commissioners recorded the following conclusion:

'The evidence thus placed before us conclusively proves that in our Public and Endowed Schools, science is as yet far from receiving the attention to which, in our opinion, it is entitled, (69) and continued we are compelled...to record our opinion that the Present State of Scientific Instruction in our Schools is extremely unsatisfactory. (70)

The Devonshire Commission was much more stridently in favour of giving science a greater and more prestigious place in the school curriculum than the Clarendon had been. The Commissioners believed, for example, that science should be introduced into education at a very early stage, and were sharply critical of the Clarendon Commission's view that boys should be allowed to discontinue wholly or in part mathematics, natural science, etc. They commented: 'we regard science, language and mathematics as essential subjects of education up to the age at which boys leave school'. (71)

In addition they emphasised the increasing importance of science to the country, and stated '... we cannot but regard its almost total exclusion from the training of the upper and middle classes as little less than a national misfortune'. (72) The strength of this opinion may well have owed something to the unease in the country which followed the 1867 Great Exhibition and the growing recognition that Britain's industrial supremacy was a thing of the past.

However, despite the urgent tone of the Devonshire Report and its pleas for more emphasis to be placed on natural science teaching, its impact was negligible. The Report of 1918 showed how little had been achieved even 40 years later and concluded: '... there has in the Public Schools as a whole been no general recognition of the principle that Science should form an essential part of secondary education.' (73) It continued: 'many of the ablest boys who enter the Public Schools, pass on to the Universities ignorant of science...' (74)

It would seem, therefore, that little real progress took place in the teaching of natural science in the nineteenth century Clarendon Schools. Fundamental change had to wait until the new century was some decades old. Even mathematics - the most fortunate of the 'modern' subjects in terms of status and teaching-time, was long considered inferior to the classics and laboured under many of the disadvantages of its fellows. As for modern languages, the Report of 1916 suggests that gains in terms of more time and higher status were in a sense illusory as the tremendous influence of the classics extended even into the domains of the non-classical subjects. The Report found that the results of modern language teaching were 'very poor' and suggests the reason that: 'For a long time after French and German were introduced into the Public Schools they were taught like the dead languages.' (75)

Thus, despite Royal Commissions and Government reports, despite a growing awareness in the country as a whole that the neglect of modern subjects - especially science - in the education of the upper and upper middle classes was at least partly responsible for Britain's increasingly poor performance as an industrial nation, the Clarendon Schools continued to devote the greater part of their resources, energies and prestige, to upholding the classical tradition of education.

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 4. PSC I p. 32
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42. Quoted in Oldham pp. 147-8
43. Oldham p. 148
44. School List p. 25*
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47. Headmaster's Report 1903, Shrewsbury School Library
48. Report from the Oxford and Cambridge Examiners Board 1910
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- 65. ibid p. 9
- 66. Report of the Committee on the Position of Natural Sciences in the Educational System of Great Britain, HMSO 1918 p. 23
- 67. Devonshire Report p. 139
- 68. ibid p. 69
- 69. ibid p. 65
- 70. ibid p. 74
- 71. ibid p. 73
- 72. ibid p. 74
- 73, Report on the Position of Natural Sciences op. cit p. 20
- 74. ibid pp. 28-29
- 75. Report on the Position of Modern Languages op. cit p. 129

^{*} Shrewsbury School Library

Conclusion

The evidence from the Public Schools Commission which was considered earlier in this thesis illustrated the very great influence which the classics exercised over the minds - and indeed the hearts - of those involved with the Clarendon schools. It also indicated the considerable resistance to curriculum change which existed in the schools and which would have to be overcome before any real modernisation of the course of study took place. We established that this resistance was particularly marked in the case of natural science.

As well as being very strong, the opposition to curricular change was also surprisingly long-lived, and extended far into the present century. The reforms in favour of modern subjects advocated by the Commissioners were in many cases either ignored or only partially adopted. Curriculum change, at least until the turn of the century, was carried out reluctantly and little attempt was made to welcome the new subjects or give them a valued place in the course of study. Enquiries and reports which followed the Public Schools Commission indicated that modern subjects were given little time, unpopular hours, were often regarded as alternatives and in many cases were not taught throughout the school. Natural science generally benefited least from any reform. Despite some broadening of the curriculum the classics retained their overwhelming prestige whilst modern languages and natural science remained inferior and often despised alternatives. Even mathematics, which enjoyed a considerably better position suffered grave disadvantages. Modern sides were introduced by the great schools but as refuges for the intellectually second-rate. Most masters and all the cleverest boys were classicists. Even as late as 1918 a government report found that the abler boys at the public schools tended to pursue a classical course. (1)

Where modern subjects were included in the curriculum traditional attitudes in the schools often influenced content and teaching methods. Modern languages, for example, were taught like the dead languages and the results were very poor. (2) Set books and syllabuses for modern subjects tended to be literary, linguistic and remote from real life. History teaching emphasised the political and constitutional rather than the social and economic aspects of the subject, and was confined to the period before 1815. We noted earlier a criticism of history teaching at Eton on the grounds that it dealt with events too near modern times. (3) As for natural science, it was described as degenerating into a lowgrade study of disconnected detail, as opposed to becoming the great alternative to classics in intellectual training outlined by scientists like Huxley and Faraday. The branches of science selected were generally those closest to mathematics, such as mechanics and physics. There was little emphasis on biology, botany and geology, areas which were favoured by such gifted and experienced natural science teachers as Wilson and Hutchinson. Even on the modern sides there was no study of the contemporary institutions of countries (and industrial competitors) like France and Germany. Thus, despite marked differences between the individual schools, which were evident from our continuum, it is fair to say that in all of them, at least until the First World War, the classics continued to occupy the dominant position in the curriculum and that modern subjects, especially natural science, made comparatively little headway.

Perhaps the greatest advance in the public school curriculum during this period came, not in the Clarendon schools, but at Oundle under the headmastership of F. W. Sanderson from 1892 to 1922. Sanderson attached great importance to the study of scientific and technical

subjects and - despite considerable opposition from senior staff and boys - he very much broadened the curriculum at Oundle and built laboratories and workshops. Sanderson is often credited with putting science on the public school map, though the curricular changes he made had little immediate impact on the Clarendon schools.

The Clarendon schools' collective resistance to curricular reform seems, at first sight, to be a most curious phenomenon in the light of their rapidly changing social and economic environment and the growing pressures for change which came from many quarters. Their emphasis on the classics and their, at best, ambivalent attitude to modern subjects, did not go unchallenged. The painstaking investigations of Royal Commissions and select committees demonstrated conclusively the urgent need for reform. Social observers like Lyon Playfair and Matthew Arnold warned of the dangers to the country from the educational stance taken by the public schools. Arnold, as we saw, had strong reservations and fears about professional education in England and its links with aristocratic education, whilst Playfair's warnings about the likelihood of England being overtaken by her Continental competitors were echoed in the findings of many government enquiries. To other respected members of the intellectual community, like Faraday and Huxley, the hegemony of the classics seemed both ridiculous and quite unjustifiable. The desire for change was evident, though to a limited extent, even within the schools. Men like Wilson, Bowen and Farrar, educated themselves in the classical tradition, were vociferous in their efforts to further the claims of modern subjects. The influential Essays on a Liberal Education reflected the views of this increasingly respected 'fifth column'.

Thus, at least from the 1860s, it was widely accepted by many influential sections of society that the education of the higher classes was undesirably narrow and that the inclusion of modern subjects, especially natural science, in the public school curriculum was vital for the future well-being of the nation. This pressure, however, had surprisingly little impact on the Clarendon schools, even though, as we saw, they were not otherwise resistant to change and could reform themselves rapidly when the need arose.

There were certainly practical difficulties in the way of curricular reform which headmasters were quick to point out. Perhaps one of the most serious was the difficulty of finding suitable staff to teach the modern subjects. This applied with particular force to natural science but also, to a lesser extent, to modern languages. The Public Schools Commission had alluded to the problem of procuring thoroughly effective modern language teachers. That this was regarded as a problem was due at least in part to attitudes current in the schools themselves, namely that foreigners, especially Frenchmen, were unable to maintain discipline over English boys. Indeed, some of the classical masters at Eton seemed to take a perverse pride in this state of affairs, which they may well have partly created. The Commissioners, however, accepted that this was the case and also that few Englishmen had a sufficiently satisfactory command of languages to teach them adequately. They felt, however, that such difficulties could be overcome.

As for natural science teachers, Wilson had mentioned that they were rare and gave a glimpse of Temple's difficulties in finding a suitable man for Rugby. Once again, however, the problem stemmed largely from the attitudes of the Clarendon schools themselves. To be acceptable for

employment in a public school, a master was expected to be either an Oxford or Cambridge man. The Devonshire Report noted that 'Headmasters naturally look to the Universities to supply them with Assistant Masters; but the number of University students of science is still so limited that the supply falls short even of such demand as exists at present'. (4) If the schools had been prepared to look outside the ancient universities, the problem would not have been so acute. In addition, Clarendon school headmasters preferred public school men, and indeed Clarendon school men, for their staffs, Eton, as we saw, restricting appointments almost entirely to Etonians. As Meadows and Brock comment, these requirements drastically limited the number of potential science masters until late in the century. (5) Thus, to a large extent the prejudices on the part of the schools were largely responsible for the paucity of natural science masters. The Public Schools Commission had anticipated difficulties in obtaining competent science teachers and had commented: 'but the demand will create a supply'. (6) This was also Wilson's view. In 'On Teaching Natural Science in Schools' he wrote: 'When the demand begins, doubtless more will qualify themselves!. (7) Quite possibly this was true. Perhaps the real difficulty was that the demand was more apparent than real.

In the case of mathematics, the problem of the unavailability of staff did not arise. The early acceptance of mathematics by the ancient universities had led to the production of a sufficient number of potential mathematics masters.

Another problem, again referred to by Wilson, was that of cost. The buildings and apparatus necessary for teaching science could not be supplied without considerable expense and Wilson pointed out that

schools would not risk increasing their fees until they were sure that 'the opinion of the clientèle will sanction both their object and their method of attaining it. (8) The Devonshire Commissioners had little patience with such arguments. 'With reference to the wealthier Foundations, and the great Proprietary Schools' they wrote, 'the want of funds cannot be properly alleged as a reason for not providing appliances proper for the Teaching of Natural Science. (9) They went on to say that the cost had been exaggerated and that science could be introduced at one tenth of the cost which was usually supposed to be that which was absolutely essential. In illustration the Commissioners cited the example of Manchester Grammar School which placed considerable emphasis on science-teaching yet spent only £100 per annum on running expenses. As was pointed out in the Report, such sums would hardly have embarrassed the older and wealthier foundations. As to meeting the cost of extra staff, the Commissioners commented acidly that since large English schools did not employ enough assistant masters as it was, there was a need to increase them whether new subjects were introduced or not. (10) Possibly earlier in the century the cost argument had been a deciding factor when fluctuations in pupil numbers had led to insecurity for many schools and discouraged them from taking on specialist staff. By the 1870s, however, such arguments were no longer applicable.

Yet another explanation for the neglect of modern subjects, frequently put forward by Clarendon school staff, was that there was simply not enough time to include new areas in the existing course of study. The Public Schools Commissioners had countered this popular objection rather forcefully by suggesting that '... of the time spent at school by nine boys out of ten much is wasted, which it is quite possible to

economise'. (11) The Devonshire Commissioners did not deny the reality of the difficulty but pointed out that it was no justification for the total, or almost total, exclusion of any great branch of human knowledge from education. They argued that to solve the problem by making education one-sided and incomplete could not be in the interest of the pupil. (12)

It would seem, then, that the practical difficulties paraded by Clarendon staff and headmasters as reasons for failure to widen the curriculum were hardly insuperable and were, at least in part, of their own making. To a large extent they can be seen as excuses, concealing a basic reluctance on the part of staff to concede ground to modern subjects at the expense of the classics.

In attempting to account for the schools' resistance to curricular change we considered several possible factors. Evidence from the Public Schools Commission and other sources indicated that some schools were much more democratic than others in the extent to which they allowed assistant masters a role in the decision-making processes of the schools. Eton, for example, tended to be extremely authoritarian in this respect while Rugby and Harrow were much more democratically organised. The possibility existed that schools with more democratic systems of internal government were more likely to welcome modern subjects into their curricula. We discovered, however, that these characteristics seemed to be unrelated and that the real consideration here was the extent to which assistants held progressive views on the curriculum. We saw that, with some notable exceptions such as Bowen at Harrow, Wilson at Rugby and Johnson at Eton, the vast majority of assistants were convinced of the desirability of the classics continuing to play a dominant role. All were classicists and Oxford and Cambridge

men, most had been educated at the schools themselves, and few had much time for modern subjects, particularly science. The rather informal selection procedures ensured that men with radical views on the curriculum were unlikely to become staff members. Thus, democracy within a school was no guarantee that modern views on the curriculum would be given a fair hearing unless there was someone to put them and a sympathetic audience to receive them. Also, as we saw, even in the most democratically-organised schools, the headmasters enjoyed considerable power and they were, without exception, convinced classicists, some like Balston and Moberly, exhibiting an acute dislike of modern subjects.

Bamford refers to the 'circular effect' of classicists being produced by the system and fed back into it as head and assistant masters to perpetuate the attitudes and prejudices they had themselves been taught. (13) The Clarendon schools long continued to favour Clarendon school products as staff members and it was therefore extremely difficult for anyone from outside the system, holding progressive views on the curriculum, to break into it. Thus, the possibility of staff members being influential in producing change in the more 'democratic' schools was offset by the fact that the vast majority of the carefully selected assistants and headmasters had had little experience outside the classically-oriented schools and universities and were educational conservatives. The 'circular effect' must go at least some way towards explaining the schools' extraordinary resistance to curriculum change.

A related factor which undoubtedly helped to shape the public school curriculum was the close relationship which existed between the Clarendon schools and the ancient universities. The vast majority of school staffs had been educated at Oxford or Cambridge and there was

a highly-developed network of personal contacts between the universities and schools. Staff tended to move backwards and forwards between the two sets of institutions, often with little or no intervening experience. As one would expect, attitudes of school staffs and dons towards the curriculum showed great similarities. The ancient universities, like the Clarendon schools, placed great emphasis on the classics and this continued to be the case at least until the end of the century. Like the majority of public school masters, many dons were convinced that classics, and to a lesser extent mathematics, should form the cornerstone of a gentleman's education and that other subjects should be regarded as inferior subsidiaries. Although only about onethird of Clarendon school boys went on to Oxford and Cambridge, the masters at the schools saw their main task as that of preparation for the ancient universities.

Both masters and dons were agreed that the influence of the universities on the school curriculum was very great and that it operated principally through the medium of exhibitions and scholarships offered by the two universities. As one would expect, more rewards were available in classics than in modern subjects. The disparity was so great that headmasters and staff felt that if they recommended boys to study natural science, for example, they could be seriously injuring their university prospects. In 1875 the Devonshire Report included a comment made by the headmaster of Rossall that the universities held out the greatest inducements for the study of classics and mathematics. Over forty years later a government report quoted the view expressed by the headmaster of Rugby that the scholarship system at both universities had the effect of encouraging boys to pursue classical studies at the expense of others. Figures for Oxford from 1906 to 1915

show that this was indeed the case. The total number of scholarships and exhibitions awarded for all subjects at the Oxford colleges during this period was 1,028 scholarships and 615 exhibitions. The distribution between subjects was as follows:

Classics	650 scholarships	358 exhibitions
Mathematics	141	61
History	122	135
Natural Science	115	59

The Report itself concluded that the inequality in the number and value of the scholarships awarded in different subjects by the universities was delaying the recognition of science. (14) This conclusion also applied, of course, to the other modern subjects. The date of the Report, let us not forget, was 1918. It seems to echo plaintively the findings of the Clarendon and Devonshire Commissions decades earlier.

Thus, with the exception of mathematics, it would seem that no real stimulus to change the public school curriculum came from the ancient universities, the lack of stimulus being particularly marked in the case of natural science. In many ways, however, this was to be expected in view of the very close relationship which existed between the schools and universities, the constant interchange of staff and the similarity of views about the values of particular subjects. Their relationship, as we saw, was one of reinforcing each other's existing attitudes rather than encouraging change. This constant reinforcement was doubtless one of the most significant factors in the schools' resistance to curricular reform.

Another factor which certainly contributed to the strength of opposition to modern subjects, and particularly to natural science, was the influence exerted by the Established Church over both the ancient universities and

the schools. Many school and university staff considered that the primary purpose of public school education was to develop certain religious/moral characteristics such as virtue, honour, self-sacrifice. (Perhaps the particular characteristics emphasised at any given time depended on conditions external to the schools. Possibly in wartime, for example, self-sacrifice came to the fore) In any event the emphasis on this function of education meant that modern subjects were seen as being of considerably less importance than the classics. Temple put the argument in a nutshell when he told the Public Schools Commissioners that classics made a man more noble, modern subjects did not.

Natural science, in the eyes of many Church of England clergymen, had an even greater disadvantage. Until the later decades of the century the more conservative members of the schools and universities saw natural science as one of religion's greatest adversaries because they believed it encouraged the questioning of religious 'truth'. They feared, and with good reason, that natural science would in time undermine the teaching of the Established Church. The almost hysterical reception of Essays and Reviews had shown the depth of feeling on the subject. In such a hostile intellectual climate natural science could make little headway. Curriculum change had to await a new and more liberal approach to knowledge which, as we saw, gradually developed from the work of reformers like Pattison and Jowett. Although many reformers themselves were unfavourably disposed to natural science and were classicists in background and temperament, the spirit of free enquiry they fostered had the effect of encouraging the development of natural science. The extension of scientific knowledge which followed was undoubtedly an important contributory factor in the long and slow process of secularisation which Britain began to experience from the later

decades of the century.

The impact of secularisation on the Clarendon schools can be seen in the move away from clerical staff. Figures from Shrewsbury indicate the trend. From 1844 up to and including 1869 18 out of 22 staff appointed were or became clergymen. From 1870 to 1896 of 23 staff appointed only 5 were or became clergymen. (15) In 1870, 54% of the staff of 'ten great schools' were ordained. In 1906, this applied to only 13.3%. We noted. however, that this change did not extend to headmasterships until the new century. Another example of the Established Church's loss of influence over the schools can be seen in the controversy which arose when the Executive Commission, appointed under the Public Schools Act, in their suggested statutes for selecting governing bodies proposed the exclusion of all save members of the Church of England. Thomas Hughes moved to strike out their recommendation, and after long and bitter debate - and despite opposition from certain headmasters, for example, Butler of Harrow - his motion was carried. Such a step would have been unthinkable even two decades earlier.

Thus, as secularisation proceeded and the grip of the Established
Church on the public schools weakened, so the tendency of natural
science to call into question religious dogma became less and less of a
barrier to its acceptance by the schools.

Secularisation was, however, a slow process and in any event only marginally affected the argument that the main purpose of a public school education was to develop certain religious/moral qualities.

Before secularisation had begun to make an impact on the schools and those connected with them, the qualities emphasised were those

appropriate to a Christian gentleman. As secularisation proceeded, however, the qualities themselves became more secular and were less closely identified with religion. Despite such changes, the religious/ moral function of education remained, and modern subjects were not seen as having a part in its fulfilment. Of all the subjects only classics could make a man more noble, more honourable, more self-sacrificing, and until the aim of education changed or until a new method of achieving it was developed, the classics would continue to dominate the public school curriculum. As time went on both changes were to take place. The cult of athleticism with its emphasis on honour, team-spirit, self-sacrifice, became to some extent the new means of moral education. Similarly, the schools gradually concentrated rather more on intellectual excellence and less on the excellence of character. Both these changes, though only partially accomplished, meant that classics lost something of their raison d'être and the way thus became clearer for modern subjects.

A factor which seemed to be extremely important in accounting for the schools' resistance to curricular change was the requirements of parents. Although the attitudes of staff no doubt carried considerable weight, the schools were in a competitive market situation and had to supply what parents demanded. We have argued that parents demanded a largely classical curriculum. The Taunton Commission came to this conclusion whilst the Devonshire Report expressed the view that upper middle class parents were distinctly against science, as indeed were their sons. (17) On the part of the boys such an attitude was surely understandable. The headmaster of Rossall told the Devonshire Commissioners that boys 'instinctively' felt that science was not equal to Latin and Greek or mathematics for educational purposes. Clearly,

such an attitude could not be !instinctive'. The boys, whose early education had been classical, were in schools which had at least some of the characteristics of total institutions, schools in which the dominant ethos was classical and where modern subjects were openly denigrated. Any general feeling on the part of boys against natural science or any other subject was clearly not instinctive but was produced by their environment.

If the boys' attitudes are easy to understand, those of the parents - at first sight - present something of a puzzle. To the Victorian middle classes living in an increasingly industrial society a classical education must surely have seemed, in many respects, an anachronism. In the course of this thesis, however, the argument has been put forward that parents demanded a classical education for their sons for two reasons, firstly because they wanted high social status for their offspring and this implied a classical education, and secondly because the classics were considered by influential bodies outside the schools, such as the Civil Service Commissioners, to be the best preparation for many of the most likely future careers for public school boys. Thus, at least until the turn of the century, the two major demands made on the schools by the upper middle classes - high social status and preparation for acceptable careers - were in harmony and very much favoured the continuation of the classics as the dominant subject in a gentleman's education.

We saw that in the status uncertainty that was a feature of Victorian middle class life, to be a public school man was, as Honey has said, a ticket of general social acceptability. (18) In such a fluid, unstable situation it was necessary to have some clear means of identification

for distinguishing between gentlemen and others. A public school classical education provided the answer and as a result the statusconscious middle classes came to regard a classical education as a social necessity. It was not until the late decades of the century before this situation began to change. Curiously it was the very success of the public schools and the increasing demand for the type of education they offered which produced the change. When only a few schools offering an aristocratic classical education had existed, the classics had admirably fulfilled the function of defining the gentleman. When many such schools existed, all offering a classical education and purporting to produce gentlemen, this function of a classical education became self-defeating. The problem was quite simply too many gentlemen. The Clarendon schools and their imitators were turning them out in thousands. It became impossible to distinguish between a gentleman from Eton or Harrow and one from Rossall or Marlborough. We saw that the schools reacted to the consequent status uncertainty by creating a hierarchy amongst themselves. Thus, by this time, the classics had, to some extent, become obsolete; they were too broad a tool for the fine distinctions which had now to be made and other more subtle means of classification, such as clearly recognisable ties and speech patterns became important. These had the advantage of allowing distinctions to be made not merely between gentlemen and others, but also between different categories of gentlemen i. e. those from the 'top' schools and those from less prestigious imitators. This transition to more subtle criteria of classification meant that at least one of the justifications for the classical curriculum had been undermined.

The second middle class demand was concerned with future career choice. We considered the Civil Service, the army and the old and new

professions as the most favoured future occupations of public school boys. We argued that in every case, those governing entry to these occupations wanted to recruit gentlemen. The Civil Service, army and liberal professions had always been the preserve of gentlemen and the reformers did not wish to make any changes in this respect. The Civil Service and army examinations were very much geared to the public school and university curricula for this very reason and at one stage, as we saw, the army examinations were modified to increase the weight given to classics in order to encourage the recruitment of public school men. As for the newer professions, or those occupations in the process of achieving professional status, they took their model from the older professions and like them insisted on an entry of gentlemen. This was the way to prestige and professional status. Any occupation associated with modern subjects, especially natural science, found itself being accorded lowly status in the professional hierarchy. As we saw, Matthew Arnold was sharply critical of the direction professional education was taking. In the context of Victorian society and its pre-occupation with considerations of social status, such a direction was almost inevitable.

The hostility towards natural science as an element in the preparation for what were traditionally gentlemen's occupations was evident even after the turn of the century as two examples will illustrate. In 1918 the Report on the Teaching of Natural Science, already referred to, pointed out that the normal avenues to commissioned rank in the army were through the Royal Military College, Sandhurst, for Cavalry, Infantry and the Indian Army, and through the Royal Military Academy, Woolwich, for the Royal Artillery and Royal Engineers. Obligatory subjects for Woolwich were English, History and Geography, French

or German, Mathematics I and II, and Science. In each of the obligatory subjects a qualifying minimum mark of 33% had to be obtained. One more subject could be selected from a list which included Mathematics III, German or French, Latin, Greek, and Freehand Drawing. For Sandhurst, the situation was rather different. The obligatory subjects there were English. History and Geography. French or German, and Elementary Mathematics; any two of the other Woolwich subjects could be taken. The Report, predictably, had no criticism of Woolwich but grave reservations about Sandhurst. It pointed out that in 1918 it was quite possible for an officer passing through Sandhurst to have had no instruction whatever in science before he entered. He would receive no science teaching while there or after leaving. As the Report commented, perhaps in the light of lessons learned in the First World War, 'It is hard to see the justification for entrusting the lives and welfare of men to officers who have had no opportunity of getting a secure hold of the knowledge of the simpler laws that govern weather, food, personal hygiene, the applications of electricity and optics and innumerable other factors that affect the daily life and work of a soldier. (19)

This situation was made even more serious by the fact, mentioned by a witness, that 'though the intellectual qualifications of the cadets at Woolwich are acknowledged to be far higher than those of cadets who obtain admission to Sandhurst, it is from among the latter that the Staff of the Army is mainly recruited.' Even worse was the admission that '... broadly speaking, the fact that a man had high scientific abilities gave him no advantages in his military career. (20) That such a state of affairs could have existed in the army in the final year of the Great War almost surpasses belief.

Almost as surprising is the Report's finding that '... the General Medical Council have not insisted on natural science as a subject in the entrance examination to the medical profession or even on evidence that a student has gone through an adequate course of instruction in science. (21) In both occupations the qualification of gentleman i. e. education at a recognised public school, was apparently of greater importance than any qualification more directly relevant to future work.

Reader argues that by the last quarter of the nineteenth century the standing of the professions, especially the lower branches, had been much raised, qualifications greatly improved and aristocratic patronage almost abolished. Professional men still remained below the social heights, but not hopelessly so, and they were at last unquestionably at a comfortable 'sneering distance above trade'. (22) This would probably not have happened had the professions not taken the path described by Arnold and had instead emphasised the importance of natural science and other modern subjects in preparing for a professional career. However, they had chosen the path of aristocratic education and if their clients had lost out in terms of expertise and specialist training, the professions themselves had gained enormously in status.

The great influence of the public schools on nineteenth century English life can be clearly seen when one considers their relationship with the traditional liberal professions and the emerging new ones. Scientific and technical knowledge were expanding rapidly. Clearly elite education required drastic modification if the professions were to take full advantage of the expansion. As we saw, this happened to only a very limited extent. Rather, professional education was distorted by the

magnetism of aristocratic education. The traditional public school ethos which venerated classics and undervalued modern subjects prevailed and drew the professions, the Civil Service and the army within its orbit.

In such a situation the apparently anachronistic demands made by parents become readily understandable. Mr. Madan of Eton, giving evidence to the Devonshire Commission, wrote of the natural unwillingness of parents and tutors to allow boys to give up much time to science 'which does not often serve as an introduction to any recognised career or profession.' The Devonshire Report commented that a big obstacle to the development of science was the utter absence of an assured career for any students of the subject and reported that the general opinion seemed to be that a boy was more likely to win for himself a future position by following the studies which formed the core of the curriculum.

Thus, the demands made by the professions, the Civil Service and army actually consolidated the hold of the classics and even in the first decades of the new century did little to break their hold. Probably the changes improved the efficiency of public school teaching, particularly in relation to mathematics, but they did little for other modern subjects, especially natural science. The Civil Service, army and professions wanted above all gentlemen - albeit well-educated gentlemen, and the defining characteristic of a gentleman, as we saw, was a classical education. Knowledge of modern subjects, particularly natural science, could be a positive hindrance, carrying, as it did, the imputation of low social status. (This could perhaps account for the Devonshire Commissioners' rather curious finding that parents were not just

indifferent to science but 'distinctly against' it.

The demands made by upper middle class parents can be clearly seen from the growth of the new proprietary schools which were able to supply exactly what was required of them, unhampered by existing practices, long traditions and cramping statutes. By the 1840s and 1850s the upper middle class blueprint of what constituted a desirable and a necessary education was becoming clear. It emphasised above all else, a Christian education which would confer gentleman status on its recipients. As we saw, a school able to confer this most desirable of all educational advantages required an irreproachable clientèle, a predominantly classical curriculum and a landed-estate image. The prototype was Rugby and to a lesser extent Harrow. Such schools became the models for the new proprietary schools, whose success depended on their ability to develop the necessary characteristics. Whether or not modern subjects were included in their curricula seemed of little account. The new schools were hardly more modern than the old and their modern sides were generally very poorly patronised.

In conclusion, it seems clear that until at least the end of the century the very strong resistance to curricular change on the part of the schools was only fractionally weakened. The opposition to modern subjects which was so apparent in the pages of the Clarendon enquiry was still very much in evidence at the end of the nineteenth and even at the beginning of the twentieth century. The schools, as we saw, were not generally resistant to change. They had showed themselves to be capable of rapid change and adaptation to circumstances when the need was great. Apparently, throughout the nineteenth century, the need for curricular change was not great - at least from the schools' point of

view though it may well have been so from the point of view of national interest.

In the course of the thesis we have considered the factors which were responsible for the schools' opposition to modern subjects. At the same time, however, we have identified other factors which served to undermine the classics and clear the way for modern subjects. We considered, for example, the impact of secularisation on the schools together with the increasing obsolescence of a classical education as a means of social distinction. There was another factor which in the early decades of the century promised to be significant in the progress of modern subjects. Baden Powell had drawn attention to the danger of scientific knowledge spreading among the middle classes and the possible resulting threat to the dominant position of the higher class. The political consequences of the dissemination of scientific knowledge was one of the themes of the Clarendon enquiry. Sir Charles Lyell, the geologist, had mentioned that there was more scientific knowledge among the middle than the upper classes. This point was taken up by Vaughan who asked: 'In a political point of view, is not that not only an unhealthy but also a dangerous state of things in some respects, that the material world should be very much better known by the middle classes of society than by the upper classes?' Pursuing the point, he asked whether it did not also tend to put a certain amount of power into the hands of the middle classes which the upper classes have not. (23)

The danger had not gone unnoticed by the universities. Acland,

Professor of Medicine, gave evidence to the effect that one reason why

Oxford had gone to the labour and expense of increasing the means of
scientific study was to be found 'in a sense entertained there of the

importance to the clergy and upper classes of England generally of more extended knowledge, in order to retain their proper relations to the lower and middle classes who have this knowledge. (24)

The spread of scientific knowledge confronted the upper classes with a dilemma which was expressed by Northcote: '... if the upper classes, in acquiring a greater amount of this knowledge of the physical world were to lose any of their literary and intellectual superiority, might they not thereby endanger their pre-eminence as much in the one way as they would gain in the other?'

Faced with the danger of a scientifically knowledgeable higher bourgeoisie the upper class responded in two ways. Firstly, they took steps to increase their own knowledge of science but this was, as we have seen, at best a half-hearted attempt. Secondly, and much more successfully, the upper class neutralised the danger by steering the higher bourgeoisie away from science. They held out instead the carrot of gentlemanly status which involved a classical education and a disparaging attitude to natural science, and the higher bourgeoisie found this irresistible. Thus the possibility that the upper class would have to set to and study natural science in order to preserve its political supremacy was averted.

It must be noted that in the case of the two factors which had the effect of undermining the importance of the classics, namely the impact of secularisation and the obsolescence of the classics in social definition, there was little evidence of any positive encouragement to science and other modern subjects. These factors simply served to weaken the hold of the classics and thus clear the way for the new subjects. There was

no recognition of science, for example, as a great intellectual adventure, offering a training of the mind at least parallel to that of the classics. Where it was advocated that the upper classes should master scientific knowledge the reason was generally political, to preserve the status quo.

When the weak factors in favour of modern subjects are balanced against the factors producing resistance to them, the schools' failure to modernise their curricula to any great extent becomes understandable. As long as the 'circular effect' applied and Oxford and Cambridge continued to venerate the classics, as long as upper middle class parents and those who governed entry to the professions wanted the schools to produce classically trained gentlemen, as long as the Established Church continued to influence the schools and education was seen as having a religious/moral function, there was little hope for modern subjects - and above all for natural science - to achieve a secure and valued place in the Clarendon schools' curricula.

- 1. Report of the Committee on the Position of Natural Sciences in the Educational System of Great Britain. HMSO 1918
- 2. Report of the Committee on the Position of Modern Languages in the Educational System HMSO 1916 p. 129
- 3. P.130 of this thesis
- 4. Devonshire Report p. 70
- 5. A. J. Meadows and W. H. Brock 'Topics Fit for Gentlemen' in 'The Victorian Public School' ed. B. Simon and I. Bradley p. 107
- 6. PSC I p. 33
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