Cambridge in the age of the Enlightenment

Science, religion and politics from the Restoration to the French Revolution

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Contents

Introduction

Despite recent attempts (Porter, 1981; A. M. Wilson, 1983; Pocock, 1985a) to lay claim to the Enlightenment as being, at least in part, English territory, the conjunction of the terms 'English' and 'Enlightenment' still seems almost a solecism: no less an historian than R. R. Palmer has gone so far as to write that 'the term "English Enlightenment", would be jarring and incongruous if it were ever heard' (1976: 608). Was not the Enlightenment essentially a French phenomenon, albeit with pale reflections in Germany and Scotland and even paler reflections elsewhere? In any case what need had eighteenth-century England of an enlightenment when it had achieved many of the goals for which the French *philosophes* were striving? Influential accounts of the Enlightenment such as those by Hazard or Gay concede the importance of such major English thinkers as Bacon, Newton or Locke in the prehistory of the movement and cite examples drawn from eighteenth-century England, but their views of the Enlightenment are largely framed in terms of debates within France. Since in France the clash between the *philosophes* and a powerful and privileged ecclesiastical establishment assumed special significance, they emphasise the anti-clerical and even irreligious character of the Enlightenment (Gilley, 1981) – what Hazard (1965) refers to as the phenomenon of 'Christianity on trial' and Gay terms 'The rise of modern paganism' (1970). Intellectual historians, like political or military historians, are naturally drawn to the heat and smoke of past battles where the sources of conflict and the identity of the opposing sides are clear-cut. But, as Plumb remarks in his *Growth of political stability in England 1675–1725* (1969: 12–14), it is important for historians to examine the sources of stability as well as conflict – an admonition which applies to historians of ideas as well as of politics.

In its intellectual as well as its political life Hanoverian England appeared to foreigners to have achieved a remarkable degree of stability. As always,

such calm was more evident to the outsider than to those on the inside who were more conscious of continuing sources of division; but, for all that, there was nothing like the same gulf in England as there was in France between a group of self-consciously enlightened thinkers and the defenders of established tradition. Underlying this relative harmony was the *rapprochement* that had been achieved between secular learning, notably science, and the established Church of England – an institution which, as J. C. D. Clark (1985) has recently emphasised, remained fundamental to the workings of society during the eighteenth century. In France science was often a weapon to be used in an attack on the privileges of the clerical estate and the political order with which it was inextricably intertwined; in England, however, science formed part of the established Church's own armoury – in large part thanks to the type of education offered to intending clergymen at Cambridge and, to a lesser extent, at Oxford. Though the highly clerical universities of England (and, in particular, Oxford) were in some respects more impervious to Enlightenment values than their Scottish counterparts, Sher's comment about the character of the Scottish Enlightenment also has some relevance to the English situation: 'If the Enlightenment in France developed outside of, and sometimes in opposition to, the clergy and the schools, the Enlightenment in Scotland, along with less spectacular instances in parts of Germany and other Protestant countries, was largely an ecclesiastical and academic phenomenon' (Sher, 1985: 151).

While in France Bacon and Newton were invoked by the encyclopedists in their campaign to 'écraser l'infâme', in England both men still formed part of the Anglican pantheon. The origins of this marriage between the new science and Anglicanism can be traced back to the foundation of the Royal Society in 1660, an organisation which owed much to the work of Anglican clergymen such as Wilkins, Ward and Sprat. However, the alliance achieved its most permanent and public expression in the 'holy alliance' between Newtonian natural philosophy and Anglican apoligetics, which was forged at the turn of the seventeenth century and remained an important landmark on the English intellectual horizon until the mid-nineteenth century. Indeed, the use of the term 'holy alliance' to describe the bond between science and religion dates from the early Victorian period when the phrase had been popularised in the very different context of the diplomacy of Metternich. Thus in his review of Robert Chambers's *Vestiges of the natural history of creation* (1844) – a work which prompted a virtual dress rehearsal of the debates about the relationship between religion and science engendered by the publication of Darwin's *Origin of species* (1859) – the prominent Scottish physicist, former clergyman and biographer of Newton, David Brewster, wrote

that 'we did not expect that this holy alliance would be disturbed either by the philosopher or the divine' (Yeo, 1984: 11).

As the example of the Presbyterian Brewster's comments on a work largely concerned with natural history suggests, the bond between science and religion in Britain was not restricted to Anglicanism nor to Newtonian natural philosophy, though these form the focus of this study where the phrase 'holy alliance' is used as a convenient way of referring to the association between the apologetics of the Church of England and the popular understanding of Newton's achievement. By charting the fortunes of this 'holy alliance' from the late seventeenth to the end of the eighteenth century this book seeks to illuminate the nature of the English Enlightenment more generally. In particular, it aims to provide some corrective to the largely Francocentric view of the Enlightenment, which views it largely as a clash between the apostles of reason and the clerical defenders of tradition, by indicating the ways in which religious and ecclesiastical developments helped shape eighteenth-century English intellectual life generally. Like Gaul, the book is divided into three parts, which are intended to correspond to three different phases in the development of the 'holy alliance'; each part is in turn further divided into three chapters – the first being devoted to political and ecclesiastical developments, the second to theology and the third to science. Part One, which covers the period from the Restoration to the Revolution of 1688, describes the development of the theological and scientific concepts which lay behind the 'holy alliance' together with a discussion of some of the influences which impeded the earlier development of that alliance; Part Two, which extends from the Revolution of 1688 to the accession of George III in 1760 (and, in deference to the importance of the duke of Newcastle as chancellor of Cambridge, with a further extension to 1768 when that great master of whig patronage died) describes the formation and dissemination of the 'holy alliance'; and, lastly, Part Three, which deals with the period from 1768 to the end of the century, examines the way in which it was questioned by a number of developments which were to become more pronounced in the nineteenth century when the 'holy alliance' was finally dissolved. Among such developments in the late eighteenth century was the growth of political and religious radicalism which in England (and in Scotland) challenged the accepted view that Enlightenment values supported rather than disturbed the existing order (Porter, 1981: 16; Sher, 1985: 304).

In order to discuss intellectual developments over nearly a century and a half it is necessary to employ some analytical categories: two which loom particularly large in this book are 'Newtonianism' and 'latitudinarianism', both of which need to be used with some caution. The term 'Newtonian-

ism', as R. E. Schofield (1978) has shown, can be subdivided into a number
of different species, particularly in its Continental manifestations. The
variety of Newtonianism with which this work is primarily concerned is
what Schofield calls 'theological Newtonianism' which used a selective
form of Newtonian natural philosophy in order to provide support for the
argument from design. As he remarks, it was a form of Newtonianism
which 'differed but little from the earliest scientific Newtonianism
represented, at first, by the Edinburgh–Oxford coterie of David Gregory,
John and James Keill, John Freind, and Archibald Pitcairne'. The main
characteristics of both the early theological and scientific followers of
Newton were a strong hostility to Descartes, a conviction that scientific
certainty could be achieved through the use of mathematics and the
quantification of observational and experimental data, a corpuscular view
of matter combined with a belief in attractive and repulsive forces, and an
assumption (largely theologically based) that space and time were
absolutes (R. E. Schofield, 1978: 177–8).

   In common with many terms that originate in religious controversy the
work 'latitudinarian' is difficult to define with precision. Like the term
'puritan' it was used for polemical effect and was employed only reluc-
tantly as a term of self-description. But, though terms such as 'puritan' or
'latitudinarian' may not be sharp-edged tools of historical analysis, they
are none the less sanctioned by contemporary usage and provide a possible
key to understanding the religious mentality of our predecessors. The
term 'latitudinarian' originated in the debates about the nature of the
Restoration Church to describe those who had conformed both to the
parliamentary regime and to the restored Church and King and who
favoured a widening of the established Church's theological boundaries to
include as many English Protestants as possible. Since those seeking such
ends tended to emphasise those doctrines on which the majority of
Protestants were agreed, rather than the theological points that were likely
to cause divisions, the word 'latitudinarian' (or its synonym 'latitude-
man') was coined to suggest theological breadth or vagueness; as one critic
put it, a latitudinarian was 'a Gentleman of a wide swallow' (E. Fowler,
1670: 10).

   The failure of proposed schemes for theological comprehension and the
widening gulf between Anglican and dissenter after 1662 are indications of
the marginal position of those with latitudinarian views within the
Restoration Church. Such churchmen were, however, to play a more
significant role in the decades following 1688 when the divisions within
the Church which the term 'latitudinarian' reflects became even more
acute. Though the Restoration Church had regarded it as its particular
mission to instil the doctrine of passive obedience, most Anglican

clerymen arrived at some compromise with the post-revolutionary order which followed the overthrow of James II's rule. None the less, many of the clergy were hostile to those of their estate who acted as apologists for the new regime, particularly as such churchmen – to whom the term 'latitudinarian' was frequently applied – were often appointed to sees vacated by the nonjurors. As the political and religious divisions prompted by the Revolution of 1688 slowly subsided the word 'latitudinarian' was less likely to be used to describe a particular ecclesiastical party (Rupp, 1986: 32–3), though it never entirely lost its partisan character since latitudinarian opinion never won over the Church as a whole (Mather, 1985: 282). However, it was sufficiently widely diffused, particularly in the period before the reign of George III, to call into question the view that 'the Georgian [ecclesiastical] norm' was 'profoundly conservative, theologically orthodox and devotionally viable' (J. C. D. Clark, 1986: 109). Norman Sykes correctly points out that latitudinarianism as a 'theological temper' could transcend 'differences of political persuasion' (1934: 343) but, in practice, latitudinarianism was generally associated with whig political principles. After all, the tory party, the traditional defender of the Church's privileges, was unlikely to be the natural haven for those who wished to widen the doors of the Church to accommodate at least some of the dissenters. This association between whiggery and latitudinarianism is reflected in a complaint made in 1729 by a member of the predominantly tory University of Oxford that he 'suffered . . . as a Whig and Hoadleian' (a follower of the arch-latitudinarian Bishop Hoadly) (W. R. Ward, 1958: 118). In 1733 a whig apologist alleged that if the tories 'had Power, they would shew all *Freethinkers, Latitudinarians,* and *Dissenters* too, that they did not much regard the Tenderness of their Consciences' (*GM,* 1733: 540) – such suspicions being further heightened by comments like those made by the tory *Jackson's Oxford Journal* during the hotly contested Oxfordshire election of 1754 that 'The principles of whiggism, at the best are lax and latitudinarian . . . they are for introducing a wild medley of all sorts of impieties from Judaism down to Quakerism' (Colley, 1982: 131).

However, such overtly partisan connotations of the term 'latitudinarian' declined in the course of the eighteenth century, in part because the definition of 'whig' itself became more elastic and inclusive. The term 'latitudinarian' was given renewed prominence in the late eighteenth-century controversy prompted by the abortive attempts to abolish clerical subscription to the Thirty-Nine Articles and the word continued to be used into the nineteenth century to describe churchmen who tended to emphasise individual interpretation of Scripture rather than the doctrinal traditions of the Church, and natural as against revealed

theology. Without the word 'latitudinarian', then, it is difficult to draw
attention to the way in which the theological developments of the
Restoration period continued to shape the outlook of a significant group of
eighteenth-century Anglican clergy who were particularly active in
fostering the 'holy alliance'. In the late eighteenth century Anglican clergy
who were described by contemporaries as 'latitudinarians' still proclaimed
themselves as followers of late seventeenth-century theologians like
Tillotson – an intellectual continuity which was strengthened by institu-
tional and personal links in an age when ecclesiastical life was dominated
by patronage.

THE CHARACTER OF UNREFORMED CAMBRIDGE

The importance of patronage in helping to maintain the continued
existence of a latitudinarian tradition within the eighteenth-century
Church underlines the importance more generally of locating intellectual
developments in a political and institutional context – hence the focus on
Cambridge University, the *alma mater* both of Isaac Newton and of most
of the prominent latitudinarian theologians. Moreover, it seemed prob-
able that a university which produced men like Newton and Bentley was
not as devoid of interest as was commonly thought – the general view of
post-Restoration Cambridge being summed up by Westfall, Newton's
latest, and most complete, biographer who writes of 'the catastrophic
decline of the university after the Restoration [which] left it an intellectual
wasteland as the Cambridge Platonists died off' (1975: 194). The purpose
of this section is, then, firstly, to outline some of the chief features of
Cambridge's institutional life before it was reshaped by the reforms of the
nineteenth century in order to provide some background to the intellectual
and political developments which are the chief focus of this book; and,
secondly, to compare Cambridge with other major eighteenth-century
British institutions of higher education, notably Oxford, the dissenting
academies and the Scottish universities.

   As is the case with many aspects of the English old regime, the
conventional view of the eighteenth-century universities owes much to
the nineteenth-century reformers who naturally tended to emphasise the
faults and failings of the traditional order in Church and State in order to
underline the need for change. Not that these reformers were altogether
wrong; even the most enthusiastic advocate of unreformed Cambridge
would find it difficult not to agree with the would-be university reformer,
Mr Heywood, who in 1850 moved in the House of Commons: 'That in
the ancient English and Irish Universities, and in the Colleges connected
with them, the interests of religious and useful learning have not advanced

to an extent commensurate with the great resources and high position of these bodies' (C. H. Cooper, 1842–1908, v: 10). But in their preoccupation with exciting public outrage at the manifold imperfections of Oxford and Cambridge, the reformers paid little attention to those aspects of university life which indicated that these institutions were something more than dry husks of a bygone age – an example that subsequent historians have largely followed.

Thus it is not often acknowledged that the end of the seventeenth and beginning of the eighteenth century was a period when Cambridge (and, to a lesser extent, Oxford) almost totally reshaped its curriculum, breaking with a tradition of scholasticism that stretched back to the high Middle Ages. At Cambridge (unlike Oxford) classical logic – traditionally the chief preoccupation of the curriculum – gave way to mathematics and the study of Locke's epistemology, and at both universities scholastic natural philosophy was supplanted by 'the new philosophy'. Indeed, by the early eighteenth century Cambridge retained little from its academic past except the study of the classics, which had largely been grafted onto the university's traditional curriculum in the sixteenth century. Moreover, at Cambridge (again in contrast to Oxford) such humanistic studies were increasingly overshadowed by the mathematical sciences as the eighteenth century progressed. The scholastic curriculum at Cambridge (as at many other European universities (Gascoigne, 1989a)) had been coming under increasing strain in the course of the seventeenth century as it became more and more difficult to assimilate the developments associated with the Scientific Revolution into intellectual categories largely derived from Aristotelian thought, but it was not until the late seventeenth century that the traditional scholastic order was almost totally abandoned. Undergraduates were at first exposed to a new system of natural philosophy based on the work of Descartes though, by the early decades of the eighteenth century, this had given way to a study of Newton's work – a further illustration of the university's capacity for change. The scale of this virtual academic revolution was somewhat camouflaged by the fact that the university continued to pledge allegiance to the same set of Elizabethan statutes and still maintained many of the outward and visible signs of the old order in the form of disputations – exercises which were preserved at Cambridge until about 1830, even though their original function of testing a student's mastery of classical logic was now outmoded.

The declining pedagogical importance of disputations – the traditional method of assessing students – helps account for the growth of another distinctive, and relatively unacknowledged, feature of unreformed Cambridge, namely the Senate House examination which eventually became known as the mathematical tripos. This rigorous and highly competitive

examination gradually took shape during the eighteenth century, though its basic form was established by 1753 when students were first classed as wranglers and senior and junior optimes, a system that laid the basis for subsequent systems of honours. It was the mathematical tripos which provided the nineteenth-century reformers with a model for competitive examinations which would provide an alternative to the deeply entrenched practices of 'Old Corruption' and appointment by patronage (Roach, 1971: 12–13).

Given the pre-eminence of the mathematical sciences within eighteenth-century Cambridge – something which the importance of the mathematical tripos reflects – it is ironic that the university is sometimes contrasted with the dissenting academies and the Scottish universities as a bastion of clerical obscurantism which was impervious to mathematics and science. Hill, for example, writes of the dissenting academies that 'They trained men for business and the professions with a far wider and more up-to-date curriculum than that of grammar schools and universities; it included mathematics and science . . . The cultural split between Anglican universities and middle-class Dissenting Academies extended to a rigid distinction between the arts and the sciences' (1961: 293–4). It is true that at Cambridge so much attention was paid to mathematics (including 'mixed' or applied mathematics) that the experimental and observational sciences were relatively neglected, though even in these areas there was more activity than is commonly thought. Moreover, although the dissenting academies were to be of scientific importance in the late eighteenth century in the age of Priestley and Dalton, they naturally at first offered a curriculum very similar to that traditionally provided by the universities since their staff had themselves been trained at either pre-1662 Oxford or Cambridge (W. A. L. Vincent, 1950: 118). Gradually the dissenting academies developed their own academic traditions though these did not always favour scientific education – at Attercliffe academy (which existed from 1690 to 1720), for example, mathematical studies were forbidden 'as tending to scepticism and infidelity' (McLachlan, 1931: 32). With the growing theological liberalism of the dissenting community such cases became more and more rare and these institutions provided an increasingly broad range of secular subjects including the sciences. So broad, indeed, was the range that students often acquired little more than a superficial acquaintance with any single discipline; as one contemporary nonconformist wrote: 'The grand error in almost every dissenting academy has been the attempt to teach and to learn too much' (*ibid.*: 40).

A similar criticism was levelled at the Scottish universities which, wrote Dr Johnson, gave everyone a mouthful and no one a bellyful of learning (McDowell and Webb, 1982: 120). Cambridge with its mathematical

myopia went to the other extreme, though its best graduates could claim to have been exposed to a more rigorous, albeit more narrow, training than their Scottish counterparts. In 1805 a young Scot remarked about a friend who had been second wrangler at Cambridge: 'To take such a degree requires reading that in Scotland we have hardly any notion of. If there are greater instances of idleness in English seminaries, there are likewise more astonishing proofs of application' (Winstanley, 1935: 228).

Where the Scottish universities clearly surpassed Oxford and Cambridge was in the encouragement they provided for original work in what have become known as the natural[1] and the social sciences. Part of the reason for this difference probably lies in the continuing vitality of the professorial system in Scotland which allowed an individual to concentrate his energies on a single discipline even though, ironically, his students might be expected to master a wider range of subjects than their English counterparts. Though Cambridge's professoriate expanded from 7 to 21 in number in the period 1660 to 1800 and its ranks included some men of distinction (quite apart from Newton) – 65% of incumbents, for example, were thought to be sufficiently important to be accorded an entry in the *DNB* – it had little impact on a university where teaching was almost exclusively a preserve of the colleges, hence the number of professors who treated their posts as sinecures. Undergraduate instruction was dominated by college tutors who were generally expected to teach the full range of the university curriculum through a system of 'catechetical' lectures which had to cater for all levels of ability; consequently, those aspiring to high honours generally employed a private coach. Such a system did little to encourage a don to identify closely with one particular branch of learning and to take an interest in its advancement.

Another area where the Scottish universities were clearly superior to their eighteenth-century English counterparts was in the provision of lay professional education, something which reflects the lay, civic control of

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[1] Morrell (1971: 159) has made the following calculations based on Hans's sample of 680 scientists from the seventeenth and eighteenth centuries:

	% Oxford-educated	% Cambridge-educated	% Edinburgh-educated
1726–1745	11	18	20
1746–1765	16	13	24
1766–1785	8	12	17

Given the relative sizes of Edinburgh and the English universities, the figures reveal the clear superiority of Edinburgh as a centre of scientific research. These statistics also underline Cambridge's declining scientific importance as the eighteenth century progressed.

the Scottish universities in contrast to the clerical nature of Oxford and Cambridge. Holmes has recently (1982) drawn attention to the great increase in the size of the professions in late seventeenth- and early eighteenth-century England, the membership of which, he calculates, expanded by about 70% from 1680 to 1730 (p. 17). This development had little effect on Oxford and Cambridge where the faculties of law (by which was meant civil law) and medicine were little more than vestigial forms – between 1660 and 1727, when about 11,200 BA degrees were awarded at Cambridge, only 373 graduated LL B and only 356 with an MB; there were also 144 LL Ds awarded and 252 MDs. As a proportion of total degrees, then, qualifications in law or medicine formed only 9% of degrees awarded (excluding the largely nominal MA) (Borlase, 1800). The situation at Oxford was similar: in 1804 there were 638 MAs studying divinity and a mere five taking medicine and either eight or fifteen law (Sutherland, in SM: 488n). Part of the reason, Holmes suggests, for the ease with which the professions expanded in the eighteenth century was that professional training could be supplied relatively cheaply through a system of apprenticeship. By contrast legal or medical training at the university was long and expensive: at Cambridge the statutes stipulated six years' residence for those taking either an MB or an LL B. Though in practice students generally remained at Cambridge for only three years and returned at the end of six to fulfil the prescribed academic exercises (Winstanley, 1935: 58), it was still an expensive, complex and often ineffective means of training.

Moreover, the general costs of a university degree had greatly increased by the early eighteenth century: in 1732 Daniel Waterland (who had matriculated in 1699) wrote to Dr Bishop that 'expenses are almost doubled within my memory' (Magdalene College, Cambridge, Waterland MSS).[2] Gone was the early seventeenth-century practice of undergraduates sleeping in a truckle bed in their tutor's room; undergraduates now had to meet the cost of more lavish accommodation. In the eighteenth century undergraduates also had to pay increasing fees to their tutors as the traditional system of college lectures fell into decay; those wishing to excel in the late eighteenth-century tripos also had to employ a private tutor. The sizar system, whereby poor students paid reduced fees in return for menial duties, was in decline, thus further limiting the opportunity for those with slender means to attend university. At St John's in March 1715 fellows were urged to observe 'a very antient and laudable custom of the said college that every Fellow and all others who

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[2] Stone (1974: 43) writes that 'The cost of an Oxford education thus appears to have increased five or sixfold from the early seventeenth to the mid-nineteenth century, although the general cost of living index had risen by only two and a half times.'

are in Fellows commons [i.e., the wealthy student fellow-commoners]
should entertain a sizar . . . [since] by neglect of this good Custom many
poor scholars have been depriv'd of that support which they should have
had' (St John's Admonition book). Needless to say, such admonitions had
little effect: the number of sizars at St John's fell from about 33 in the 1660s
and 1670s to about 13 in the 1760s (E. Miller, 1961: 60); servitors also
largely disappeared in late eighteenth-century Oxford (Doolittle in SM:
257).

In Scotland, by contrast, the costs of a university education were
considerably reduced by the fact that residency was not compulsory; in
many cases undergraduates could have lived at home and those coming
from outside the university town could use the six-month long vacation to
return home to earn money for the coming year. In the mid-eighteenth
century, it was possible to survive on as little as five pounds a year at one of
the Scottish universities in contrast to fifty pounds or more necessary at
Oxford and Cambridge (O'Day, 1982: 276). The Scottish universities,
then, were in a better position to provide a relatively cheap form of
education in professions such as law or medicine which in England were
largely provided outside the universities. The Scottish universities of the
big cities, Glasgow and Edinburgh, unlike Oxford and Cambridge, also
had access to major hospitals and courts.

It was probably the Scottish universities' involvement in professional
education which accounts for their considerable growth in the course of
the eighteenth century, in contrast to the enrolments at Oxford and
Cambridge which, for much of the century, were in decline. Overall, the
enrolments at Scottish universities increased from about 1,000 in 1700 to
2,700 in 1800. Edinburgh had about 300 students at the beginning of the
century, a figure which had risen to 1,279 by 1800; of these, 660 were
studying medicine (O'Day, 1982: 274–7). Glasgow's enrolments doubled
during the same period (Emerson, 1977: 473). The Scottish universities'
involvement in professional education also provided a stimulus for
research. The law faculty helped to provide the institutional setting for the
Scottish pioneering work in the social sciences; thus as professor of moral
philosophy at Glasgow from 1752 Adam Smith lectured on a range of
subjects including jurisprudence while his pupil, John Millar, author of a
number of important works of sociological history, was professor of law
at Glasgow from 1761. Similarly the medical faculty acted as a catalyst for
scientific research, notably in chemistry: the chemist William Cullen held
both medical and chemical professorships at Edinburgh, an example
emulated by his more famous pupil, Joseph Black.

In the wake of the controversy generated by Sir William Hamilton's less
than tactful comparison of the achievements of the Scottish and the

English universities in the *Edinburgh Review* of 1831 the Cambridge polymath, William Whewell, sought to counter criticisms of his university's relatively meagre research record by arguing that the English universities' 'primary function is that of institutions for the purpose of education; and their being seats of science is a character which belongs to them mainly as connected with and resulting from the other [i.e., their educational function]'. Consequently, he continued, 'it is mere folly to look upon such persons [as college fellows] as men whose office is *discovery*, or to make demands upon them as if their duty were to produce *new* truths' (*British Critic*, 1831: 71–2). The force of this defence is weakened, however, when one considers that in fact only a small proportion of fellows were directly involved in teaching since undergraduate instruction was virtually monopolised by the tutors. The 1796 *Cambridge University calendar* reveals that all colleges had only one or two tutors apart from Queens' (which had three), St John's (three senior tutors and four junior tutors) and Trinity (two tutors and four assistants). Thus only a small fraction of the university's approximately four hundred fellows were involved in teaching in any permanent capacity. The tutors, as Heberden wrote in 1792, 'form[ed] the most respectable part of the society' and it was often from their ranks that future masters were chosen. Heberden went on to add that the pre-eminence of the tutors was 'an additional proof, if any such were wanting of the efficacy of employment on the mind and character, and of the necessity of rubbing off the corroding rust of inactivity; a rust with which the resident Fellows of Universities are too frequently incrusted' (pp. 46–7).

What, then, did the fellows who were not tutors do? As Heberden's comments suggest it is difficult to find any tangible record of many of the fellows' activities. John Venn calculated that of the 158 fellows elected at Caius between 1707 and 1777 only eleven are listed as authors in the British Library's catalogue (1901: 157). As the eighteenth century progressed, however, a growing proportion of the fellows – possibly even the majority – were nonresident, coming into college only at special times in the year such as the audit dinner or the election of fellows. Nonresidency had been frowned upon in the seventeenth century except in special circumstances, for example when a fellow was given leave to accompany a genteel pupil on the grand tour. There were still residues of such attitudes in the eighteenth century: in 1721 Caius reminded a fellow who was practising as an advocate in the Court of Arches that there was an 'order, of above twenty years' date, that every Fellow is required to reside one quarter of every year'. A similar order was repeated in 1734 though, by 1751, there were signs that the college was slowly giving way, for it reduced the requirement to 'one month in each half-year, and that in term