INTRODUCTION

Many foreigners visited England to urge support for the protestant states of Europe, which were becoming increasingly devastated by the Thirty Years War (1618–48). Most stayed only briefly, gaining the sympathy of the puritan congregations, but they failed in their main objective—that Britain should assume the leadership of protestant Europe. Britain had itself declined into instability. Laud was temporarily dominant; puritan leaders were exiled and the trends of the English reformation were reversed. Religious conflicts matched mounting discord over the domestic and foreign policies of Charles I. As Britain drifted into civil war, the despairing European protestants were obliged to rely increasingly on the leadership of Gustavus Adolphus and Sweden. Milton lamented that 'England (having had this *grace* and *honour* from GOD to bee the first to set up a Standard for the recovery of *lost Truth*, and blow the first *Evangelick Trumpet* . . .) should now be last, and most unsettl'd in the enjoyment of that *Peace*, whereof she taught the way to others'.*

In spite of persecution, the puritan movement remained intellectually resilient and aggressive, confident that the nation would regain the initiative in the European reformation. Although England could make no claim to any sort of leadership of protestant Europe, it remained a vital centre of religious debate and secular learning. The mounting challenge to authoritarian religion was matched by a growing spirit of innovation in philosophy, the sciences and education. Accordingly, the nation remained a source of attraction for many foreign intellectuals. They attended the universities and some settled in England, playing an active part in the movement for the reform of church and state. Above all they provided a vital link with the Continent, guaranteeing English

* John Milton, *Of Reformation*, 1641, quoted from *Complete Prose Works of John Milton* (*CPW*), ed. Don M. Wolfe (New Haven, 1953–), vol. 1, p. 525. See also *Areopagitica*, 1644, *CPW*, vol. 2, p. 552.

participation in the complex trends of the intellectual revolution of the seventeenth century.

Samuel Hartlib (*c.* 1600–62) was one of the most celebrated of these foreign settlers, achieving a central role in English intellectual life during the Puritan revolution. Milton spoke of him as 'a person sent hither by some good providence from a farre country to be the occasion and the incitement of great good to this Iland'.* Long afterwards, when his projects had been generally forgotten, John Evelyn remembered him as 'not unlearned, zealous and religious; with so much latitude as easily recommended him to the godly party then governing, among whom . . . he found no small subsistence during his exile'.† The encyclopaedic scope of Hartlib's interests resulted in his familiarity with such contrasting personalities as Milton and Evelyn. Milton valued his role as a reformer of religion and learning, while Evelyn regarded him as the purveyor of 'many secrets in chemistry, and improvements in agriculture, and other useful novelties . . .' But the activity which aroused most comment was his universal correspondence, which made him an invaluable source of information on these divers intellectual and social issues, his network of contacts ramifying through Europe and beyond, extending from Transylvania to the New England colonies. It was this activity which inspired John Winthrop Jr, the first Governor of Connecticut, to apply to Hartlib the memorable epithet 'the Great Intelligencer of Europe'.

It was only a slight exaggeration that Hartlib claimed at the end of his career to 'have lived these 30 years in England, being familiarly acquainted with the best of Archbishops, bishops, Earls, viscounts, barons, Knights, Esquires, Gentlemen, Ministers, professors of both Universities, Merchants, and all sorts of learned or in any kind useful men . . .'‡

* John Milton, *Of Education*, 1644, 'To Master Samuel Hartlib', *CPW*, vol. 2, p. 363.

† John Evelyn, letter to William Wotton, 12 September 1703, *Diary and Correspondence*, ed. William Bray, 4 vols. (London, 1887), vol 3, pp. 390–1.

‡ Letter from Samuel Hartlib to John Worthington, 3 August 1660, *HDC*, pp. 110–11.

With enormous enterprise, he undertook to realise Bacon's ideal of organising the intellectuals of Europe into 'a Noble and Generous Fraternity' through 'correspondence by mutual Intelligence'.* He shared Bacon's confidence that a great co-operative effort to marshal empirical knowledge would lead to an intellectual regeneration, a return of man's dominion over nature which had been sacrificed at the Fall. This was a corollary of the protestant search for spiritual renewal; secular wisdom with consequent material power of the Baconian and spiritual regeneration of the puritan, provided conditions for the imminent realisation of the Kingdom of God, in the form of the earthly paradise, fulfilling the biblical prophecies of the New Eden and New Jerusalem.

In spite of recent signs of apostasy, Hartlib and his colleagues were convinced that England lay under a special dispensation, designed to be a focal point in the *Instauratio magna* of learning as one aspect of the complete reformation of religion. Hence, they were not sympathetic with the widespread puritan antagonism to secular learning, which found extreme expression in the world-rejecting tendency of the millenary sects. For them piety and learning were integrally related manifestations of the regenerate intellect. This ascetic–religious ideal provided the underlying motivation for their utopian writings and philanthropic projects. They operated under a deep sense of religious obligation, convinced that their aims were sanctioned by providence as appropriate to the penultimate stages of history. As with the socially oriented asceticism of such radical groups as the Diggers, they aspired to reforms extending far beyond redressing the immediate defects of episcopacy, or the correction of the political and economic misdemeanours of Charles I. Fired with spiritual

* Francis Bacon, *De Dignitate et Augmentis Scientiarum*, 1623, *Works* ed. Spedding, Ellis and Heath (new edition, London, 1872), vol. 1, p. 491: 'ita magnus ad hoc cumulus accedere possit, si academiae universae per totam Europam sparsae arctiorem conjunctionem et necessitudinem contraherent . . . eodem modo fieri non potest, quin intercedat fraternitas illustris et generosa inter homines per doctrinas et illuminationes, quandoquidem Deus ipse *Pater Luminum* nuncupetur'. English quoted from G. Watts's translation, 1640.

enthusiasm, they developed policies which implied a more radical social reconstruction than was ever envisaged by the conservative legislators of the interregnum. Consequently their impact was limited; nevertheless, their philosophies and reform proposals retain an abiding interest, providing a dramatic rehearsal of problems of central interest to modern political thought and social theory.

Although Hartlib's group have not received nearly the same attention as the Levellers and Diggers, their views were distinctive and their social policy was amazingly comprehensive. More than any other group of reformers, they retained the respect and even mild approbation of the interregnum governments, with the result that they attained a slight measure of the state patronage which had been the persistent desire of Francis Bacon. This gave Hartlib the opportunity to organise detailed programmes of social reform for presentation to parliament and its committees. These covered most spheres of social policy, but the advancement of learning occupied the central role, his group contributing schemes covering the reorganisation of all levels of the educational system, from poor school to university. They proposed a reorganisation of the curricula, outlined new pedagogical methods and produced new textbooks with an explicit psychological foundation. Hartlib saw education as the key to the reform of religion and society . . . 'the readiest way to Reform both Church and Commonwealth'. His closest collaborator, John Dury, thought likewise, 'without the reformation of the wayes of education in the schooles, it will not be possible to bring any other reformation to any settlement or progress of the whol Commonwealth'.*

A great proportion of the voluminous educational writings of this period was directly instigated by Hartlib, who became the central figure in what Foster Watson aptly described as the 'Educational renaissance' of the commonwealth.† For the first time in English history, concentrated efforts were made

* Hartlib's 'To the Christian Reader' in *The Reformed School* (London, 1650), A4r–v., p. 142. John Dury, *A Seasonable Discourse* (London, 1649), p. 10.

† Foster Watson, 'The English Educational Renascence', *English Review*, Nov. 1909.

to outline detailed models of a state-controlled, comprehensive educational system. Parliament was now expected to play a dominant role in educational policy, a function which it had previously not had the opportunity to exercise. To their disappointment, the planners could not overcome the inertia of parliament, although for thirty years Hartlib was tireless in his efforts to promote their designs. Aspects of this history were recalled when he appealed in vain to Charles II for the resumption of his state pension at the beginning of the restoration.

That your Magisties Petitioner ever since he came into this Kingdome hath sett himselfe apart to serve his Generation in the best objects.

First, by erecting a little Academie for the education of the Gentrie of this Nation, to advance Pietie, Learning, Moralitie, and other Exercises of Industrie not usuall then in Common Schooles.

Secondly, by giving Entertainment and becoming a sollicitor for the Godly Ministers and Schollars, who were driven in those dayes out of the Palatinat, and other Protestant Churches then laid waste; by which meanes . . . [incomplete].

In the Third place, Your Magesties Petitioner found an opportunitie to maintaine a Religious, Learned and Charitable Correspondencie with the Chief of note in Forrain Parts, which for the space of Thirtie yeares and upward he hath managed, for the good of this Nation (as of the Leading Men of all Parties) by procuring unto them:

1. Rare Collections of Manuscripts in all the parts of Learning, which your Magesties Petitioner hath freely imparted, transcribed, Printed and sent to such, as were most capable of making use of them.
2. The best experiments of Industrie practised in Husbandrie and Manufactures; and in other Inventions and Accomodations tending to the good of this Nation, which by printing he hath published for the benefit of this Age, and of Posterity.
3. A constant Relief (according to his ability) or Addresse for poore distressed Schollars, both of this Nation and of Forreigners, who wanted employment, to recommend them to such as could make use of their service.

4. A constant Intelligence in matters of Piety, Virtue, and Learning both at home and abroad, with those that were best able to concurre therein, for the good of Mankind in all respects'.*

The Spiritual Brotherhood

It is not surprising that England was selected as the base for these activities. Although Hartlib was born at Elbing in Polish Prussia, his family had strong English connections. His mother was English; his father and grandfather had played an important role in the English 'Fellowship of Merchants' based at Danzig and Elbing.† Even before visiting England, he was probably inspired by the philosophical works of Francis Bacon, most of which were published during Hartlib's formative years. These writings presented the vista of the dramatic potentialities of empirical knowledge when organised efficiently and adequately patronised. Hartlib's first English visit, from 1625 to 1626, to complete his studies at Cambridge, must have convinced him that the puritan movement offered an ideal combination of patronage, religious enlightenment and sympathy with the new learning.

Cambridge in 1626 was at the height of its influence as the focal point of English puritanism, and was witnessing the genesis of the Cambridge Platonist movement.‡ The celebrated preacher, Richard Sibbes, had newly returned as Master of St Catharine's Hall and perpetual curate of Trinity parish. John Preston was at the end of his famous career as Master of Emmanuel College. His wealthy supporters, the Fiennes, Rich and Greville families, became the patrons of Hartlib; his pupils—the 'Spiritual Brotherhood'—became Hartlib's collaborators. Joseph Mede, one of Hartlib's early correspond-

* 'To the Kings most Excellent Majesty. The Humble Petition of Samuel Hartlib Senior'. Hartlib Papers, VII, 19: undated, but probably written in 1660.

† For further details of Hartlib's family and early life, see *SH*, pp. 1–5; *HDC*, pp. 1–16.

‡ W. Haller, *The Rise of Puritanism* (New York, 1938), ch. 2, 'The Spiritual Brotherhood', pp. 48–82.

ents and supporter of Bacon, was at Christ's College completing his influential analysis of the apocalypse, *Clavis apocalyptica* (1627). John Milton and Henry More, students of Christ's, inherited Mede's erudition; they and other Cambridge Platonists were supporters of the Hartlib circle. John Worthington, eventually Master of Jesus College and editor of Mede's works, became one of his closest collaborators. Cambridge therefore provided an inspiring example in the generation of Ames, Bacon, Harvey, Preston and Mede, which was followed eagerly by Hartlib's contemporaries.

Hartlib returned to Prussia to find that Elbing was drawn into the Thirty Years War. This provided an additional motive for his return to England in 1628, the year of the publication of William Harvey's *De motu cordis*, and soon after the appearance of Bacon's *New Atlantis*. Hartlib now embarked on his life's mission of attempting to realise the aspirations of this utopian fragment.

Soon after his arrival he made plans to establish an academy with the dual aim of introducing an enlightened education for the sons of the nobility and providing him with a source of income to support philanthropic activities. Soon he established at Chichester 'a little Academie for the education of the Gentry of this Nation, to advance Pietie, Learning, Moralitie and other Exercises of Industrie, not usuall then in Common Schooles'.*

In spite of its ambitious design, this project lasted for less than a year, its failure being largely attributable to Hartlib himself; like many educational reformers, he was too immersed in more lofty proposals to pay attention to the practical details of his academy. The collapse of the academy, and Hartlib's inability to find another secure source of income, drove him into the hands of capricious patrons. He and his friends devoted considerable energies to securing a stable income during the next thirty years, his name being canvassed for benefices, librarianships, headships of colleges, and civil service appointments. None of these plans was completely successful and his correspondence indicates reliance on large numbers of

* See above, p. 5.

irregular private contributions. The needs of his philanthropic activities always outstripped this income, with the result that his family was constantly on the verge of destitution. Nevertheless, poverty was not allowed to hinder his ambitious plans. He settled in London, his house at Duke's Place serving as the base for his foreign correspondency, patronage of young scholars and entertainment of exiled ministers.

Very rapidly he became acquainted with the English religious and intellectual reformers, whom he attempted to assist and unify. His letters to Dury in 1630* illustrate these early efforts to co-ordinate the activities of the puritan ministers, whose support Dury required for his mission to unite the protestant churches of Europe. These initial services to the spiritual brotherhood were to pay dividends during the period of Independent ascendancy twenty years later.

Most patrons and intellectuals were content to accept the peripheral advantages of Hartlib's network of correspondence, such as information about recent publications, inventions, foreign news, and so on. A few, seeing the great advantages of co-ordinated activity, formed the nucleus of his 'Christian Association' which was to exert considerable influence during the puritan revolution. Hartlib's first associate, John Dury (1596–1680), was to become an indispensable colleague and lifelong friend.† Identity of outlook and similarity of interests has created considerable confusion about the authorship of their writings. Anonymity was almost certainly an intentional guise of their Christian Association, although it was always clear that Hartlib and Dury were themselves its chief agents, Hartlib being the primary organiser and instigator, while Dury drafted the majority of their tracts. As Dury pointed out, he, Hartlib and Comenius, 'though our taskes be different, yet we are all three in a knot sharers of one anothers labours, and can hardly bee without one anothers helpe and assistance'.‡

* See below, pp. **75–8**.

† For Dury, see Bibliography. John Dury had probably known Hartlib since 1627, when Hartlib returned to Elbing. Dury was minister to the English presbyterians at Elbing from 1624 to 1630.

‡ Dury, *A Motion Tending to the Publick Good* (London, 1642), pp. 41–2, p. **107**.

Identity of purpose was reinforced by agreements in the form of sacred covenants, an increasingly influential means of attachment to religious and political programmes during the puritan revolution. Covenant theology had varying social manifestations. In the hands of Hartlib and his colleagues, it reinforced their sense of sanctification in the mission to propagate a utopian social and religious programme. With this outlook, they operated more as an international spiritual brotherhood than a quasi-political pressure group. Hartlib and Dury's writings were designed to represent this evolving religious association, which was called the '*collegium charitatis*' in 1630 and 'Christian Association' in 1650. At a more esoteric level they adopted the titles *Macaria* and *Antilia*. Under the solemn obligation of their pact—'haec fraterni Foederis pacta inviolabiliter in timore nominis ejus servanda inter nos sancisimus'—Hartlib, Dury and Comenius pledged themselves to spare no personal sacrifice for their programme to advance piety and learning:

1. Per procurationem Pacis Religionae inter dissentes.
2. per educationem juventutis Christianae veri Christianismi scopo magis conformem.
3. per Reformationem studii verae Sapientiae, ad quod capessendum publice alii, hoc praesertim fine excitandi erunt, ut omnes et facilius consuetas mundi vanitates animadvertere, et veras verae felicitatis vias diliucide agnoscere, possint'.*

Dury's commitment to this programme was announced by 1628 in his earliest letters to Hartlib. While his greatest energies were reserved for ecclesiastical pacification, he saw education as the means to prevent religious discord in succeeding generations. A letter from Elbing illustrates his recognition of the significance of educational theory; 'As for Pedagogicall affaires they have hitherto taken up all my spare hours for I am almost entred into a Labyrinth seeking to enter into a

* This Covenant—'Foederis fraterni ad mutuam in publico Christianismi bono promovendo aedificationem sancte in conspectu Dei initi tabulae', signed 3/13 March 1642, is given fully in *HDC*, pp. 458–60.

particular consideration of the whole duty of a tutor and what he ought to doe to teach a child from his infancy as it were by the hand through an insensible Custome of doeing unto a perfect degree of all vertues'.*

The most complete of Dury's early educational writings is the essay, *De summa curae paedagogicae seu spirituali agricultura exercitatio* (*c.* 1628).† This drew the familiar comparison between the process of education and the cultivation of plants, a theme which influenced both the terminology and metaphors of Bacon and Comenius. The efficient husbandman also provided an organising principle for popular puritan works on casuistry. This approach was particularly appealing to the Hartlib circle, since its members were intimately involved in proposals for the reform of both morals and agriculture. In 1652 Hartlib and Dury published *The Reformed Spiritual Husbandman*, while their protégé, Ralph Austin, used his impressive work on horticulture as the occasion for an extensive theological discourse.‡

In *De cura paedagogicae*, Dury applied this flexible analogy to defend the primacy of ethical considerations in education and develop a tentative psychological theory of learning. Dury's intense concern to use education as the means to instil the principles of ascetic protestantism is the underlying theme of this tract. God has sown the seeds of virtue. It is our responsibility to plant and cultivate. Only an enlightened and spiritually elect teacher holds the key to the power of the whole truth. This teacher, having apprehended the nature of virtue, is then qualified to clear away the tares and induce the spiritual kingdom in the mind of his pupil—'ut igitur infernalis Zizaniae extirpare plantas, et regni coelestis implantare queat

* Extract of letter from Dury to Hartlib, Elbing, 13 November 1628, Hartlib Papers, 1, 12. This mentions draft treatises on education entitled *De spirituali agricultura* and *De morum puerilium disciplina*.

† Hartlib Papers, 1, 17.

‡ Ralph Austen, *A Treatise on Fruit Trees. Together with the Spiritual use of an Orchard. Held forth in divers similitudes between Natural and Spiritual Fruit Trees according to Scripture and Experience* (Oxford, 1653 and 1657).