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**Teaching “merchants’ accompts” in Britain during  
the early modern period**

**John Richard Edwards**

A2009/2

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March 2009

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Printed and published by:

Cardiff Business School  
Colum Drive  
Cardiff  
CF10 3EU

ISSN 1750-6638



## **TEACHING “MERCHANTS’ ACCOMPTS” IN BRITAIN DURING THE EARLY MODERN PERIOD**

### **Abstract**

British-based studies of the education of aspiring accountants have confined attention to developments following the formation of professional bodies. This paper examines educational provision during the early modern period which broadly coincides with the rapid commercial expansion that occurred in mercantilist Britain 1550-1800. We reveal institutional and pedagogic innovations designed to meet the training requirements of aspirant accountants and bookkeepers. We also show how the gendered male orientation of teaching institutions and instructional texts in accounting did not entirely exclude young women from acquiring desired knowledge of the accounting craft.

**Keywords:** accounting history; accounting literature; education; women.

## Teaching “merchants’ accompts” in Britain during the early modern period

### Introduction

Education is not a subject area yet chosen for significant study by accounting historians (Anderson-Gough, 2008, p. 298). Oldroyd and Dobie’s (2008, p. 95) review of the literature on bookkeeping reveals significant study of its theory and practice but says next to nothing about when, where and why it was taught. Anderson-Gough’s (2008, p. 299; see also Clanchy, 1975) appraisal of the literature on education vaguely reports: ‘Long before the modern professions were created, the activity of keeping accounts was performed by those educated and trained within the institutions of religion, monarchy and empire in order to carry out the administrative duties of those institutions.’ Her survey also contains some interesting snippets on pre-professional education but, reflecting the content of the extant pedagogic literature, the principal focus is on developments post-1850 located within a disciplinary framework based on examination (Hoskin, 1986, 1993). Methods of exposition of double entry bookkeeping have also been the subject of study (Jackson, 1956; Chatfield, 1977, pp. 217-231), but such analysis is confined to the content of published texts with the sites of pedagogic instruction almost completely ignored.

It is the purpose of this paper to address this space in the literature by focusing on education during the ‘early modern period’ which roughly coincided with the era of rapid commercial expansion that occurred in Britain between 1550-1800 (Heaton 1948; Davis, 1967; Coleman, 1977). To define further the compass of this study, accounting education will be that based on double entry bookkeeping, variously described,<sup>1</sup> which was becoming the *à la mode* method of

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<sup>1</sup> Descriptions (and variants thereof) include: merchants accompts/accounts; the Italian manner/method; accounting by way of debtor/debtor and creditor. All describe the system of bookkeeping initially advertised in print by Luca Pacioli (1494) which made use of the waste book (memorial), journal and ledger. Subsequent authors attempted to distinguish their ‘new’ system in some way, though the difference was often of a relatively minor character. In due course the term ‘double entry bookkeeping’ achieved generic status to describe all systems based on the obligation to record the dual effect (debit and credit) of each transaction entered in the books.

record keeping as the early modern period progressed. Campbell (1757, p. 293) believed that, in making a youth 'fit for the Compting House of any Merchant', the principal requirement was that *he* 'ought to be a compleat Master of Figures and Merchant Accompts'. Or as Dowling (1765, p. 1; see also Webster, 1721, p. 77) put it: 'Book-keeping, the last but most important Part of Education, previous to the Counting-house'.

The outstanding British pure mathematician of the nineteenth century, Arthur Cayley, described double entry bookkeeping as 'like Euclid's theory of ratios an absolutely perfect one', while the brilliant German writer and philosopher Johann Wolfgang von Goethe judged it 'one of the finest inventions of the human spirit' (quoted in Chambers, 1995, p. 5, p. 10). These extravagant claims add nothing to those put forward by the English 'gentleman, accountant and lexicographer' (Parker, 1997, p. 31), Roger North (1714, pp. 1-2), in the breed of instructional treatise central to this paper.

The Books of Merchandise Accompts are kept in a certain Method, ... which Method is so comprehensive and perfect, as makes it worthy to be put among the Sciences, ... which, thro. the Invention of past Ages, universal Practice, and in Matters of Interest, (the fiercest Engagement of Human Wit and Stratagem) is reduced, as this is, to the strictest Compendium, and (respecting the Intention and Use of it) to a consummate Perfection.

The remainder of this paper begins by identifying innovations in institutional education designed to meet demands for instruction in accounting matters. The emergence of a relevant literature is then examined followed by an analysis of the ways in which women featured in these pedagogic processes. We then present our concluding remarks. The materials used to inform this study are secondary sources, residing principally outside the accounting literature, the *Oxford Dictionary of National Biography (ODNB)* and treatises on double entry bookkeeping published up to 1800.

## **Educational institutions**

### *Some early developments*

It is known that some accounting was taught early on at England's oldest university. In an article in the *American Historical Review*, Richardson (1941; see also Hoskin and Macve, 1986, pp. 115-116) recounts the activities of Thomas Sampson who taught at the University of Oxford in the second half of the fourteenth century. Richardson (1941, p. 260) explains the nature of Sampson's instruction by drawing on correspondence relating to three of his pupils. One

is pictured as having gone up to Oxford to read for a degree in arts, but his father has heard from the earl of W., who is prepared to take the young man into his service the following year. So the father writes and tells his son to put himself under Thomas Sampson to learn writing, composition, and accounting<sup>2</sup> and to pay his master 100 shillings to ensure that he will be well taught.

There is little further evidence of the teaching of accounting in Britain before 1600 though the curricula of some Elizabethan grammar schools do contain references to 'the art of casting accounts [which] was useful to boys who would later be apprenticed' (Curtis, 1963, p. 91). Examples include (Curtis, 1963, pp. 91-92): St Olave's Grammar School, Southwark, 1561, where the master taught children 'to write and read and cast accounts'; Bungay, Suffolk, 1592, which was a school 'for writing and casting accounts with the pen and counters according to their capacities';<sup>3</sup> Stainmore, Westmorland, 1594, which provided for the '[i]nstruction of children in reading, writing and accounts; Wellingborough, Northampton, 1596, where the 'Master and usher' were said 'to teach Latin, and also reading, writing and accounts'; and Aldenham, Hertfordshire, 1599, where it was the job of the 'usher to teach English, writing, ciphering, and accounts'.

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<sup>2</sup> The Appendix to Richardson's paper (1941, p. 279) lists five 'tracts on household accounts' written in Latin or French by Sampson (see also Parker, 1994, p. 72).

<sup>3</sup> The ordinary tradesman kept his accounts by means of counters; pen-arithmetic was usually known as cyphering (Curtis, 1963, p. 91).

The rapid development of Britain as a commercial nation leads one to imagine a corresponding growth in schools cultivating commercial, mercantile and navigational skills (O'Day, 1982, p. 208). Certainly the number and range of educational institutions increased enormously during the 1600's and 1700's. The general picture which emerges from debate about the changing nature of education at this time is that there also occurred a decline in demand for classical education, possibly due to contractions in the clerical job market (O'Day, 1982, pp. 196ff.). Whether commensurate with this or not - the debate is something of a quagmire - there was certainly a growing interest in developing vocational and practical curricula. It was an era of unprecedented experimentation with new forms of educational provision, with various kinds of schools, academies and forms of private tuition rising up to compete with the old private schools and free grammar school (Hans, 1951; cf. O'Day, 1982, pp. 199-200).

The distinction between private schools, academies and grammar schools was not always sharply defined (Hans, 1951, p. 63) either in terms of organisational structure or educational provision. Certainly the labels private school and academy were used interchangeably. Academies were privately-run institutions, and the distinctions between them and grammar schools included curricula, fee paying arrangements and staff qualifications, with teachers at academies rarely possessing a university degree (Hans, 1951, p. 63). However, we know that many academies taught traditional grammar school subjects and, to some extent, the opposite applied. Also, grammar schools increasingly charged fees when they could.

The outcome was the development of a new type of curricula across the range of educational institutions, which paid growing attention to the bookkeeping needs of business. Despite problems of definition, the available evidence is best presented on an institutional basis.

### *The old grammar schools*

The falling value of grammar school endowment; the corruption and lack of interest on the part of school governors; the fall in demand for classical education; and the difficulties which the grammar schools encountered in adapting their curricula, because of their

statutory provisions, all contributed to the eventual decay of most grammar schools in the eighteenth century. (O'Day, 1982, p. 199)

Changing educational needs have also been identified as particularly important, with an upsurge in the demand for a 'realist' education seen as a detrimental impulse for some grammar schools (O'Day, 1982, pp. 215-216). But not everyone agrees. Richard Tompson (1971), for example, insists that the decline of the grammar schools has not been convincingly documented, and that they were adapting themselves to changed demands by attempting to be flexible in their curricula and educational provision (O'Day, 1982, pp. 199-200; see also Money, 1993).<sup>4</sup>

Manchester Grammar School appears to provide 'the perfect example of a grammar school which continued to prepare some boys for the universities but simultaneously offered a commercial curriculum' (O'Day, 1982, p. 201; Hans, 1951, p. 98). Between 1740 and 1765 Manchester admitted 196 boarders and 477 day-boys: the majority drawn from the artisan and shopkeeping classes, with a smattering of pupils from professional, merchant and rural middle-class homes. As a reflection of this intake a high proportion of former students went into industry and commerce. According to O'Day, (1982, p. 201), Manchester, and grammar schools similar to it, was simply responding to contemporary needs by introducing subjects more directly relevant to the artisan, shopkeeping and prosperous middle classes, in the face of a falling demand for the classics.

Scotland was also active in this arena and, by 1750, mathematics, science and bookkeeping were finding a place in the curriculum. For example, at Ayr Grammar School, in 1746, John Mair (initially appointed to a teaching post in 1727) became the first master and teacher of arithmetic, bookkeeping and other sciences (Mephem, 1988, p. 21, p. 69). He authored his influential *Book-keeping methodiz'd* in 1736; a treatise which was in its ninth edition by 1772.

### *Private schools*

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<sup>4</sup> Hans (1951) also questions whether the non-conformist academies introduced scientific and commercial subjects before the grammar schools or private sector institutions.

Leaving aside the Great Public Schools (Hans, 1951, pp. 17-19) which catered for the upper classes, private schools existed from early on and themselves played an important role in the formation of the intellectual elite of the eighteenth century with, in Hans estimation (1951, p. 63; cf. Simon, 1979), about 10 per cent of all cases in the *ODNB* educated at such institutions. The private schools were often established in opposition to the old Grammar schools and derived their traditions from other sources. The two groups of private schools - the classical and the modern - can be distinguished by features besides their curriculum. The *modern*, with a stress on mathematical and technical-vocational subjects, were usually called academies (see next subsection), and their masters were non-university trained laymen. The classical schools did not adopt the appellation academy, their masters were normally Church of England priests, and they concentrated on preparing pupils for Oxford and Cambridge. Even these, however, 'sometimes had teachers of Navigation and Merchants' Accounts and prepared directly for the Navy or business' (Hans, 1951, p. 63). As time went by, more classical private schools tried to break away from the rigidity of old foundations and introduce new subjects and teaching methods. But more central to our story are the academies which are considered next.

### *Academies*

there are several able Book-keepers in Merchants Compting Houses in this City that have gone thither directly out of this Academy without any other Preparation<sup>5</sup>

Established in opposition to the old private schools and the grammar schools, academies emphasised different teaching methods and offered a curricula more diverse and relevant to contemporary society. An early exemplar was the Soho Academy which opened its doors to pupils in about 1690. Hans (1951, Op. 69) includes information on 11 academies established by 1740. Their numbers proliferated throughout the remainder of the century, finally reaching approximately 200 (Hans, 1951, p. 69). In England, most academies (Hans, 1951, p. 69

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<sup>5</sup> Preface to Bland (1730) who taught at the Academy at Little Tower Street, London.

believes about two-thirds) were situated in and around London which was overwhelmingly the main centre of urban population (O'Day, 1982, p. 208).

Hans (1951, pp. 69-70) divides the academies into three categories; those catering for the upper middle class which were in their curricula most like grammar schools and many of whose students went on to university (e.g. Kensington, Hans, 1951, p. 77); the comprehensive or multilateral schools which had both general and vocational streams; and those which were vocational/technical preparing pupils for the army, navy, business or technical vocations. The categorisation was by no means clear cut. Many masters of multilateral academies explicitly stated that their aim was to produce businessmen and technicians with a broad culture based on a liberal education, e. g. John Rule's Islington Academy aimed to 'form [the] gentleman, scholar and the man of business' (Hans, 1951, pp. 92-93). There is little distinction between this aim and that of William Milns, master of the City Commercial School (a technical academy), who sought to combine 'Literary with Commercial, Mathematical and Philosophical education' (Hans, 1951, p. 66).

A distinctive feature of all types of academy lay in the fact that their masters were usually 'self-made men who acquired their knowledge and experience by attending courses in academies or private reading, and often started their careers by giving private lessons'<sup>6</sup> (Hans, 1951, p. 68; see also p. 185). Even when profiling only the senior management, Hans (1951, p. 68) tells us that 'Of the 144 Head and Assistant Masters of academies, whose careers we could check, 30 (9 Scottish) were University graduates, mostly laymen, only 10 were ordained priests, 12 were F.R.S, 97 Teachers of Mathematics, and 6 others'. The list of 9 'well-known scientists and Fellows of the Royal Society' (Hans, 1951, p. 68) includes no less than four writers on bookkeeping (Martin Clare, John Seally, Robert Hamilton and Dr. Charles Hutton) but, although the importance of the subject in the curricula is emphasised, the contributions of these teachers and other to the relevant literature (save Clare) are not mentioned.

The insignia 'academy' was indicative of a curriculum which had a high content of mathematical and technical/vocational subjects. Most of them catered for a lower-middle class clientele. Even

the Kensington Academy, that 'regularly sent students to the Universities', was damned with faint praise by a leading contemporary possessing more traditional values. Founded by James Elphinston in 1763, his friend Samuel Boswell remarked: 'I would not put a boy to him whom I intended for a man of learning. But for the sons of citizens, who are to learn a little, get good morals, and then *go to trade*, he may do very well' (Boswell, 1823, p. 174, emphasis added). But sometimes even the aristocracy saw the value of a commercial training. Sir Ralph Verney, first baronet of Middle Claydon, Buckinghamshire, sent his son John (later, first Viscount Fermanagh) to a 'Mr Rich's school, where he received a commercial education and learned merchants' accounts', before paying a £1,000 bond to apprentice him to a Levant Company merchant, Sir Gabriel Roberts (Whyman, 2004).

In developing their courses, the new academies drew, to an extent, on the traditions of the 'courtly Academies' of the seventeenth century, which had trained the 'noble youth' for professions as courtier or soldier, and had been distinct from universities in the range of subjects studied, such as mathematics, physical training and 'accomplishments' (Hans, 1951, p. 64). Another influence on the curricula and methods of the new academies was the Royal Society, founded in 1662, which 'promoted the advance of experimental science and the inventions of scientific instruments (Hans, 1951, p. 64).

By the middle of the eighteenth century, the academies had an established tradition. They claimed superiority over the old grammar schools on the grounds that their curriculum was stripped of unnecessary material, that new methods of teaching brought better and quicker results, and that time was saved by allowing students to progress at their own speed rather than being restricted to annual transfers from one form to another (Hans, 1951, p. 66). Unlike the grammar schools which children might attend for the entire period of their education, academies generally catered for ages twelve to eighteen. Often youths would attend for only two or three years within that age range though, exceptionally, attendance would be even longer: for example, the Bath Academy advertised a ten-year course of study lasting up to the age of 17 (Hans, 1951, p. 80). Youths might attend a grammar or public school and then an academy, as

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<sup>6</sup> See section entitled '*Italian book-keeping taught either at home and abroad*'.

did Robert Clive (Clive of India) who successively attended ‘the grammar school at Market Drayton; Merchant Taylors' School, London (1737–9); and finally Mr Sterling's at Hemel Hempstead, Hertfordshire (1739), where he learned bookkeeping procedures’ (Bowen, 2004).<sup>7</sup> Sometimes there would be close collaboration between grammar schools and academies with pupils from the local grammar school in Newcastle, sent to attend applied mathematics lessons, which encompassed bookkeeping, at Charles Hutton's ‘writing and mathematical school’ opened in 1760 (Guicciardini, 2004). Finally, an adult requiring additional skills might attend evening classes at an academy for that purpose (O’Day, 1982, p. 210).

### *Curricula*

Prospectuses issued by academies stressed the advantages of individualised learning, small numbers and direct methods of teaching. Up to five categories of curricula were offered – grammar, naval, military, commercial and technical – each designed to serve five distinct types of clientele: ‘university entrants; naval and mercantile marine candidates; army hopefuls; business and law clerks; technical professionals’ (O’Day, 1982, p. 208). Hans (1951, p. 65) confirms that pupils were divided into ‘streams’ according to the profession they were planning to enter, with each academy offering between three and five streams to its pupils. Those preparing for a career in business or as law clerks therefore studied in the commercial stream, where they would be taught merchants’ accounts, shorthand, commercial arithmetic and correspondence and legal practice, as well as a core of English, mathematics, geography, geometry and history. Pupils could also select subjects from any other stream, that is, it was a flexible system combining core and selective subjects.

McLachan (1931, p. 227) reproduces a detailed timetable for the Warrington Academy, though it is not entirely clear to which year of study it relates. On all weekdays the first hour was

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<sup>7</sup> Also: Sir Charles Cockerell, banker, who attended a course in accounts and bookkeeping at a school in Bromley, Middlesex, in 1776, after spending two years at Winchester College (Marshall and Kuiters, 2004); John Shore, first Baron Teignmouth (1751–1834), who ‘left Harrow [School] for a commercial school at Hoxton to study bookkeeping and accounts, the formal requirement for appointment as a writer in the company's civil service’ (Embree, 2004).

devoted to arithmetic and bookkeeping. It is unlikely that ‘ancient geography’ provided pupils with greater mental stimulation on Saturday mornings before, one imagines, taking to the playing fields. An analysis of the curricula of twenty-eight, probably relatively large, academies shows them to have taught up to four vocational subjects (Hans, 1951, Table 6, p. 67). Twenty of the academies taught merchants’ accounts, 18 navigation, 16 surveying and gauging and 12 offered military subjects. Two of the four academies in Hans’ table that, exceptionally, catered for the middle class (Hackney, Kensington, Bath and Ewell) taught merchants’ accounts, as did all seven of the multilateral academies. It was naturally at the technical/vocational academies that the teaching of merchants’ accounts flourished. The following sub-sections provide further insight to the aspiration and operation of some of these academies, focusing specifically on accounting matters.

#### *Aspiration and operation*

In 1715, Thomas Watts opened an academy in Abchurch Lane with ‘severely practical objectives, as a training school for counting-house clerks’ (Holmes, 1982, p. 51). In the following year Watts published *An essay on the proper method of forming a man of business*. An advertisement on the back page provides an insight to *modus operandi*:

At the Accountants Office in Abchurch-Lane Young Gentlemen are taught the several Parts of the Mathematicks, and Qualify’d for Trades, Merchandize, the Public Offices, Clerkships, Stewardships or any other Parts of Business. To all which the Italian method of Book-Keeping, according to the Modern Practice, is peculiarly apply’d and adapted, after a New, Expeditious, and Approv’d Manner of Instruction ...<sup>8</sup>

Following a move to Little Tower Street, Watts’ school was advertised as an ‘Academy or Accountant’s office for qualifying Young Gentlemen for Business’ (quoted in Ogborn, 2004, p. 301). Described as ‘perhaps the most prestigious of London’s many academies, which

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<sup>8</sup> Further examples of advertisements for courses offered that included instruction on bookkeeping may be found in Hans (1951) for the Academy at Chestnut 1745 (p. 97), the Lambeth Academy 1787 (p. 105), the Wapping Academy 1724 (p. 106) and the Mathematical School at Newcastle, 1760 (p. 109).

functioned in the first half of the 18th century' (Johnson, 2001, p. 607), it grew into a large institution with 'many wealthy and aristocratic boarders' (Hans, 1951, p. 87). Classical studies and natural philosophy were introduced to meet the needs of an widening clientele, but 'vocational subjects formed its permanent feature' (Hans, 1951, p. 87). Its 'brilliant team of teachers' (Hans, 1951, p. 87) included the writing master and accountant, John Bland. The preface to Bland's *An essay in writing exemplified* (1730) states that the school's focus on business needs, when teaching both writing and merchants accounts, 'has had so good an Effect, that there are several able Book-keepers in Merchants Compting Houses in this City that have gone thither directly out of this Academy without any other Preparation'. O'Day (1982, p. 209) believes that Bland's tuition in commercial and vocational subjects was an important factor in the school's success.<sup>9</sup>

A two-page advertisement published in 1747, as well as addressing 'Those who would be formed for the Counting-House', reveals Watts as entrepreneurially innovative and philanthropically inclined. First, it offers a summer school so that 'at the same Time, Young Gentlemen are acquiring Classical Learning at Westminster, or any other great School, they may, by rightly applying vacant Hours at this Academy, attain Mathematical, Philosophical, or Mercantile Knowledge'. Second, while reaching out to the sons of the rich, the poor are not neglected: 'Those who are not able to pay for Instruction are (by proper Recommendation) made Accountants *gratis*' (Foot, 1747).

The Soho Academy, located in Soho Square, London,<sup>10</sup> was founded by Martin Clare, MA, FRS, three years after Watts' academy was established. Clare authored the *Youth's introduction to trade and business ... for the use of schools* (1720)<sup>11</sup> and remained headmaster till 1751. His book makes it clear that the school was intended as a commercial

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<sup>9</sup> Bland left the Academy in 1739 and gave private lessons from Birchin Lane until 1744 when he opened his own academy at Bishopsgate Street where he was master until his death in 1750 (Hans, 1951, p. 85).

<sup>10</sup> In common with the Little Tower Street Academy, Soho was 'connected with Masonry' (Hans, 1951, p. 88).

<sup>11</sup> This ran to at least a twelfth edition published 1791.

Academy, though the curriculum included Latin and French as part of ‘a Well-directed Education .... immediately necessary for Forming the Man of Business’ (Clare, 1720, preface).

We noted above that the Academy at Islington aimed to shape the ‘gentleman, scholar and the man of business’ and, to achieve this objective, accounting featured prominently in an advertisement for the school published in 1766 (Hans, 1951, p. 93):

Gentlemen intended for trade or merchants’ counting-house may be taught to write well and cast up by a short and practical method in a few weeks; they are also taught merchants’ accounts by double entry in a very short time, with two sets of books, one calculated for wholesale, and the other for retail business, and exactly agreeable to the practice of the most eminent merchants and traders of London ...

John Seally (educated at Bristol Grammar School and Hertford College, Oxford) authored *The accountant’s companion* (1770), that had a principal focus on arithmetic but which also covering single entry bookkeeping ‘Very necessary in facilitating the Acquisition of the Italian Method’ which was presumably taught at the academy he established in Bridgewater Square, Barbican, London, in 1767.<sup>12</sup>

Charles Hutton started his teaching career at an elementary school, in Newcastle, where he had studied before initially going to work in a mine. While teaching, he undertook further study at the Mathematical School in Newcastle, and in 1760 became master of the school advertising courses where ‘persons may be fully and expeditiously qualified for business and ... may be completely grounded therein ... Merchant’s Accounts (or the true Italian method of Book-keeping ...’ (Hans, 1951, p. 109). Like many teachers, Hutton authored a text intended for ‘the use of schools’ (1785, part title, see Table 1).<sup>13</sup>

The Bristol Academy was founded by George Donn as a mathematical school c. 1721. His son, Benjamin (b. 1729), first assisted him then (1766) opened his own academy in that city. Benjamin published *The accountant and geometrician* in 1765 and, ten years later, the

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<sup>12</sup> Seally took holy orders and was vicar of East Meon, Hampshire and became F.R.S in 1791. He ran his academy until his death in 1795 (Goodwin, 2004).

<sup>13</sup> A twelfth edition appeared in 1806

second edition<sup>14</sup> of *The accountant: containing essays on book-keeping by single and double entry* (Table 1). According to his biographer (Baigent, 2004):

Donn was one of a number of educational reformers in Bristol at the time who wanted to stop the rote learning of words and substitute the study of things with the aid of toys or experiments, introducing children to the principles behind each subject so that they could accept rationally what they were taught, not merely believe it slavishly.

Academies were reliant for their survival on their ability to generate cash from students or patrons. Some did not last long, and this was the case with Donn's academy. By 1773 he had 'lost the patronage of the corporation and the Merchant Venturers' and was required to vacate his premises (Baigent, 2004). He then set up an academy at The Park, near St Michael's Church, but that also seems to have failed. Leaving Bristol for Kingston, near Taunton, he ran another academy for a little while.

### *Dissenting academies*

The development of dissenting academies was precipitated by the Act of Uniformity 1662 which required clergy to swear allegiance to the Church of England. Dissenters (the Act was immediately followed by the resignation of over 2,000 rectors and vicars), who were also effectively excluded from Oxford and Cambridge by the Act and by University statutes, in many cases turned to teaching 'to eke out a living' and help ensure 'their sons and the sons of those like-minded with themselves [were not] deprived of university education' (McLachan, 1931, p. 1). Some of the academies were more liberal, striving to maintain the principle of open-door entry, though few of these enjoyed 'a long life, partly owing to the revolutionary political opinions of their students, partly to the lack of adequate support and the deaths of their principal tutors' (McLachan, 1931, p. 5).

Dissenting academies established and operating in the second half of the eighteenth century – called by O'Day (1982, p. 214) 'academies of the third period – may be seen as providing

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<sup>14</sup> The first edition has not been traced, but the Preface is dated 20 February 1759.

professional training of all kinds and a good general practical education for youths entering the world of business. For example, Warrington Academy (1757-1786), set up to provide ‘a course of liberal education for the sons of dissenters, and particularly for dissenting ministers’ (McLachan, 1931, p. 209), attracted 393 students. Of the 218 students whose subsequent profession is known, about 100 went into commerce, 24 into law, 21 into medicine, 18 to the army and 55 into divinity. The full course of study spanned five years, ‘but for men “intended for a life of Business and Commerce” a course of three years was arranged’ (McLachan, 1931, p. 210), during which they would be taught ‘the best methods of Book-keeping’ (quoted in McLachan, 1931, p. 211).

The tradition of teaching bookkeeping was continued at the Manchester Academy (1786-1803) formed to take the place of Warrington immediately following the latter’s demise. The ‘renowned Quaker chemist and originator of the atomic theory’ (McLachan, 1931, p. 258), John Dalton, was its tutor in mathematics and natural philosophy from 1793 to 1800, though his responsibilities included the teaching of bookkeeping. As an indication of the financial arrangements at this time, Dalton received three guineas a year from each of his students with a guaranteed minimum stipend of £80 per annum, with ‘commons and a room in the College being provided for him at a cost of £27 10s. per annum’ (McLachan, 1931, pp. 258-259). The minimum remuneration rule was certainly operable in 1794 and 1799 when he had 24 and 22 students respectively. Class contact was 21 hours per week (McLachan, 1931, p. 259).

The Standard Hill Academy, Nottingham, founded in 1797 by Robert Goodacre, a former Baptist turned Unitarian, was another of ‘those non-conformist schools which introduced a liberal curriculum’ (Erickson, 1959, p. 110). The academy was, again, relatively short-lived, closing in 1825 when Goodacre left for America, although revived by his son between 1837-1859. According to one of Nottingham’s local historians, F. A. Wadsworth, the Standard Hill Academy served as ‘the chief private school in Nottingham at which were educated the sons of leading townsmen, many of whom afterwards distinguished themselves in the professions and in various trades and industries’ (quoted in Erickson, 1959, p. 110).

*'Italian book-keeping taught either at home and abroad'*<sup>15</sup>

Final taught sources of commercial instruction were provided through tuition at home, in some small establishment separate from the home, or 'abroad'.

Home-based tuition was a popular method of education for children of the middle and upper classes. Where the teacher visited the tutee's home, he might do so intermittently or perhaps be engaged there on a full time basis. A number of academy-based teachers of mathematics started their careers in this way (Hans, 1951). The same was the case with teachers of bookkeeping, where examples include Benjamin Donn, Thomas Crosby and Charles Hutton (Hans, 1951, p. 183, p. 187). The 'post of a private tutor to scions of a famous house was both honourable and lucrative' (Hans, 1951, p. 182), and Hutton probably did well from his employment by 'a wealthy gentleman, Shafto, as tutor in his family' (Hans, 1951, p. 183).

One of the famous names in the early history of British public accounting is Charles Snell who, in 1720, was engaged by the government to undertake investigations connected with the South Sea Scandal, following which he prepared a report entitled *Observations made upon examining the books of Sawbridge and Company*. In 1720 he also published *The Merchants Counting-House*, and the title page announced its availability

for the Use of his Scholars, At the Free Writing-School in Foster-Lane, London: Where he Teaches Writing, In all the Hands used in Great-Britain; Arithmetick, In Whole Numbers and Fractions, Vulgar and Decimal; Merchants Accompts, By a Complete, Practical, and Approv'd Scheme: and Foreign Exchanges; Who also Teaches the same in French: And Boards Young Gentlemen

Where teachers operated from their own premises, they might take boarders,<sup>16</sup> often looked after by a female relative or spouse. Often, a distinction between such teaching institutions and the smaller academies cannot be easily made (Hans, 1951, p. 117). An example of someone running a small private establishment was Abraham Nicholas who announced:

<sup>15</sup> From an advertisement immediately preceding the introduction to Stephens (1735).

In Cusheon Court youth are boarded and taught writing in all useful hands, arithmetic, vulgar and decimal. Book-keeping after the present practice of the most eminent trades. The Italian method of Merchants' Accounts with foreign coins, weights, measures and exchanges. Whereby Youth may be fitted for trade, clerkship or merchandise. Takes a small number. (Hans, 1951, p. 186)

Nicholas, who authored *The young accomptant's debtor and creditor* (Table 1) also taught 'abroad' to make a living (Hans, 1951, p. 186). An advert by Robert More<sup>17</sup> also reveals the availability of instruction on commercial subjects at dual locations.

At the golden Pen in Castle Street in Leicester Fields, Writing in all the Hands of England, Arithmetick, Vulgar and Decimal, Merchants Acco<sup>s</sup> and Short-hand are taught by Rob<sup>t</sup> More, W<sup>g</sup> M<sup>f</sup>. Also Youth Boarded or Taught Abroad. (Heal, 1931, p. 76)

In the next section we study relevant characteristics of the accounting literature available for instruction during the early modern period.

### **Accounting and bookkeeping literature**

Jones (2008) makes the case for *The dialogus de scaccario* ( c.1179) as the first Western book on accounting. Neither that book nor didactic works on estate management that contained information about accounting and accountability, such as 'Walter of Henley's Husbandry, the *Seneschaucie*, the anonymous *Husbandry* and the *Rules of Robert Grossetête*' (Oschinsky, 1956, p. 92; see also Oschinsky, 1971; Dobie, 2008; Harvey, 1994), were concerned with double entry bookkeeping.

The situation changed beginning in the sixteenth century, and was facilitated by the availability of printed media. The first printed book on merchants accounts appeared in Britain in 1543, and Parker (2004a) believes 'Hugh Oldcastle Scholemaster' may have used it as the basis for

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<sup>16</sup> John Bettesworth's *Arithmetic made easy* (1780, back page) announced that: 'At the Authors House in Paradise-Row, Chelsea, six gentlemen May be genteely boarded, and expeditiously taught...'

<sup>17</sup> Similarly the writing master and accountant, Francis Walkingame (Hans, 1851, p. 187).

classroom instruction. The publication of books on accounting blossomed in the seventeenth and eighteenth centuries. ‘Connor (2004, pp. 28-29<sup>18</sup>) has observed 40 didactic texts on accounting appearing between 1630-49 as did 80 between 1730-1749. Moreover, “by 1700 people from all points of the social scale were accounting with facility” (Anderson-Gough, 2008, p. 302)

Table 1 focuses on books on double entry bookkeeping both as signals of the range of material available for classroom instruction in Britain and to elucidate the occupational characteristics of their authors. It was constructed by searching the Early English Books Online and Eighteenth Century Collection Online websites<sup>19</sup> for titles containing selected keywords (book-keeping, debtor/debitor and creditor, double entry, Italian manner, Italian method, merchants accompts, merchants accounts),<sup>20</sup> to which were added any unidentified books listed in Edwards et al. (2009, Table 1). The occupation of the author is often provided on the title page of the treatise<sup>21</sup> but, where this is not the case, the relevant literature was searched for possible illumination. People who wrote about accounting then, as today, followed a range of different occupations, and these often changed during their career. The listed occupation represents our best understanding of what they mainly did at the time of writing the book listed in Table 1. Where authors wrote more than one book, their earliest identified publication is used. So, in the case of Charles Snell, his occupation is Master of the free-writing-school, in Foster-Lane, near Cheap-side, London, as stated on the title page of *The tradesman’s directory* (1697) rather

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<sup>18</sup> See also Yamey, 1975, p. xviii.

<sup>19</sup> <http://eebo.chadwyck.com/home> ; [http://galenet.galegroup.com/servlet/ECCO?locID=ucw\\_itc](http://galenet.galegroup.com/servlet/ECCO?locID=ucw_itc)

<sup>20</sup> The title reproduced in Table 1 is usually an abbreviated version of the original. For example, the fuller title of Dafforne (1635) is: *The merchants mirrour: or, directions for the perfect ordering and keeping of his accounts; framed by way of debtor and creditor, after the (so tearmed) Italian-manner: containing 250. rare questions, with their answers, in forme of a dialogue. As likewise, a waste-book, with a compleat journall, and leager thereunto appertaining; unto the which I have annexed two other waste-books for exercise of the studious: and at the end of each is entred the briefe contents of the leagers accounts, arising from these. And also a moneth-book, very requisite for merchants, and commodious for all other science-lovers of this famous art.*

<sup>21</sup> The title page is used even where different or additional occupations are indicated elsewhere in the publication. For example, an advertisement contained in Stephens (1735) shows that he was a teacher as well as an accountant.

than Accomptant which was how he described himself when *The merchants counting-house* was published in 1720.

Just five of the 60 texts listed were published in the sixteenth century, 15 in the seventeenth century, 15 in the first half of the eighteenth century and 25 in the second. Such books were principally intended for use in schools, but some also ‘for the Help and Assistance of Merchants in their several Compting-Houses; and young Gentlemen at their first Entrances on their Mercantile Apprenticeships’ (Dilworth, 1777, title page). Capital cities are the dominant publication venues; 47 books appeared in London and 8 in Edinburgh, with the remaining five treatises published elsewhere in England.

Fifty-two of the authors had known occupations:<sup>22</sup> 22 were teachers, 12 accountants, five accountants who were also teachers, seven merchants, six gentlemen, one bookkeeper and one accountant and businessman. The dominant occupational affiliation was therefore teacher. From their own descriptions, not all considered themselves principally instructors in accounting, even though, in virtually all cases, their treatise focused chiefly on that area of knowledge. Daniel Dowling, Benjamin Donn, Alexander Malcolm, Charles Hutton and James Dodson described themselves as teachers of mathematics. Two (Abraham Nicholas and William Webster) labelled themselves writing masters (included in the 22 teachers above), and the six who described themselves as accountants as well as teachers were: John Clark; Richard Dafforne; Edmund Fitzgerald; Richard Hayes; James Peele and Charles Snell. Fifteen of the teachers identify their pedagogic institution, including: John Cooke, Master of the Academy the lower End of Charles-Street, St. Johyn’s Square, London; and, John Mair, Teacher, Ayr Grammar School. Indeed, five of the eight authors whose books were published in Scotland described themselves as masters or teachers.

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<sup>22</sup> In most cases the stated occupation has been abbreviated for inclusion in Table 1; in particular, workplace affiliations have been omitted.

Twelve of the books had the word arithmetic/arimetick in their extended title, including Robert Hamilton's (1788) *An introduction to merchandise. Containing a complete system of arithmetic*, that has been described as 'the most important accounting text of the eighteenth century' (Mephram, 1988, p. 95). The close pedagogical link between accounting and arithmetic has been well documented (e.g. Brown, 1905), with teachers of accounting, such as Edward Noone (1690), writing only a book on arithmetic, and a number of the authors in Table 1 (e.g. Fisher, 1759, Gordon, 1765 and Thompson, 1777)<sup>23</sup> also writing arithmetical texts. Indeed, nine of the texts – Chamberlain (1679), Fisher (1735), Hatton (1695), Hutton (1785), Malcolm (1718), Perry (1777), Tap (1613), Wise (1760) and Woolgar (1766) – address arithmetic before turning to bookkeeping or merchants accounts and, in most cases, devote more space to the former. We therefore discern a substantial literature available for classroom instruction or self-study. Indeed, as Yamey (1975, p. xx) put it: 'Probably the majority of the publications [between 1550-1880] were aimed at young people studying book-keeping and accounts or were designed to supplement efforts of teachers giving verbal instruction.'

The way in which books on accounting were structured to ease understanding through a series of rules, sometimes expressed in verse, and the personification of accounts is described by Jackson (1956). Connecting directly the treatise to training in the classroom environment was James Peele who, in his second and larger work, *The path-way to perfectness* (1569) presents instruction in 'the form of a dialogue between a schoolmaster and a scholar' where the scholar has been 'sent by a merchant to acquire a knowledge of double-entry bookkeeping' (Yamey, 2004).

Accounting is often, and quite correctly portrayed as an occupation gendered male well into the twentieth century. But, as we shall see in the next section, women were not entirely absent from the educational arena even in the early modern period, though evidence of their participation is not readily available.

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<sup>23</sup> In the case of Gordon and Hamilton, the double entry bookkeeping treatise listed in Table 1 comprised the second volume of a two volume text, where the first covered arithmetic.

## Women

Ay, Madam, (said the Old Gentleman) Were it not a great deal better, that he spent his Time in Gaming, Whoring, and Drinking in London?

There is a growing narrative on the roles of women in accounting's history (Khalifa and Kirkham, 2008), recently prominent among which have been studies of women as accountants within the domestic realm and, to an extent, within the sphere of business (Khalifa and Kirkham, 2008, pp. 440-444). Much of the focus has been on accounting for small-scale operations, but there are examples, not yet explored within accounting's historiography, of women 'doing accounting' as part of their responsibility for the management of large estates. Anne (Lady) Harcourt was left to run the Stanton Harcourt Estate, near Oxford, when her first husband died in 1642. Following remarriage to Sir William Waller, 'Lady Waller's diary reveals how, in presiding over a country house, she was required to be omniscient, practising medicine, accountancy, and estate management, as well as performing many of the functions of a teacher or clergyman within the household' (Gasper, 2004).<sup>24</sup>

For insights concerning the education of women pre-professional organisation, it is also necessary to go outside the accounting history literature. O'Day (1982, p. 183) reports that, in the sixteenth century, girls 'might learn what they needed for their future life', including accounting, 'at their mother's knee'. Adamson (1922, p. 229) reports that, two centuries later, parents who paid for their daughter's education either in private schools or the home did so for instruction in 'English, writing, arithmetic so far as it related to "keeping accounts", drawing, needlework, dancing and a little French'. Walker (1988) has revealed the importance of instructional texts in moulding daughters of middle class families in the nineteenth century. Didactic texts were also an important source of instruction for young ladies in Georgian Britain. *The polite lady: or a course of female education* was published in 1769 and, in a series of letters from mother to daughter, Portia starts by expressing satisfaction that Sophia is 'now

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<sup>24</sup> See also *ODNB* entries that cover: Abigail Baldwin (1658-1713) who is judged to have possessed 'remarkable bookkeeping skills' (Lynch, 2004); Lady Alice L'Estrange (1585-1656), whose 'Methodical bookkeeping' was her 'principal contribution to the management of the household and the estate' (Griffiths and Whittle, 2004). The analytical framework for these bookkeeping systems is unstated.

settled at Mrs. Bromley's boarding-school' (Allen, 1769, p. 1). No longer able to guide her daughter's upbringing, by example, advice tendered by Portia, from a distance, includes the conviction that Sophia should 'be a complete mistress of the four simple rules of arithmetic, the rule of proportion, and a plain method of book-keeping' (Allen, 1769, p. 13). A little later, in the 1780s, the Bath-born educational writer and engineer, Richard Lovell Edgeworth, 'rode around [his estate] with his teenage daughter Maria, teaching her accounting, valuing the land, and getting to know the tenants' (Colvin, 2004). A little outside the timeframe for this paper, in the 1810s, Vickery (1998, p. 114) reports that 'the widow, Anne Robbins, taught her children reading, writing, spelling, Latin grammar, accounts and geography'. And it was around this time that a nonconformist school for 'ladies and gentlemen', founded by Sampson Biddulph, offered classes in merchants' accounts (Erickson, 1959, p. 111).

The content of early pedagogic texts on double entry bookkeeping underscores the notion that 'male and female roles are both socially and historically constructed, not biologically determined' (Khalifa and Kirkham, 2008, p. 433). From a study of these texts, the evidence is one of exclusion.<sup>25</sup> The books introduced in the previous section had titles that gendered commercial and accounting education exclusively male. Typical among them are titles which commence: *Young man's companion* (Wise, 1760), *Youth's faithful monitor* (Woolgar, 1766) and *The man of business* (Perry, 1777). Delving further into the titles, Dafforne's (1635, emphasis added) *The merchants mirrour* is followed by an alternative label: *Or, Directions for the perfect ordering and keeping of his accounts*. Snell (1697, emphasis added) emphasises the masculine character of the accounting craft time and again:

*The tradesman's directory; or, a short and easy method of keeping his books of accompts so as readily to know at any time the state of his affairs, upon any particular accompt, whether of men, money, or goods. Also how to bring his books to a ballance, and to know his profits or losses in the whole course of his trade.*

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<sup>25</sup> Walker (1998, p. 509) reveals that instructional texts in Victorian England engaged with accounting to reinforce 'contemporary structures of patriarchy' in the home.

Venturing inside these treatises, reference to the feminine gender remain hard to find,<sup>26</sup> but are not entirely absent. Quin (1776) is unique within this collection in placing men and women on an equal footing when making the case for buying his book. For the purpose of ‘keeping orderly accounts’, Quin (1776, pp. 1-2) claims to have devised a simple system that might be understood by any ‘Ladies, Gentlemen, Merchants, and Mechanics, capable of subtracting one sum of money from another’. Quin (1776, p. 17) warms to his theme

Consequently as the approach to so valuable an acquisition is rendered plain and easy, it is inexcusable in Ladies and Gentlemen to omit having a proper knowledge of their domestic concerns, from the duty they owe to their own interests, and the pleasure of being able in an orderly manner to satisfy the minds of those with whom they transact any business’

Quin (1776, p. 68) further recognises the influence of the biological sex stereotype in excluding women from the eighteenth-century classroom:

Ladies in the general course of their education, have been debarred by custom from a necessary knowledge of accounts; as if their sex prohibited them from being endowed with so reasonable an accomplishment, as to know the real state of their own affairs.

The importance of female understanding of merchants accounts is then laid bare:

It has been too fatally known to both maiden and widowed ladies, incapable of arranging the proper state of their accounts, how defenceless they have stood against the attacks of the insinuating flatterer; the deceit of the seeming friends, and the fraud of sagacious agents – nay, how many families have suffered, by the husband’s absence, or his infirmities when at home, while the wife remained incapable of inspecting the duties of the clerk, and unable to state a single circumstance of the most material part of her business.

It would be easy to deride Quin for his association of women with a ‘plain and easy’ version of double entry bookkeeping and for their presumed inherent defencelessness and subordination to the male. And it might be argued that he was simply looking to expand the potential client base

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<sup>26</sup> Beyond them as consumers, in illustrative books of account, of such items as women’s shoes, girl’s gloves, ladies’ scissors.

for his book in a market which was already well-served. But it is perhaps fairer to point out that Quin sees the male as benefiting equally from engaging with a simplified version of the accounting craft, and to acknowledge a greater degree of gender awareness than other writers display.

Alexander Brodie also recognises a role for women in accounting, but it is confined to a traditional arena of female involvement. Brodie (1722) attaches three pages at the end of a book which starts with an address 'To the Nobility and Gentry'. In this appendix, he suggests that further material 'might be useful to Persons of all Ranks ... where nothing is transacted in the Way of Trade'. Indeed, the system Brodie describes is 'so easy, and entertaining, that I dare recommend the Practice thereof to all Ladies and Gentlewomen, who delight in a good Economy'. The system described is, however, charge and discharge rather than double entry bookkeeping, with the noble lady left to apply to domestic affairs an accounting from John Faithful, Steward to James Royal, Esq. In a similar vein, Hutton (1785, p. 145) contains a section on single entry bookkeeping which is described as 'so easy, that it may also be taught in a few weeks time to young ladies as well as young gentlemen'.

Roger North, who wrote his 1714 (p. 2) text under the alias 'A person of honour' emphasises the masculine characteristic of accounting when asserting: 'I do not know, that any Art practised among Men, is come up to a positive *ne plus ultra*, but that of Accompting'. And for those who object that the operation of a full system of double entry bookkeeping might occupy too much of a man's time, North's answer (1714, p. 129) takes the form of

a Story literally true; which is of a Lady in the Country, that complained to a Reverend Ancient Gentleman, that her Husband spent his Time strangely about Projects of Inclosing ... Ay, Madam, (said the Old Gentleman) Were it not a great deal better, that he spent his Time in Gaming, Whoring, and Drinking in London?

All the writers of instructional texts listed in this paper and probably all those that are not during the period covered by this paper, were male. At one time, George Fisher was thought to be a pseudonym for Ann Fisher Slack, but this conviction seems to have been effectively refuted (McMickle, 1984, p. 49). We can therefore conclude that the identity of an accountant,

according to the literature on double entry bookkeeping published up until 1800 was almost exclusively gendered male.

### **Concluding remarks**

Margaret Hunt (1996, p. 61) envisages the keeping of good accounts, as ‘a symbol of rationality, honesty, and control’, as central to the proper ordering of society by the end of the seventeenth century, in both the public and private realms. As evidence of how accountants had already entered the society’s mind-set, Hunt refers to literary examples of accountants as heroes, such as the young man, featured in a 1758 novelette, who ‘as he was designed to follow his Father’s Business [,] closely applied himself to the perfect Knowledge of Merchants Accompts, of which he is justly esteemed to be ... the most compleatest Master in *Great Britain*’ (quoted in Hunt, 1996, p. 60). It has been the aim of this paper to reveal how this man, and the countless other clerks, bookkeepers, accountants and merchants, obtained a working knowledge of ‘Merchants Accompts’.

The early modern period saw a ‘commercial revolution’ (Ormrod, 2003) that went a long way towards transforming Britain from a relatively unimportant European country to one of the world’s leading nations. An education system which appears to have served Britain well enough during the middle ages was slow to respond to changing requirements. Some free grammar schools and old private schools responded to new conditions by revising curricula dominated by Latin and classical studies to include modern and vocational subjects. But change was slow and patchy.

The main impetus for change was provided by new private schools and academies that offered a wide range of subjects of relevance to those destined for commerce and the military. Also important were the small-scale schools, often preparing only a handful of students specifically for engagement in the counting-house. This portfolio of new institutions appears not only to have been innovative in the design of their curricula; they were also more flexible in allowing pupils to study for short or long time periods, and they often welcomed adults keen to expand their

vocational skills. There are signs that some schools were innovative in their teaching methods with George Donn endeavouring to introduce ‘children to the principles behind each subject so that they could accept rationally what they were taught, not merely believe it slavishly’ (Baigent, 2004). There were also numerous texts available for classroom instruction, written mainly by teachers of accounting and cognate subjects.

We have seen that the commercial academies and schools were masculine institutions. The teachers were male and also, invariably, the pupils. Fortunately, those requiring accounting knowledge did not have to rely on institutional provision. There was the possibility of them being self-taught, which was an important option for females given the male orientation of educational establishments. For Jane Elizabeth Gobell, writer and businesswoman (Hagglund and Fogell, 2004), accounting was not part of her formal education, but she later taught herself in order to keep her father’s books and, following marriage in 1761, probably those of her husband’s business. We have also seen that girls, as well as boys, might benefit from parental instruction.

Excluded from the schools and academies, women may therefore have made use of treatises on accounting for illumination. Where they did so, it was from a masculine perspective, with those responsible for constructing a literature that decided what constituted accounting and who should perform that function exclusively male in the period covered by this study.

## References

### *Early treatises other than those listed in Table 1*

- Allen, C. (1769) *The polite lady: or a course of female education. In a series of letters, from a mother to her daughter*, 2<sup>nd</sup> edn. London.
- Bettesworth, J. (c. 1780) *Arithmetic made easy, in the first four fundamental rules, with an appendix of reduction and the single rule of three*. London.
- Bland, J. (1730) *An essay in writing exemplified in the several hands, and forms of business*. London.
- Brooks, W. (c. 1765) *A delightful recreation for the industrious. A copybook of plain and practical writing*. London.
- Campbell, R. (1757) *The London tradesman*. London.
- Clare, M. (1720) *Youth's introduction to trade and business*. London.
- Donn, B. (1765) *The accountant and geometrician*. London.
- Fisher, G. (1759) *Arithmetick, in the plainest and most concise methods hitherto extant. With new improvements, for dispatch of business in all the several rules*. Glasgow.
- Foot, W. (1747) *An essay on education: intended principally, to make the business of grammar-schools, of real service to such youth*. Bristol.
- Mair, J. (1736) *Book-keeping methodiz'd*. Edinburgh.
- Noone, E. (c. 1690) *Brachyarithmia or the rules of arithmetick in a short and easie method written in a variety of useful hands*. London.
- Pacioli, L. (1494) *Summa de arithmetica, geometria, proportioni et proportionalita*. Venice: Paganino de' Paganini.
- Peele, J. (1569) *The pathe-waye to perfectness*. London.
- Seally, J. (1770) *The accountant's companion*. London.
- Snell, C. (1720) *The merchants counting-house*. London.
- Webster, W. (1721) *An essay on book-keeping, according to the true Italian method of debtor and creditor, by double entry*, 2<sup>nd</sup> edn. London.

### *Other references*

- Adamson, J. W. (1922) *A short history of education*. Cambridge: Cambridge University Press.
- Anderson-Gough, F. (2008) Education. In J. R. Edwards and S. P. Walker (eds) *The Routledge companion to accounting history* (297-316). London: Routledge.

- Baigent, E. (2004) Donn, Benjamin (1729–1798). *Oxford dictionary of national biography*. Oxford University Press [<http://www.oxforddnb.com/view/article/7815>, accessed 3 Feb 2009].
- Boswell, J. (1823) *The life of Samuel Johnson, LL.D.: comprehending an account of his studies and numerous works*, vol. II. London: Printed for J. Richardson
- Brown, R. (ed.) (1905) *A history of accounting and accountants*. Edinburgh: Jack. Reprinted by Frank Cass, London, 1968.
- Bywater, M. F. and B. S. Yamey (1982) *Historic accounting literature: a companion guide*. London: Scolar Press.
- Chambers, R. (1995) *Thesaurus of accounting: 500 years of accounting*. Oxford: Elsevier Science/Pergamon.
- Chatfield, M. (1977) *A history of accounting thought*. New York: Robert E. Krieger.
- Coleman, D. C. (1977) *The economy of England, 1450-1750*. London: Oxford University Press.
- Colvin, C. E. (2004) Edgeworth, Richard Lovell (1744–1817). *Oxford dictionary of national biography*. Oxford University Press [<http://www.oxforddnb.com/view/article/8478>, accessed 5 Feb 2009]
- Connor, R. (2004) *Women, accounting and narrative. Keeping accounts in eighteenth-century England*. London: Routledge.
- Curtis, S. J. (1963) *History of education in Great Britain*, 5<sup>th</sup> edn. London: University Tutorial Press.
- Davis, R. (1967) *Commercial revolution: English overseas trade in the seventeenth and eighteenth centuries*. London: Historical Association.
- Dobie, A. (2008) The development of financial management and control in monastic houses and estates in England c.1200-1540. *Accounting, Business & Financial History*, 18(2), pp. 141-159.
- Edwards, J. R., G. Dean and F. Clarke (2009) Merchants' accounts, performance assessment and decision making in mercantilist Britain, *Accounting, Organizations and Society*, forthcoming.
- Embree, A. T. (2004) Shore, John, first Baron Teignmouth (1751–1834). *Oxford dictionary of national biography*. Oxford University Press [<http://www.oxforddnb.com/view/article/25452>, accessed 5 Feb 2009]
- Erickson, C. (1959) *British industrialists. Steel and hosiery 1850-1950*. Cambridge: Cambridge University Press.
- Gaspar, J. W. (2004) Anne, Lady Waller [other married name Anne Harcourt, Lady Harcourt] (d. 1661). *Oxford dictionary of national biography*. Oxford University Press [<http://www.oxforddnb.com/view/article/70274>, accessed 5 Feb 2009]

- Goodwin, G. (2004) Seally, John (1741/2–1795). Revised, G. P. Cerny. *Oxford dictionary of national biography*. Oxford University Press [<http://www.oxforddnb.com/view/article/24984>, accessed 3 Feb 2009]
- Griffiths, E. and J. Whittle (2004) L'Estrange, Alice, Lady L'Estrange (1585–1656). *Oxford dictionary of national biography*. Oxford University Press [<http://www.oxforddnb.com/view/article/68097>, accessed 5 Feb 2009]
- Guicciardini, N. (2004) Hutton, Charles (1737–1823). *Oxford dictionary of national biography*. Oxford University Press [<http://www.oxforddnb.com/view/article/14300>, accessed 5 Feb 2009]
- Hagglund, E. and P. Fogell (2004) Moore, Jane Elizabeth (b. 1738). *Oxford dictionary of national biography*. Oxford University Press [<http://www.oxforddnb.com/view/article/72234>, accessed 5 Feb 2009]
- Hans, N. A. (1951) *New trends in education in the eighteenth century*. London: Routledge & Kegan Paul.
- Harvey, P. D. A. (1994) Manorial accounts. In R. H. Parker and B. S. Yamey (eds) *Accounting history. Some British contributions* (91-115). Oxford: Clarendon Press.
- Heal, A. (1931) *The English writing-masters and their copy-books 1570-1800*. Cambridge: Cambridge University Press.
- Heaton, H. (1948) *Economic history of Europe*. New York: Harper.
- Hoskin, K. (1986) The professional in educational history. In J. Wilkes (ed.) *The professional teacher: proceedings of the 1985 annual conference of the History of Education Society of Great Britain* (1-17). London: History of Education Society.
- Hoskin, K. (1993) Education and the genesis of disciplinarity: the unexpected reversal. In E. Messer-Davidow, D. R. Shumway and D. J. Sylvan (eds) *Knowledges: historical and critical studies in disciplinarity* (271-304). Charlottesville: University Press of Virginia.
- Hoskin, K. W. and R. H. Macve (1986) Accounting and the examination: a genealogy of disciplinary power. *Accounting, Organizations and Society*, 11(2), pp. 105-136.
- Hunt, M. R. (1996) *The middling sort. Commerce, gender and the family in England, 1680-1780*. Berkeley: University of California Press.
- Jackson, J. G. C. (1956) The history of methods of exposition of double-entry book-keeping in England. In A. C. Littleton and B. S. Yamey (eds) *Studies in the history of accounting* (206-214). London: Sweet & Maxwell.
- Johnson W. (2001) The Watts Academy, 1715–1750: Robins' probable involvements and opportunities. *International Journal of Impact Engineering*, 25, pp. 607-614.
- Jones, M. J. (2008) The Dialogus de Scaccario (c.1179): The first Western book on accounting? *Abacus*, 44(4), pp. 443-474.

- Khalifa, R. and L. M. Kirkham (2008) Gender. In J. R. Edwards and S. P. Walker (eds) *The Routledge companion to accounting history* (433-450). London: Routledge.
- Marshall, P. J. and W. G. J. Kuiters (2004) Cockerell, Sir Charles, first baronet (1755–1837). *Oxford dictionary of national biography*. Oxford University Press [http://www.oxforddnb.com/view/article/47774, accessed 5 Feb 2009]
- McLachlan, H. (1931) *English education under the Test Acts*. Manchester: University of Manchester.
- McMickle, P. L. (1984) Young man's companion of 1717: America's first book on Accounting? *Abacus*, 20(1), pp. 34-51.
- Mephram, M. J. (1988) *Accounting in eighteenth-century Scotland*. New York: Garland Publishing.
- O'Day, R. (1982) *Education and society 1500-1800: the social foundations of education in early modern Britain*. London: Longman.
- Ogborn, M. (2004) Geographia's pen: writing, geography and the arts of commerce, 1660-1760. *Journal of Historical Geography*, 30(2), 294-315.
- Oldroyd, D. and A. Dobie (2008) Bookkeeping. In J. R. Edwards and S. P. Walker (eds) *The Routledge companion to accounting history* (95-119). London: Routledge.
- Ormrod, D. (2003) *The rise of commercial empires: England and the Netherlands in the age of mercantilism, 1650–1770*. Cambridge: Cambridge University Press.
- Oschinsky, D. (1956) Medieval treatises on estate accounting. In A. C. Littleton and B. S. Yamey (eds) *Studies in the history of accounting* (91-98). London: Sweet & Maxwell.
- Oschinsky, D. (1971) *Walter of Henley and other treatises on estate management and accounting*. Oxford: Clarendon Press.
- Parker, R. H. (1994) Finding English words to talk about accounting concepts. *Accounting, Auditing & Accountability Journal*, 7(2), pp. 70-85.
- Parker, R. H. (1997) Roger North: gentleman, accountant and lexicographer. *Accounting History*, 2(2), pp. 31-51.
- Parker, R. H. (2004a) Oldcastle, Hugh (d. 1543). *Oxford dictionary of national biography*. Oxford University Press [http://www.oxforddnb.com/view/article/56444, accessed 3 Feb 2009]
- Parker, R. H. (2004b) Ympyn, Jan (c.1485-1540). *Oxford dictionary of national biography*. Oxford University Press [accessed 12 Oct 2004: <http://www.oxforddnb.com/view/article/56448>]
- Richardson, H. G. (1941) Business training in medieval Oxford. *American Historical Review*, 46(2), pp. 259-280.

- Simon, J. (1979) Private classical schools in eighteenth century England. *History of Education*, pp. 179-191.
- Tompson, R. (1971) *Classics or charity?* Manchester: Manchester University Press.
- Vickery, A. (1998) *The gentleman's daughter: women's lives in Georgian England*. New Haven: Yale University Press.
- Walker, S. P. (1988) *The Society of Accountants in Edinburgh 1854- 1914. A Study of Recruitment to a New Profession*. New York: Garland.
- Walker, S. P. (1998) How to secure your husband's esteem. Accounting and private patriarchy in the British middle class household during the nineteenth century. *Accounting, Organizations and Society*, 23(5/6), pp. 485-514.
- Whyman, S. E. (2004) Verney, John, first Viscount Fermanagh (1640–1717). *Oxford dictionary of national biography*. Oxford University Press  
[<http://www.oxforddnb.com/view/article/66749>, accessed 5 Feb 2009]
- Yamey, B. S. (1975) Introduction. In Institute of Chartered Accountants in England and Wales, Library, *Historical accounting literature* (xvii-xxvi). London: Mansell.

**Table 1. Books on double entry bookkeeping 1547-1800 and other selected details**

<i>Author</i>	<i>Title</i>	<i>Publication Place</i>	<i>Year</i>	<i>Occupation</i>	<i>Occupation identified from*</i>
Booth, Benjamin	<i>A complete system of book-keeping, by an improved mode of double-entry.</i>	London	1789	Merchant	
Brodie, Alexander	<i>A new and easy method of book-keeping.</i>	London	1722	Gent.	
Browne, Thomas	<i>The accurate-accomptant; or, London-merchant.</i>	London	1670	Accomptant	
Carpenter, John	<i>A most excellent instruction for the exact and perfect keeping merchants bookes of accounts by way of debtor and creditor.</i>	London	1632	Gent.	
Chamberlain, Robert	<i>The accomptants guide, or, Merchants book-keeper.</i>	London	1679	Accomptant	
Chapman, Thomas	<i>The merchant's and tradesman's universal director and assistant: being a new and accurate system of merchants accompts.</i>	London	1764	unknown	
Clark, John	<i>Lectures on accompts, or book-keeping; after the Italian manner, by double entry of debtor and creditor.</i>	London	1738	Writing master and accountant	
Colinson, Robert	<i>Idea rationaria, or The perfect accomptant.</i>	Edinburgh	1683	Merchant	Parker, 1974
Collins, John	<i>An introduction to merchants accounts.</i>	London	1653	Professor	
Cooke, John	<i>The compting-house assistant; or, book-keeping made easy. 2nd edn. The merchants mirrour. Or, Directions for the perfect ordering and keeping of his accounts.</i>	London	1764	Master of the Academy	
Dafforne, Richard	<i>The young book-keeper's assistant. 7th edn.</i>	London	1635	Accountant and teacher	
Dilworth, Thomas	<i>The accountant, or, the method of book-keeping, deduced from clear principles.</i>	London	1777	Schoolmaster	
Dodson, James	<i>The accountant: containing essays on book-keeping by single and double entry</i>	London	1750	Teacher	
Donn, Benjamin	<i>A compleat system of Italian book-keeping.</i>	London	1775	Teacher	
Dowling, Daniel	<i>Speculum mercativum, or, The young merchants glass.</i>	London	1765	Teacher	
Every, John	<i>The instructor: or, young man's best companion.</i>	London	1674	unknown	
Fisher, George		London	c.1735	Accomptant	
Fitzgerald, Edmund		Whitehaven	1771	Writing master and accountant	
Fulton, John Williamson	<i>An epitome of the elements of Italian book-keeping.</i>	London	1800	Bookkeeper	
Gordon, William	<i>British-Indian book-keeping. A new system of double entry.</i>	Edinburgh	1765	Teacher	
Gosnell, Thomas Knolles	<i>The universal accountant and complete merchant. Volume II</i>	London	1794	Accomptant	
Hamilton, Robert	<i>An elucidation of the Italian method of book keeping.</i>	London	1788	Professor	Mephram, 1988, pp.
	<i>An introduction to merchandise. 2nd edn.</i>	London			

Hamilton, William	<i>Book-keeping new modelled: or, a treatise on merchants accounts.</i>	Edinburgh	1735	Teacher	
Handson, Raph	<i>Analysis or resolution of merchants accompts. 4th edn.</i>	London	1669	Accomptant	
Hatton, Edward	<i>The merchant's magazine.</i>	London	1695	Gent.	
Hawkins, John	<i>Clavis commercii: or, The key of commerce.</i>	London	1689	Schoolmaster	
Hayes, Richard	<i>Modern book-keeping: or, the Italian method improved. 2nd edn.</i>	London	1739	Accomptant and writing-master	
	<i>A complete treatise on practical arithmetic; and book-keeping, both by single and double entry. Adapted to the use of schools. 7th edn.</i>				
Hutton, Charles		London	1785	Teacher	<i>ODNB</i> Yamey (1956); Hill Vellacott (1988)
Jones, Edward Thomas	<i>Jones's English system of book-keeping, by single or double entry.</i>	Bristol	1796	Accountant and businessman	
King, Thomas	<i>A exact guide to book-keeping by way of debtor and creditor.</i>	London	1717	Accomptant	
Lazonby, Thomas	<i>Merchants accounts: or, the Italian method of book-keeping.</i>	York	1757	Schoolmaster	
	<i>Amphithalami, or, The accomptants closet being an abbridgment of merchants-accounts kept by debtors and creditors.</i>				
Liset, Abraham	<i>A compleat system of book-keeping, after the Italian method. 10th edn.</i>	London	1660	Gent.	
London, John		London	1749	Merchant	
Macghie, Alexander	<i>The principles of book-keeping explain'd.</i>	Edinburgh	1718	Merchant	
Mair, John	<i>Book-keeping methodiz'd. 2nd edn.</i>	Edinburgh	1741	Teacher	Mephram, 1988, p. 68
Malcolm, Alexander	<i>A new treatise of arithmetick and book-keeping.</i>	Edinburgh	1718	Teacher	
	<i>A briefe instruction and maner how to keepe bookes of accompts after the order of debtor and creditor.</i>				
Mellis, John		London	1588	Scholemaister	
Monteage, Stephen	<i>Debtor and creditor made easie.</i>	London	1675	Merchant	title page 2nd edn.
Nicholas, Abraham	<i>The young accomptant's debtor and creditor. 2nd edn.</i>	London	1711	Writing-master	
North, Roger	<i>The gentleman accomptant.</i>	London	1714	A person of honour	
	<i>Here ensueth a profitable treatyce called the instrument or boke to learne to knowe the good order of the kepying of the famouse reconyng.</i>				
Oldcastle, Hugh	<i>The maner and fourme how to kepe a perfecte reconyng after the order of the moste worthie and notable accompte, of debitour and creditour.</i>	London	1543	Teacher	Parker, 2004a
Peele, James		London	1553	Accountant and teacher	Bywater and Yamey (1982, p. 51)
Perry, William	<i>The man of business, and gentleman's assistant.</i>	Edinburgh	1777	Master	
Petri, Nicolaus	<i>The pathway to knowledge.</i>	London	1596	unknown	

Quin, Matthew	<i>Quin's rudiments of book-keeping.</i>	London	1776	unknown	
Roose, Richard	<i>An essay to make a compleat accomptant.</i>	London	1760	Accomptant	
Sedger, John	<i>Sedger's rudiments of book-keeping.</i>	London	1777	unknown	
Shires, John	<i>An improved method of book-keeping</i>	London	1799	Accomptant	
Snell, Charles	<i>The tradesman's directory.</i>	London	1697	Master	
Squire, William	<i>The modern book-keeper; or, book-keeping made perfectly easy</i>	London	1769	Master	
Stephens, Hustcraft	<i>Italian book-keeping, reduced into an art.</i>	London	1735	Accomptant	
Stevenson, William	<i>Book-keeping by double entry.</i>	Edinburgh	1762	Merchant	
Tap, John	<i>The path-way to knowledge.</i>	London	1613	unknown	
Thompson, Wardhaugh	<i>The accomptant's oracle. Volume II</i> <i>An essay on book-keeping, according to the true Italian method of</i> <i>debtor and creditor, by double entry</i>	Whitehave n	1777	Accomptant	
Webster, William	<i>Book-keeping reformed.</i>	London	1715	Writing-master	
Wicks, John Harris	<i>The scales of commerce and trade.</i>	London	1797	Master	
Willsford, Thomas	<i>The newest young man's companion. 4th edn.</i>	London	1660	Gent.	
Wise, Thomas	<i>Youth's faithful monitor. 3rd edn.</i>	Berwick	1760	Accomptant	
Woolgar, William	<i>A notable and very excellent woorke.</i>	London	1766	Accomptant	
Ympyn Christoffels, Jan		London	1547	Merchant	Parker, 2004b

\* title page unless otherwise stated.