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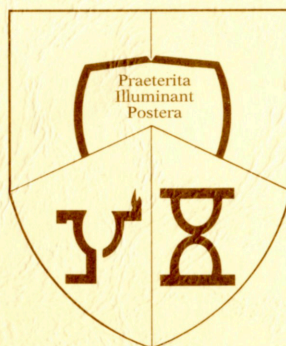
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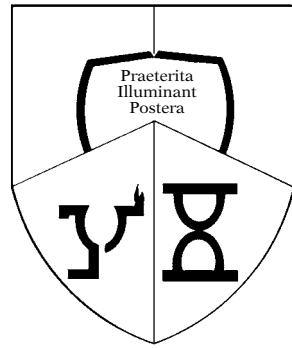


The
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Journal

December 2006
Volume 33, Number 2

Research on the Evolution of Accounting
Thought and Accounting Practice

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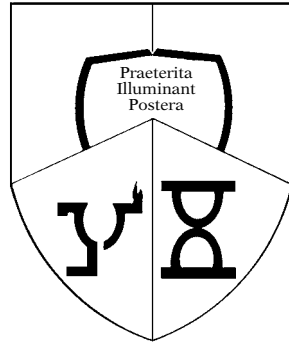
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The editor is pleased to announce that the following articles were selected as joint winners by the editorial board as the best of *AHJ's* Volume 32 (2005). The Academy of Accounting Historians endows cash awards for the winning papers. Thanks to Cheryl McWatters for coordinating the voting process:

“Cost and Management Accounting in Pre-Industrial Revolution Spain”

– Fernando Gutiérrez, Carlos Larrinaga, and Miriam Núñez

“The Role of Accounting Practices in the Disempowerment of the Coahuiltecan Indians”

– Sarah Holmes, Sandra Welch, and Laura Knudson

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ACCOUNTING REPRESENTATION AND THE SLAVE TRADE: THE *GUIDE DU COMMERCE* OF GAINAT DE L'AULNAIS

Abstract: The *Guide du commerce* occupies a distinctive place in the French-language literature on accounting. Passed over by most specialists in the history of maritime trade and the slave trade, the manual has never been the subject of a documented historical study. The apparent realism of the examples, the luxury of details and their precision, all bear witness to a deep concern to go beyond a simple apprenticeship in bookkeeping. Promoting itself essentially as “*un guide du commerce*,” the volume offers strategic examples for small local businesses, as well as for those engaged in international trade. Yet, the realism also demonstrated the expertise of the author in the eyes of potential purchasers. Inspired by the work of Bottin [2001], we investigate the extent to which the manual reflects real-world practices and provides a faithful glimpse into the socio-economic context of the period. Two additional questions are discussed briefly in our conclusion. First, can the work of Gaignat constitute a source document for the history of *la traite négrière*? The second entails our early deliberations about the place of this volume in the history of the slave trade itself.

INTRODUCTION

In spite of its very general title which undoubtedly explains its passing mention in the history of accounting, the 1771 *Guide du commerce* of Gaignat de l'Aulnais is likely one of the very first specialized manuals on accounting. Aside from a few paragraphs dedicated to traditional commercial matters (e.g.,

Acknowledgments: Special thanks to our colleagues who have provided encouragement for and appreciated our ongoing interest in this work. The lead author assumes full responsibility for translations from the original French.

exchange transactions, weights and measures, bills of exchange) and a somewhat classical presentation of single- and double-entry bookkeeping, the work deals essentially with the shipping trade and, more specifically, one of its most dramatic aspects – the slave trade.

Over and above this early specialization which, as will be explained later, is not an entirely isolated example, the manual, by the distinctive nature of the trade it describes, occupies a distinctive place in the French-language literature on accounting. In fact, with the exception of Affleck's [1854] *The Cotton Plantation Record and Account Book*, which Heier [1988] and Fleischman [2003] have studied, the *Guide du commerce* probably plays a unique role in all of the accounting literature.

Research into the accounting for slavery and the slave trade has been limited. Possible reasons for this lack of attention have been outlined by Fleischman [2003] and Fleischman and Tyson [2003]. Heier [1988] examined accounting's role in slavery with the focus on Thomas Affleck's volume. This study, as those of Fleischman and Tyson [2000, 2003], examines slavery in terms of the management of plantations and estates in Hawaii and the ante-bellum U.S. Vollmers [2003] has examined industrial slavery in the U.S., specifically the role of slave labor in the turpentine industry of the 19th century. We have only found, as a study of the slave trade itself, the article by Donoso Anes [2002], which examines the trade undertaken by the English South Sea Company on behalf of Spain in the 18th century. However, it is focused more on the conflict between the principal and his subcontractor than with the actual accounting for the trade.

To our knowledge, the *Guide du commerce* is the only work to present in a detailed manner the specialized accounting treatment for slave-trade operations, specifically the diverse transactions related to the "human cargo" (*la cargaison*), undertaken during the course of the voyage. Seemingly passed over by most specialists in the history of maritime trade and the slave trade, with brief mentions by Rinchon [1955, 1964] and Boulle [1972], the manual has never been, as far as we can determine, the subject of a documented historical study. Yet, the book is neither unknown nor extremely rare; it is listed in Reymondin's [1909] and Hausdorfer's [1986] accounting bibliographies, and the *Catalogue collectif de France*¹ indicates that it is part of the holdings

¹<http://www.ccf.fr/bnf.fr> This electronic catalogue lists the holdings of the Bibliothèque Nationale and university and municipal libraries of the major cities of France.

of several libraries in France, including the Bibliothèque Nationale, as well as the municipal libraries in Nantes, Rouen, La Rochelle, and Versailles. This list is without a doubt incomplete.²

Within the context of our broader research program dealing with maritime commerce and the slave trade specifically, all signs prompted us to devote particular attention to this volume. A quick first reading indicated that the work's importance greatly surpassed that of a number of classic accounting treatises, independent of its theme. In effect, the apparent realism of the examples outlined, as much from the point of view of the products as the locations or even the people implicated (the names of established *armateurs*³ in Nantes are readily recognized), the luxury of details and their precision, all bear witness to a deep concern to go beyond a simple apprenticeship in bookkeeping. Promoting itself essentially as "*un guide du commerce*," the volume provides much more than copied examples of account books; it offers to its readers, as it were, strategic examples for small local businesses, as well as for those engaged in international trade. Yet the realism had in all likelihood another purpose, to demonstrate the expertise of the author in the eyes of potential purchasers.

This type of argument has been made earlier by Jean Bottin [2001], historian of the merchant world and commercial practices of France, subsequent to his in-depth analysis of a number of French accounting manuals. We have taken our inspiration from his approach. Thus, our primary question inverts the argument of Gaignat, who uses his commercial experience to sing the praises of his manual. Our premise, rather, is to investigate the extent to which the manual reflects real-world practices and provides a faithful glimpse into the socio-economic context of the period. Answering this question definitively is a long and exacting task. Nevertheless, initial research allows us to provide a preliminary and positive response for some limited yet significant aspects.

Two additional questions are raised and discussed briefly in our conclusion. The first is in keeping with the logic of Bottin's

²It is reasonable to believe that some of these libraries have not yet completed the computerization of the catalogues listing their older holdings.

³Some terms have been retained in French due to their lack of equivalent in English: *l'armateur* – a ship owner, specifically one who engaged in the maritime trade and operated a diversified business; *le négociant* – merchant, but distinct in the sense of one who was engaged in wholesale trade and did not have a retail establishment; *un négrier* – a vessel engaged in *la traite des Noirs* or *la traite négrière* – the slave trade.

[2001] approach, which considers that certain bookkeeping manuals can be considered as sources of commercial history and can compensate for the absence of archival sources. Can the work of Gagnat constitute a source document for the history of *la traite négrière*? The second entails our early deliberations about the place of this volume in the history of the slave trade itself.

The originality of our research stems, therefore, as much from the theme of the work studied as from the questions which drive it. It utilizes a relatively new approach to the study of accounting treatises that in all likelihood could be adopted for other works and in other countries. In our view, this approach could reinvigorate the history of accounting literature, a history which has been somewhat abandoned and has become rather dusty.

The paper proceeds in four sections. First, we bring together a few biographical elements in order to situate Gagnat in the business universe of Nantes, without relying only on his own indications. The second section reinserts the manual in the output of French accounting and explains its originality by a comparison with the commercial context of Nantes. The third section provides a quick exposé of the technical content of the manual, detailing more particularly the passages devoted to the slave trade. The fourth section raises the question of the realism of the work, not only in terms of accounting practice, but also the commercial environment and the characters represented therein.

GAIGNAT DE L'AULNAIS: A BIOGRAPHICAL SKETCH

In his *Guide du commerce*, dedicated to “Son Altesse Sérénissime Monseigneur le Duc de Penthièvre, gouverneur de Bretagne,” Gagnat introduces himself at the outset as an “*ancien négociant de Nantes, ci-devant professeur de la grande école du Commerce à Paris, et actuellement bourgeois à Sceaux-du-Maine, et procureur fiscal de S.A.S. Monseigneur le Comte d’Eu en sa Baronnie de Sceaux et dépendances.*”⁴ In his three published works, Gagnat provided a bit of information about his life. We have tried to combine these details with others furnished by our research into a diverse array of primary and secondary sources.

⁴“former *négociant* of Nantes, previously professor of the “*grande école du Commerce*” at Paris, and currently bourgeois at Sceaux-du-Maine and fiscal procurator for the Count d’Eu...”

Born April 11, 1719 in Angers [Archives départementales du Maine et Loire], where he was a student of the Oratorian Fathers [Port, 1965], Claude Gaignot (the particle “de” later added to his name) was married to Françoise Saulnier on August 16, 1740. Baptismal and marriage registers record Gaignot broadly speaking as a merchant, while on the tax rolls (*les rôles de capitation*), his position was variously as a shopkeeper [Archives Municipales de Nantes, CC 458, 1743], grocer [Archives Municipales de Nantes, CC 460, fo. 109, 1762], and bookkeeper [Archives Municipales de Nantes, CC 459, fo. 68, 1754]. Another document refers to him as a *maître écrivain*.⁵ These details are the only bits of information that we possess at this point about his activities in Nantes. However, more details are known about the last years of his life at Sceaux, a borough south of Paris, where he had settled in the late 1760s and where he died on February 24, 1791.

His traces are indeed revealed in Sceaux in 1778, where he authored an anonymous work entitled *Promenade de Sceaux-Penthièvre, de ses dépendances et de ses environs* in which he indicates his position and duties at Sceaux [Gaignat de l’Aulnais, 1778a]. The book’s authorship is not in doubt⁶; not only does the author reveal in his preface that he also penned *Guide du commerce* and *l’Arithmétique démontrée, opérée et expliquée*,⁷ published in 1770, but a manuscript document signed by de l’Aulnais [Gaignat de l’Aulnais, 1778b] and dedicated to the Princesse de Lamballe⁸ is held by the Musée de l’Île de France [Château de Sceaux, INV 73-4-1, CAT 1195], a museum located in the Château de Sceaux itself. His home was arguably one of the

⁵“writing master” [Archives Municipales de Nantes, FF 184, 1751]. See note 12 for further details.

⁶The general catalogue of the Bibliothèque Nationale attributes the book to Gaignat de l’Aulnais. Furthermore, his name is inscribed in pencil on the back of the half-title page, spelled as Gaignat de l’Aulnays. The society of the friends of Sceaux (la société des amis de Sceaux) reissued the work in 1939 [Gaignat de l’Aulnais, 1939].

⁷The three volumes in rough translation are “A Walk in Sceaux-Penthièvre, its Surroundings and Outskirts,” “Handbook of Trade and Commerce,” and “Arithmetic: Its Demonstration, Process and Explanation.”

⁸Born in Turin in 1749, Marie Thérèse Louise de Savoie-Carignan became Princess of Lamballe when she married Louis Alexandre Stanislas of Bourbon-Penthièvre, prince of Lamballe, son of the duke of Penthièvre. A favorite of and confidant to Queen Marie-Antoinette, the Princess of Lamballe was decapitated by the guards of the prison of Grande Force. Her head was paraded in Paris on the end of a pike during the revolutionary days of September 1792, sparked by the announcement of the invasion of France by the Prussians.

most beautiful patrician homes in Sceaux. It served, after a long period as the notary office, as the city hall following the marriage in 1772 of Denise-Rose Le Rémois, Gagnat de l'Aulnais' daughter-in-law, to François Desgranges, future notary and mayor of Sceaux and founder of a dynasty of leading citizens of the city [Advielle, 1883, pp. 477-482].

The notarial records of the department of Hauts-de-Seine confirm that on March 9, 1771, Gagnat became fiscal procurator for HSH His Grace the count of Eu in the barony of Sceaux and dependencies [Archives départementales de Hauts-de-Seine, 3 E 49]. Following the death of the count of Eu on July 13, 1775, the estate was transferred to his cousin, the duke of Penthièvre, a legitimized bastard of Louis XIV and the marchioness of Montespan. Lord High Admiral of France and governor of Brittany, the duke of Penthièvre, to whom Gagnat had dedicated his *Guide du commerce* a few years before, possessed one of the greatest, if not the greatest, fortunes of the realm [Duma, 1995].⁹

The fiscal procurator was one of the two key people in administration and seigniorial justice. The other, the seneschal, was principal judge, chief of police, and administrative head, making him the most important person on the seignior after the lord. The fiscal procurator had a dual role – to uphold the public interest and to collect seigniorial rents. Furthermore, he frequently fulfilled the role of collector and superintendent of the seignior, making him essentially the steward of the estate. Given that the passage from merchant to paid officer of the state was a relatively frequent occurrence in France during the *ancien régime*, Gagnat's career path is not surprising. However, although his office did not necessarily make him a high ranking public figure, its importance was undeniable and buying it must certainly have necessitated a substantial investment. Aside from the aforementioned house, the notarial records indicate that he and his wife owned other assets. According to Advielle [1883, p. 406], he was the first and primary purchaser of national property (*les biens nationaux*)¹⁰ in his city. His marriage in 1768 to Denise Buisson,¹¹ widow of François le Rémois and descendant of Jean Bruslé, second fiscal procurator in Sceaux and notary,

⁹In particular, he owned a vast estate in land comprising the châteaux of Anet, Amboise, Bizy, Blois, Chanteloup, Châteauneuf, Eu, Rambouillet, and the Hôtel de Toulouse in Paris.

¹⁰properties nationalized during the French Revolution of 1789. Confiscated from the clergy and the nobility who had left France, these assets were then sold to the bourgeoisie to replenish the state coffers.

¹¹Two sons were born of this union.

likely helped him to acquire his office as fiscal procurator. Nonetheless, he still would have had to amass a certain personal fortune in order for the marriage to take place. This sum could not have come from his first marriage to Françoise Saulnier in 1764. Since she declared at the time of her marriage that she did not know how to write or sign her name, it was apparent that she came from a modest household, re-affirmed by her initial status as shopkeeper. We can conclude, therefore, that his fortune resulted from his previous professional activities unless he had inherited it from his parents.

However that may be, after his departure from Nantes at the beginning of the 1760s, Gaignat de l'Aulnais [1771] presents himself as a "*professeur d'une grande école du commerce à Paris,*" probably one of the private pensions endowed at the end of the 18th century, some of which were available specifically for the children of traders [Julia, 1995]. However, it is doubtful that the exercise of this profession could have provided Gaignat with substantial professional fees, especially since his courses apparently were free of charge. He was not a member of the Parisian corporation of writing masters,¹² and his disputes with the Academy of master writers, arithmeticians, mathematicians, and bookkeepers led to the discontinuation of "*son cours gratuit de démonstration sur toutes les parties du Commerce*"¹³ [Gaignat de l'Aulnais, 1770, p. 17].

We also learn from the *Guide du commerce* that in 1766, Gaignat had tried his hand at another endeavor, the establishment and management of a pawnshop [Gaignat de l'Aulnais, 1771]. However, the "*Comptoirs royaux pour les dépôts de confiance des effets du public ou prêt sur gages,*"¹⁴ for which Gaignat intended to be the bookkeeper, never materialized when the King refused to grant the 30-year exclusive privilege demanded by the business promoters.

¹²In the 17th and 18th centuries, those who taught bookkeeping in Paris usually belonged to the community of writing masters which was organized into a "*métier juré*" by letters patent by Charles IX in October 1570 [Hébrard, 1995] and held the monopoly over the teaching of calligraphy and the verification of accounts. Letters patent dated January 30, 1727 gave its members the title of "*juré écrivain expéditionnaire et arithméticien, teneur de livres de comptes, établi pour les vérifications, comptes et calculs contestés en justice*" – sworn writer and mathematician, bookkeeper, established for the audit, accounts, and calculations contested in legal proceedings.

¹³"free lessons in all aspects of commerce"

¹⁴in effect, a public warehouse and pawnshop established under the auspices of the Crown

In *l'Arithmétique démontrée et expliquée*,¹⁵ Gagnat de l'Aulnais [1770] announced two other works – a book on agriculture, an undertaking he claimed to practice on his Parisian properties after having done the same in Brittany, and an enigmatically titled autobiography *l'Abandonné parvenu par le fruit défendu*.¹⁶ A quick interpretation of the title refutes the hypothesis of an inheritance, yet corroborates that of a happy alliance. This last undertaking no doubt would have shed much light on the author's merchant past, but, to this day, no trace of either book has been found. It is likely that neither one progressed beyond the planning stage.

While Gagnat affirms having worked in Nantes for 25 years in the largest commercial businesses, as well as in several other cities [Gagnat de l'Aulnais, 1770], the question remains as to the capacity in which he did so. Our lengthy presentation of the possible origins of his fortune is a response to that query. Was he really a trader in the sense of one who operated a commercial (wholesale) enterprise of significant scale? Alternatively, was he a simple retail merchant or was his claim nothing more than a marketing ploy? While certain documents of the period note that he was a merchant, we have not yet found any trace that would allow us to verify his membership in the circles of *le grand négoce*.¹⁷ Even an examination of tax ledgers yielded no information on this matter [Archives départementales de Loire-Atlantique, C 870], and the amount of poll tax that he paid was quite meager. However, that he taught accounting and played the role of a qualified bookkeeper on the account of one or more merchants in Nantes is eminently probable since these functions were tightly linked during the 18th century [Lemarchand, 2001]. He himself declared in the preface to his *Guide* that he had overseen “the business affairs” and “the maintenance of account books” for various merchants. Moreover, as we will later illustrate, the very content of his work attests to his knowledge of the triangular trade and of certain key actors in Nantes in the first half of the 18th century.

These few biographical details allow us equally to reduce the uncertainty that continues about the volume's publication

¹⁵The work is dedicated to “Mgr Louis Paul de Brancas, gouverneur des ville et château de Nantes.”

¹⁶The title has been roughly translated as “The forsaken one who succeeded through forbidden fruit.” As in English, “parvenu” also means “upstart.” Thus, a play on words was intended here.

¹⁷major trade enterprises or “big business”

date. In 1752, Gagnat received initial confirmation regarding royal approval for the *Guide du commerce* and *l'Arithmétique démontrée, opérée et expliquée*; an approval reiterated in 1764. A copy of both titles appears in the text. Relying on this later date, a number of accounting biographies and library catalogues indicate that the book was edited in 1764. In reality, its publication occurred later as attested to by the book's description of events occurring in Paris in 1766 and 1767. Moreover, in a notice to readers, Gagnat states that he had launched the volume on a subscription basis in 1764, but that the number of subscribers had fallen short of his expectations. He had reimbursed them through various bookshops and had decided to publish the volume at his own expense. Further proof is provided by the fact that Gagnat explains on his title page that he is fiscal procurator to the count of Eu [Archives départementales des Hauts de Seine, 3 E 49], an occupation he took up only on March 9, 1771. This event furnishes therefore the *terminus ad quo* and the death of the comte d'Eu in 1775, the *terminus ad quem* of the publication date. This view is confirmed by a prospectus inserted in *l'Arithmétique démontrée* [Gagnat de l'Aulnais, 1770, p. 5] which proposed two volumes via subscription: the *Guide du commerce* to be distributed in 1771 and *des Mappemondes, pour trouver la correspondance des poids, des aunages et des mesures de contenance, qui sont en usage dans l'Europe, l'Asie, l'Afrique et l'Amérique*.¹⁸ It is this later date that we have adopted, although we do not possess all the necessary details to confirm it with complete certainty. According to Kerviler [1904, tome VIII, p. 97], the volume would have been re-printed in Paris in 1791, the year of the author's death, but we have not found any trace of this second edition.

The project evolved between 1752 and 1771, with the result that the *Guide du commerce* is presented as a series of juxtaposed pieces written at different periods. The 1752 approval mentioned a work entitled *La manière d'apprendre à tenir, en peu de temps, les livres de comptes à partie double et simple* (*The Manner in Which to Learn Quickly How to Keep Accounts by Single and Double Entry*). It disappeared from the 1754 approval as by then it had simply become the second section of the *Guide du commerce*. The examples in this section are dated between 1754 and 1755, while those in the fourth section, which deals with the slave trade and which were not included in the initial approval,

¹⁸translated as "Maps of the world, to determine the correspondence of weights, volumes, and measures used in Europe, Asia, Africa, and America"

are dated 1761. The complete work represents a training tool intended to respond to the educational needs of *les négociants* in the major port cities and of their bookkeepers.

A SPECIALIZED MANUAL À LA NANTAISE

The Work and the Market for Accounting Training in 18th Century France: During the last third of the 17th century in France, an abundance of works and, more specifically, manuals on book-keeping were written with merchants in mind [Lemarchand, 2001]. This movement accompanied the initial stages of a growth in commercial activity, which would elevate 18th century France to the ranks of one of the primary trading nations of Europe. It took into account the need for specific training and reflected the establishment of a truly specialized market. Indeed, the training of traders and their bookkeepers could not have consisted only of the oral transfer of knowledge at the trading house; certain techniques, such as accounting, required other means of transmission. Manuals and lessons from a specialized master contributed an indispensable complement to learning.

The authors of the manuals found themselves in direct competition. One way to attract the clientele was to widen and diversify the contents of their works so that they responded to specific needs. It is thus that Boyer, Savonne, and Thomas, authors from Lyon, wrote about the international aspects of trade in their city and evoked certain “*spécialités lyonnaises*,” such as the *carnets* (notebooks) and other *bilans* (balance sheets) used in the course of the *payements* of the four big annual fairs during which commercial debts between merchants from all over Europe were offset. The application of double entry for transactions involving state funds was a recurring theme. Long after Simon Stevin, this idea was taken up by Irson [1678], who suggested a double-entry journal and ledger model for salt-tax collector, and later by Barrême [1721] in his *Plan d’une recette générale des finances tenue en parties doubles*.¹⁹ Conversely, Bernard d’Hénouville [1709] recommended a simple revenue-and-expenses accounting procedure in his *Guide des comptables*. Although the work is essentially about public finance accounting, the author applied this method to the presentation of the accounts for the outfitting and laying up (*l’armement et le désarmement*) of a ship.

With the exception of Gentil [1777], the theme of maritime

¹⁹“outline of a general framework for finances to be kept in double entry”

trade is comparatively absent in manuals from Paris and Lyon. Alternatively, it is present in most of the 18th century works written by authors living in port cities, such as Gobain [1717], Desgranges in Bordeaux, or Giraudeau [1764] in Marseille. However, the work of Gaignat de l'Aulnais clearly sets itself apart from the others, both by its quantity and by the precision and distinctiveness of its themes. Half of his work (216 of 444 pages; the third and fourth sections) deals exclusively with maritime trade. Of this portion, 120 pages relate to the slave trade. Importantly, in the remainder of his work, maritime commercial activities occupy an important place, both in the models of commercial documents and the examples of accounting entries.

Aside from a few pages dealing with the slave trade in Savary's [1675] *Le parfait négociant* and the *Dictionnaire du commerce* by his sons [Savary des Bruslons, 1748], of which certain pages re-appear in *l'Encyclopédie*, the *Traité général du commerce de l'Amérique* of Chambon [1783] is, to our knowledge, the only French work that can be likened to that of Gaignat de l'Aulnais. Published a dozen years later than that of Gaignat, the contents differ significantly from those of the *Guide du commerce*. In addition to a compilation of all texts that regulated trade in America, including the slave trade, Chambon's work consists of information and prescriptions concerning: "*Les mœurs des nègres et des esclaves, l'état des marchandises propres à ce commerce, les précautions à prendre dans l'achat des esclaves avec les moyens de les conduire en santé en Amérique.*"²⁰ It provides, in particular, models of an invoice for return goods as well as a summary slip (*le bordereau*) for the sales revenue of slaves and of its use to recapitulate *les retours*²¹ in accordance with statutory regulations. A copy of the summary had to be provided to the *fermiers généraux* (government farmers general) who collected indirect taxes. The documents that Gaignat de l'Aulnais presents are of a very similar form. For the rest, the prescriptions concerning the choice of goods, the purchase of slaves, and their conveyance to America, especially in terms of hygiene and general care, are mostly based on the advice given by *armateurs* to their captains. Debien [1972] and Esnoul le Sénéchal [1932] provide examples

²⁰the customs of Negroes and slaves, the types of merchandise suitable for this trade, precautions to take in the purchase of slaves, and the means to ensure their healthy arrival in America"

²¹*Les retours* or returning merchandise refers to the merchandise that was brought back to France as a result of sales of the outbound goods. The ultimate sale of this merchandise determined the final profit or return earned by the investors.

of such recommendations. This volume, therefore, belongs to a category quite distinct from that of Gaignat.

A Specialized (Accounting) Response to a Specialized Need: It was certainly no accident that the *Guide du commerce* had been written in Nantes between the beginning of the 1750s and the middle of the 1760s. The economic and political context of maritime activity, along with the particular place of the city in the slave trade, contributed to its appearance.

The historical links between Nantes and maritime trade are centuries old. Already an established center for commerce and trade, the 18th century brought a series of economic forces that motivated the merchants of Nantes to seek out new markets and ventures. The city had been affected significantly by the series of wars in Europe. Moreover, periods of famine and the decline in textile production and the salt trade upon which much commerce had depended meant a decline in the city's fortunes. New trading ventures were being investigated, and given the experience with and links to other parts of Europe, commerce quickly expanded to take advantage of the trade in colonial commodities. Under the mercantilist system, the colonies existed to support the political and economic interests of the metropolis.

Furthermore, tensions in the labor market led to the replacement in the colonies of engaged labor from France with *les captifs* (captives). Still few in number at the beginning of the century, slave expeditions took off during the 1740s to be interrupted totally during the Seven Years' War (1757-1763). After the Treaty of Paris, which marked the end of the conflict, the trade recommenced quickly and experienced strong growth, along with maritime trade in general.²² Early ventures into *la traite des Noirs* grew in the 1740s. During the period that immediately preceded this resurgence, the writing of the fourth part of the *Guide de commerce*, devoted to the slave trade and its accounting treatment, took place.²³

²²During the period of the Seven Years' War, slave-trade voyages were few and risky. According to Pétrel-Grenouilleau [1998, p. 50], the percentage of vessels from Nantes engaged in the French trade was 66.6% and the average number of vessels sent per year from Nantes only 0.28. This percentage dropped to 40.5 for the period after the war [1763-1778], but the average number of vessels rose to 22 per year. As noted by Gaston-Martin [1931, p. 23], the percentage of the trade undertaken by *les armateurs nantais* declined after 1762; yet, Nantes remained the dominant trade center.

²³The examples that are developed here are dated in the years 1761 and 1762.

Nevertheless, even if the city of Nantes alone carried out 42% of French slave-trade expeditions (1,427 of a total of 3,341) [Daget, 1990, p. 109], this activity did not dominate maritime trade. On average *les négociants* of Nantes devoted approximately only one-fifth of their shipping to these ventures. Yet, it did increase demand for other maritime shipping, such as trips to and from the colonies to transport colonial merchandise. The slave trade also facilitated the development of a broad business network to provide shipping resources for the trade and links with agents in Africa and the colonies.²⁴

Yet, if the Seven Years' War had brought a provisional end to the traffic in slaves, the *armateurs* of Nantes, having anticipated the war's end, easily determined that they could earn large profits after such a lengthy interruption. The *négociants* of the city did not hesitate to underscore their commitment to the trade [Archives départementales de Loire-Atlantique, C 882, fo 37, April 5, 1764]:

*...Cependant, on ne saurait dissimuler que malgré ces pertes, malgré ces obstructions, les négociants, et principalement ceux de Nantes, tant pour répondre aux vœux du Gouvernement, que pour se procurer la rentrée de leurs créances et tâcher de faire quelques profits, ont fait usage de ce qui leur restait de fonds et de tout leur crédit, pour armer avec ardeur pour la traite des Noirs et pour les colonies...*²⁵

Written at the end of a period in which the drop in trade activity undoubtedly provided Gaignat some forced leisure, the *Guide de commerce* appears to be a logical and anticipated response to the growth in maritime trade and the slave trade. The resurgence of the slave trade was accompanied by a renewal of shipping activity, increasing the volume's market potential [Goddard, 1993, p. 290]:

L'étude des armateurs durant la reprise nous permet de remarquer deux nouveautés: le commerce négrier n'est plus dominé par une ou deux familles comme les Mon-

²⁴Further information on Nantes and its role in the slave trade is developed in other manuscripts that are part of our broader research program.

²⁵"...Nonetheless, one cannot deny that despite the losses, despite the obstructions, the *négociants*, and principally those of Nantes, as much to respond to the wishes of the Government, as to obtain the return of their receivables and to try to make some profits, have made use of what remained of their funds and of all of their credit, to outfit ships zealously, for the *traite des Noirs* and for the colonies..."

*taudouin ou les Grou avant la guerre. En outre, il tend à se "démocratiser", un grand nombre de débutants plus modestes se lancent dans l'aventure et entre 1763 et 1766, des nouveaux négriers viennent sans cesse grossir le rang des armateurs.*²⁶

Besides, Gagnat already had provided ample coverage of maritime trade in the first three parts of his work; thus, he could hardly ignore devoting part of his treatise to *la traite négrière*, given that its management required specific processes and procedures. Everything at Nantes at that moment in time pointed him in this direction.

It is known that the practice of the slave trade and slavery, framed within *le Code Noir* and justified by the Church, hardly seemed to cause the *armateurs* of Nantes any pangs of conscience. Nonetheless, while providing the public with a tool intended to undertake in the most rational manner possible something which others had claimed to be an odious crime (and which the Chevalier de Joncourt earlier had condemned in the *Encyclopédie*), Gagnat could not prevent himself from slipping into various points of the text some elements that revealed his own uneasiness. However, if in the section on American commerce (p. 20), he speaks of "*pauvres esclaves, tristes et chagrins de quitter leur pays*"²⁷ who must be well treated and amused to avoid their attempting suicide or dying from sadness, it was hardly more than gratuitous compassion. One also finds such commentary mixed with similar recommendations in the *Dictionnaire du commerce* [Savary des Bruslons, 1748], where one also finds a discourse at times clearly racist, which is not the case with Gagnat.

Later, a notice (*avis*), inserted between pages 232 and 233 and probably composed at the time of the volume's publication, included a discourse totally humanist in tone, which Gagnat tempered thereafter with an argument that reveals what Pétré-Grenouilleau [2004, p. 261] calls the principle of the "coagulation of interests." In the end, he dodges the debate by introducing the illicit export of grain, a cause of scarcity, as a term of comparison:

²⁶"The study of *les armateurs* during the resumption [of trade] allows us to note two innovations: the slave trade was no longer dominated by one or two families, such as *les Montaudouin* or *les Grou* as before the war. Moreover, it tended to be "democratized"; a large number of newcomers, more modest in means launched out into the adventure between 1763 and 1766, new *négriers* [vessels] began to expand the ranks of *les armateurs*."

²⁷"poor slaves, sad and morose at having to leave their country"

*Je conviendrais comme beaucoup d'autres, qu'il n'est pas bien de faire le commerce des nègres ou noirs, pour les faire travailler aux terres, comme des bœufs, sans les récompenser, ou plutôt sans les instruire sur la religion, et je dirais qu'on devrait plutôt les enlever de leurs pays, afin de les instruire des lois, pour qu'après instruction desdites lois et de quelque art ou métier, ils retournassent dans leurs pays pour instruire toute la nation, laquelle se rendrait utile à l'État par les règlements qu'on y mettrait ; mais ce commerce ayant toujours été toléré, pour le bien même des colonies et l'avantage de tous les commerçants, je dis qu'il est plus qu'inhumain de faire le commerce illicite des grains, c'est-à-dire, illicite, sans l'autorité souveraine, que de faire le commerce de nègres en Afrique et en Amérique.*²⁸

Gaignat returns one last time to this topic by inserting a new notice right between the documents related to the purchase of captives and those dealing with sales (p. 339). The page, curiously composed, begins with a brief text, extracted and adapted from the *Dictionnaire du commerce*, dealing with the profit that could be realized on the “*marchandise de nègres*,” then continues with an eminent critique entitled “*Extrait de la dureté de l'esclavage*.”²⁹ This text of roughly 50 lines delivers a condemnation without recourse of slavery and the slave trade. Its author to date remains unknown but various fragments of the text are found in the work of another author [Henrion de Pansey, 1770]. The text ends as follows: “*Un pareil commerce d'acheter et de vendre des nègres fera-t-il enfin rougir le négociant qui fait le commerce d'esclavage aussi cruel que peu nécessaire.*”³⁰ Thus, in less than one page, Gaignat reminds the reader that this activity could be quite lucrative, but that it is also immoral, all the while teaching everything

²⁸“I admit, like many others, that the trade in *les nègres* or *noirs* is not a good thing, to make them work on the land, like cattle, without compensation or more so without instructing them in religion. Rather, I would say that instead one should remove them from their country in order to instruct them in laws, such that after receiving this instruction in such laws and in some art or trade, they would return to their country to instruct all of the nation, which would prove useful to the State by the regulations that would then be put in place. Yet, given that this trade has always been tolerated for the good of the colonies and for the advantage of all merchants, I state that it is more inhumane to undertake the illicit trade of grains – that is to say, illicit, without sovereign authority – than to undertake the trade in *nègres* in Africa and America.”

²⁹translated as “Extract from the Severity of Slavery”

³⁰“Such trade to buy and sell Negroes, will it finally embarrass the merchant who undertakes the trade in slaves as cruel as it is unnecessary?”

that one needs to know to practice it. Is this sheer cynicism, the indication of a real crisis of conscience, or, more simply, a cheap way to soothe his uneasiness? It is difficult to say; yet, remember that the work was edited between 1771 and 1775, and that it was precisely at the beginning of the 1770s that the French fight for abolition took flight. Having departed Nantes for Paris, Gaignat perhaps encountered a different atmosphere; yet, this alone did not dissuade him from publishing his text, the contents of which are the focus of the next section.

THE TECHNICAL CONTENT OF THE WORK

The subtitle of the *Guide du commerce* sets out in detail the different sections which we now examine:

*La première comprend le commerce de la Chine, celui du Pérou, celui de l'Amérique, avec des modèles d'achat et de vente [...] La seconde est la manière de tenir les livres de compte en parties simples et en parties doubles [...] La troisième contient la gestion d'une cargaison de navire à l'Amérique [...] La quatrième est la manière de traiter, de troquer ou d'acheter les Noirs en Afrique [...] et d'acheter les retours en Amérique [...] avec des tableaux de traite de nègres et d'achat en retour.*³¹

Section One: Trade in China, Peru, and America (pp. 1-26): Comprising 26 of the book's 450 pages, this very short section deals with trade in China and Peru, mainly in terms of the value of the currencies, weights, and measures. It also examines trade in America (the West Indies and Canada), this time mainly in terms of the merchandise being traded. The instructions deal with diverse points; for example, the author indicates the more favorable trading periods in terms of climate. Various models of commercial documents are presented: damage reports, charter-parties, invoices for merchandise loaded on ships, and sales reports for Martinique. While the slave trade is simply mentioned, the author does provide a model of a "*procès verbal d'un nègre*

³¹"The first section covers trade in China, Peru, and America, with models of purchases and sales...The second presents the manner in which to keep account books in single and double entry...The third contains the management of a ship's cargo destined for America...The fourth is the manner to trade, exchange or buy Blacks in Africa...and to buy merchandise in America...with tables for the trade in Negroes and the return purchases."

mort.”³² This type of occurrence report was no doubt filed frequently enough to warrant a standardized form (p. 23):

*Nous officiers, major et mariniers du navire l'Aventurier, certifions à qui il appartiendra, que cejourd'hui 28 mars 1754, faisant notre visite ordinaire à l'infirmerie, avons trouvé un nègre mort de la marque T, que nous avons reconnu appartenir à la cargaison, et nous l'avons fait jeter à la mer en notre présence. En foi de quoi nous avons signé le présent, pour servir ce que de raison.*³³

Section Two: Single- and Double-Entry Bookkeeping (pp. 27-212): This section begins with the presentation of models of general commercial documents such as bills of exchange, the transfer of ownership shares, protests, and bills of lading. More specific documents follow: loans “à la grosse aventure,”³⁴ insurance contracts for ships and shipments, maritime bills of lading, etc. The author then moves quickly into accounting and presents single-then double-entry bookkeeping. In this introductory schema, initially presented in France by Mathieu de La Porte [1704] and replicated in several French textbooks until the beginning of the 20th century, the single-entry method is interpreted simultaneously as an educational introduction to keeping debit and credit accounts (thus, by double entry),³⁵ and as a model to be used by “les marchands qui vendent en détail et ceux qui font des affaires peu considérables”³⁶ [La Porte, 1704, p. 6]. Gagnat reiterates this notion of single-entry bookkeeping for small merchants when

³²“statement regarding the death of a negro”

³³“We, being major officers and mariners on the ship, *l'Aventurier*, certify to whomever it may concern that today the 28th of March 1754 in the course of our regular visit to the infirmary, found a dead Negro with the mark “T” who we recognized as belonging to the cargo, and that we had him put overboard in our presence. In witness to this we have signed the foregoing as an explanation.”

³⁴Loans “à la grosse aventure” financed maritime expeditions at very high interest rates. If the ship was lost, however, the lender forfeited both the principal and the interest.

³⁵Incidentally, the 1673 *Ordonnance* [titre I, article 4] sets out that, “l’aspirant à la maîtrise sera interrogé sur les livres et registres à partie double et à partie simple, sur les lettres et billets de change, sur les règles d’arithmétique, sur la partie de l’aune, sur la livre et poids de marc, sur les mesures et les qualités de la marchandise, autant qu’il conviendra pour le commerce dont il entend se mêler.” (The aspiring master will be examined on the books and registers in double entry and single entry, on letters and bills of exchange, on the rules of arithmetic, on the division of an ounce, pound, and the weight of a mark, on the measurement and quality of merchandise, as such as it is necessary for the business in which he intends to get involved) [La Porte, 1704, p. 6].

³⁶“retail merchants and those operating relatively small businesses”

he states: “*Je n’établis dans cette teneur de livres à parties simples qu’un petit commerce*” (p. 44).³⁷

Single entry (pp. 43-86): As was customary in accounting treatises, after a brief exposé of the principal aspects of single entry with an enumeration of the books to be maintained, the author opens the journal of a hypothetical merchant. After the recording of a series of various transactions, he next presents the corresponding general ledger. This commercial venture is located in Nantes and is centered on port activity. Those commercial enterprises with which business relationships are established are either ports accessible by coastal shipping (Lorient, Rouen, Saint-Valéry, or, further along, Amsterdam, Hamburg) or cities linked by the river (downstream: Paimbeuf, and upstream: especially Angers, Saumur, Tours, Blois, or Orléans). The colorful names of some of the people involved add to the realism of the situation; for example, merchandise is transported on the boats of a Brignon (also known as Bras-de-Fer), or those of La Gaudine of Angers, both inland shippers. Very few of the goods exchanged are manufactured products (handkerchiefs and soap); most are food products, spices (oil, butter, Chinese rhubarb, cheese from Holland and Gruyère, coffee, liquorice, sugar, pepper, and saffron), beverages (wine from Bordeaux and *eau-de-vie*), raw materials from animals (wool from Bayonne), dyes (indigo and madder), and materials (fir planks, tar, and resin). No specific comments are provided as to the actual technical aspects of the affair.

Double entry (pp. 87-212): This case deals with an *armateur*, and the author begins with the presentation of an inventory illustrating the scope of his commercial activities. Among the assets listed, we notice four bills of exchange drawn on some of the biggest traders in Nantes who owed their fortune to the slave trade: Michel, Jean-Baptiste Le Masne, Veuve Montaudouin, Augustin de Luines. Other assets include 100% ownership of the *Saint-Louis* and 50% ownership of another ship outfitted by Augustin de Luines and bound for Martinique. Furthermore, the trader in question owns annuities on the l’Hôtel de ville in Paris, a house in la Fosse, the *armateurs’* district, and a house in Haute-Goulaine, located in the Nantes countryside.

The entries reflect the entire scope of the trader’s activities.

³⁷“I am only establishing with this single-entry bookkeeping a small business affair.”

In reading the document, we notice his loading of merchandise destined for Saint Domingue and Martinique; lending money *à la grosse*³⁸ at 30% interest to ships headed for Guinée and Saint Domingue; insuring ships leaving for the West Indies; outfitting a ship destined for Martinique, etc. The wide range of documents provides insight into the scale of the commercial endeavors undertaken by this trader from Nantes and allow for glimpses into the workings of various specific accounts relating to maritime trade: insurance accounts, accounts involving "*la grosse aventure*," accounts for private cargo,³⁹ and accounts for ships, as well as records of outfitting and laying up of ships.⁴⁰ Silk goods, cloth from Laval, cloth from Morlaix, cut slate, flour, beaver pelt hats, Spanish oil, codfish, beef, and butter were destined for these islands, in exchange for sugar, coffee, indigo, and cotton.

Following the logic inherent to the workings of venture accounts, the year-end entries aim to reconcile the completed transactions accounts with the loss and gain account and to transfer the balances of the other accounts to the closing balance account. Following this operation, the author provides a brief example of bookkeeping for a company with three partners in which he includes himself as an associate named Delaulnais.

In his general presentation of bookkeeping, Gaignat quotes, without references, a maxim by Savary [1675]: "*l'ordre est l'âme du commerce*."⁴¹ In addition to the need, so often reiterated, to be just unto oneself and to know one's affairs well, he stresses the implicit role accounting plays in the supervision of subordinates. Indeed, well-kept ledgers are a source of concern to all ill-intentioned clerks who worry that one day their deceit will be brought to light by "*un négociant vigilant et régulier dans la connaissance de ses marchandises et de sa caisse*."⁴² This interpretation of accounting's role in controlling subordinates, by pas-

³⁸See footnote 34.

³⁹Private cargo (*pacotille* or *port-permis*) referred to items that the officers and some members of the crew were allowed to transport for their own use, over and above the ship's normal cargo. Private parties could finance their purchases and receive part of the profits. This arrangement represents a variant on the former commission contract. This practice provided a direct incentive to the crew and also motivated them to ensure cargo arrived safely at its destination port.

⁴⁰See Lemarchand [1995] for further details regarding ship accounts, their outfitting and laying up (*l'armement* and *le désarmement*).

⁴¹"Order is the soul of commerce."

⁴²"a *négociant* vigilant and consistent in the knowledge of his merchandise and his cash on hand"

sively and indirectly deterring dishonesty, will be transformed in the last two sections of the book where this role will become one of accounting's explicit functions.

Section Three: Bookkeeping⁴³ for Navigators (pp. 213-308): This section leaves the merchant house so to speak and addresses accounting as it is undertaken by the manager (agent or representative) of a shipment; in other words, usually the captain of the ship acting for his principal and whose accounting must reflect managerial activity⁴⁴ that is "clear and beyond doubt and suspicion" (p. 213). These activities include the keeping of a blotter/daybook, a journal, a general ledger, and a *livre de récapitulation* in which all the cargo's merchandise is listed in alphabetical order and in which all sales are recorded. This "*livre*" is, in a sense, an ongoing inventory of the cargo, both in terms of its quantity and value, and is a precious source of information. Gaignat states that, thanks to this record, "*d'un coup on voit tout ce que l'on a vendu de quelques espèces de marchandises que ce soit, ce qu'il en reste dans le magasin, et ce que lesdites marchandises ont produit*" (p. 217).⁴⁵

In addition to reflecting the managerial control of the captain, such accounting techniques also provide the *armateur* with strategic information:

Si vos livres sont dans un ordre bien clair et bien régulier, ceux qui vous ont commis, voient d'abord le bon ou mauvais état de leurs affaires, ce qu'ils doivent et ce qui leur est dû, les marchandises sur lesquelles ils ont profité et celles sur lesquelles ils ont perdu; cette connaissance les engage à continuer les bonnes et remédier aux méchantes (p. 220).⁴⁶

⁴³Gaignat uses the expression "*teneur des livres*," which in French could be interpreted as referring to the contents of the ledgers. However, "*teneur*" here refers only to the "keeping" of the books.

⁴⁴The word "management" is to be interpreted here in a more narrow sense than it is used today, and refers to managing or controlling the affairs of others.

⁴⁵"in a glance one sees everything that has been sold in every type of merchandise whatsoever, what remains in the stores, and what yield this merchandise has produced"

⁴⁶"If your books are clearly and regularly maintained, those who are entrusted with your affairs can see the good or bad state of their business, what they owe and what is owed to them, the merchandise from which they have profited and that on which they have lost; this knowledge will motivate them to continue their good efforts and to remedy the bad."

After presenting various models of bills of exchange along with instructions as to their use, the author elaborates on the cargo of a ship leaving Nantes bound for Saint Domingue in April 1754. He begins by presenting the invoice for the cargo's merchandise, followed first by a table which summarizes the cargo in alphabetical order and then by the account book outlining in single-entry form the sales in Saint-Mars and Léoganne, as well as the return purchases.

In a current account between the captain and the *armateur*, the captain lists himself as debtor for the sales carried out and creditor for the expenses relating to the ship during its stay in Saint Domingue, the return merchandise, and the balance on hand. Given that not all of the merchandise has been sold, a portion of it is left with a trader in Léoganne for him to sell and some of it, for lack of a market, is brought back to Nantes.

The general ledger, in which only the clients' and the suppliers' accounts and the cash account appear, ends with the *livre de récapitulation* which lists all of the merchandise items individually. Examination of this document reveals that a comparison of the buying price and the selling price of the merchandise does not immediately yield the net gain, as one is expressed in terms of "*argent de France*" (French currency) and the other in terms of "*argent des Îles*" (colonial currency). Examining the terms of payment laid out in the two bills of exchange drawn on merchants in France by traders in the islands (p. 265), the calculation is fairly simple: the "*argent de France*" or "*livre tournois*" was worth one-third more than the "*argent des Îles*" or "*livre coloniale*" [Rinchon, 1964, p. 19].

More than a technical brief that a few examples of accounting entries would have sufficed to illustrate, this section abounds in information; 96 pages of documents relating to instructions on commercial activities amply justify the wide scope of the work's title. In effect, much like the trade goods that are the subject of the preceding section, the contents of this section represent a model cargo of sorts, composed of 97 different products from assorted categories: construction material, tools, coal, candles, dishes, cloth, clothing and footwear, trimming material, food products, jewelry, clocks and watches, etc. While the books kept by the captain served as a means of controlling his managerial activities, nothing is said of possible incentives or profit-sharing mechanisms put in place to encourage him to sell his cargo at the best possible price. The terms of his salary are never discussed.

Section Four: The Slave Trade (pp. 309-444): This trade involves the following accounts and documents: a journal outlining the trade, an invoice book, a journal on the sale of the slaves and return purchases, and a general ledger.

Trade Operations and the Journal: The trade journal begins with an invoice for the cargo's merchandise, in terms of both its quantity and its value. It is followed by the items used by the captain to carry out business (gifts and fees paid to local authorities), procurement expenses, and purchases of captives, gold, or ivory during his stops along the African coast from March to August 1761. As all the payments are made in kind, the quantity and value of the merchandise provided in return are indicated for each transaction. The journal also records the death of captives that occur in the course of trading activities.

Here again, the author's commitment to realism leads him to make provisions for more than 20 types of trading goods (Chambon [1783] lists 16) and to record entries corresponding to over 80 transactions carried out in 16 different locations. The trade goods are similar to those proposed by Chambon and those used during the expeditions from La Rochelle that Deveau studied [1990, pp. 71-75].

The exchange of captives for merchandise did not result from simple barter since buyers and slave merchants utilized a money of account to express the price of *les captifs*. At the trade locations visited by the ship in the example presented, this unit of account was an ounce of gold (subdivided into *l'écu*, one-sixteenth of an ounce, and as a multiplier, *le marc*, eight ounces). However in other places, it was *la pièce*⁴⁷ (a piece of fabric) or even *la barre* (bar of iron). Once the price of a captive had been established, at the close of an initial discussion, it remained to discharge the obligation in merchandise. The journal entry in Table 1 provides an example of the assorted merchandise given in exchange for a captive for whom the price had been fixed at 7 ounces and 9 *écus*.

⁴⁷The expression "*pièce d'Inde*," signifying at its origin a piece of Indian fabric, was used equally in certain countries to represent a sort of standard measure of "*un captif*," namely a black of 15 to 30 years of age, healthy, robust, well-built, and with all his teeth ("*un noir de 15 à 30 ans, sain, robuste, bien fait et qui a toutes ses dents*") Chambon [1783, p. 399].

TABLE 1
Journal Entry, April 17, 1761

Du 17 avril 1761		
AVOIR de l'Éveillé, un Nègre, pour 7 onces 9 écus, en les marchandises suivantes, savoir :		
1. once 0. écu	1. Ancre d'eau de vie	£ 12. 0. 0.
	2. Barils de poudre de 8 lb 1/4 à 14 sols la lb	11. 11. 0.
1. 6.	1. Pièce de Néganepaux	28. 0. 0.
	1. Pièce de Batujapaux	28. 0. 0.
1. 0.	2. Fusils, à 6 livres pièce	12. 0. 0.
	30. Pierres à Fusil, à 6 livres le cent	3. 0. 0.
	2. Barils de suif, pesant 50 lb à 35 livres le cent	17. 10. 0.
3. 2.	4. Plattes, à 6 livres pièce	24. 0. 0.
	1. Coffre de Pipes de 25 grosses, à 4 livres la grosse	100. 0. 0.
1. 1.	2. Chapeaux communs, à 50 sols pièce	5. 0. 0.
	12. Couteaux Flamands	1. 16. 0.
	1. Salempouris blanc	19. 0. 0.
	2. Barres de Fer plates, et 2 carrées	15. 0. 0.
7. onces 9. écus		£ 276. 17. 0.

Source: Gagnat [1771, p. 319]. Note that one *livre* was divided into 20 *sols* and the *sol* into 12 *deniers*.

Gagnat points out that as soon as the trade journal is completed, a copy of it can be sent to the *armateur* on the first boat bound for France. In effect, it contains information vital to a trader interested in fitting out ships in the near future. Depending upon the scale of personal preferences of the courtiers and the relative fluctuation in market conditions, the lots of merchandise given in payment, at the close of a second discussion, varied from one location to another and from one courtier to another.

A table entitled “*récapitulation en total de la traite de la cargaison du navire le Sénaut à la Côte d'Or*”⁴⁸ lists the total number of captives exchanged and classifies them according to sex and age using the terms “*nègres, négresses, négrillons, et négrittes.*”⁴⁹ The table is designed to record the number of deaths occurring in the course of the trading activities, the ocean crossing, and the sale itself. In the example provided, the total is 20 people out of 358. Details are also provided as to the quantity of merchandise exchanged in kind, the amount remaining, in theory,

⁴⁸“final recapitulation of the trade of the cargo from the vessel *le Sénaut* on the Gold Coast”

⁴⁹“men, women, boys, girls”

of stock merchandise, and the shortages and surpluses resulting from a verification of the actual stock on hand.

An *“état des esclaves embarqués à bord du navire,”* outlining the number of captives onboard, was once again classified using the above nomenclature and distinguished between those belonging to the cargo per se, bearing a mark on their right breast and those termed *“pacotilles,”* personal property of the officers who bought them and bearing a mark on other parts of their body. This document indicates that in this case, the captain has merchandise listed as *pacotilles* consisting of 16 captives (10 men, 3 women, 2 boys, and 1 young girl, each bearing a mark on his/her left breast) that he can sell on his own account. The *“pacotille”* or *“port permis”* of the officers was typically used as an incentive by the captain or other officers. Practiced independently of the triangular trade, it applied solely to merchandise. Premiums were often paid for every captive brought to the islands; profit-sharing incentives, whereby a share of the ship was granted in direct relation to the gains, were likewise commonplace. These two strategies were assuredly more efficient than the *“port permis”* applied to captives in the sense that, if the latter can be considered a type of guarantee that the captives would receive relatively good treatment, it can be surmised that the officers would tend to keep for themselves the captives representing the most advantageous quality-to-price ratio.

The Sale of “les Captifs”: An invoice for the *“vente de 338 têtes d’esclaves appartenant à la cargaison du navire le Sénaut faite à Saint-Pierre de la Martinique”* (sale of 338 slaves from the cargo of *le Sénaut* undertaken at Saint-Pierre de la Martinique) outlines, for each of the 39 buyers, the name, the number of captives bought, the method of payment, the terms, and the price. For example:

Dumont-Flamet, pour 14 nègres et 10 négresses, en sucre terré et en café payables en mai et juin, 22 000 livres (pp. 341-342)⁵⁰

This summary invoice is followed by a detailed invoice of the merchandise received in exchange as payment – sugar, coffee, and cotton (only 6.5% of payments involved cash) – and loaded on board the ship itself to be brought to Nantes or on other ships that departed earlier. The wealth of detail provided is exemplified by the fact that numbers and weights are given

⁵⁰*Dumont-Flamet, for 14 Negroes and ten Negresses, in dried sugar and coffee payable in May and June, 22,000 livres”*

for 883 hogsheads of sugar. It is important to note, however, that in this respect, Gaignat is only following the instructions of the July 6, 1743 *Ordonnance* [cf. Chambon, 1783, p. 353], and that once he has decided to provide a complete sample, he does so thoroughly.

The journal on the sales of captives and the return purchases provides details on the sales and outlines selling prices per head. It is thus that we learn that Dumont-Flamet paid one thousand *livres* per man and 800 *livres* per woman, with the prices fluctuating between 800 and 1,100 *livres* for the men and 780 and 860 *livres* for the women. The section pertaining to the sale of captives has four columns on the left which correspond to the four categories of captives and allows for the quantifying of sales for the purpose of verification. This journal also outlines the sale of certain ship accessories no longer needed for the return voyage, such as the *chaudière à noirs* in which the slaves' meals were prepared. The costs related to the stay in Martinique are also recorded, from October 1761 to June 1762, as are the return purchases made possible by the cash sales.

The general ledger does not demand specific comments; it is preceded by a trial balance resulting from the trade. The profit recorded as of the end of the captain's tenure in Martinique equals 286,749 *livres* for the parties involved. This sum is in no way a net gain; rather, it implies that all the cargoes reached their destinations safely and were sold in their entirety by the *armateur* from Nantes. The operating result can only be obtained by deducting from the aggregate the total of *la mise-hors*⁵¹ and all applicable expenses of *le désarmement* [Lemarchand, 1995]. Such matters, however, did not concern Gaignat, who aimed only to provide a model of books pertaining to the managerial activities of the captain. He did not tackle at this juncture the transactions of *l'armement* and *le désarmement* of *Le Sénaut*, undoubtedly considering that the succinct examples of the second section were sufficient.

⁵¹*La mise-hors* refers to the total of all expenditures to equip the ship for the voyage. All costs were recorded in detail in the *armateur's Comptes d'armement*. An individual copy of *la mise-hors* was provided to the investors for their records to ensure accountability and stewardship of the *armateur* for all expenses incurred on their behalf. The expenditures began with the vessel itself, all costs to prepare it for sail, provisions, etc. The wages and advances paid to the vessel crew, all taxes, fees, and commissions were listed. All of these items were outlined down to the smallest item and purchase. The most significant portion of *la mise-hors* was the cost of merchandise with which to undertake trading activities.

REALISM AND LEGITIMATION OF THE ACCOUNTING DISCOURSE

Bottin [2001] has examined the representations of commercial activity in the accounting manuals of Savonne [1567], Van Damme [1606], and Irson [1678]. Beyond the pedagogical dimension, he has studied how these texts give evidence of the functioning and modalities of business and commerce at this time. We have examined the work of Gaignat from this perspective. More precisely, if the latter presents in detail the diverse managerial and accounting aspects of maritime trade and, more specifically, the slave trade, it reveals equally a multitude of detail about the business milieu as a whole. Several reasons explain this feature, but they can be summarized in two points:

1. The author wishes to affirm his expertise and knowledge of this business through the choice of examples "*inspirés du réel*" (inspired from reality) [Bottin, p.132]. These examples illustrate the knowledge that he had acquired of commercial affairs from his own experience. This "marketing angle" would attract a clientele and following for his work.
2. The validity of the information is implied and reinforced by drawing from the actual social and geographic context, conferring a certain authority on the author. We recognize within the examples the individuals themselves, along with the technical procedures and operations of the period. The latter conform to the actual methods used, but also are linked importantly to the contemporary environment and known individuals.

We have undertaken the production of a dual series of comparisons. Our intent is to determine the degree of realism of the examples, first from the point of view of techniques and markets, followed by that of the characters introduced in the text. Our research is still under way and the results presented here are partial. Nonetheless, in our view, their significance is sufficient to be presented such as they are. For the realism of the examples, we have limited our study to the various elements of the *journal de traite*; for the characters, we have enlarged our landscape to include the entire work.

Realism of the Examples – the Case of the Journal de Traite: This journal furnishes a mass of very precise details of which the degree of realism can be estimated, either from the indications provided in a number of historical studies dedicated to the slave

trade or through direct comparisons with documents contained in the archival collections of various *armateurs négriers* or published by historians. We have proceeded with several comparisons which by no means exhaust the totality of available documents.

Thanks to the *Répertoire des expéditions négrières françaises au XVIII^e siècle* of Jean Mettas [1984], it was relatively straightforward to verify that the vessel's itinerary along the coast of Africa corresponded clearly with those frequently taken by slave-trade ships. With a stop at Mesurade (Monrovia, Libéria), followed by calls at Tabou (Côte d'Ivoire), Anamabou, Petit-Popo (Aneho, Togo), Judas (Ouidah, Bénin), then a rest break at l'Île du Prince (Príncipe) prior to the departure for Martinique, one has in this example the classic itinerary. Moreover, without an in-depth search, we have been able to establish that the assortment of trade merchandise was relatively similar to the one that had been recommended by Chambon, as well as to those from trade expeditions from Rochefort studied by Deveau [1990, pp. 71-75].

However, the work offered data that allowed us to go further and to tackle the question of the realism of the terms of exchange. In the entries for the purchase of captives, Gaignat takes great care to note systematically the price of merchandise in *livres*, *sols*, and *deniers*. By recapitulating the details of the slave purchases as a whole and by adding up on one side, the price of captives in ounces and, on the other, the price of their equivalent merchandise in *livres*, *sols*, and *deniers*, it is possible to calculate the average value of an ounce (in this example, 40 *livres*, 5 *sols*, and 10 *deniers*). Taken in isolation, this figure is of limited interest, but it is quite different if we compare this result with another calculation. A document preserved at the Musée du Château des Ducs de Bretagne of Nantes, reproduced in Renault and Daget [1985, p. 88], provides the conversion of trade merchandise from *La Musette*, a *négrier* from Nantes departed September 6, 1788 for Juda. This "*réduction de la cargaison en onces de traite*"⁵² allowed the vessel captain to obtain the equivalence of one gold ounce, being 41 *livres*, 16 *sols*, and 3 *deniers*.

The two results are quite close, and if one accepts the realism of Gaignat's example, which at this point needs to be supported by other comparisons, the calculation above provides another lesson. In effect, even if Gaignat wrote the fourth part in 1761 or 1762, as he dated his examples in these years, he must

⁵²"reduction of the trade cargo into ounces"

have taken his inspiration from data of a much earlier date as only two expeditions left Nantes between 1756 and 1762. With a gap of 30 years, we note a remarkable stability in the cost of trade merchandise and the preference scales of African courtiers.

This example demonstrates as well the usefulness of the *journal de traite* as an information source for the *armateur*. The preparation of a table, such as that of *La Musette*, suggests a prior collection of data since the value of each piece of trade merchandise is expressed therein in its equivalence in ounces before, it seems, the smallest purchase had taken place. It was only through an experience on the African coast transcribed in the written register that a piece of velour from Utrecht could be evaluated at four ounces or that one could consider that four baskets of anisette or 28 pounds of cannon powder were needed to make one ounce.

We have also examined in the example by Gaignat the price expressed in ounces of the 370 captives purchased on the account of the vessel *Le Sénaut*. The price varied with changes in the trade locations, but Gaignat did not proceed to any calculation of averages. The details in the *journal de traite* are adequate to make this calculation. The results appear in the comparative Table 2, which incorporates as well the details provided by three *journaux de traite* of three vessels from Nantes: *La Reine des Anges* [Archives départementales de Loire-Atlantique, 16 J 9], *La Jeannette* [Archives départementales de Loire-Atlantique, B 5006] (examined earlier by Boulanger [1970]), and *Le Roy Guinguin* [Archives départementales de Loire-Atlantique, 16 J 1]. We have added the information provided by Chambon [1783, p. 399] about the ratios of the price of a man and that of a woman, of a young boy, and a young girl. We also have calculated these ratios for each of the vessels.

TABLE 2
Comparative Exchange Prices

	<i>Le Sénaut</i> (Gaignat)		Cham- bon	<i>La Reine des</i> <i>Anges</i> 1741-1742		<i>La Jeannette</i> 1743-1744		<i>Le Roy</i> <i>Guinguin</i> 1764-1766	
	Ounces	Ratio	Ratio	Ounces	Ratio	Ounces	Ratio	Ounces	Ratio
Nègre	7.8	1	1	7.14	1	5.12	1	8.8	1
Négresse	5.2	0.68	0.66	5.12	0.73	4.9	0.79	6.8	0.76
Négrillon	3.6	0.44	0.50*	5.1	0.64	4.0	0.70		
Négritte	3.3	0.43	0.50*	4.1	0.52				

* 0.50 between five and ten years; 0.66 between ten and 15 years

The average prices in Gaignat's example are closely related to those of the other vessels, at least for adult captives. They are especially very close to those of the captives of *La Reine des Anges*, a ship that covered a similar itinerary to that of Gaignat's fictitious *négrier*.

The Reality of the Characters and Faithfulness to the Commerical Context: We offer here only early results of a long-term research project whose intent is to analyze in detail the commercial practices and networks presented in Gaignat's examples in order to estimate the understanding that he possessed of them. More than 450 different characters appear in the examples. In our endeavors to identify them, we have had recourse to multiple primary and secondary sources. The results presented have been obtained either from various historical works or from the industry tax rolls (*les rôles d'imposition du vingtième d'industrie*) of the city of Nantes [Archives départementales de Loire-Atlantique, C 870], which furnish for each taxed merchant his street, parish, and the amount of tax.

From the very beginning, when Gaignat presents various models of commercial documents, he does not fail to include individuals easily recognizable by their contemporaries. One finds, for example, the name Sengstack, a merchant family long established in Nantes, mentioned in relation to the drawing of a bill of exchange, then later as a partner in a loan contract *à la grosse aventure*. Also present are Augustin de Luines (Luynes), an important *armateur* in the city [Saupin, 2004], and the Veuve Montaudouin, who had taken on the business of her late husband during the 1730s and who had managed, in association with her sons, one of the largest commercial fortunes of the city [Gaston-Martin, 1931, p. 211].

Additionally in the first part, various insurance contracts are presented in detail, and one finds in the examples a number of this activity's most important players, intimately linked to that of *l'armement*. Appearing here in particular are the families Michel, the Laurencin, and once again, the Veuve Montaudouin. Beyond the individuals, the commercial examples also reflect the spheres of activity of the merchants of Nantes. Insurance and credit were often obtained in foreign cities, such as Rotterdam and London; merchandise came from various regions of France, but also from other European countries.

In the second part of the work, Gaignat presents first single-entry and then double-entry bookkeeping. The single-entry system is illustrated through the example of a small business

established in Nantes. The picturesque nature of the names of certain characters who appear in the entries has the effect of strengthening the realism of the situations described. We have merchandise aboard the boats of a certain Brignon dit Bras-de-Fer, an inland shipper, or on those of La Gaudine, a shipper from Angers. If Bras-de-Fer remains unknown, even though this type of surname was common in these surroundings [Godelaine, 1999], it is completely reasonable that La Gaudine was the wife or the daughter of Germain Gaudin, a shipper from Angers.⁵³ In effect, this manner of signifying the wife or daughter of an individual, which seems today particularly pejorative, was very common in the 18th century and remained so until recently in the rural areas of west France and likely also in other regions.

The degree of realism can be grasped through a brief analysis of the alphabetical index of the single-entry general ledger. Forty-seven names of individuals are listed, 31 of whom are from Nantes. The others were located, we assume, in various French or European cities. To date, 12 individuals from Nantes have been identified, by name and by occupation. Take, for example, a purchase of merchandise acquired from a certain Durax on March 1, 1754. We have found his business and its location in the poll-tax rolls (*les rôles d'imposition*) and even have an approximate idea of the size of his commercial activity from the amount of tax paid. In the same manner, we have identified several other merchants and *négociants* (e.g., Arthur Wittemberg, a *négociant*; Peyroux, a druggist; Garreau, a grocer; and Julien Leroux, a cooper and personal friend of Gagnat who was a witness at his marriage). All of these names appear next to those of known *armateurs*, such as Luker, Thiercelin, and, once again, Pierre Sengstack. In each case, we have been able to verify that their activities corresponded with those that were mentioned in the accounting entries.

While we are far from having traced all the names appearing in this index, particularly those that are not from Nantes, the majority of the individuals identified originate from the world of small business. In contrast, the shift in the accounting model to double entry is accompanied by an enlargement of the transaction base undertaken and the business network mobilized. The analysis of the entries reveals investments in a number of

⁵³On November 12, 1751, Marguerite Gaudin, daughter of Germain Gaudin, inland shipper, married René Legros, a shipper as well. The Legros family was part of one of the best-off shipping families at the end of the 18th century [Godelaine, 1999, pp. 71-74].

vessels, the purchase and sale of merchandise in Europe and in the colonies, and the inclusion in the general ledger of accounts open for diverse correspondents in the context of commission operations or in association. The commercial partners are further and further away, and the surnames and the place names evoke a network that is a great deal more expansive than the earlier one. Again, we have used the alphabetical index of the general ledger as an initial means to grasp its contents.

Of the 40 individuals listed in the general ledger, 14 of them undertook their activities in Nantes. Some were prestigious *négociants*, such as Perré de la Villestreux, Trochon de Lorieère, Lemasne de Chermont, and Christophe Drouin. Of the 14 non-local partners, only four have been identified. These include the Maupassant family, *négociants* who specialized in grains and who delivered flour as it happens, and Levassor, a major sugar refiner of the city of Orléans.

Besides the general ledger, we also have catalogued the various names of partners with whom a nominal account was not necessarily opened, either directly or indirectly. As such, certain individuals appear simply from having been implicated in the settling of a bill of exchange or from having intervened in an insurance contract. In our view, one example seems to be of particular significance among those that we have identified as it brings together two rather exceptional characters, a vessel and its captain. One finds listed in an entry related to a loan “à la grosse aventure,” the “navire *La Badine*, capitaine Lissarague, allant en Guinée.” In reality, on March 5, 1742, the vessel *La Badine*, equipped by the Lemasne brothers, had set sail from Nantes for Guinée under the command of Capitain Lissarague [Mettas, 1984, p. 261; see also, Archives départementales de la Loire-Atlantique, 120 J 364, 375, 382].

In the same manner, several individuals introduced in the third and fourth parts of the volume have been identified, and we conclude with a single example that bears witness, if it is still necessary, to the degree of realism and richness of the cases developed by Gaignat. One finds the details of a transaction implicating a certain Lussy and the *société* Testard frères. Lussy was a well-known sugar producer from Martinique [Butel, 2002, p. 110], while François and Abraham Testard were *négociants*, whose family originated in Bordeaux but was also established in Martinique [Butel, 2002, p. 187]. We also know, thanks again to Butel [2002, p. 110], that François Testard married Élizabeth Lussy in 1744. The two families find themselves linked in another entry wherein 34 slaves from the cargo of *Le Sénaut*, sold to

Lussy, are settled by 88 barrels of sugar and by a bill of exchange drawn on the Testard brothers.

CONCLUSION

We have demonstrated that a non-negligible number of individuals intervening in diverse transactions described in the *Guide du commerce* were very real, and that Gaignat provided a version equally realistic of the conditions and practices of the slave trade in terms of the price of captives and the value of an ounce. Even if this aspect remains limited in relation to the trade itself, we could have equally examined the amount of customs or the sales price of slaves in relation to the entire field of activity covered in the volume. Either approach confirms the fact that Gaignat possessed an intimate knowledge of this type of business and, more generally, of commerce in Nantes and its foreign partners.

Evidently, several of the entries presented by Gaignat have been taken more or less directly from the account books that he kept, either on behalf of *négociants* in Nantes or on his own account. One could almost imagine that the books for the voyage of *Le Sénaut* had simply been copied from those of an actual expedition. A laborious comparison with the catalogue of Mettas [1984], which covers the itinerary, the season of the voyage, the number of captives, the final destination, and varied incidents noted by Mettas has led us to reject this hypothesis. The voyage of *Le Sénaut* is therefore a construction by Gaignat, a construction made from a pedagogical calling, yet one certainly enriched by real cases.

Thus, could it constitute a source document for the history of the slave trade? If we had been able to establish that the voyage of *Le Sénaut* corresponded to a real expedition, the answer would have been simple, all the more so since entire sets of *les journaux de traite et journaux de vente* (trade journals and sales journals) are rare. Our response is more nuanced. Again one might ask if the work offers in the slightest any new information about the mechanisms of the slave trade, a question about which abundant documentation already exists. This question is one that only specialists would be in a position to answer. Bottin [2001] insists on the role that accounting manuals that he studied can play as source documents for commercial history since they relate to a period for which the archival collections of French merchants are very rare. However, this is not the case for the 18th century in general or the slave trade in particular, even

if a plethora of archival sources is not available.

However that may be, we believe that the mere existence of the work by Gaignat should be considered as an element of slave-trade history, one almost neglected to this point. It is not that we consider that he could have had in reality any effect on practice; it would be necessary for that question to be resolved by examining the work's contributions and diffusion. While an innovator in terms of the field covered, nothing suggests that he was equally so on the technical plane. Further in-depth investigation would shed light on this question. It is rather in what Gaignat reveals about the rationalization process of "*l'infâme traffic*" that he inserts into his story. A rationalization, which manifests itself equally in other domains during this period, included the construction of vessels better adapted to the trade, the use of bellows for aeration [Chambon, 1783], or the concern over concentration of trade operations in order to shorten the stay on the African coast.

In effect, the use of *les journaux de traite* designed to record several elements of the same transaction in specific columns (the price in ounces, then the price in trade merchandise in *livres tournois*, the preparation of various recapitulative tables, or, even more, the use of formulaic phrases for death notifications) are as much signs of a stage of perfection and of a systematization of procedures. Such systematization was part of the concern to affect the finest possible control over the captain's activities, but was related more generally to the desire to master an activity of eminent risk as much as possible.

Examined from this angle, the work of Gaignat could constitute one element of a possible response to one of the more recent questions examined by historians of the slave trade – that of its "technical contributions to capitalism" [Pétre-Grenouilleau, 2004, p. 352]. However, our research has not advanced sufficiently to go further than a simple prognostication. We conclude with a quote from Olivier Pétre-Grenouilleau [2004, p. 356] which summarizes perfectly the debate touched upon and which translates in equally perfect terms the sentiments felt throughout our recurring conversation with the work of Gaignat de l'Aulnais:

À la fois violente inhumaine et réglée, on serait tenté de l'interpréter [la traite] comme la rationalisation et l'institutionnalisation, en temps de paix, d'un type d'économie dont le but initial était d'accélérer de manière expéditive l'acquisition des richesses. Elle constituerait ainsi l'une des nombreuses buttes témoins de la progressive

sophistication du commerce, et témoignerait d'une phase plus barbare que les autres dans le long processus de civilisation des mœurs décrit par Norbert Elias [1973].⁵⁴

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AUDITOR SWITCHING AND THE GREAT DEPRESSION

Abstract: This paper explores the pattern of auditor switching in Canada before and during the Great Depression based on a sample of 1,344 financial statements. Hierarchical log linear analysis shows that there is a significant change in the pattern of switches. Prior to the Depression, the contemporary pattern of auditor switching is observed; that is, there is a flow of clients from small to large audit firms and from Canadian to international audit firms. During the Depression, however, this flow of clients is reversed with large international firms losing clients through switches, on average, to Canadian and smaller audit firms. The contemporary audit literature suggests possible reasons for the observed patterns in terms of the demand for higher quality audits by clients and audit firms' risk management of potential client bankruptcy.

This paper explores changes in the pattern of auditor/client switching and continuity in Canada before and during the Great Depression of the 1930s. The Great Depression has been referred to as a "defining moment" in economic history [Bordo et al., 1998]. It provides a setting that allows the market's response to shocks to be assessed. The shock to the audit market was twofold. First, the Depression exposed the securities market manipulations of the late 1920s and made potential and current investors aware of the importance of credible financial information for assessing the liquidity, solvency, and future earnings potential of firms [Previts and Merino, 1979, p. 245]. This shock increased the value of the audit as a signal of the quality and

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credibility of financial statements and, hence, provided incentives for client firms to switch to higher reputation auditors.¹

The second impact of the Depression was to increase dramatically the risk of financial distress and bankruptcy faced by client firms and, derivatively, the risk of loss of reputation and litigation for damages faced by auditors. Audit firms must assess the risks posed by their portfolios of clients in order to ensure their profitability and survival. This will involve a pre-engagement assessment of the risk of new clients and the resignation from engagements with existing clients where the risk level has become unacceptable. The Depression dramatically, if temporarily, increased the average risk level of auditors' portfolios of clients. This could result in auditor switches initiated by the auditor in order to maintain an acceptable level of risk in its portfolio of clients.

The Great Depression also coincided with significant changes in the regulation of the audit market in some countries [Edwards, 1989]. In the U.S., the Securities Exchange Acts of 1933 and 1934 increased the disclosure requirements of publicly listed firms and increased the auditor's liability for fraudulent statements. While the effect and intent of such legislation on the stock markets is subject to debate [Benston, 1973; Merino and Neimark, 1982; Cooper and Keim, 1983; Tinker, 1984], its impact on the U.S. auditing profession is less controversial. The audit profession emerged from the Depression with a statutory demand for its services, revised audit objectives (i.e., the change in focus from the balance sheet to the income statement and the greater emphasis on the "fairness" of the financial statements rather than the accuracy of their tracking of transactions), and greater liability for misleading financial statements [Gilman, 1939].

In countries of the British Commonwealth, audited financial statements were required by statute well before the Depression (1844 in the U.K., 1907 in Canada). In these countries, there was no immediate legislative response to the financial reporting issues exposed by the Depression. Nonetheless, the Depression also coincides with changes in the practice of auditing in these countries [Chandler et al., 1993]. In the U.K., the 1931 Royal Mail Steam Packet Case, where secret reserves were used to hide deteriorating performance, is widely credited with increasing the emphasis on the income statement and the qual-

¹See Lieberman [2001] for a discussion of periodization strategies including the "exogenous shock" approach used here.

ity of earnings, although an audited income statement was not required by law in the U.K. until 1947 [Edwards, 1989]. Similarly in Canada, there is evidence of a change in auditing practice even though the disclosure of audited income statements was not required until 1951 as a professional standard and 1953 as a matter of legislation [Anderson, 1977, p. 10]. In these countries, then, changes in the demand for audit services were played out in the marketplace and professional practice rather than being brought about explicitly through regulation.

This paper explores the relationship between the Great Depression and patterns of auditor switching and continuity in Canada based on a sample of audited financial statements dated between 1910 and 1941. The Depression in Canada was as severe as that in the U.S. [De Long, 1997], but this setting provides an opportunity to observe the relationship between the Depression and changes in behavior of the audit market in the absence of changes in government regulation of auditing coincident with that event.

The paper is organized as follows. In the next section, the contemporary literature on auditor switching is reviewed. This review suggests that the Depression may have had contrary effects on the supply and demand sides of the audit market. On the demand side, four explanatory models of auditor switching each suggest that clients should prefer larger, better reputation auditors when the demand for credible financial information increases. On the supply side, the literature suggests that as the financial risks of clients increase, auditors should be more likely to resign in order to maintain a profitable portfolio of lower risk clients. The institutional context of the Canadian audit market between 1910 and 1941 is then discussed to identify which of these models may apply in this setting. This is followed by a description of the data used and presentation of an analysis of auditor continuity and switching behavior before and during the Depression. The paper ends with a discussion and some historical speculation on the results.

PRIOR LITERATURE AND INSTITUTIONAL CONTEXT

The audit market is highly differentiated with a wide range of sizes of audit firms as well as audit firm specialization in geographic and industry-specific markets [Yardley et al., 1992]. The decision by a client to hire or retain an auditor and the decision by the auditor to accept or retain a client is a complex process subject to many variables. The sections below review the domi-

nant supply and demand side theories of auditor switching in the contemporary literature.

The Demand for Audit Services: Our understanding of the dynamics of the audit market is largely based on data from the last 30 years in the U.S. This stream of research was triggered by the 1976 U.S. Senate's investigation into the "accounting establishment" [Metcalf, 1976]. The report documented the growing concentration of the supply of audit services to publicly traded companies by a small group of audit firms and their influence on the standard-setting process. It was not clear, however, whether this oligopoly was a result of market forces or uncompetitive behavior by the firms. The report led to a series of studies that examined such things as the pricing of audit services [Simunic, 1980], the initial choice of auditors by firms [Simunic and Stein, 1987], and the pattern of auditor switches, the subject of this paper. The argument was made that if audit pricing, auditor choice, and auditor switches could be explained by economically reasonable matching of the characteristics of auditors and clients, then the structure of the industry could be attributed to competitive market forces rather than to attempts by the firms to gain monopoly power.

This paper focuses on the pattern of auditor switching and continuity. The dominant pattern identified in contemporary literature has been a persistent shift of clients from small to large audit firms. There are four explanations for this pattern. First, clients may be using the reputation for quality of the larger firms to increase the credibility of their financial statements [DeFond, 1992; Teoh and Wong, 1993; Colbert, 1998]. In the face of uncertainty about the possible quality of auditors, a "brand name" may signal better monitoring of management reporting and lower agency costs. In order for this mechanism to be operative, the brand-name effect must be stronger than the quality effect provided by licensure and the minimum education standards required as a prerequisite for licensure. This effect is also consistent with "premium" pricing for the services of larger firms in competitive markets [Francis, 1984; Bandyopadhyay and Kao, 2001].

Second, clients may be relying on the "deep pockets" of large audit firms and liberal liability laws to provide insurance to potential users of financial statements in the event of an audit (or business) failure [Beatty, 1993; Menon and Williams, 1994]. The extent to which audit firms have been held liable for damages to clients and third parties varies across countries and across

time. The large firms have claimed that there is a liability crisis in auditing [cf., Freedman, 1993; Schuetze, 1993]. They suggest that the audit market may collapse if auditors are exposed to claims from all potential users of financial statements if there are no limits on the extent of their liability. These arguments lead to calls for proportionate liability and incorporation of professional practices as means of limiting liability [Kirby, 1997]. This explanation appears to be particularly relevant to the U.S. where third party liability and class action suits against auditors are more likely to hold.

Third, there may be economies of scale or scope in the audit market such that larger audit firms can produce services at lower cost than smaller firms [Francis and Stokes, 1986]. The economy of scale argument implies that there is a pool of fixed costs associated with the operation of the audit firm. These costs may include the costs of administration, research, information systems, and the fixed costs associated with the complement of partners of the firm. If there are economies of scale, clients may switch to larger audit firms as they grow in order to take advantage of audit efficiencies. The economies of scope argument implies that the audit firm can supply multiple services to a client less expensively than several firms supplying each service independently [AICPA, 1997]. The economy of scope argument usually links information flows from the audit to management consulting [cf., Shu, 2000]. If there are economies of scope, a client may switch auditors as its needs for non-audit services grow to allow one firm to provide both sets of services. Note, however, that economies of scope may involve offsetting problems associated with maintaining the independence of the audit.

Finally, if the audit is indivisible, clients may need to switch to larger firms as they grow to get the service they require [Benson, 1979; Chan, 1995]. Doogar and Easley [1998] demonstrate that the existing distribution of the sizes of audit firms can be derived from the distribution of the sizes of client firms using this assumption. This may apply to the need for the audit firm to provide service over an extended geographic range or to the size of the audit team required to complete the work on a timely basis. For example, Richardson [2001] notes that the change in strategy of Canadian banks from raising money from commercial term deposits and share subscriptions to reliance on demand deposits resulted in an expanded retail banking network that many smaller audit firms could not service.

We will consider the relevance of these theories to the

current study; i.e., the time period surrounding the Great Depression in Canada, after reviewing contemporary theory concerned with the supply of audit services.

The Supply of Audit Services: The literature examining the supply of audit services is of more recent origin. It can be dated to the bankruptcy of the audit firm Laventhol and Horvath in the U.S. in 1990. At that time it was the seventh largest audit firm in the U.S. but was unable to bear the costs of litigation of charges of negligence in a number of business failures during the 1980s. This event highlighted the importance to audit firms of managing the riskiness of their portfolios of clients (i.e., the business risk to the audit firm in addition to the risk of rendering an incorrect audit opinion [audit risk]) [cf., Brumfield et al., 1983; Jubb et al., 1996]. Subsequent research has demonstrated that audit firms take the riskiness of clients into account in setting their fees and respond to changes in business risks by adjusting their portfolios of clients away from those facing liquidity and solvency problems [Krishnan and Krishnan, 1997; Jones and Raghunandan, 1998; Johnstone and Bedard, 2004].

Shu [2000] documents that clients whose auditors resigned were more likely to move to a smaller audit firm. This would occur if the risks of litigation/reputation loss are less to smaller firms if the smaller firms have different risk tolerances than larger firms, or if smaller firms were industry specialists with superior knowledge of business risks [Menon and Williams, 1999; DeFond et al., 2000]. This literature thus suggests that in times of increased business risk, large audit firms will protect their reputations by resigning from, not renewing, or refusing engagements where they are unable to assess or manage the business risk.

The Canadian Institutional Environment: This section reviews the Canadian institutional environment to identify the demand and supply issues noted in the theoretical literature that are most likely to affect auditor switching and continuity in the period prior to the World War II in Canada. First, the reputation or quality differences among firms are likely to be larger during this period than in contemporary studies. Licensing requirements for public accountants were not instituted until 1946 in Canada, beginning in Quebec. This means that there were no minimum quality standards for auditors during the pre-Depression or Depression periods. In addition, the audit market was considerably less concentrated, and the number of audit firms

active in the market was larger than is the case in many contemporary markets [Danos and Eichenseher, 1986; Richardson, 2001]. It is reasonable, therefore, to assume that the variation in quality among auditors in this period was greater than usually encountered in contemporary auditor switching studies.

Second, the auditors' exposure to legal liability is significantly less in Commonwealth countries than in the U.S. [Anderson, 1977, p. 95; Baker, 1996]. The common law exempts auditors from liability to third parties under the strict privity of contract doctrine. This doctrine was first introduced into the area of auditors' legal liability by the *Ultramares* case in the early 1930s [*Ultramares v. Touche* 174 N.E. 441 N.Y. 1931]. Although this case was tried in the U.S., it is widely cited in U.K. and Canadian courts. In the U.S., this doctrine has been superseded by the liability provisions of the 1933 and 1934 Securities Acts for listed companies. More recently, some states have also applied broader liability rules based on the Restatement of Torts (Second) Section 522 or by the "reasonably foreseeable" doctrine introduced in *Rosenblum* [*In. v. Adler* 461 A.2d 138 N.J. 1983]. In the Canadian environment, and particularly during the period examined, the auditor's liability for negligence was limited to the client.

Even though the risk of litigation was relatively lower than at present, audit firms sought to avoid financially distressed clients to protect their reputations and the stability of their fee income. Cowperthwaite [1986, p. 22], for example, notes that both Peat Marwick and Price Waterhouse refused to audit stock brokerages during the Depression because of their financial condition and the low reputation in which some stock brokerage firms were held. He also notes that an unsuccessful lawsuit against the firm during this period resulted in the loss of clients because of the suggestion that the firm had failed in its duties [Cowperthwaite, 1986, p. 4]. There was a need to manage the business risk faced by the audit firm and to protect the audit firm's reputation.

A methodological note is in order at this point. In contemporary tests of the auditor client-portfolio adjustment hypothesis, researchers partition their sample into those clients that are experiencing financial distress and those that are not. This partitioning is based on financial statement accounts. Two problems prevent this approach in this paper. First, the required financial disclosures by firms in Canada during this period were limited to the balance sheet. While some firms disclosed income statements, it was not common practice and such statements

were unaudited. Thus, it is impossible to partition firms on the basis of earnings. Second, it is well documented that during this period, a firm experiencing financial downturns might use secret reserves to maintain the appearance of a sound balance sheet and to pay dividends [Bliss, 1987, p. 424].² This practice usually became public knowledge only if the firm ultimately failed. Consequently, it is inadvisable to examine the effect of the financial condition of particular client firms on auditor switching based on published financial statements. In addition, the cause of auditor switches was not disclosed during this period so the competing explanations presented above cannot be differentiated directly by the reason for the switch. The Great Depression, however, affected all sectors of the economy [cf., Urquhart and Buckley, 1965], and, hence, it is reasonable to assume that there were supply-side adjustments across the entire pattern of auditor switches.

Third, the potential for economies of scale was very limited at this time. Auditing during this period was a labor-intensive process; the use of statistical sampling and computer-aided audits did not occur until well after World War II. The main basis for economies of scale was the use of junior staff to undertake audit procedures. This source of leverage was equally available to all but the smallest audit firms and is unlikely to have given any subset of the firms in this sample a comparative advantage. The same can be said of the potential for economies of scope. During this period, the firms' main lines of business were auditing and, after World War I, tax advice [Little, 1964; Jones, 1981]. The contemporary arguments about economies of scope rely on the transfer of information between the audit and consulting functions [Shu, 2000]. Although management consulting practice can be dated to the development of scientific management in the early 1900s, it really did not become a significant business until after World War II [Mellett, 1988].

Fourth, it is possible that auditor switching was related to the size and reputation of audit firms. The reputation of the audit firm, or the quality of the audit performed, has frequently been inferred by its dominance of the market [Davidson and Neu, 1993]. The large audit firms (the Big-Eight, Six, or Five depending on the time period of the study) are usually regarded

²Other techniques included misreporting loans as equity [e.g., in the railroad industry, Thomson, 1938] and using alternative valuation bases to avoid write-downs on securities [e.g., in the financial services sector, Bliss, 1988, pp. 416-424].

as being equal in quality and differentiated from smaller audit firms [Francis and Simon, 1987; Beatty, 1993]. This assumption has been validated by showing that these firms are paid a premium for their services in competitive markets [Francis, 1984; Bandyopadhyay and Kao, 2001].

Francis and Simon [1987] explicitly test for and do not find a price premium for second-tier (“national”) audit firms in their sample. Their work suggests that the contemporary reputation effect in auditing is limited to the “brand name,” international accounting firms. Contrary to this, Krishnan and Schauer [2000] find that audit quality, measured as compliance with GAAP among non-profit organizations, is also related to the size of firm among non-Big-Six firms. DeFond et al. [2000] find both discount and premium pricing among specialist audit firms. These results suggest that reputation/quality may be reflected by the large international audit firms but that size may also affect the perceived and/or actual quality of audits beyond this group of firms.

In Canada during this period, both international and Canadian firms held positions as market leaders while some of the international firms that dominate other markets were minor suppliers in this market (e.g., Deloitte, Ernst) [Matthews et al., 1998, pp. 46-47 for a ranking of U.K. firms; McKee and Garner, 1992, p. 14 for a ranking of U.S. firms during this period]. In this study, the six largest firms include three Canadian firms and three “international” firms, originating in either the U.K. or the U.S. These firms are at least 20% larger than their closest rivals. This situation allows us to observe the effects of size, quality defined by local market share, and international reputation defined by membership in the set of dominant international firms independently.

Overall, the audit market environment at this time suggests that auditor switching by clients may have been related to the reputation/quality auditors or by a desire to lower the cost of their audit through the use of larger auditors. Simultaneously, audit firms were concerned about the effect of client failure on their reputations and the stability of their income streams. These factors are assumed to affect the entire period but to have different weights in the pre-Depression versus Depression periods as discussed below. There will also be auditor switches for other reasons such as price and opinion shopping, death and retirement of auditor partners, etc. These factors are assumed to be randomly distributed across time and are unlikely to be systematically related to the occurrence of the Great Depression.

These factors, however, may be systematically related to the size of the audit firm and, hence, would explain the consistently higher rate of switches among small audit firms.

RESEARCH QUESTIONS

The literature suggests that the market for audits fundamentally changed after the Great Depression due to a greater emphasis on the earnings capacity of the firm and greater reliance on audited financial statements as the indicator of that capacity. This shift increased the importance of auditor reputation to clients. The Depression also resulted in a sudden, but temporary, shift in the risk profile of many clients, providing incentives for auditors to realign their portfolios of clients to manage their business risk. Since there is a discontinuity in the nature of the demand for and supply of audits, we hypothesize that the distribution of clients over categories of auditor will be affected. Based on the contemporary literature on auditor switching, we expect that the pattern of auditor switches will be related to the local market share (size) and/or international status/reputation of the audit firms involved in the switches. The theoretical literature and contemporary evidence suggest that prior to the Depression, the pattern of auditor switching should favor large international firms. The auditor switching literature, however, does not provide a theoretical basis for predicting the direction of the change in auditor switching behavior during the Depression.

Given the discussion above, we test a non-directional hypothesis about the change in the pattern of auditor switches during the Depression (in alternative form):

- H1 The pattern of auditor switching among categories of audit firms in Canada will differ during the Great Depression compared with the pre-Depression period.

In addition to testing this hypothesis, we explore the pattern of auditor switches for evidence of consistencies in the average flow of clients among categories of auditors under different circumstances from which can be inferred the relative reputation of large international and Canadian audit firms (and others) during this period.

Data: The paper is based on financial statements published in *The Annual Financial Review, Canadian* [Briggs and Houston]

at five-year intervals from 1906 to 1941.³ The *Review* was published between 1902 and 1941, when it ceased publication. It presented a summary of the annual reports of major Canadian firms through this time period. The summary included the main financial statement information and the names of key officers. It did not include the auditors' certificate and, prior to 1906, did not disclose the name of the auditor, if any.⁴ This series has been used as a source of information about Canadian financial reporting practices in the absence of archives of early Canadian annual reports [Murphy, 1988; Richardson, 2001].

In order to be included in the sample, financial statements for each company were required for at least two periods along with the reported name of the auditor. These criteria yielded 1,836 financial statements from 492 firms. In order to observe auditor changes or continuity, the first observation from each series (492 financial statements) is dropped. The sample generates 1,344 temporally ordered pairs of financial statements that include 310 cases where clients switched auditors. Switches involved 195 client firms with 1.59 as the mean number of switches per firm and a standard deviation of 0.9. The data were divided into two sets using 1930 as the dividing line.⁵ This resulted in 648 financial statements from 383 firms for the pre-Depression period, including 186 auditor changes involving 133 firms, and 696 financial statements from 418 firms for the Depression period, including 124 auditor changes involving 103 firms.⁶ A supplementary analysis, described below, focuses on those 167 firms that appeared in both periods.

To facilitate analysis, the audit firms were divided into three categories based on their market share throughout the entire period and their country of origin based on the method used in Richardson [2001]. The market is concentrated with the six largest firms accounting for 45% of all audits. Further, there is a discrete break between the sixth largest and seventh largest firm

³The firms used represent those cases where there were (1) at least two financial statements available and (2) the auditor was listed. A total of 3,661 financial statements were included in the source material.

⁴The disclosure of the auditor in this series coincides with debates leading to the statutory requirement for audited balance sheets added to the Ontario Companies Act in 1907.

⁵The Great Depression is usually dated from the stock market crash in October 1929. The first financial statements impacted by the Depression would have appeared in 1930.

⁶Some firms appear in both periods so the number of firms in the sub-periods does not equal the overall number of firms.

(the sixth largest is almost 20% larger than the seventh largest) so that it is reasonable to treat these six firms as a distinct group. The largest firms include three Canadian firms (Clarkson, Ross, and Riddell) and three international firms (Price Waterhouse, Touche, and Peat Marwick). These subgroups are identified as the Canadian Big-3 and the International Big-3 in the analyses. The remaining firms are referenced to as "Other."⁷

For each financial statement pair, we identified in the database the categories of the initial auditor and the auditor of the subsequent set of financial statements. For the subsequent auditor, an additional category of "no change" was added to allow us to examine patterns of continuity as well as patterns of switches in the data. We also separated the financial statements into two categories based on the year-end as being in either the pre-Depression (before 1930) or Depression (1930 and after). The data are thus captured in a 3x4x2 (initial auditor * subsequent auditor * time period) contingency table.

Analyses: To explore the distribution of observations among the cells in the matrix described above, we specify the following saturated model:

$$\log m_{isd} = \mu + \lambda^I + \lambda^S + \lambda^D + \lambda^{IS} + \lambda^{ID} + \lambda^{SD} + \lambda^{ISD}$$

Where:

- m = cell frequency for a given combination of I, S, and D (indexed by i , s , and d)
- μ = the logarithm of the mean cell frequency across all conditions
- λ = a parameter to be estimated (the increase/decrease in cell frequency due to I, S, D and their interactions)
- I = auditor category in the initial period
- S = auditor category in the subsequent period
- D = the time period (either Depression or pre-Depression time period)

The model was estimated using hierarchical log linear analysis. This technique is appropriate for categorical data as it requires no assumptions about the distribution of variables and does not require a specification of the direction of relationships. Given H1, we use this model to test for a significant three-way interaction (I*S*D); i.e., does the pattern of switches between

⁷The original coding separated "Other Canadian" and "Other International" depending on their country of origin. Due to the small numbers of clients of "Other International" in the data, these two categories were combined for analysis.

categories of auditors change between the pre-Depression and Depression periods? The results are shown in Table 1. Based on a likelihood ratio chi-square, we observe a significant loss of categorization ability if the three-way interaction is dropped from the model (LR Chi-square = 18.6, $p < 0.05$). From this result, we conclude that H1 is supported.

TABLE 1
Analysis of Patterns of Auditor Continuity and Switching

$$\text{Model: } \log m_{isd} = \mu + \lambda^I + \lambda^S + \lambda^D + \lambda^{IS} + \lambda^{ID} + \lambda^{SD} + \lambda^{ISD}$$

Where:

- μ = the logarithm of the mean cell frequency across all conditions
- λ = a parameter
- m = cell frequency for a given combination of I, S and D (indexed by i, s, and d)
- I = auditor category in the initial period (International Big-3, Canadian Big-3, and Other)
- S = the auditor category in the subsequent period (no change, International Big-3, Canadian Big-3, and Other)
- D = the time period (either Depression or pre-Depression time period)

H₁: the pattern of auditor switching among categories of audit firms in Canada will differ during the Great Depression compared with the pre-depression period (the three-way interaction between I, S, and D is not zero)

Tests that K-way and higher order effects are zero (n=1,344).

K Model	DF	L.R. Chi-square	Probability
$3 \log m_{isd} = \mu + \lambda^I + \lambda^S + \lambda^D + \lambda^{IS} + \lambda^{ID} + \lambda^{SD}$	6	18.582	.0049
$2 \log m_{isd} = \mu + \lambda^I + \lambda^S + \lambda^D$	17	163.294	.0000
$1 \log m_{isd} = \mu$	23	2,160.622	.0000

Tests of partial associations

Effect Name	DF	Partial Chi-square	Probability
Initial auditor*Time period λ^{ID}	6	97.936	.0000
Initial auditor*Subsequent auditor λ^{IS}	2	11.958	.0025
Subsequent auditor*Time period λ^{SD}	3	17.301	.0006
Initial auditor λ^I	2	263.184	.0000
Subsequent auditor λ^S	3	1,732.429	.0000
Time period λ^D	1	1.715	.1904

The results also show that the main effects, with the exception of “D,” and the two-way interactions are statistically significant. Although these results are not of direct relevance to

the hypothesis, they are discussed here for completeness. The lack of significance of "D" (the time period) simply means there is no significant difference in the number of observations in the pre-Depression and Depression periods. The significant main effects on "I" (the initial auditor) and "S" (the subsequent auditor) means that clients were not evenly distributed across categories of auditors. The significant two-way interactions mean that (a) auditor switching changed the distribution of clients across categories of auditors over the entire period (I*S), (b) the distribution of clients across categories of initial auditors differed between time periods (I*D), and (c) the distribution of clients across categories of subsequent auditors differed between time periods (S*D). The significant three-way interaction, noted above, controls for all of these effects.

Table 2 provides a tabular summary of the data. Panel A shows the pattern of continuity and auditor switches among classes of audit firms during the pre-Depression period. This panel shows that there was less client turnover among the large firms than smaller firms during this period and that the international audit firms had the lowest rate of turnover. The lower section of Panel A provides the distribution of switches among categories of auditors during the pre-Depression period. Consistent with contemporary studies, the large international firms were gaining clients through switches (e.g., 3.2% of switches were away from the Big-3 international firms, but 18.8% of switches were to Big-3 International firms from other categories of auditors). Similarly, the Big-3 Canadian firms were gaining clients through switches (11.8% vs. 12.9%). The small firms were, on average, losing clients through switches during this period (84.9% vs. 68.3%).⁸

Panel B of Table 2 provides the same data for the Depression period. Two changes are evident; first, there is significantly⁹ less turnover among small audit firm clients although total turnover has increased. Second, the direction of switches among auditor categories has changed. The Big-3 international firms were, on average, losing clients through switches during the Depression

⁸Some changes in auditor from one class to another may have been associated with mergers between accounting firms. We assume that these represent choice points for the auditor and client about whether or not to change categories of auditor and are, in principle, no different than any other auditor switching event.

⁹The significance of individual cells is based on a test of the Pearson residuals comparing the observed data and a model assuming independence of the three factors used in the log linear model [Friendly, 1994]. All references to significant results are based on a $p < 0.05$.

TABLE 2
Auditor Continuity and Switches

Panel A: Auditor Continuity and Switches during the Pre-Depression Period

Pre-Depression Sample		Auditor in Subsequent Period				Total
		No Change	International Big-3	Canadian Big-3	Other	
		Percentage within Initial Auditor				
Initial Auditor	International Big-3	95.6%	1.5%	0.7%	2.2%	100%
	Canadian Big-3	81.2%	6.8%	2.6%	9.4%	100%
	Other	59.9%	6.3%	5.1%	28.7%	100%
	Full Sample	71.3%	5.4%	3.7%	19.6%	N = 648
		Percentage of Auditor Switches				% Client Losses
Initial Auditor	International Big-3		1.1%	0.5%	1.6%	3.2%
	Canadian Big-3		4.3%	1.6%	5.9%	11.8%
	Other		13.4%	10.8%	61.1%	84.9%
	% Client Gains		18.8%	12.9%	68.3%	N = 186

Panel B: Auditor Continuity and Switches during the Depression

Depression Sample		Auditor in Subsequent Period				Total
		No Change	International Big-3	Canadian Big-3	Other	
		Percentage within Initial Auditor				
Initial Auditor	International Big-3	89.8%	1.9%	3.9%	4.4%	100%
	Canadian Big-3	84.8%	2.6%	0.7%	11.9%	100%
	Other	76.4%	3.5%	5.0%	15.02%	100%
	% of Sample	82.2%	2.9%	3.7%	11.2%	N = 696
		Percentage of Auditor Switches				% Client Losses
Initial Auditor	International Big-3		3.2%	6.5%	7.3%	16.9%
	Canadian Big-3		3.2%	0.8%	14.5%	18.6%
	Other		9.7%	14.7%	41.1%	64.5%
	% Client Gains		16.1%	21.0%	62.9%	N = 124

Panel C: Changes in the Pattern of Auditor Switches (Depression – Pre-Depression Periods)

		Changes in the Percentage of Auditor Switches (Depression – Pre-depression)			
Initial Auditor	International Big-3		2.2%	5.9%	5.6%
	Canadian Big-3		-1.1%	-0.8%	8.6%
	Other		-3.8%	3.0%	-19.6%

while small audit firms were less likely to suffer clients switching. Panel C of Table 2 provides a summary of the changes.

Of particular significance are the cells above the diagonal in the matrix in Panel C of Table 2. These cells capture the change in the flow of clients among categories of audit firms during the Depression. All these changes are positive and statistically significant indicating that during the Depression, there was an increase in switches from International Big-3 firms to the Big-3 Canadian firms and "Other" firms (changes of 5.9% and 5.6% respectively) and from Canadian Big-3 firms to "Others" (a change of 8.6%) when compared to the pre-Depression period.

The second analysis, reported below, uses those firms in the data base for which at least one financial statement is available both before and during the Depression. The additional restrictions reduce the sample size and hence the power of the tests, but this subset of the data allows each firm to act as its own control to remove possible effects due to changes in industry composition between the two periods, possible survivorship bias, and other factors associated with the change in client populations. This sample includes 167 firms generating 779 temporally ordered pairs of financial statements. There are 189 auditor switches among this group, 118 from the pre-Depression period involving 80 firms (based on 444 pairs of financial statements) and 71 from the post-1930 period involving 54 firms (based on 331 pairs of financial statements).

The hierarchical log linear analysis results for these data are consistent with those reported above. There is a significant three-way interaction effect (LR Chi-square 12.1, d.f.=6, $p < 0.06$, $N = 779$) indicating that the pattern of auditor switches changed between the pre-Depression and Depression periods. The pattern of auditor switches in this sample is also consistent with the results from the full sample described above. In particular also, the bottom panel of Table 3 shows that the changes in percentage of switches above the diagonal are again all positive, indicating an increased flow of clients from Big-3 International firms to Big-3 Canadian firms and smaller firms during the Depression.

DISCUSSION

The data provide evidence that there was a statistically significant change in the pattern of auditor switching during the Depression compared with the pre-Depression period in Canada. In the pre-Depression period, as well as for the entire

TABLE 3
Auditor Continuity and Switches
(Firms in Both the Pre-Depression
and Depression Samples)

Panel A: Auditor Continuity and Switches during the Pre-Depression Period

Pre-Depression Sample		Auditor in Subsequent Period				Total
		No Change	International Big-3	Canadian Big-3	Other	
		Percentage within Initial Auditor				
Initial Auditor	International Big-3	95.1%	1.0%	1.0%	2.9%	100%
	Canadian Big-3	85.7%	6.5%	0%	7.8%	100%
	Other	61.5%	5.7%	6.4%	26.4%	100%
	% of Sample	73.4%	4.7%	4.1%	17.8%	N = 444
		Percentage of Auditor Switches				% Client Losses
Initial Auditor	International Big-3		0.8%	0.8%	2.5%	4.3%
	Canadian Big-3		4.2%	0%	5.1%	9.3%
	Other		12.7%	14.4%	59.3%	86.4%
	% Client Gains		19.2%	14.6%	66.2%	N = 118

Panel B: Auditor Continuity and Switches during the Depression

Depression Sample		Auditor in Subsequent Period				Total
		No Change	International Big-3	Canadian Big-3	Other	
		Percentage within Initial Auditor				
Initial Auditor	International Big-3	89.2%	2.9%	4.9%	2.9%	100%
	Canadian Big-3	79.0%	3.2%	1.6%	16.2%	100%
	Other	73.0%	2.2%	5.4%	19.5%	100%
	% of Sample	78.6%	2.7%	4.8%	13.9%	N = 335
		Percentage of Auditor Switches				% Client Losses
Initial Auditor	International Big-3		4.2%	7.0%	4.2%	15.4%
	Canadian Big-3		2.8%	1.4%	14.1%	18.3%
	Other		5.6%	14.1%	46.5%	66.2%
	% Client Gains		12.7%	22.5%	64.8%	N = 71

Panel C: Changes in the Pattern of Auditor Switches
 (Depression – Pre-Depression Periods)

		Changes in the Percentage of Auditor Switches (Depression – Pre-depression)			
Initial Auditor	International Big-3		3.4%	6.2%	1.7%
	Canadian Big-3		-1.4%	14.0%	9.0%
	Other		-7.1%	0.3%	-12.8%

sample, including both period observations, we see the pattern of auditor switching that is identified in contemporary studies. Large firms, particularly large international firms, on average gain clients due to auditor switches. Furthermore, there were significantly more switches from large Canadian firms to large international firms during this period than vice versa (4.3% versus 0.5% of switches) and significantly more switches from "Others" to the large firms than vice versa (24.2% versus 7.5% of switches combining the two large-firm categories). This pattern of switches supports the inference that the large international audit firms were preferred, on average, to Canadian audit firms by those clients who switched auditors. Also, large audit firms were generally preferred to small audit firms by those clients who switched auditors. The models reviewed above suggest that this could occur if the large international firms had a better reputation than large Canadian firms and large Canadian firms had a better reputation than smaller firms ("Others").

In the Depression period, the pattern of auditor switches is reversed for the large international firms. During this period, large international firms, on average, lost more clients to large Canadian firms than they gained due to switches (6.5% versus 3.2%) and lost clients overall due to auditor switches. This does not imply that the large international firms were contracting during this period since growth can also occur through the growth of existing clients or through new client firms entering the market. The large Canadian firms gained clients, on average, during this period while the small firms lost clients due to switches but at a significantly lower rate than during the pre-Depression period.

If the relative reputation of audit firms remained the same throughout this time period, then this reversal of the net flow of clients may be explained by the effect of the Great Depression on the relationship between clients and audit firms. The change in the pattern of auditor switching over the period examined is consistent with the following explanation. Prior to the Depression, the expanding capital markets created competition for funds, and large audit firms benefited by being seen as increasing the quality and credibility to financial statements compared with small firms. During the Depression, while this was undoubtedly still an issue, audit firms were adjusting their portfolio of clients and/or refusing certain new clients to manage their business risk. This would explain a shift from large international firms to large Canadian firms if the Canadian firms had better knowledge of local conditions and, hence, could better manage

the business risk of some clients that the large international firms felt were too risky. This aggregate result is consistent with Cowperthwaite's [1986, p. 22] observation that two of the Big-3 International firms (Peat Marwick and Price Waterhouse) refused to audit stockbrokers during the Depression. For this class of clients at least, the international firms were withdrawing their services because of increased business and reputation risks.

Alternative Explanations: There are at least three possible counter explanations to the interpretation offered here for the observed pattern of auditor switching. First, it may be possible that the Depression encouraged client firms to become more price sensitive in their selection of audit firms (i.e., changes in the elasticity of demand). Second, it may be the case that the Depression resulted in the downsizing of client firms such that their needs were now better met by using the services of smaller audit firms. Finally, the pattern of switches may reflect changes in the pattern of mergers among audit firms over this period. Each of these alternatives is discussed below.

The first alternative concerns possible price effects during the Depression. Unfortunately, no data are available concerning the pricing of audit services during this period. Theoretically, however, the shift of clients among auditors due to Depression-induced price competition is unlikely. Price competition may have already affected the distribution of clients, but no new effects are anticipated due to the Depression. First, if the relative prices of audits from different categories of audit firms remain constant, then no shifts in demand should occur. There is no *a priori* reason to assume that the price deflation during the Depression should impact all professional firms equally. In fact, if auditors with better reputations are earning higher than average returns, then presumably they are better able to meet price competition if this becomes a factor. Second, the demand for professional services has been found to be relatively income inelastic [e.g., less than 1, cf., Houthakker and Taylor, 1970]. In other words, the demand for a certain level of audit quality may be determined by extrinsic factors such as regulatory and stakeholder requirements and is less affected by the income available to the firm to purchase these services.

The second alternative explanation concerns possible changes in the size of clients during the Depression. The possibility of changes in the demographic composition of clients has been addressed partially through the research design. Sample 2 uses firms as their own control for both periods. This appears to have

been a successful control for size. The firms that switched auditors do not differ significantly in reported total assets ($p=0.54$). The firms that did not switch auditors groups also do not differ significantly in terms of reported assets ($p=0.86$). Furthermore, the firms that switched auditors did not differ significantly from those that did not switch auditors in either the pre-Depression ($p=0.53$) or Depression groups ($p=0.80$). Changes in client demographics are unlikely to explain the changing pattern of auditor switches.

Finally, the pattern observed could reflect changes in the pattern of audit firm mergers specifically if the larger firms were engaged in more mergers prior to the Depression than afterwards and client firms continued with the merged firm after the merger, thus creating the appearance of auditor switching to larger firms. We have already argued that the client's choice of an auditor and the merged firm's decision to retain a client are no different, in principle, during a merger than at other times. Unfortunately, there is little data on the pattern of audit firm mergers in Canada during this period so this alternative cannot be ruled out directly. One counter indicator is Collard [1983] who provides a list of mergers affecting both the Ross and Touche audit firms in Canada. Only one merger is reported during the period covered in this study, occurring in 1919. In terms of the data analyzed here, the number of audit firms represented in the data by year does not change significantly between the pre-Depression and Depression periods (pre-Depression, average = 91.3 accounting firms, s.d. = 9.6; Depression, average = 86, s.d. = 8, $p<0.5$). It appears unlikely that this effect could explain the results.

CONCLUSION

This paper uses the Great Depression as a setting to explore the dynamics of the market for audit services in Canada in the face of an exogenous shock to normal patterns of auditor switching. The theoretical literature suggested two possible associations between the Depression and patterns of auditor switches. First, it is possible that the increased importance of financial statement quality and credibility during the Depression could increase the association between the reputation and size of audit firm and auditor switches, reflected in a higher proportion of auditor switches from small audit firms to large firms and from Canadian audit firms to international audit firms. Second, it is possible that the changes in the risk profile of audit

clients during the Depression could create incentives for auditors to realign their portfolios to maintain profitability, resulting in more switches from large, better reputation firms to smaller firms or firms with a greater local knowledge of business risks.

The data support the hypothesis that there was a change in the pattern of auditor switches during the Depression compared with the pre-Depression period. In the Depression period (1930-1941), small Canadian audit firms were less likely to lose clients to the international firms, and auditor switches were more likely to result in clients moving to smaller and lower-status auditors, reflected in an increase in switches from the International Big-3 to the Canadian Big-3 and in an increase in switches from the Canadian Big-3 to "Other" Canadian firms. These results stand in marked contrast with contemporary accounting switching studies that show a consistent flow of clients to the large international firms. The data do not allow for tests of causal models, but based on current theories of auditor switching, one explanation is that during the Depression the large international firms withdrew from or denied services to risky client firms, allowing firms with higher risk tolerances or better knowledge of the Canadian market to benefit. This aggregate result is consistent with Cowperthwaite's [1986, p. 22] observation that two of the Big-3 International firms (Peat Marwick and Price Waterhouse) refused to audit stockbrokers during the Depression. Several alternative explanations were also ruled out on theoretical or empirical grounds, but the cause of the shift in the pattern of auditor switches in this period bears further investigation.

The period under consideration allows size and international reputation/status to be associated with auditor switching decisions independently. The results show that in this setting both factors are related to switching behavior, implying that client firms could differentiate between Big-3 International firms, Big-3 Canadian firms, and "Others." In the pre-Depression period, both large Canadian firms and international firms benefited from the movement of clients to larger firms. This suggests that clients were able to differentiate between the large and small Canadian firms. In the Depression period, the realignment of clients also provides evidence that clients differentiated the international firms from larger and smaller Canadian firms. There is an apparent flow of clients down this chain of firms and an increase in the flow of clients directly from the International Big-3 to the smaller Canadian firms. Taken together, the pattern of auditor switches suggests that, even in this early stage of the development of the Canadian audit market, international repu-

tation was more important than size in auditor choice decisions but that size, reflected in local market share, was a factor in such decisions.

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FROM TICKING TO CLICKING: CHANGES IN AUDITING TECHNIQUES IN BRITAIN FROM THE 19th CENTURY TO THE PRESENT

Abstract: The purpose of this article is to detail and explain the changes in auditing techniques that have taken place in Britain since the Victorian era, an area of study hitherto neglected by accounting historians. In so doing, it is hoped that an increasing knowledge of past practices will put the current processes into context. The source material for the paper includes new evidence from a program of oral history and postal questionnaires, together with more traditional sources such as the trade journals and textbooks. The so-called bookkeeping audit of vouching and checking postings and castings, and with the auditor also doing a fair proportion of the client's accounting, was typical down to the 1960s. Major changes then took place, including a decline in accounting work, an increased focus on the balance sheet, and a reliance on sampling and the systems approach. This trend is explained by a growth in the size and professionalism of audit clients. Further change since the 1980s reflects the use of risk assessment, materiality, and analytical review and may be ascribed to the growing commercial pressures on auditors.

INTRODUCTION

With the collapse of Enron and WorldCom, together with their auditors, Arthur Andersen, auditing today is clearly the most controversial aspect of the accountant's work [*Economist*, November 30, 2002]. The American scandals were, of course, presaged by equally dramatic upheavals in the audit world in Britain, particularly in the late 1980s and early 1990s. Indeed, audit failures in Britain are as old as auditing itself [Mitchell et al., 1993]. Yet, the growth of the British accountancy profession and the world-wide success of its accountancy firms were to a large extent based on the audit function [Matthews et al., 1997]. In view of this prominence then, it is remarkable how little interest auditing has received from accounting historians. In particular, there has been almost no attention to how, histori-

cally, auditors conducted their work [Lee, 1988, p. xi; Matthews, 2002].

This article is intended to close this gap in our knowledge. Of course, it would be impossible in an article of this length to cover all the detail of change so that a broad-brush approach has been taken of necessity. Within these limits, the purpose of the article is to establish the salient developments in auditing, the broad timing of change, and, crucially, the causes. Unfortunately in the latter regard, there is little helpful sociological or economic theory of technical change in a profession, unlike the mass of theorizing on technological innovation in manufacturing [e.g., Freeman and Soete, 1997]. There has been some discussion regarding innovation in the service sector; for example, Podolski [1986] and Silber [1983, pp. 89-95] in U.S. financial services, and Pearson [1997], who analyzed change in the British insurance industry. However, these do not amount to useful theory as such since they focus almost exclusively on product innovation, whereas the history of auditing change is one of process. We are left therefore in this article to look pragmatically for the main drivers of historical change in the hope that the answers will inform debate on current auditing issues. As Millichamp [2002, p. 191] has argued in his audit textbook: "The study of the history of a subject will often illuminate its present condition." To know where we are or where we are going, it is important to understand from whence we have come.

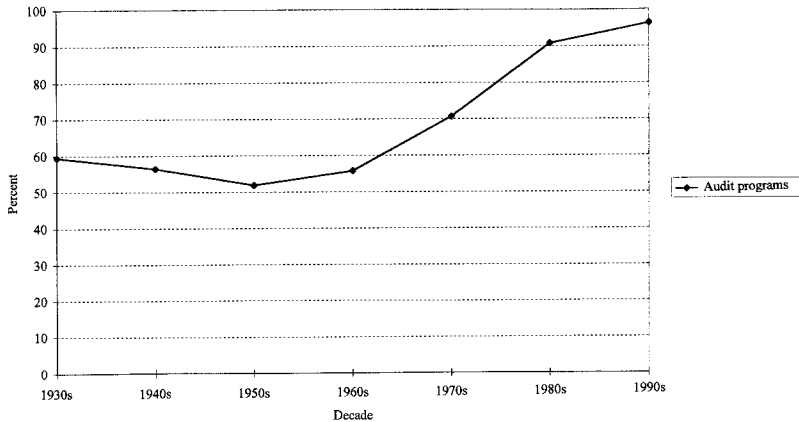
The source material for this article is largely based on the data generated by a project, funded by the Institute of Chartered Accountants in England and Wales (ICAEW), which used oral history and postal questionnaire techniques to gather information on all aspects of the auditor's life and work. Interviews were carried out with 77 retired or practicing chartered accountants. They included past and current leaders of the profession, while others were selected to provide a good cross-section of experience in large and small firms with a good geographical spread. Included also were some older interviewees in order to gain perspectives on the earliest possible times; in fact, some respondents started practicing in the 1920s. All interviewees were closely questioned on the audit methods they used and the changes they saw during their careers. Discussion of the methodology of the oral history part of the project and the successes and problems encountered, together with edited interviews and brief biographies of the respondents, have been published by Matthews and Pirie [2001, see also, Matthews, 2000]. Full tran-

scripts are available from the author with permission from the interviewee.

TABLE 1
Data Taken from a Postal Questionnaire to ICAEW Members

Year of qualification	1920s and 1930s	1940s	1950s	1960s	1970s	1980s	1990s	Total
Total sample	300	300	300	300	300	300	300	2100
Response rate (%)	32.7	48.0	54.3	49.0	43.7	40.0	39.2	45.0
Replied "always" or "often" to question on the use of audit programs (%)	59.5	56.5	51.9	55.8	70.8	90.5	96.4	

FIGURE 1
Use of Audit Programs



Source: Postal questionnaire, see text.

Notes: The graph represents the percentage of respondents who replied that they "always" or "often" used audit programs during their training, respondents being grouped into the decade in which they trained.

The postal questionnaire was a pioneering project in accounting history. An extensive discussion of the methodology has appeared in a recent article [Matthews, 2002], and tables of the complete data will be published in book form shortly [Matthews, 2006]. Briefly, questionnaires were mailed out to a random sample of ICAEW members who, as can be seen from Table 1, were grouped into cohorts depending on their decade of qualification. The questions on audit techniques were then directed to the respondents' period of training as the most

likely time when they were performing audit work, allowing for matching audit practice to specific decades. For example, respondents were asked to tick whether they used audit programs during their training, “always,” “often,” “sometimes,” or “never.” The combined percentage replying “always” or “often” for each decennial cohort is set out in Table 1 and graphed in Figure 1, clearly revealing the historical trends in the use of audit programs. In addition, since two questions asked were for the name of the firm with which the respondents qualified and the type of company they mainly audited, any influence these factors might have had on the techniques used can be judged. There was usually a clear impact, as illustrated in Table 2, where, for example, 89.8% of all the respondents who mainly audited quoted companies said they used audit programs “always” or “often,” whereas only 64.6% of those who mainly audited non-quoted companies gave that response.

TABLE 2
Responses to a Postal Questionnaire

(N = 945)				
Respondent replied that during their training their firm ...	Respondent mainly audited quoted companies	Respondent mainly audited non-quoted companies	Respondent trained with a top-20 audit firm	Respondent trained with an audit firm outside the top 20
	%	%	%	%
drew up the client's accounts “frequently”	20.6	54.4	33.4	57.4
used audit programs “always” or “often”	89.8	64.6	77.7	64.5
used statistical sampling “always” or “often”	50.8	23.1	44.8	20.0
audited the client's internal control systems “always” or “often”	66.4	25.5	46.8	24.0
sent out management letters “always” or “often”	68.5	35.5	56.8	30.1
attended stocktaking “always” or “often”	78.0	55.2	62.4	42.7
circularized debtors “always” or “often”	68.8	35.7	54.5	38.1

Source: Top-20 auditing firms determined from data as in Matthews et al. [1998, Table 5, pp. 46-47].

Another source used here is a survey (funded by the Leverhulme Trust) of company reports dating from the late 19th century, where, for example, audit fees and the wording of audit reports also cast light on the amount and nature of audit work undertaken. The final primary source was a search of the archive of past examination papers held at ICAEW headquarters which identified when questions on particular techniques first appeared in the final audit examinations, giving some further indication of the timing of their rise to importance.

The more traditional documentary sources, principally the trade press and contemporary textbooks, were also used. It could be argued with justification that audit textbooks in particular should not be relied upon as authoritative sources of current procedures; they may be ahead of practice, or since they are updated irregularly, more often they might lag behind. With this in mind, the author has always attempted where possible to corroborate textbook evidence with other sources. Where this has not been possible, the reader should be on guard.

The article is set out chronologically, starting with a discussion of the initial bookkeeping audit, and then looking at the changes that accelerated in the 1960s, followed by a section on the impact of the computer, then one detailing the changes from 1980 down to the present day more or less. A summary of the findings concludes the article.

THE BOOKKEEPING AUDIT

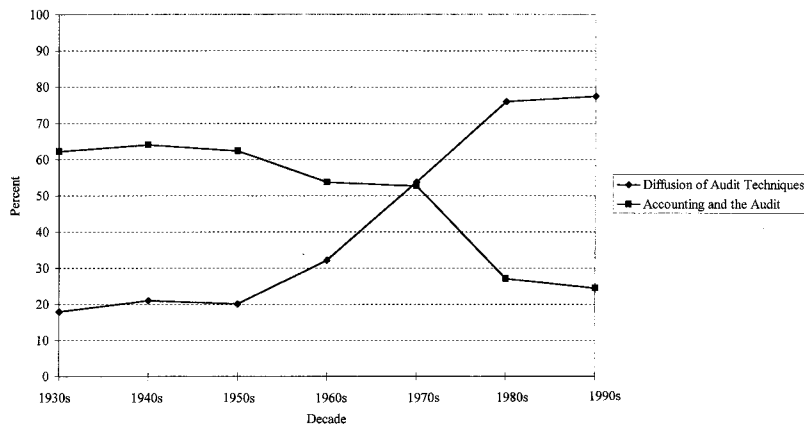
The Bookkeeping Audit and Accounting: The most significant feature of the traditional British bookkeeping audit is that it was closely bound up with also doing the client's accounting. Although accounting historians like Jones [1981, p. 54] have been aware of this fact, the extent of the practice and its longevity, not to say its full implications, have been largely overlooked by historians, perhaps because the Companies Acts and the audit textbooks all made a clear distinction between the directors' responsibility to produce a balance sheet and the auditors' job to give an opinion on it [de Paula, 1914, pp. 2-3; Spicer and Pegler, 1914, p. 196; Edwards and Webb, 1985, p. 177]. However, many articles in the *Accountant* in the 1880s and 1890s indicate the accounting role of the auditor. For example, the senior partner in probably the largest practice in Birmingham commented: "In this district it is frequently left to the auditor to balance the books himself, and he is even required sometimes to write up the Private Ledger" [quoted in Chandler and Edwards, 1994, pp.

157, 159]. Of the 26 court cases between 1887 and 1936 reported in Dicksee’s textbook where the audit process is made clear, in 19, almost three-quarters of them, the auditor drew up the final accounts. Indeed, in the well-known case of the London and General Bank in 1895, the judge was explicit (if in error) on the matter: “Mr Theobold’s duty as auditor was confined to framing the balance sheets” [*London Times*, August 7, 1895, p. 5; Waldron, 1969, p. 780]. Most accountants interviewed in the ICAEW project also attest to the symbiosis of accounting and the audit, and, indeed, that clients would often see drawing up the accounts as the role of the audit [e.g., interviews with Chapman, Fabes, and Goodwin]. Our postal questionnaire also revealed that about two-thirds of respondents who qualified between the 1920s and the 1950s said that during their training, their firm drew up their clients’ accounts “frequently” (see Figure 2). As late as the 1960s, 38% of those mainly auditing quoted companies said they did so.

The reasons for this characteristic of the early audit are not difficult to find since the typical audit clients in Britain were small (or even not so small) family firms. These so-called private companies were by far the British auditors’ largest market [Matthews et al., 1998, p. 245]. Chandler and others have detailed the managerial amateurishness of these family-run companies

FIGURE 2

Diffusion of Audit Techniques and Accounting and the Audit



Source: Postal questionnaire, see text.

Notes: The diffusion of techniques is an average of the combined responses illustrated in figures 1-6. Accounting and the Audit is the percentage of responses to a question indicating that the respondents “frequently” drew up the accounts of their clients while conducting an audit at the start of their career.

in Britain [Chandler, 1990, pp. 242, 266; Keeble, 1992]. Indeed, even quite large quoted companies often had non-existent or underdeveloped accounting departments [Reader, 1976, p. 144; Chandler, 1990, p. 68], while internal audits only became common in the 1960s [Hill, 1979, p. 12; Chambers, 1981, p. 21; Chandler and Edwards, 1994, p. 85; interviews with Brittain, Grenside, and Hewitt]. It has been estimated that as late as 1951, there was only approximately one qualified accountant on average working in business per public company in Britain, with only one in four of these being a chartered accountant, while there were still merely 2.5 per company in 1971 [Matthews et al., 1998, p. 90]. The reason British auditors did their clients' accounting therefore was that the majority did not have the personnel to do the work themselves [interviews with Colvin and Partridge].

Ticking and Bashing: The major result of the auditors' accounting function was that, if British auditors were making up the books for their clients, their auditing work had to focus on transactions. Where possible, they had to check everything to guarantee the arithmetic accuracy of the figures and ensure that the books balanced.

Nonetheless, an audit had to be conducted alongside the accounting work, and the techniques of the external company audit undertaken by professional accountants, as opposed to the early amateur shareholder auditors, were probably well established by at least the first half of the 19th century. Quilter, a leading accountant of the day, when questioned on his role as an auditor by a House of Lords Select Committee on railway audits in 1849, described an audit process which would have been familiar to auditors a century later [Parker, 1986, p. 29; Kitchen, 1988, pp. 26-29]. This traditional, so-called bookkeeping audit, however, is hazardous to describe since the work varied depending on the size and nature of the client's business and from one accounting firm to the next. Spicer and Pegler's [1914, p. xiv] textbook discussed in detail 37 different classes of audit, ranging from railways to social clubs which they considered needed special consideration. On the other hand, fundamentally, the bookkeeping audit probably went through a process which was common to most audits and was the standard procedure described in the textbooks.

A first audit, of course, would start with a review of the bookkeeping system used by the client. Once this was established, the work typically consisted of first closing off the books

of account, reconciling the cash book and the bank statements, then checking the posting (transferring) of figures from one account book or ledger to another, vouching (verifying) transactions with documentary evidence such as invoices, and casting (totaling) the columns of figures in the books. This process was highly labor intensive, usually performed by trainee articled clerks, and was by all accounts unpleasant work, involving, "going out with a team usually in pairs, where one sat with the ledger, and calling out enormous numbers of entries over to each other, trying hard not to fall asleep" [interview with Venning]. An auditor of the 1940s remembered: "In those days it was all hand-written stuff and the whole essence of the audit was the ticking of every single item you could find in the books. Everything was ticked at least once. It was ticked twice; in front for a posting and behind for a voucher. It was ticked three times for anything in the cash book, in front for a posting, behind for a voucher and underneath for a check to the bank pass book" [interview with Livesey]. Also, clerks would have individual stamps, often using different colored ink, to identify who had done the checking [interviews with Chapman and Fabes]. Thus, the mind-numbing work was known affectionately or otherwise as "ticking and bashing" [interviews with Aspell, Atkinson, Boothman, Sims, and Whinney]. Many interviewees emphasized how it "was based on arithmetical accuracy which was the great key to it all" [interview with Shaw]. Did the books balance? If they did not, "one searched for mistakes of a penny, believe it or not" [interview with Middleton]. Again to this point, "the most important thing was you had to cast quicker than any client...it was considered a great disgrace if you couldn't add up quicker than the chief clerk" [interview with Jones].

Some historians like Chandler [1997, p. 70] and Edwards [1989, p. 196; see also, Chandler et al., 1993, p. 448] have tended to side with contemporary critics that the bookkeeping audit was a "mechanical," superficial affair. However, although the audit ran through a fairly mechanical set of procedures, this did not equate with its being brief or cursory. The amount of work being done in the early audits was assessed from a sample of 23 company reports for the early 1880s, where the mean time lapse between a company's accounting year-end and the date of the audit report, together with the level of audit fees, using an estimated two guineas a day charge-out fee [Pixley, 1910, p. 38; Jones, 1995, p. 59; Edwards et al., 1997, pp. 17-21], produced an estimate of about four staff working for two months on the average audit of quoted companies. This estimate is confirmed by

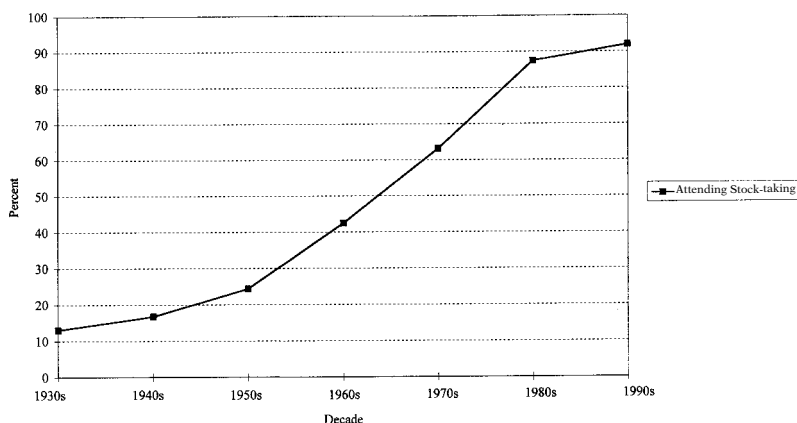
our interviews [with Atkins, Boothman, Milne, Mold, Wilde, and Wilkes]. Also, from the beginning of the professional audit, some interim work prior to the financial year-end was performed, which adds to our estimates of typical audit effort [de Paula, 1914, p. 15; Spicer and Pegler, 1914, p. 25; interviews with Atkinson, Chapman, Haddleton, and Mold].

The Balance Sheet: Overwhelmingly the most hours of a typical bookkeeping audit were employed in checking the accuracy of the recording of transactions. The valuation and verification of balance sheet items was much less time-consuming because there was very little physical checking, and auditors were usually prepared to take the word of management on such matters as value [Littleton, 1981, p. 312]. However, the main diversity of audit practice occurred because some clients were large and professionally managed enough to have accounts departments capable of handing the auditor a completed set of accounts, the accuracy of which they then checked (in other words, the statutory and textbook meaning of an audit). These were called “pure” audits. Early auditors realized that checking transactions on these audits was both more difficult (because of the scale of the client’s operations) and less important than verifying balance sheet items. In 1888, an accountant argued: “Take the case of a bank, what are we to do there? We must limit our examinations very much to the balance sheet” [quoted in Chandler and Edwards, 1994, p. 87]. A Price Waterhouse partner interviewed recalled of the 1950s that the audit “would have been quite focused on the balance sheet. The broad underlying theory being that, if you get two balance sheets right, the difference between the two would show up in the profit and loss account. So rather than audit the profit and loss account to death we concentrated on making sure the balance sheet was right” [interview with Stacy].

However, even on pure audits, the early British auditors rarely went beyond their clients’ books and paperwork, certainly not doing the physical checking and valuation of stock. After 1896, they could point to the judgment in the Kingston Cotton Mill case, which held that the auditor “is entitled to rely upon the representation of responsible officials” [Spicer and Pegler, 1914, p. 174]. Of course, the textbooks still recommended that the auditor should ascertain that the stock-taking was adequately done, and should cast the stock-sheets and test the valuations [Dicksee, 1904, p. 215; Spicer and Pegler, 1914, p. 175]. But auditors made the point many times that they were not techni-

cally qualified to evaluate stock; therefore, they had to rely on management's written or verbal assurances. It was commonly stated that they had done so in their audit reports [*Accountant*, April 11, 1936, p. 576]. But, on occasions, auditors did attend a client's stock-taking; indeed, some did the stock-taking for the client [interview with Sanders]. As Figure 3 reveals, approximately 13% of respondents to our postal questionnaire stated their firms always or often attended stock-taking even in the interwar period. Yet, although the practice was on the increase, only a quarter did so in the 1950s. Again, there was a wide variety of procedure; some firms attended stock-takes as a matter of routine while others never attended [interviews with Boothman, Davies, Fabes, and Patient].

FIGURE 3
Attendance at Stock-taking



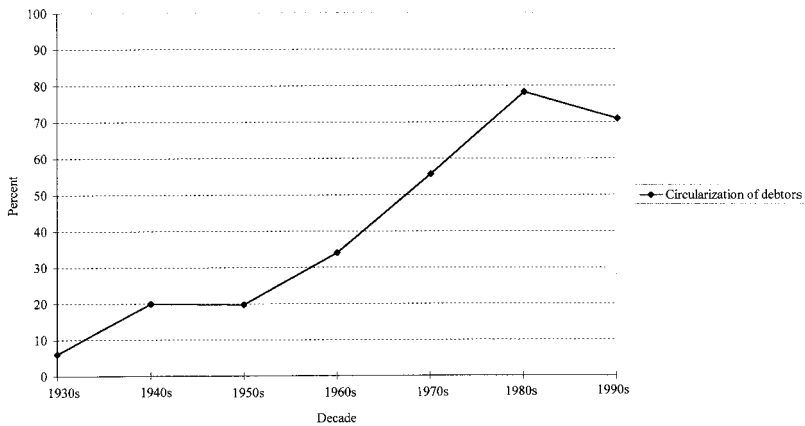
Source: Postal questionnaire, see text.

Notes: The graph represents the percentage of respondents who replied that they "always" or "often" attended stocktaking during their training, respondents being grouped into the decade in which they trained.

Nor did the assessment of debt usually involve the auditors in more than a look at the client's documents and taking its assurances. Various articles in the *Accountant* in the 1890s had argued for the circularization of debtors, but the practice was not generally taken up [Chandler and Edwards, 1994, pp. 111, 144, 154]. Reference to the practice did appear in the fourth edition of Spicer and Pegler [1925, p. 569], and an article in 1926 noted: "Now, it is a recognised practice with professional auditors to circularise debtors...the procedure provides such a safeguard as cannot lightly be ignored by the auditor" [*Accountant*, November 27, 1926, pp. 738-739]. This assertion, however, provoked a fierce

response: "I deal with businesses where the number of accounts runs into thousands. Who bears the costs of circularisation?" [Accountant, December 2, 1926, p. 806]. Figure 4 confirms that circularization was practiced in the interwar period although it was a minority activity. Our interviews again confirm the wide diversity of experience [interviews with Ainger, Burgess, Carter, Chapman, Edey, Keel, and Passmore].

FIGURE 4
Use of Debtor Circularization



Source: Postal questionnaire, see text.

Notes: The graph represents the percentage of respondents who replied that they "always" or "often" circularized debtors during their training, respondents being grouped into the decade in which they trained.

Audit Documentation: Another aspect in which the early audit procedures differed between firms was the extent to which the work was pre-planned and written down in an audit program. From at least the late 19th century, it was the practice of many firms to use audit notebooks "as a record of routine work performed and of queries raised in the course of an audit" [Dicksee, 1892, pp. 1-2]. The chief motive behind the programs in the audit notebooks was the control of the audit clerks: "In a large practice, unless some such method is adopted, the principals must of necessity lose a very large amount of control, and will be very much in the hands of their staff" [de Paula, 1917, p. 12; also see, Dicksee, 1904, p. 5]. An auditor described in 1889 how the audit book for each audit had "columns for the initials of each person who has performed the work, and made himself responsible for its having been correctly and thoroughly done. By this means, much labour is saved on a second audit and

thorough continuity secured" [quoted in Chandler and Edwards, 1994, p. 110]. The term "audit programme" was of slightly later provenance. Spicer and Pegler [1910] published a book of model "audit programmes," each especially tailored for a wide variety of audits (e.g., banks, railways, breweries, etc.). The term was used in the first edition of Spicer and Pegler [1911, p. 29], but only first appeared in the ICAEW's Final Audit paper of 1929 [November, question 10].

The audit notebook did service at least into the 1960s [interview with Hardcastle], and, remarkably, the final edition of Dicksee (1969) continued the description of them which, with only one or two alterations, was the same given in the first edition of 1892 [Waldron, 1969, p. 36]. The same audit notebook could perform prolonged service. An accountant who trained with Thornton and Thornton in the 1950s recalled: "I looked at the audit programme and it went back ten years, and the previous audit programme went back another ten years" [interview with Haddleton]. Talking of the early 1960s, another auditor noted that, "the same programme was used no matter what firm you dealt with. We'd turn up in many a different factory and carry out the same sort of procedure" [interview with Chapman]. The divergence in the use of audit programs can be seen from our questionnaire evidence, illustrated in Figure 1, showing that from the interwar period through to the 1960s, only around 50-60% of audit firms were always or often using them.

Two further documentary elements which were to become more prominent later were also present in the bookkeeping audit. First, loose documentation was inevitably accumulated to some extent in the conduct of an audit and was carried forward from year to year. The first edition of de Paula [1914, pp. 12-13] suggested that, "all working papers should be filed and kept." Yet again, there was wide disparity of practice; some firms had no audit programs but good working papers and vice versa, while others had neither [interviews with Boothman and Denza]. By the 1940s, some major firms like Price Waterhouse had begun to systematize their working papers, a practice that increased after the war [interview with Duncan; de Paula, 1966, pp. 15-16; Waldron, 1969, p. 373; de Paula and Attwood, 1976, pp. 18-21, 268]. Second, an audit manual, in embryo at least, dating from perhaps the 1860s, is detailed in the first edition of Dicksee [1892, pp. 2-4] and gives a list of 22 general instructions starting with: "1. In commencing a new audit you should obtain a list of all the books kept and all the persons authorised to receive or pay money."

Testing: Accounting historians have tended to underestimate the amount of testing in early audits. Littleton [1981, p. 312], in his survey of lectures published in the *Accountant* in the 1880s, concluded that “very little of it was done.” Lee [1988, p. xviii] also found that there was “little evidence of test checking prior to 1900.” Indeed, in a legal judgment in 1885, it was declared to be the duty “of an auditor to check and verify by vouchers or otherwise *every item* before he passed it” [quoted in Chandler, 1997, p. 64]. The first edition of Pixley’s [1881, p. 164] textbook laid down: “A thorough and efficient audit should embrace an examination of all the transactions of a Company”; this wording remained in the tenth edition [1910, p. 541].

But testing highlights the significance of the size of the client. With smaller companies, the auditor could check everything, while to vouch all transactions for large clients like the railways was impossible. Accordingly, test checking was a feature from the beginning of the professional audit. A speaker at an ICAEW meeting in 1888 stated: “I cannot see in many businesses how it is possible for the whole of the work to be audited; when one bears in mind... a bank like Coutts’ at the West end of London... We must accept certain results, and only audit a part of the work” [quoted in Chandler and Edwards, 1994, p. 85]. Different parts of a business were to be looked at each year, or what became known as rotational testing [Chandler and Edwards, 1994, p. 87]. Dicksee [1892, pp. 8-9] stated in his first edition: “it cannot be denied that (except in concerns of comparative insignificance) a minute scrutiny of every item would be quite impossible to the Auditor... The accuracy of the accounts may be verified by tests which render the checking of every posting unnecessary.” The first edition of Spicer and Pegler [1911, p. 22] discussed testing, and advised the auditor:

...if discrepancies are found he should carry his examination further. If, on the other hand, the transactions he has examined are in order, he is entitled to assume that the remainder can be safely passed.... The vouchers should be tested exhaustively, either by taking a certain consecutive period, or by examining all vouchers over a certain amount.

These are descriptions of what became known respectively as “block” (i.e., “We took a month and checked everything;” [interview with Evans]), and “stratified” testing [Spicer and Pegler, 1914, pp. 56, 72]. Also, the second edition of Spicer and Pegler [1914, p. 99] described testing by “taking individual accounts in

different ledgers,” indicating that, although not named as such, “depth testing” or “walk-through testing” was also in early use.

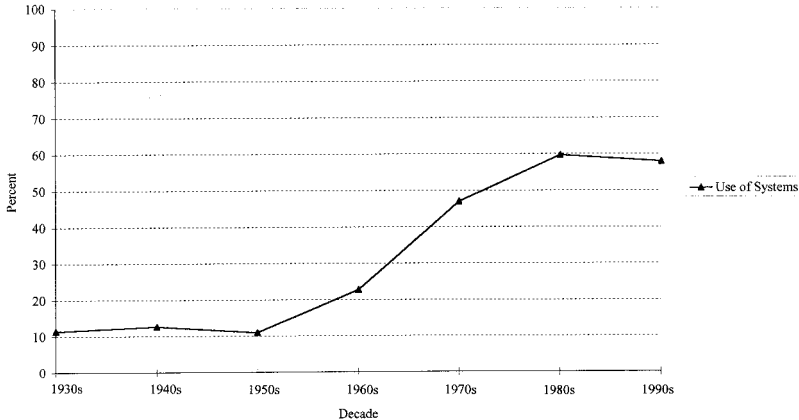
Power [1992] has argued that the early audit “tests” should be distinguished from later “sampling,” a word first used in the 1933 edition of Dicksee, since the former did not incorporate the concept of “representativeness.” Representativeness as a component of sampling, Power maintained, developed in the statistics discipline in the 1920s, unconnected with auditing. In practice, however, the distinction between testing and sampling would seem to be mere semantics since it is clear that early auditors were undertaking random tests on the understanding that they were to be taken as representative of the whole. If mistakes were found during a block test, that was indicative of a general weakness which necessitated further investigation [interview with Keel].

Internal Check: The so-called systems approach, at least in the form of auditing the internal check, can also trace its origins back to the earliest professional audits. In their preface to *Audit Programmes*, Spicer and Pegler [1910, n.p.] detailed what this involved:

It will be observed that the suggestion that the Auditor should ascertain the system of internal check in operation has been repeatedly made. This phrase indicates some system of account-keeping and the checking thereof by the staff of the business, so arranged, that collusion between two or more persons becomes necessary before fraud can remain undetected for any length of time....The practical importance to the auditor of an exact knowledge of any system in operation is unquestionable, as in all large audits the work to be done by the Auditor will be in direct relation to the system of internal check employed.

Again, the auditing of the client’s system has tended to be overlooked by historians. Lee [1972, p. 150], for example, states that it “was first generally recognised as a feasible approach to the function [auditing] in the 1920s and 1930s.” However, even in 1888, an auditor asserted: “Take the case of railway companies. We cannot there deal with details; we must be content with the internal audit, and to a great extent merely satisfy ourselves as far as we can as to the results” [quoted in Chandler and Edwards, 1994, p. 87]. The first edition of Dicksee [1892, p. 40] also noted that “a proper system of internal check frequently obviates the necessity of a detailed audit.” The first edition of Spicer and

FIGURE 5
Use of Systems Approach



Source: Postal questionnaire, see text.

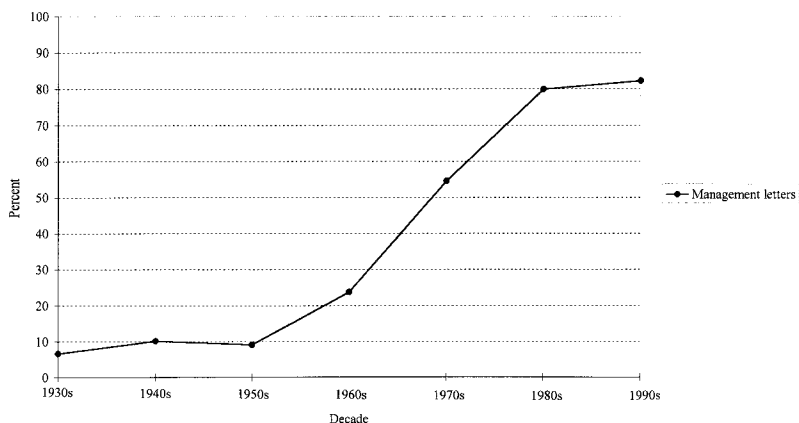
Notes: The graph represents the percentage of respondents who replied that they "always" or "often" used the systems approach during their training, respondents being grouped into the decade in which they trained.

Pegler [1911, pp. 6-7] also put a heavy emphasis on assessing and then relying on the internal check. Figure 5 shows that in the early decades just over 10% of auditors said they audited the client's internal control systems always or often. An interviewed auditor of quoted companies in the 1930s described how: "If the company's own controls were strong then the sampling would be limited. If they were weak, then the sampling was much more extended" [interview with Keel].

Management Letters: From the beginning, auditors commented to management on any weaknesses found in the internal controls. The management letter proper emanated from America where auditors, often called "the profession of business advice," from early on apparently had to make themselves useful to their clients [Montgomery, 1912, p. 7]. In Britain too, as Figure 6 shows, approximately 10% of firms from the interwar period through the 1950s always or often sent out management letters. One auditor remembered: "We did that in 1934...It was a letter that went out with the final accounts and the audit report. It might say: 'We think that your recording of petty cash is rather loose...'" [interview with Passmore].

Contrasts with American Practice: The argument so far therefore is that the nature and diversity of the early British bookkeeping

FIGURE 6
Use of Management Letters



Source: Postal questionnaire, see text.

Notes: The graph represents the percentage of respondents who replied that they "always" or "often" used management letters during their training, respondents being grouped into the decade in which they trained.

audit was largely determined by the size and variety of the clients. This view can be confirmed by comparison with American practice in this period.

As is well known, British auditors carried their brand of bookkeeping audits to the U.S. in the 1880s, which the Americans soon abandoned [Anyon, 1974, p. 9; Parker, 1986, p. 66; Miranti, 1990, p. 29; Previts and Merino, 1998, pp. 128, 134-135]. The first edition of the leading U.S. audit textbook [Montgomery, 1912, pp. 8-10] favored the more progressive "balance sheet audit" which by the 1930s at least already involved testing of the client's systems using internal control questionnaires (ICQs) [Myers, 1985, p. 63]. By 1932, an informed observer could claim that "the US profession had progressed to higher standards than those obtaining in Britain" [Edwards, 1976, p. 302].

Moyer [1988, p. 128] argued that since American companies had no legal obligation to be audited, the auditors had to make themselves useful and to keep down costs by the use of sampling and appraising control systems. It was also argued that bank finance, which was the rule in the U.S., strongly fostered "balance sheet audits" which assessed the client's ability to repay loans [Littleton, 1988, pp. 24-25, 31]. However, the weakness with the argument is that once stock market finance became significant in the 1920s and the 1934 Securities and Exchange Act made the audit compulsory for listed companies in America, practice still

continued to diverge significantly from the British [Montgomery et al., 1949, p. 5; Chatfield, 1977, pp. 132-133; Cochrane, 1979, p. 178; Zeff, 1979, p. 209; Tricker, 1982, p. 55; Michie, 1987, pp. 34, 169, 197, 264, 272; Previts and Merino, 1998, pp. 249-251].

The main reason for the transatlantic differences in audits, therefore, was probably that American clients have always been on average larger than the British [Lee, 1972, p. 24; Lee and Parker, 1979, p. 161; Chandler et al., 1993, p. 456]. For example, whereas in 1903, U.S. Steel, the largest industrial employer in America, had 168,127 workers, the largest U.K. equivalent, Fine Cotton Spinners & Doublers, had approximately 30,000 workers [Schmitz, 1993, p. 23; Wardley, 1999, p. 107]. As a result of their size, Chandler [1962, 1977, 1990] has shown that U.S. companies were professionally managed and even had sophisticated accounting departments and internal audits by the 1870s [Montgomery et al., 1949, p. 53]. The size and professionalism of their clients therefore explains why American auditors led in the use of sampling and the systems approach. Also, since they were far more likely than the British to be presented with a finished set of accounts, the need was obviated to attend to the arithmetic accuracy of the bookkeeping, allowing American auditors to focus on the balance sheet.

AUDIT CHANGES FROM THE 1960s TO 1980

Causes of Change: As our questionnaire data, graphed in the figures, and our interviews with those working at the time show, auditing in Britain was transformed in the 1960s and 1970s. What caused this change?

A number of factors which might have had an impact on audit techniques do not appear to have done so. Statute law was not a major influence. The Companies Acts laid down the duties of the auditor but never made any stipulation as to how the audit should be conducted [Bigg, 1951, pp. 213-214, 276, 303; de Paula and Attwood, 1976, pp. 251-252; Woolf, 1997, pp. 288-289, chap. 9]. Although many legal judgments set out to some extent what was expected of the auditor, they seldom went into how to accomplish the task. Similarly, recent issues of state regulation or corporate governance post-Cadbury [1992], although concerned with audit quality, did not venture into how auditing should be practiced.

Nor did professional regulating organizations tell their members how to audit. Even recent auditing standards have failed to initiate process change, and were, according to Woolf

[1997, pp. 16, 18-19], merely “the codification of contemporary audit practice and procedures...[and] indicators of best practice,” although they perhaps hastened diffusion from larger to smaller firms [Edwards, 1989, p. 212; ICAEW, 2000, pp. 5-7].

To what extent did American practice influence the British? Without exception, changes in British auditing techniques and nomenclature over the last hundred years came to prominence first in America. These make a formidable list: working papers, sampling, statistical sampling, the balance sheet audit, internal control, ICQs, flow charts, attendance at stock-taking, circularization of debtors, management letters, materiality, risk assessment, and analytical review. However, although British firms had to adopt American audit practices when auditing American subsidiaries in Britain, for example, attendance at stock-takes and the circularization of debtors, which had been imposed on American auditors following the 1939 McKesson and Robbins fraud case, the timing of the transformation of the British audit in the 1960s seems to have owed little to transatlantic influence since it came long after the changes had been made in the U.S. [Accountant, June 24, 1939, p. 851, August 16, 1941, pp. 85-86; Chatfield, 1977, pp. 135-137; Cochrane, 1979, p. 178; Baxter, 1999, pp. 157-174].

Of greater impact on the auditing process in Britain was the fact that from the 1950s, labor was becoming much more expensive for accountancy firms. Traditionally, articled clerks received no salary during their training. Rather, they paid a premium, typically £500 (£10,650 at 2005 prices) in 1950, for the privilege of being trained [Matthews and Pirie, 2001, pp. 401-402]. This free labor meant there were few time pressures on the book-keeping audit so it could afford to be detailed [interviews with Engel, Evans, and Venning]. However, by the 1950s, the demand for accountant recruits was outstripping the supply of suitable candidates. Our questionnaire evidence indicates that whereas 88% of respondents paid a premium in the interwar period, only 30% did so by the 1950s, the last being in 1958. Increasingly, firms had to offer attractive salaries to their trainees. One factor was that, whereas in the 1950s only 8.6% of respondents to our questionnaires had gone to university, by the 1980s the figure was 87.5%. Chartered accountancy had largely become an all graduate profession. By 1967, Cooper Brothers was offering £850 (£9,600 at 2005 prices) as a starting salary for an articled clerk, and Peat Marwick Mitchell, £800 (£9,020).¹ The figure to-

¹I am grateful to Professor J.R. Edwards for these data.

day is around £20,000 [Hays, www.hays.com/accountancy]. This escalation in the cost of audit labor meant that, regardless of the other factors at work, the “check everything” audit was doomed as too expensive.

The most important factor driving change in the audit in the 1960s, however, was probably company size. We argued above that the main determinant of the character of British audits in the 19th and first half of the 20th century was the size and professionalism of the clients. The significance of this factor is borne out by the additional questionnaire data set out in Table 2. As can be seen, “progressive” practices were always more likely where the respondents mainly audited quoted companies and, to a lesser extent, where their training was mainly in the larger audit firms. Moreover, since the size of clients determined the size of audit firms and not the reverse, client size is revealed as the primary determinant of audit practice.

The importance of client size on changes in audit technique, of course, is that British companies were growing rapidly in scale, particularly in the 1950s and 1960s period. The tenth, 25th, and 50th largest employers in Britain approximately trebled in size between 1935-1970, growth being most rapid in the 1955-1970 period [Jeremy, 1991]. The share of the largest one hundred manufacturing companies in total net output increased from 22% in 1948 to peak at 41% in 1978, entirely due, according to Hannah [1983, pp. 144, 180], to the merger movement among companies, at its height in the 1960s. As a result of this trend, family control of the one hundred biggest manufacturers declined from 54% in 1950 to 30% in 1970. British companies were also becoming more multinational and diversified [Channon, 1973, pp. 24, 60, 67, 75, 78]. With the increased scale and complexity of British companies and the decline of family control came the introduction of more professional management. It was now cheaper for companies to employ their own accountants than to use the auditors to do their accounting. Consequently, the number of qualified accountants working in industry increased over five-fold from 1951 to 1991 [Matthews et al., 1998, p. 215; interview with Hewitt].

The importance of the increase in the scale of clients on audit practice is attested to in many of our interviews. Typical was the following response: “From 1946 to 1966, everything went up in scale. ... You had on the one side businesses merging, integrating, taking over, consolidating and on the other side you had the profession struggling to keep the lid on. ... You couldn’t carry on casting all the books yourself” [interview with Jones]. In the fol-

lowing sub-sections, we detail the impact of the growing size of audit clients on how the British audit was conducted.

The Decline in the Accountancy Function and the Rise of the Balance Sheet: The growing professionalism of the typical client meant, as Figure 2 illustrates, the decline in the accounting role of the auditors and the increasing predominance of the pure audit. This development provided both a challenge and an opportunity for British auditors. It was a problem in that when the audit also involved making up the accounts, clients could see they were getting something for their money. Now, as this unofficial accounting role of the auditor disappeared, clients were increasingly likely to view the audit as a “damn nuisance,” which probably accounts for the growing need for British auditors to make themselves more useful to the client, manifested in part by the management letter [interview with Aspell; Humphrey and Moizer, 1990, pp. 231-232; Woolf, 1997, p. 144]. On the other hand, the reduction of accountancy work gave British auditors the opportunity to shift the focus of the audit to the balance sheet as in America.

This trend was also encouraged by the growth in scale and complexity of the client, which meant that the auditor could undertake proportionately less checking of transactions, relying more for audit assurance on verifying balance sheet items. Also, largely due to company mergers and increased size, there was a greater reliance among British companies on funding via the stock market. Between the late 1940s and early 1970s, domestic capital raised on the London Stock Exchange increased ten-fold in real terms [Wilson, 1995, pp. 189-190]. Consequently, investors, particularly the institutions, which held 60% of equities by the 1970s [Wilson, 1955, p. 191], together with investment analysts and the financial press, increased interest in issues of corporate profitability and solvency, again putting focus on the balance sheet and the verification of assets and liabilities [Lee, 1972, pp. 87-88; Woolf, 1997, p. 192; interview with Tweedie].

The impact of these factors can be measured by the changing audit practice with respect to inventory and debt. Through the 1950s, the trade press, textbooks, and the ICAEW itself increasingly urged attendance at stock-taking [*Accountant*, September 21, 1957, p. 346, November 2, 1957, p. 509; de Paula, 1957, p. 126; Waldron, 1969, p. 175, 1978, p. 186]. By 1969, the ICAEW Statement on Auditing (No. 11) stated: “In most circumstances attendance was the best method of stock verification” [*Accountant*, April 19, 1969, p. 550]. As Figure 3 shows, the prac-

tice grew rapidly in the 1960s and 1970s to the point that by the 1980s, attendance had become almost universal, with growth levelling off in the 1990s. Stock is a far more prominent feature of the audit today than it was in the bookkeeping days. Now, because of its impact on the profit figure, the textbooks call stock the “key item in accounts.” It was for the auditor “the one that must be singled out for special attention” [Woolf, 1997, p. 191; Millichamp, 2002, p. 184; interview with Tweedie]. Chan et al.’s [1993, p. 768] interviews with partners in the Big Six firms in the early 1990s indicated that with some clients, the effort spent in auditing inventories could take as much as 25% of audit time.

Similarly, circularization of debtors was still “not a widespread practice” in the late 1950s [*Accountant*, August 2, 1958, p. 132], and the Coopers manual [1966, pp. 267-268] claimed it “is not usually carried out.” Debtor circularization was first explicitly mentioned in an ICAEW Final Audit examination paper in 1965 [November, question 5]. However, Figure 4 on debtor confirmations shows a similar trend to Figure 3 – less than 10% of firms in the interwar period carried them out, with a rapid increase in the practice to almost 80% in the 1980s. Our interviews confirm this pattern [interviews with Fabes, Patient, Whinney, and Wilde].

A rider must be added, however, to the trends detailed above. As can also be seen from Figure 2, a quarter of our questionnaire respondents stated that they frequently also drew up their clients’ accounts, even in the 1990s. Although for those auditing quoted companies this practice had all but disappeared, there remained a large constituency of smaller clients where the auditors still “do the books,” and where elements of the old bookkeeping audit are still very much alive. However, frequently the main concern with small companies is minimizing tax, where stock valuation is vital, which could explain, as Table 2 reveals, why apart from the use of audit programs, attendance at stock-taking was the most used of the “progressive” audit techniques with smaller clients.

Documentation: The increased size of audit clients also prompted an increase in planning the audit and greater use of documentation. The bigger the job, the greater the imperative to think about the timing and organization of audit work, as well as the need for firms to control the larger numbers of staff. As can be seen from Figure 1, there was a significant increase in the 1970s in the use of audit programs. Maintaining working papers on audits of any size also became the rule, and the disparity

of practice between firms as in the other techniques was much reduced [interviews with Boothman, Denza, and Duncan].

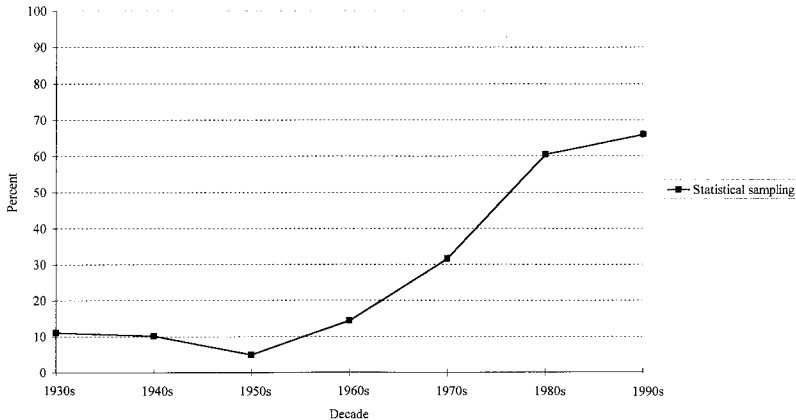
Another significant change in audit documentation in this period, also prompted by the growing scale of audits, was the increased use of audit manuals. Although a number of firms (e.g., Thornton and Thornton) [interview with Haddleton]) had by the 1950s expanded on the brief general instructions we noted were sometimes used in Victorian times, none matched the Cooper Brothers manual, apparently written by the head of the firm, Henry Benson, and first issued to staff in 1946 [Benson, 1989]. The purpose of the manual was again labor control: "Their big worry was keeping control of the staff. There were huge numbers of people, they didn't know what they were getting up to, they were scared out of their wits and this was the origin of the audit manuals" [interview with Goodwin]. Eventually published in 1966, the 620-page manual based the firm's audit procedures on formal documentation with a heavy reliance on the client's internal controls [Cooper, 1966, p. vii; *C&L Journal*, No. 31, June 1979, p. 15].

The Coopers manual was highly influential on auditing practice both before and after its publication [interviews with Atkins, Hewitt, and Middleton], and spurred other firms into either adopting it or producing their own as did Price Waterhouse, for example, in 1969. Most firms of any size had manuals by the early 1970s [interviews with Patient and Stacy]. However, Humphrey and Moizer [1990, pp. 225-226, 228] found from their interviews with 18 audit managers that while the audit manual was still used for its original purpose of controlling staff, they were "merely establishing a loose framework in which expert audit judgement could be exercised."

Statistical Sampling: The increased size of audit clients also meant the need for greater reliance on testing. As one interviewee [Livesey] put it: "No longer could you pretend to tick everything. So we did begin to think about systems and look at sampling." By the 1970s, there was also greater technical sophistication in the form of so-called statistical sampling, taking random samples and applying the laws of probability to the number of errors found in order to extrapolate to an estimate of errors in the whole population. Although a brief article on probability and the audit, which acknowledged no American influence, appeared in the *Accountant* [October 8, 1932, p. 444] in the early 1930s, the Americans made the early running, dating from an article in the *American Accountant* in 1933 by Lewis Carman

[*Accountant*, November 15, 1958, p. 605]. Moreover, the use of the word “sampling” in the audit context was also of U.S. origin. An American academic, L.L. Vance, a leading popularizer in the 1940s and 1950s and a professor of statistics at Princeton University, collaborated with the U.S. firm of Haskins & Sells in developing a precursor to monetary unit sampling, first published in 1972 [McRae, 1982, pp. 143, 152]. The practical application of statistics by American auditors, however, was slow. Of the leading U.S. auditors surveyed in 1979, only 45% said they used statistical sampling and only 13% stated they had started doing so before 1970 [McRae, 1982, p. 181].

FIGURE 7
Use of Statistical Sampling Techniques



Source: Postal questionnaire, see text.

Notes: The graph represents the percentage of respondents who replied that they “always” or “often” used statistical sampling techniques during their training, respondents being grouped into the decade in which they trained.

As can be seen from Figure 7, statistical sampling gained in usage in Britain in the 1970s. Here, however, the figures must be treated with caution since the 10% of our respondents who stated that they used statistical sampling in the 1930s and 1940s, when asked for the methods used, indicated that they were in fact referring to basic block testing. However, younger respondents indicated they were referring to statistical sampling as defined above, and Figure 7 shows a clear upward trend in its use from the 1960s to the 1970s. The first question on statistical sampling in an ICAEW examination paper appeared in the Final Audit paper of 1971 [November, question 1]. By the 1970s, all the textbooks, while previously more or less silent on the issue,

were devoting chapters or significant sections to the technique [Lee, 1972, pp. 47, 169-171; Waldron, 1978, p. 404]. The upward trend in the use of statistics in auditing in the 1970s is also confirmed in our interviews, also significantly suggesting that their rise was largely dependent upon the advent of computers, which greatly facilitated the selection and retrieval of samples [McRae, 1982, p. 14; interviews with Brindle, Colvin, Milne, and Niddrie].

Power [1992, p. 58] has argued that statistical sampling was adopted as “less an explicit technology and more as playing a role for members of the profession by positioning them as credible monitoring agents on behalf of capital.” Again Power’s view cannot be accepted. Statistical sampling as a public relations exercise would not explain why firms that adopted it made no particular attempt to broadcast the fact, nor why many in the audit profession resisted its introduction on the grounds that it was a flawed methodology being foisted on the profession by academics [*Accountant*, May 16, 1964, pp. 631-632]. Firms like Arthur Andersen and Cooper Brothers apparently never used the technique to any extent [interviews with Middleton and Plaitowe]. The technical objections to statistics were that financial transactions are not homogenous and are therefore less susceptible to the laws of probability. There was also a perceived need for large sample sizes and a corresponding increase in costs [*Accountancy*, June 1977, p. 121; McRae, 1982, p. 297; Sherer and Kent, 1983, p. 68; interviews with Carty and Currie].

There is also evidence that statistics were only partially used. Turley and Cooper [1991, p. 111; see also, Higson, 1997, p. 211] reported: “Many of these methods are...often weak on the evaluation of sample test results.” The written replies to our postal questionnaire also give the impression that statistics were used more for the selection of samples than for the analysis of the results. One audit manager told Humphreys and Moizer [1990, pp. 227-228] that they found “it difficult to statistically extrapolate our results so we tend to have to use judgement always.”

Internal Controls: A growing reliance on the systems approach was probably the major result of the growth of the scale and professionalism of audit clients. The increased size of clients meant that the auditors could not hope to use (substantive) tests on as high a proportion of actual transactions as they had done. But, happily, the concomitant increase in the professionalism of British management meant that they increasingly had financial and organizational systems and internal audits which went well

beyond the internal checks of the earlier era (although the segregation of staff duties remained part of internal controls). These the auditor could now use for audit assurance, questioning the systems with ICQs, illustrated in flow charts and checked by in-depth compliance testing [Millichamp, 2002, p. 86].

As we have said, the Coopers manual placed a major emphasis on checking internal controls and the firm practiced the procedure on their largest clients, like Unilever, in the 1950s [Accountant, October 26, 1957, pp. 474-475; Cooper, 1966, pp. 1, 11, 15, 361-457]. But Coopers was almost certainly in the vanguard [Accountant, May 20, 1967, pp. 658-665; interviews with Heywood and Middleton]. Despite the fact that as early as 1961, the ICAEW's statement U1 had stressed the need for the depth testing of internal controls, even in the 1960s, articles in the trade press indicated that the practice was not that common [Accountant, December 2, 1961, pp. 718-719, May 18, 1963, p. 645, November 2, 1963, p. 573]. Figure 5 shows that still less than a quarter of trainees always or often used the systems approach in the 1960s. Indeed, the term "internal control questionnaire" did not appear in the ICAEW Final Audit paper until 1970 [November, question 2]. By the 1970s, however, all the textbooks were alerting their readers to the rise of the systems approach [de Paula and Attwood, 1976, pp. ix, 17; Waldron, 1978, pp. 33-63, 91]. The first edition of Woolf [1978a] put it at the heart of the audit function, usually conducted in interim work prior to the year-end. Figure 5 shows that by the 1980s, 60% of respondents to our questionnaire said they always or often used the systems approach.

Management Letters: As noted above, along with the systems approach went the management letter, initially used to point out any weaknesses found in the client's controls. Figure 6 demonstrates how increasingly in the 1960s, British firms took up the practice. Management letters became the general rule from the 1970s, coinciding with the rise of the internal control audits. In the 1960s, however, the management letter also moved beyond mere comments on the client's control weaknesses into offering general advice to "help the company to become a better company" [interview with Grenside; Accountant, August 27, 1966, p. 257; Coopers & Lybrand, 1981, p. 116]. Lee [1972, pp. 40-41] argued that auditors should comment on where "the auditor feels there could be increased efficiency and profitability." But the standard textbooks were slow to acknowledge the management letter, perhaps because of a reluctance to discuss commercial

aspects of the audit not part of the statutory obligation of the auditor [de Paula and Attwood, 1976, p. 25; Waldron, 1978, p. 120; Woolf, 1978a, p. 145; Gray and Manson, 1989].

COMPUTING AND THE AUDIT

Our interviews and the questionnaire results suggest that auditors themselves felt that the greatest single change in the way the audit was conducted in their careers was brought about by the technological revolution embodied in the electronic computer. Indeed, the work of auditing largely went from ticking ledgers to clicking a computer mouse.

Computers had been preceded in the interwar period by mechanical processors. Principal among these was the comptometer, which took the drudgery out of casting and was first used widely in Britain in the 1920s. Punched card machines, ideal for processing information from invoices, statements, wages, or stock records, could produce a trial balance by 1925 [*Accountant*, February 2, 1924, p. 177, September 12, 1925, pp. 403-462, February 3, 1929, p. 133, August 7, 1937, p. 198; Bigg and Perrins, 1971, chap. XI; Campbell-Kelly, 1989, pp. 7-8, 1992, p. 130, 1994, p. 71; Jones, 1995, p. 166, plate 58]. With continual improvements in performance, these machines remained the most common office data processors until the 1970s [Campbell-Kelly, 1989].

These mechanical processors had some impact on the audit, but they did not pose the same problems for the auditor as the computer [*Accountant*, March 20, 1937, pp. 418-419]. Stoneman [1976, pp. 20, 183] has estimated there were 12 electronic computers installed in the U.K. by 1954, 306 by 1960, 1,424 by 1965, 5,470 by 1970, and 10,983 by 1975. It was only in the late 1960s, therefore, that computers became a significant factor in auditing. In the 1970s, they were still the large, unreliable, relatively weak, and expensive mainframes which only sizeable clients could afford [McRae, 1977, p. 120]. The next major landmark was the personal computer, developed simultaneously by the American companies, Apple and IBM, in 1979-1980. Compact enough to sit on the desktop of the smallest audit client, PCs were rapidly taken up in the 1980s and 1990s, and by the turn of the century, over 500 million had been sold worldwide [Carr, 1985, p. 36; *Observer*, August 12, 2001]. With far greater storage, calculating power, and reliability, PCs had an impact on accounting and auditing even greater than the mainframes.

The main debate initially within the profession was whether

to audit “through” or “around” the computer. To begin with, out of a necessity born of ignorance, the latter approach, which “relies on verifying input and output and on reconciling the two...without investigating too closely the actual processing patterns of the computer” was the preferred procedure [Gwilliam, 1987, p. 308; interview with Niddrie]. But the increase in computer speeds in the 1970s meant that preserving the audit trail with print-outs became uneconomical, and audit around was increasingly challenged by the audit through approach (i.e., checking the computer’s own processing) [Gwilliam, 1987, pp. 308-309; Woolf, 1997, p. 341]. The advocates of audit through seemed to gain the upper hand in the late 1960s. Pinkney [1966, p. 14, chaps. 3-6] urged the use of test packs, putting trial data through the system, and running the auditor’s own programs in the client’s computer. These procedures were again American in origin and were introduced into Britain from the late 1960s [*Accountant*, September 3, 1966, p. 37, January 25, 1969, pp. 345-346]. A survey of 64 British accounting firms in 1981 found that 22 said they had little or no involvement with computers. Of the rest, including 12 out of the top 15 firms, 85% said they checked that the system specification was in line with the client’s documentation; 61% used test packs; 56% used their own audit programs; and 72% used off-the-shelf packages [*Accountancy*, October 1981, p. 68].

However, there are strong suggestions that audit through did not triumph completely. Pound found in 1978 that audit around was still used in practice [Gwilliam, 1987, p. 308]. In 1982, Gwilliam and Macve, based on talks to researchers in eight international accounting firms, concluded: “Some firms consider ... a perfectly satisfactory audit can be carried out ‘around’ the computer” [*Accountancy*, November 1982, p. 121]. Also, Turley and Cooper [1991, p. 37] still found poor computer literacy generally among audit staffs and problems with the compatibility between the systems of the client and those of the auditor. Higson [1997, p. 205] confirmed that even in the 1990s, audit around was very much alive and kicking.

The IT revolution also had an impact on other audit techniques – what students of technological change in manufacturing call “spin-off” [e.g., Trebilcock, 1969]. One such effect was that it became easier for clients to do their own accounting, particularly with the arrival of PCs, so that computers can be counted as another factor in reducing the accounting role of the auditor. Second, the fact that computers are more difficult to check and interrogate than manual systems reinforced the

change in audit emphasis towards assessing the client's own internal controls. Third, computers also reduced the need for arithmetic precision by the auditor; indeed, it abolished the old skill of casting columns of figures. Finally, as we noted earlier, the growing popularity of statistical sampling from the 1970s owed a great deal to the spread in the use of computers.

CHANGES IN THE AUDIT FROM 1980 TO THE PRESENT

Growing Commercial Pressures: Apart from the exogenous upheaval of the computers, we have so far explained the main changes in audit techniques as principally due to the increased size of the client. However, by the 1980s, the steam had gone out of the growth in British companies; the share of the largest one hundred manufacturing companies in total net output, for example, fell from 41.0% in 1978 to 37.5% in 1990 [Hannah, 1983, p. 180; *Business Monitor: Report on the Census of Production*, 1990]. From 1980, the major force for audit change became cost and other commercial pressures. The increasing cost of audit labor noted above continued apace, but added to this supply-side consideration, there were also growing demand-side pressures. By the late 1970s, as a result of tariff reductions and the whole process we now call globalization, British companies had become increasingly exposed to foreign competition. During the world depressions of the early 1980s and early 1990s, with clients desperately needing to cut overheads, audit fees were an obvious target [Griffiths and Wall, 1997, p. 659; interview with Heywood]. Companies began for the first time putting their audits out to competitive tender and switching auditors to secure the best deal. In the early 1990s, audit firms competed among themselves for business by cutting fees or "low-balling" [*Accountancy*, February 1978, p. 10; *Accountancy Age*, April 14, 1994, p. 2; interview with Grenside].

The wider economic pressures on clients has meant that, since the late 1970s, audit firms have had to cut their costs, which has had a major impact on audit processes. As one of our interviewees [Engel] characterized it, firms became "much more conscious of the time spent ... much more cost conscious." "One had to start thinking: 'Well we did three months last year; can't we get away with a month'" [interview with Venning]? Gwilliam [1987, p. 418] explained: "An underlying motive for improved efficiency has been increased price or fee competition in the market for auditing services." As Turley and Cooper [1991, p. 34] put it, the "overwhelming" influence affecting audit procedure in

the late 1980s was “‘fee pressure’ and the need for cost effectiveness and efficiency.” A typical interviewee of Turley and Cooper [1991, p. 35] observed, “the key emphasis is on collecting the minimum amount of evidence we need to support an audit opinion.” An auditor interviewed by Higson [1997, p. 210] thought “the whole thing is about reducing substantive testing – justifiably” [see also, Humphrey and Moizer, 1990, p. 230; Manson, 1997, pp. 234-235; interviews with Carty and Kemp].

Decline in Some Techniques: In general then, most of the techniques we discussed above as growing in popularity since the 1960s and which became the mainstay of auditing, principally the systems approach and statistical sampling, had their cost effectiveness increasingly called into question in the late 1970s. Our evidence, however, indicates that the decline in some techniques has to some extent been overstated. Turley and Cooper [1991, pp. 14-15] thought that the systems approach as practiced in the 1980s led to what was called “over-auditing” and “resulted in a large volume of flowcharting, evaluation of systems and testing, much of which was not well focused or necessary.” Therefore, they argued that when costs needed to be cut, the technique was a prime candidate and a marked decline in its use followed. As Figure 5 shows, however, although there may have been a slight decline, and certainly no further growth of the technique in the 1990s, checking internal controls remained a very common audit procedure.

Based on the weaknesses discussed above and the skepticism of some firms, there was also a distinct cooling of enthusiasm for statistical sampling in the 1980s and 1990s. A number of interviews with senior audit practitioners induced Higson [1997, p. 211] to take an extreme view, concluding: “Now with most firms there is little pretence at a statistical approach to auditing ... the auditor ‘may not do any tests of detail in many cases’ ... increasingly ‘sampling is a test of last resort’.” This apparent wholesale retreat from statistics in auditing does not, however, accord with our questionnaire evidence. Figure 7 shows that the diffusion of statistical sampling slowed in the 1990s, but there is no evidence of a decline in its use. Moreover, the traditional substantive testing methods using the auditor’s judgment as discussed above remained popular [Woolf, 1997, p. 131; Porter et al., 2003, p. 231].

Our questionnaire data illustrated in the graphs also indicate a decline in the growth in usage of audit programs, management letters, and attendance at stock-taking in the 1990s.

Figure 4, in fact, reveals a marked absolute decline in the use of third-party confirmations in the 1990s. Circularizing debtors was increasingly seen as cost-ineffective since the response rate was always poor and got worse as would-be respondents themselves came under cost constraints [interview with Spens; Woolf, 1978a, p. 177; Attwood and Stein, 1986, p. 217].

The Rise of Risk Assessment: A number of writers, including Turley and Cooper [1991] and Higson [1997], have argued that cost pressures and the decline of the systems approach were replaced by a greater reliance on the assessment of risk and analytical review, relatively cheap processes. Of course, the idea that some clients and some areas of the client's business carried a greater risk of things going wrong and, therefore, should attract greater audit attention was as old as auditing itself, implicit in Pixley's oft-quoted principle, enunciated in the 1880s, that, "the auditor must be entirely guided by his experience as to what he can take for granted, in fact, anything he does take for granted is at his own peril" [quoted in Chandler and Edwards, 1994, p. 155]. But risk and materiality as explicit concepts appeared first in America, at least by the 1949 edition of *Montgomery's Auditing*, which noted: "In the performance of field work the auditor must keep in mind the elements of materiality and relative risk. The exercise of due care implies greater attention to the more important items in the financial statements than to those of less importance" [Montgomery et al., 1949, p. 13].

However, not until the late 1970s, was the concept of risk established as a conscious focus of the British audit. Although journal articles in the early 1970s discussed risk and materiality [e.g., *Accountancy*, April 1972, pp. 18-20, October 1973, pp. 17-22], and Lee [1972, p. 168] noted: "The less confidence he [the auditor] has about the system, etc., the greater will be the degree of risk he will be undertaking by not verifying every transaction," none of the other textbooks of the 1970s, including Woolf's first edition in 1978, mentions risk as a factor in the audit. Indeed, the various editions of Woolf's booklet, *Current Auditing Developments*, probably allow us to date the rise of risk assessment as an audit "technique" since the first edition, published in 1978, contained no mention of the concept, while the third edition in 1982 had a whole section devoted to it [Woolf, 1983, p. 93]. The first ICAEW examination question explicitly dealing with areas of risk appeared in the 1981 Final Audit paper [December, question 1]. Our interviews also indicate that the notion of risk rapidly assumed popularity in the early 1980s and came

to carry a heavy burden in the overall audit methodology. The head of Arthur Andersen went so far as to say in the late 1990s: "all the business now is about risk assessment" [interview with Currie; also Carty].

Attempts were also made to use statistical techniques to assess risk. Deloitte, Haskins & Sells and other firms were apparently using a statistically based risk model in 1982 [Gwilliam, 1987, p. 190], but generally statistics were little used in practice and most risk assessment was left to the auditor's judgment [Humphrey and Moizer, 1990, p. 225; Turley and Cooper, 1991, p. 61; Manson, 1997, p. 251]. Of course, since judgment is what auditors have always used, there is room for skepticism as to whether the vogue for risk assessment actually represents a change in audit technique.

Materiality: As with risk, auditors had used the concept of materiality informally from earliest times. It was implicit in stratified testing, and textbooks like Taylor and Perry [1931, p. 9] noted that test checking of large businesses could be "confined to more important matters." The first published usage in Britain came perhaps in an early ICAEW recommendation in the 1940s, which stated: "any change [in accounting principles] of a material nature ... should be disclosed if its effect distorts the results" [Bigg, 1951, p. 285]. Firms like Coopers used the concept of materiality explicitly in the 1950s [interview with Denza; Cooper, 1966, p. 32], and in 1968, the ICAEW Council's statement on the "Interpretation of 'Material' in Relation to Accounts" was published [*Accountant*, July 27, 1968, pp. 116-117]. Even so, not until the 1978 edition of Spicer and Pegler, did a British textbook define the term. It is probably safe to say therefore that materiality as an explicit audit technique does not come fully into its own, along with risk and analytical review, until the 1980s [Waldron, 1978, p. 233].

The key issue with regard to materiality was how to determine, given the huge variation in the size and nature of clients, the monetary level at which an error becomes material. The textbooks offered formulae [Woolf, 1997, p. 169], but Lee [1984] found that out of 21 firms in the U.K. in 1984, seven had no materiality guidelines for their staff, and only ten provided specific quantified criteria for application in practice. As the Audit Practices Board's Statement of Auditing Standards on materiality in 1995 made clear: "Materiality is a subjective issue." According to Woolf [1997, pp. 168, 171], materiality guidelines were "unavoidably a matter for the audit partner's judgement," a quality

auditors had used since the dawn of the professional audit.

Analytical Review: Alongside risk and materiality, the Americans led the way with the concept of analytical review. In 1950, a list of auditing methods drawn up by the American Institute of Accountants already included “analysis and review” [Myers, 1985, p. 53]. Yet again, it is also clear that analytical review, one definition of which is an “assessment of whether the figures in the accounts make sense” [Gwilliam, 1987, p. 419], had been an early tool of auditors in some form. Even in the 1890s, they looked at changes in the gross profit percentage and the stock/turnover ratio of their clients for signs of irregularities in the accounts [Chandler, 1996, p. 22]. Early railway accounts often gave the previous year’s results alongside the current figures, allowing auditors to make comparisons [Midland Railway, half-yearly account, June 30, 1860; Arnold and Matthews, 2002, p. 8]. A leading Price Waterhouse partner indicated his firm was using its working papers for the purposes of analytical review in the 1950s [interview with Stacy]. The Coopers manual indicated the firm was computing data such as gross profit and stock and debts as a percentage of turnover, looking for anything that suggested “special circumstances explaining material variations in these figures” [Coopers, 1966, p. 19; interview with Livesey].

The vogue for the formal use of analytical review as a consciously specified technique, however, is of more recent provenance and was rapidly introduced at the same time as risk assessment. The first explicit use in Britain of the term “analytical review” was found in an article in 1979 on audit evidence [*Accountancy*, September 1979, p. 120]. By 1982, Gwilliam [1987, p. 13] reported that “firms generally are heavily committed to analytical review.” Indeed, in that year, McRae, based on the audit manuals of five large firms, concluded that their audit procedures were basically similar: first, analytical review; second, procedural evaluation via sampling in depth and compliance sampling; third, substantive testing; and, finally, the evaluation of the results [McRae, 1982, pp. 36-41].

As with risk, predictive analytical models which used regression analysis (e.g., taking data from previous years to predict the current year’s figures and identifying unexpected change) were available [McRae, 1982, p. 160]. Gwilliam [1987, p. 13], however, found: “The technique [regression analysis] was apparently much more used in the US, while in Britain even by the mid-1980s ‘slow progress’ was being made” [Gwilliam, 1987, pp. 419-420]. Only one firm had a model that could be described as

in general use, while “in the great majority of audits subjective judgements (based on a variety of sources of evidence) have to be made” [Gwilliam, 1987, p. 193]. The Audit Practices Board’s Statement on Auditing Standards on “analytical procedures” in 1995 made no mention of the use of regression analysis [Woolf, 1997, pp. 219-221], while Fraser et al. [1997, p. 42], in a survey of 700 audit partners, found that although 77% used analytical review, mainly at the conclusion of the audit, regression analysis “attracted little use in practice.”

SUMMARY

Prior to the 1960s, the professional audit had altered little since its inception. This bookkeeping audit had a number of characteristic features. Relatively few audits in Britain, even down to the 1960s, were pure audits – the auditor being handed a complete set of accounts by management on which they gave an opinion. Although called an audit, the work in Britain typically also involved doing the client’s accounting as well. Tasks included making up the books entirely, closing off the ledgers, casting the columns of figures and striking a trial balance, drawing up the final accounts, and then attesting to them as having been audited. The auditor could be required to pick up the job at any stage in this process, determined largely by the competence of the client’s accounting staff, while, at the same time, auditing or checking the integrity of the figures. The typical bookkeeping audit then consisted of armies of articulated clerks vouching transactions, checking postings, and casting columns of figures; with smaller clients, all the transactions were frequently checked. Most time in the bookkeeping audit was spent in this work; far less time was allocated to verifying items in the balance sheet where the word of management would frequently be taken as sufficient evidence. Moreover, so mechanical was the process that little thought went into planning the audit. Often no written program was followed or working papers kept, and little attention was paid to the nature of the client’s business.

These features of the typical early audit are explained by the fact that British clients were commonly family firms with amateurish management who saw the auditors as primarily there to do the accounting which they were not capable of doing themselves. The importance of client size in determining the nature of the audit is confirmed by the fact that within the bookkeeping audit, there was a relatively wide diversity of practice. Larger clients did offer scope for the pure audit, and procedures

that after 1960 were to become the norm, such as testing, checking the client's systems, focusing on the balance sheet, attending stock-taking, and even analytical review, were practiced in some form from the start of the professional audit. The importance of size would also explain why the Americans seemed to pioneer or at least to adopt these techniques before the British, since their audit clients were larger, with more professional managements.

There was, nonetheless, a general transformation in the conduct of the typical British audit in the 1960s and 1970s, driven, we have argued, largely by the decline of the family firm and the rise of the modern professionally managed business enterprise, by the related increase in external funding for companies, the needs of blind investors, and also by the increase in audit labor costs. These developments meant that, first, the practice of also doing the client's accounting declined. Second, the checking of accounting transactions was reduced, and substantive sampling increased, using, from the 1970s, statistical techniques. Third, audit evidence was also likely to come more from testing the client's own systems of internal control. Fourth, the focus of the audit investigation shifted from the profit and loss account to the balance sheet. Fifth, more work, particularly the testing of transactions and systems, was now likely to be conducted in interim audits during the financial year, leaving the year-end for balance sheet verifications. Sixth, more planning went into an audit, and the relatively strict following of audit programs and manuals and the keeping of working papers became almost universal. Seventh, accounting, as the unofficial aspect of the bookkeeping audit declined, it was replaced by the attempt to help the clients improve their businesses, embodied in the management letter. Finally, by far the biggest change in the audit process was the clients' use of computers from the 1960s on, which had spill-over effects in facilitating the use of statistical sampling.

Within one or two years around 1980, driven by the growing global competitive environment in which their clients found themselves, audit firms needed to adopt audit practices which cut costs and fees. As a result, the typical "systems" audit of the 1970s came under question and was to some extent superseded. Auditors spent more time before and after the gathering of audit evidence in a process known as analytical review, while the areas of focus in the audit were increasingly determined by risk assessment and guided by the concept of materiality. Audit investigation became directed at areas of the client's business deemed most prone to significant error. These post-1980 changes have

usually been at the expense of the amount of testing of the accounting records and systems.

A number of further points should be made. As with the changes of the 1960s, strong elements of the apparent innovations of the 1980s had existed in some form since auditing began. Although analysis and risk assessment had the image of novel sophistication, they both relied heavily on the essential and age-old auditor's tool – judgment. Moreover, since there is no physically identifiable activity involved as, for example, in stock-taking attendance or circularization of debtors, there is doubt that the developments of the 1980s represent changes in audit technique at all.

Finally, our evidence shows that the more recent decline in some techniques, such as substantive sampling and the systems approach, has been exaggerated by some writers. Woolf [1997, p. 171] probably got it about right with his assessment of the relative importance of the auditor's practices in the 1990s as follows: "Internal control, if sound, may provide the auditor with one-third of the assurance sought; another third may be obtained from analytical review, assuming these show the draft accounts to be reasonable. The remaining third, in all cases, must be sought from substantive testing of transactions and balances." Therefore, aside from the largely exogenous but enormously important computer revolution, the causes of the changes in auditing techniques detailed in this article were basically economic and a function of the changes among the auditor's clients – the growth in their size before 1980 and the growing internationally competitive environment thereafter. The audit profession is, of course, part of the financial services sector, and, as might be expected of a service industry, the conduct of the audit process responded to the needs of the paymaster.

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F.E. VIGARS' *STATION BOOK-KEEPING*: A SPECIALIST AUSTRALIAN TEXT ENABLING THE ADAPTATION AND TRANSFER OF ACCOUNTING TECHNOLOGY

Abstract: Studies of early Australian accounting texts and their authors have yet to be augmented by examinations of the subsequent specialist books which were written to guide accounting practice within specific domains, such as the pastoral and mining industries. This study examines the contents, use, and influence of an early specialist pastoral accounting text entitled *Station Book-keeping*, which was published in Australia in five editions over the period 1900 to 1937. The life and career of the book's author, Francis Ernest Vigars, are also outlined. *Station Book-keeping* described and advocated a comprehensive system of double-entry accounting for pastoral stations and is posited as a key medium by which this technology was adapted and transferred for use by these entities. In turn, it is argued that Vigars' book, by extending the use of conventional accounting technique, facilitated greater involvement by professional accountants within a major Australian industry.

INTRODUCTION

The earliest known accounting and bookkeeping texts to be published in Australia began to appear in the second half of the 19th century. Expositions of the contents and influence of

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these books, as well as biographies of their authors, have been the subject of several contributions to the accounting history literature. Recent examples include Carnegie and Parker [1994] on James Dimelow who, as far as can be ascertained, wrote the first accounting text to be published in Australia and which appeared in sets between 1871 and 1873; Carnegie and Varker [1995] on Edward Wild; and Carnegie and Parker [1996] on William Butler Yaldwyn, a peripatetic accountant who authored bookkeeping texts while residing in New Zealand and South Africa. Previously, Goldberg [1977, 1984] explored the contributions of John Scouller to the development of the accounting literature in Australia.

The existing Australian historical literature of this genre relates to texts of a general nature rather than those dealing with bookkeeping within specific industries. This is not surprising, given the tendency for generalist texts to precede those of a specialist nature and the propensity of accounting history researchers to favor accounting “firsts,” such as locating the earliest local bookkeeping text in a country or region [Carnegie and Napier, 1996, p. 8; Carnegie and Williams, 2001, p. 105]. Economic development in colonial Australia relied heavily on the two key industries of agriculture and mining, which emerged to exploit the natural resources available. Conforming to the general pattern, specific local contributions dealing with accounting in these specialist fields were not published until after locally authored, generalist bookkeeping texts became available.

The earliest local contributions dealing with accounting within the Australian mining industry, typically among other subjects, include works by Armstrong [1888], De Lissa [1894], Brayshaw and Berriman [1899], Godden and Robertson [1902] and Hoover [1903, c.1905, 1906].¹ The earliest publications on bookkeeping for pastoralists and farmers in colonial Australia include relatively brief contributions by Musson [1893], Buckley [1897], Goldsbrough Mort and Co., Ltd. [1897], Hombsch [1897], and Brooks [1899], and an anonymous article on “Farm Book-keeping” in the *Queensland Agricultural Journal* [1899].

The first locally authored and published work to provide a comprehensive treatment of pastoral accounting, *Station Book-keeping: A Treatise on Double Entry Book-keeping for Pastoralists*, appeared in 1900. In the introductory comments to this work, the author, Francis Ernest Vigars [1900, p. 3], made the follow-

¹Hoover, who worked as a mine manager in Western Australia, subsequently became president of the U.S. [Vent, 1991].

ing claim: "As far as the author is aware, no work treating with Station Accounts exclusively has been published." *Station Book-keeping* was published in five editions through 1937. From the second edition of 1901, the title of the text was expanded and became *Station Book-keeping: A Treatise on Double Entry Book-keeping for Pastoralists and Farmers*. The main purpose of the text was to articulate an accounting system for the large pastoral stations that dominated the fertile agricultural regions of Australia at the end of the 19th century.

In spite of the apparent popularity of Vigars' book, evidenced by available indications of sales volumes and its frequent presence in public library collections,² little has been written previously about this text or its author. This study seeks to overcome this lack of attention by describing the background and content of *Station Book-keeping* and elucidating its role in shaping accounting practice within a major Australian industry. Implications for the nascent organized accounting profession in Australia are also considered.

Consistent with these objectives, the key theoretical premises of the study are developed around the notion that textbooks may function as key media for the transfer of technology. Further, this process of technology transfer may have implications for defining and consolidating the jurisdiction of an organized occupational group. These theoretical premises are elaborated in the following section, followed by an outline of the life and career of Francis Edward Vigars. The purpose of this exposition is twofold. First, because of the essential interplay between "text" and "author," an awareness of Vigars' life and career assists in understanding his book and its origins. Second, following Yamey [1981, p. 131], it recognizes that an important role of the accounting history literature is to enrich the biographical record of significant contributors to accounting practice and thought. Proceeding from this biographical outline, an overview is provided of the pastoral accounting industry in Australia to 1900, the year in which the first edition of *Station Book-keeping* was published. The text itself is then reviewed, highlighting that the essential accounting technology it refined, articulated, and advocated was double-entry bookkeeping (DEB). The implications of the book are then explored in terms of the adaptation and transfer of accounting technology and the professionalization of the accounting occupation. Summarizing comments are provided in the concluding section.

²Evidence to support these assertions is presented in a subsequent section.

THEORETICAL PREMISES

Dewey, in his well-known library classification system, first published in 1876, depicted accounting as a technology [Gordon and Kramer-Greene, 1983], a typology that has been adopted by many subsequent writers [Chatfield, 1977; Chambers, 1991, p. 3; Bougen, 1994, pp. 325, 328; Boyns and Edwards, 1996; Carnegie and Parker, 1996; Foreman, 2001]. Carnegie and Parker [1996] utilized this perspective in assessing the influence of Yaldwyn's publications on the transfer of accounting technique from the U.K. to the southern hemisphere (particularly Australia, New Zealand, and South Africa) during the latter part of the 19th century. A similar framework was applied subsequently by Foreman [2001] in examining the development of an accounting system during the period 1910 to 1916 at Commonwealth of Australia government factories, where Taylorist precepts deployed were linked to a visit by John Jenson, a Defence Department public servant, to the U.S. and Canada in 1910.

As these studies have shown, accounting techniques, as with other technologies, are susceptible to transfer. This is a key theoretical premise of this study: that the practice of accounting derives not just from the development of particular techniques, but also from the circumstances and means which cause those techniques to be adopted in settings from which they were previously absent. The inherent nature of accounting, emphasizing written records and statements, suggests that textbooks may function as a key medium for the dissemination of accounting techniques.

The technology transfer enabled by Yaldwyn's text, among other books, was generalist and geographical; it involved the transfer of general accounting techniques from one location to another. In the present study, this notion of technology transfer is refined to take account of the nature of a specialist text. That is, Vigars' *Station Book-keeping* is posited as a facilitator of a second wave of technology transfer which was industrial (rather than geographical) and specialist (rather than generalist). Further, a process of adaptation was an essential precursor to this transfer. Generic accounting techniques had to be refined and augmented in order to comport with the peculiar needs of the industry in which they were to be applied. This necessitated that an author's general accounting expertise be supplemented by relevant industry experience.

As well as positing that significant textbooks may function as vectors of accounting change by acting as media for the adap-

tation and transfer of accounting technology, this study is guided by a second theoretical premise. When accounting changes, so also do the circumstances of those who practice it. In particular, such changes are likely to have implications for the status and work opportunities of accounting practitioners and the standing of their occupational associations.

The concept of social closure, as encapsulated in the “professionalization project,” underpins the literature on the sociology of professions. A professionalization project is mounted by an occupational group whose members are concerned to close opportunities to others in order to secure social and economic rewards and achieve professional trajectory [see, for example, Weber, 1968; Larson, 1977; Willmott, 1986; Murphy, 1988; Walker, 1995; Carnegie and Edwards, 2001]. In her acclaimed book, *The Rise of Professionalism: A Sociological Analysis*, Larson [1977, p. xvii] defined the professionalization project as “an attempt to translate one order of scarce resources – special knowledge and skills – into another – social and economic rewards.”

However, in spite of its centrality throughout an otherwise often dissonant sociology of professions literature, the nature of professional expertise has remained under-explicated [West, 1998, 2003, ch. 2]. As summarized by Goldstein [1984, p. 175], a body of knowledge is presumed to be “absolutely necessary” for aspiring professions, with “the social process of professionalization ... dependent on the intellectual core.” Yet, the same author notes that sociologists of professions have taken bodies of professional knowledge “as givens,” and proceeded by “placing the *constitution* of professional knowledge outside the purview of their investigation” [Goldstein, 1984, p. 177, emphasis in original; see also, Freidson, 1973, p. 14; Parkin, 1979, p. 103; Boreham, 1983, p. 695; Baer, 1986, p. 532; Shaw, 1987, p. 778; Robson and Cooper, 1990, p. 386].

As is the case for their counterparts in other locations [see, for example, West, 2003, pp. 56-62], identifying the special knowledge and skills of early Australian accountants is a somewhat problematic task. This is also evident from the studies which highlight the diverse occupational backgrounds and aspirations of the founders of one major occupational association [Chua and Poullaos, 1993, 1998; Edwards et al., 1997; Carnegie and Edwards, 2001; Carnegie et al., 2003]. Following Larson [1977], a lack of distinctive expertise would appear to be a major impediment for an occupational group seeking to achieve a professional trajectory. This is reinforced by Abbott’s [1988, p. 70] claim that the capacity of an occupational group to carve

out a professional jurisdiction will be “based on the power of a profession’s abstract knowledge to define and solve a certain set of problems.”

The strongest claim of the nascent accounting profession in Australia to distinctive expertise lay in the area of DEB. As stated by Carnegie [1997, p. 243], “double entry accounting, as a mystery to the laity, also served to mark off the accounting profession from other professional groups.” Textbooks which represented DEB as the preferred or “proper” system of accounting therefore seem likely to have served the interests of local accounting practitioners. In addition to advocating and standardizing particular techniques,³ textbooks may aid a professionalizing occupation by enhancing and formalizing the education of novices, as well as providing tangible evidence of an occupation’s claim to scholarly knowledge.⁴

In summary, two interrelated rationales are advanced for why significant accounting textbooks warrant attention from accounting historians. First, such books may be important in explaining and tracking how particular accounting techniques came to be adopted in specific regions or industries. Second, given the presumed importance of specialized expertise in determining occupational status, studies of texts which served as formal and didactic records of accounting technique may assist in explaining the emergence and consolidation of accounting as a professional occupation. Building from these theoretical premises, the next section provides a biographical sketch of the author of *Station Book-keeping* as a precursor to examinations of the industry for which it was written and the text’s contents and implications.

VIGARS’ LIFE AND CAREER

Francis Ernest Vigers was born at Ysbytty Ystwyth, western Wales, on March 8, 1866. The family later moved to the Isle of Man where his father became mine agent at the Laxey Mine. Little is known of Vigers’ education, particularly where he gained his accounting knowledge; however, his elder brother Alfred was an accountant in Aberystwyth [*Census...*, 1881].

³Napier [1995, p. 269], for example, has identified that accounting books published in the U.K. in the late 19th and early 20th centuries were important in developing consensus on accounting principles.

⁴*Station Book-keeping*, with its scholarly epithet of “a treatise,” appears to exemplify such knowledge claims.

Vigars arrived in Sydney, via Tasmania, in January 1891.⁵ At this time, he had no relatives in Australia and resided in boarding houses [Vigars, 1939].⁶ He stated that he came to Sydney because of his “delicate state of health” and a belief that the Australian climate would be more suitable for his condition. He was employed in “various positions” prior to the publication of the first edition of *Station Book-keeping* in 1900, including a brief stint working as a public accountant (*Sands Directory*, 1895, 1896). Around 1897, Vigars left Sydney for pastoral station life. *Station Book-keeping* [1990, p. 3] alludes to this experience: “the many special advantages which the writer has had of studying the best means of filling this want.” The address given under the author’s name in the introduction to the first edition of *Station Book-keeping* is “Carwell,” Gulargambone, New South Wales.⁷ Situated in western New South Wales, Gulargambone was a pastoral run which started about 1840. In 1900, it would have been a small, remote township since the railway system did not reach the area until 1903 [“Coonamble,” 2003].

Gibson [1974, pp. 20-21] noted that larger New South Wales pastoral stations (20,000 acres and over) around the period 1900 to 1914 normally employed a resident bookkeeper who lived with the family. It seems likely that Vigars was employed as the station bookkeeper at “Carwell” at the time of writing the first edition of his book. This would go far to explain his first-hand knowledge of the Australian pastoral industry.

In the second edition of his book, published 18 months after the first, Vigars described himself as a “station accountant and auditor” of 14 O’Connell Street, Sydney. Later in 1901, he entered into a partnership with Frederick Morse Sky, which op-

⁵These details of Vigars’ arrival in Australia were obtained from shipping records held at the Archives Office of Tasmania (Marine Board 2/39/42, p. 213) and the State Records Office, New South Wales [Passengers Arriving 1854-1922, Location X209, January to February 1891, Reel 501].

⁶One of the sources for the details of Vigars’ early life summarized here is a statutory declaration he prepared in March 1939 at the age of 73. The purpose of making the declaration is unclear. However, a note in the document indicates that the original had been forwarded to Barclays Bank, London. The declaration is contained in the deceased estate file for his second wife, Una [State Records Office, New South Wales, 20/2507, No. 6579].

⁷“Carwell” is the name of a pastoral station that continues to operate in the area although it has changed ownership many times and is now much smaller than at the time of Vigars’ involvement. In 1885, “Carwell” was listed in *Hanson’s Pastoral Possessions* as comprising 53,612 acres. The authors are indebted to Mrs. D. Best, president of the Gulargambone Historical Society, for this information.

erated from the same address under the name “Vigars and Sky.”⁸ The partnership was evidently successful, with Vigars and Sky gaining a reputation as a specialist firm in pastoral accounting [Gibson, 1974, p. 19]. In 1910, for example, the firm prepared the information for a prospectus of the British Australian Meat and Produce Export Company, Ltd. [Mitchell Library, Q338C].

At the time of publication of the third edition of his book (1909), Vigars described himself as F.E. Vigars, FCPA of the firm of Vigars and Sky, Incorporated Accountants, Sydney.⁹ In the same year, he visited England [*The Public Accountant*, 1909]. In the fourth edition (1914), Vigars described himself simply as “Incorporated Accountant, Sydney.” He retired from the firm on September 3, 1926 due to “his state of health” [*The Public Accountant*, 1926; Vigars, 1939], although a practice continued to operate as Vigars and Sky until 1959 [Sky, 2002]. When leaving the firm 26 years after the initial edition of *Station Book-keeping*, Vigars was 60 years of age.

Vigars was an associate from 1901 of the Corporation of Accountants in Australia (CAA), formed in 1899 [*The Public Accountant*, 1901]. The CAA was amalgamated in 1909 with the Australasian Corporation of Public Accountants (ACPA) which Vigars and Sky had joined as fellows by April 25, 1908, although they were not founder members. The ACPA was the antecedent of The Institute of Chartered Accountants in Australia (ICAA), established in 1928 [Poullaos, 1994]. Vigars claimed to have been a member of the ICAA “for many years” [Vigars, 1939], although in the fifth edition of *Station Book-keeping* (1937), he still used a post-nominal (FCPA) which dated from the ICAA’s predecessor organization.¹⁰ His name last appeared on the published ICAA membership lists in 1931, in the “Separate List” of members who were retired or had accepted salaried appointments outside of public practice.

Twice married in later life, Vigars survived both his wives. There was no issue from either marriage. From 1938, Vigars

⁸Frederick Morse Sky was active in politics and public affairs and owned a pastoral station in the Mudgee district of New South Wales. He was a member of the CAA, the ACPA, and the ACPA’s successor, the ICAA. Sky died on June 10, 1935 at the age of 62 after a career in public practice that spanned more than 30 years [*Sydney Morning Herald*, June 11, 1935].

⁹Vigars’ post-nominal indicates fellowship of the ACPA.

¹⁰There is some evidence to suggest that Vigars was active within the accounting bodies in which he held membership. In August 1901, a letter appeared under his name in *The Public Accountant* urging the adoption of decimal currency [Vigars, 1901]. For several years, he was a presiding officer at the CAA’s examinations.

was a recipient of the Commonwealth government old age pension and upon his death in 1940, due to coronary failure, his only recorded asset was land at Blacktown in New South Wales, valued at £18.¹¹ His death notice was no more than a short announcement: "Vigars December 28 1940 at Sydney Francis Ernest Vigars aged 75 years" [*Sydney Morning Herald*, January 1, 1941, p. 4]. No published obituary notice has been located in the professional or general press.

During his professional career, Vigars acquired many investments in land in Sydney and in other parts of New South Wales, such as the Shire of Blaxland [Torrens Title Purchasers' Index, State Records Office, New South Wales B227782 Book Vol. 3756 Fol. 36]. However, these investments, with the exception of the one piece of land listed in his estate, had been disposed of at the time of his death. The available evidence suggests that Vigars died having accumulated few financial resources from his professional work as an accountant and textbook author. He seems to have suffered from periods of ill health which may have contributed to his impoverishment in later life. By the time of his death, Vigars had dissipated most of his financial resources. He may well have died a lonely man.¹²

PASTORAL ACCOUNTING IN AUSTRALIA TO 1900

Commercial enterprises in pre-Federation Australia were reliant on Britain for the vast majority of their technology, including accounting systems and texts [Carnegie and Parker, 1996, p. 25].¹³ For example, the library catalogue published by the Incorporated Institute of Accountants, Victoria in 1896 almost exclusively comprised British publications, with a small number sourced from the U.S. [Bridges, 1975, p. 13]. British texts were readily available and often accompanied migrants arriving from Britain [see, for example, Scorgie and Capitanio, 1997]. Accordingly, the available books on farming and related matters tended to have been written essentially for the British

¹¹This information on Vigars' estate was obtained from the State Records Office, New South Wales.

¹²At the time of his death, Vigars' had at least two nephews living in Australia, but neither was mentioned in records and announcements of his death and funeral. Upon enlistment in the armed forces in 1942, one of these nephews, John Vigars, listed Francis Vigars as next of kin, presumably unaware that his uncle was already deceased [Australian Government, World War II Nominal Roll].

¹³Federation of the six British colonies within Australia into the Commonwealth of Australia took place on January 1, 1901. Upon federation, the colonies became known as states [Turner, 1973, pp. 327-356].

system of agriculture which featured mixed-farm activities [see, for example, Juchau, 2002, pp. 375-378], typically conducted by tenant farmers.¹⁴ The landlord was often absent and relied on an agent to look after his interests, including the collection of rents from tenant farmers [Carnegie and Napier, 2002, pp. 704-705].

Agricultural operations in Australia were vastly different to those of Britain [Carnegie and Napier, 2002, p. 703], with pastoral stations at the close of the 19th century often in excess of 20,000 acres [Carnegie, 1997, p. 30]. The dominant crop was wool, introduced by Macarthur in the early years of European settlement. This quickly became the primary export, and Australia's development up to the discovery of gold in the 1850s was tied closely to the wool industry. Cattle numbers began to increase with the advent of frozen and chilled shipping in the mid-1880s, which permitted beef exports [Greasley and Oxley, 1998, p. 197]. The work of Farrer [1898] during the last decade of the 19th century in developing strains of wheat suitable to Australian climatic conditions, particularly wheat that was resistant to rust, also helped to develop a further major export industry. Nevertheless, sheep dominated the rural landscape in large parts of the country, and the majority of pastoral stations remained wholly or significantly dependent on wool production.

Although Australian exports were subject to volatile world prices, the biggest single factor causing variability in farm income was weather, particularly drought. The drought of 1895-1903, known as the "1902 drought" [Foley, 1957, p. 13], was one of the most severe on record and affected most of the heartland regions for wool production – New South Wales, Victoria, and southern Queensland. The aggregate flock numbers provided by Butlin [1958, p. 5] for these three locations highlight the volatile nature of the industry – 47.3 million in 1887, 89.3 million in 1892, and 44.3 million in 1902. The rapid increase in the five years to 1892 was due to new land areas being opened up and the prevailing high international prices for wool. The subsequent drop of over 50% in ten years reflected drought conditions, accentuated by the generally depressed world market for wool.¹⁵

It is against this background of new settlement amid harsh climatic and economic conditions in the last decade of the 19th

¹⁴A description of the British rural sector at the turn of the century may be found in Delderfield [1966].

¹⁵By contrast, the period from 1904 to 1908 was one of excellent growing conditions and good world prices for wool, with the result that stations were able to record very good returns.

century that the earliest local publications on pastoral accounting appeared [Musson, 1893; Buckley, 1897; Goldsbrough Mort and Co., Ltd., 1897; Hombsch, 1897; Brooks, 1899; "Farm Book-keeping," 1899; see also, Juchau, 2000]. A common theme of these publications was to lament the general state of accounting practice within agricultural enterprises and urge the adoption of DEB. Musson [1893, p. 162] exemplified these concerns, asserting that "it appears to be the rule amongst farmers to keep no proper set of books from which a balance sheet could be made out, for instance." Musson advocated the adoption of DEB based on the preparation of a day book and a ledger, as well as other books of account.

While these advocates of "proper" accounting practice were contributing to a local accounting literature and recommending the adoption within the pastoral industry of the accounting systems with which they were familiar, it would be hazardous to presume that pastoral accounting practice itself was either non-existent or totally inadequate for pastoral station management purposes. Carnegie's [1997, p. 242] study of 23 sets of surviving 19th century business records of pastoralists from the Western District of Victoria found that accounting records "were not only maintained at stations but the pastoralists involved generally focused on the integrated use of financial and non-financial operating information for pre-Federation pastoral industry management."

In summary, Carnegie [1997] found that Western District pastoralists typically prepared personalized ledgers that were not structured to enable the determination of periodic financial performance and position. Instead, the ledgers constituted ends in themselves and were, in effect, combined debtors and creditors recording systems which catered for barter transactions while also providing a means for recording key personnel information. In the case of volume records, diverse, non-financial operating statistics were commonly recorded in books maintained for stores, stock, shearing, and bales of wool produced. Such detailed records provided the capacity to measure wool and lambing production over time.

Later, from the early 1870s, professional accountants would often become associated with a Western District station on the advent of a deceased estate, typically with the death of the pastoral pioneer. From 1870 in Victoria, such an event would precipitate a need to determine and pay death duties [Carnegie, 1997, pp. 176-180, 215]. The advent of income taxation in Victoria in 1895, with the consequent need for the financial

information required for the preparation of income tax returns, further increased the demand for professional accounting services within the pastoral industry. Predictably, the providers of these services tended to favor what they perceived as “proper” accounting systems, double-entry financial records. These were sometimes added as an overlay to existing personalized financial recording systems. In summary, pastoral accounting practices began to change in the latter part of the 19th century. A key impetus for this was the introduction of various taxation measures which made pastoralists accountable to the state.¹⁶ The newly emergent class of “professional” accountants were facilitators of the change.

At the close of the 19th century, and presumably based on his pastoral accounting experience in remote areas of New South Wales, Vigers augmented calls to pastoralists to introduce “proper” financial recording systems. In the introduction to the first edition of *Station Book-keeping*, published around March 1900, Vigers [1900, p. 3] stated:

In writing the accompanying work it has been the author’s aim to place within reach of all those interested in pastoral pursuits, a clear and concise mode of keeping Station Accounts. That such a work is wanted, is undoubted; and from the many special advantages which the writer has had of studying the best means of filling this want, has sprung the present treatise.

Vigers [1900, pp. 3-4] proceeded to amplify the need for his treatise observing:

It must be obvious to all thinking persons, that, in these days of keen competition, a strict record of all business matters undertaken should be kept, and comparisons made from year to year of the Receipts and Expenditure and their sources. By this means a Pastoralist can at any time ascertain his actual financial position, and not be led or misled by supposition of such-and-such being his position.

As the first comprehensive Australian text on pastoral

¹⁶This parallels accounting development in Britain, as described by Parker [1989, p. 11]: “Annual profit calculation and asset valuation were of little use in the absence of sophisticated capital markets and income tax collectors, neither of which, so far as most business enterprises were concerned, were present until the late nineteenth century. It was only then that the benefits of double entry were generally perceived to exceed the costs.”

accounting, *Station Book-keeping* reflected the author's DEB knowledge as well as his practical experience in the field. It also provided him with an opportunity, as a practitioner with expertise in a major local industry, to return to public accounting in Sydney as a "station accountant and auditor."¹⁷ This was a new class of specialist accountant and signaled Vigars' belief that pastoral accounting constituted a distinctive field of expertise.

A REVIEW OF *STATION BOOK-KEEPING*

The first edition of *Station Book-keeping*, comprising 71 pages, was divided into two parts. The first consisted of an explanation of DEB and presented the various books of account prescribed for a station owner. These books, illustrated with sample entries and explanations, included a day book, invoice book, account sales book, bill book, cash book, journal, and ledger.¹⁸ The second part contained a comprehensive example of accounting records for a period of three months, including opening and closing entries, trial balance, profit-and-loss account, and balance sheet. It also included a specimen of a sheep paddock book for monitoring numbers of sheep in any particular paddock by recording all movements in and out, including those slaughtered for rations.

The second edition, published 18 months later in September 1901, was expanded to five parts, spanning 171 pages. In this edition, Vigars [1901, p. 4] elaborated on his aspirations by stating in the introduction that he intended the book to "aid towards a complete system of [double-entry] Book-keeping being more largely adopted upon stations and farms." The new edition included a wages book and a shearing expenses book among the necessary station financial records. Also presented were examples of accounting for the conditional purchase of land from the state by installments, with annual principal and interest payments shown. The 1901 edition included a comprehensive illustration of accounting for transactions for a period of six months,

¹⁷In an advertisement appearing in *The Australasian Pastoralists' Review* [1901, p. 831], Vigars announced his preparedness "to take up station accounts, prepare balance sheets, supply properly ruled books, and generally advise on station bookkeeping."

¹⁸In spite of this range of subsidiary records, as pointed out by Parker [1990, p. 441], Vigars recommended that all transactions recorded in the subsidiary records be repeated in the (general) journal. This, again, seems to indicate Vigars' emphasis on the standard, formal double-entry system of accounting, with subsidiary records serving primarily as temporary memoranda until their details could be entered into the "proper" double-entry system.

three more than the first edition, incorporating entries to the additional books introduced in this edition.

The slight expansion of the third edition (1909) to 188 pages reflected the addition of sections on accounting for share farming and the preparation of partnership accounts. The fourth edition (1914) marked a comprehensive revision and an expansion to 250 pages. Included in the introduction were references to the need for trustees to maintain proper records and the requirement to submit an annual tax return, but these matters were not subject to further exposition in the text itself.¹⁹ This edition illustrated the preparation of station records without the use of a journal, with entries posted directly from a diary in which activities and transactions were initially recorded. This was a departure from previous editions where the use of a journal was emphasized as an essential part of the double-entry accounting system.²⁰

The fifth and final edition (1937) continued the earlier pattern of expansion, comprising 318 pages. This edition recognized for the first time that some pastoralists would, in addition to their station operations, hold investments such as fixed deposits, shares in public companies, and interests in other properties. Accounting for such investments and the methodology for incorporating the associated income into the "income account" and balance sheet were illustrated. The income account was in addition to the profit-and-loss account for station operations. A further feature of the 1937 edition was the provision of exercises which required the preparation of entries in the books of account for a list of pastoral transactions, the calculation of profit or loss, and the preparation of a balance sheet.

Station Book-keeping, in all five editions, demonstrated a lack of concern for the evaluation of pastoral industry performance in physical terms. Apart from presenting a descriptive list of types of volume records that "may be recommended" for the pastoralist [Vigars, 1900, pp. 10-11, 1901, pp. 10-11, 1909, p. 10, 1914, p. 10, 1937, p. 10], pastoralists were not instructed by the author on how to prepare and use volume records. Vigars did provide a specimen of a sheep paddock book in the first edition [1900, pp. 70-71], but this was removed from subse-

¹⁹Vigars may have considered such tasks to be the exclusive province of professional accountants.

²⁰This change to Vigars' previous insistence on recording in the general journal was possibly made in recognition of changing practice. Overseas textbooks of the period did not recommend the use of a general journal except for closing entries [see, for example, Dicksee, 1910; Cole, 1913].

quent editions and published separately. There was no further discussion or illustration of recording systems concerned with the capture and use of non-financial operating information. It therefore seems likely that Vigars shared the common perspective of early pastoral accounting authors on this matter – that the maintenance of volume records was largely outside the domain of “proper” professional practice. It may also be the case that operational records were not included because Vigars and the profession generally considered that these were already well understood and effectively utilized within the pastoral industry. Despite this lack of emphasis on the use of operational information, Vigars did include a wide range of additional information for the benefit of pastoralists in all five editions, ranging from water tank measurements to hints on disease control in sheep. This is consistent with Vigars’ avowed intent that the text was to assist owners and managers in the management of pastoral properties.

As *Station Book-keeping* expanded in size, it appears that there may have been some refinement of the text’s target market. The first edition [1900, p. 3], a comparatively slim 71 pages, had proclaimed “the author’s aim to place within reach of all those interested in pastoral pursuits, a clear and concise mode of keeping Station Accounts.” Consistent with this intent, the first published review that has been located for the book appeared in an agricultural journal, *The Pastoralists’ Review* [1902, p. 782]. This review of the second edition noted that, “the explanations are such that a person who has never done any work of this sort could speedily become expert in a thorough and sound system of keeping accounts.” The first advertisement located for Vigars’ book also appeared in this journal and expressly stated that it was a work “for Pastoralists and Farmers” [*The Pastoralists’ Review*, 1902, p. 30]. The third edition of *Station Bookkeeping* was also reviewed in *The Pastoralists’ Review* [February 15, 1909, p. 1135].

However, a revised market focus appears to have accompanied the comprehensive revision which spawned the significantly enlarged fourth edition. Reviews and other notices relevant to the book appear to cease in agricultural journals.²¹ Instead,

²¹The predominant agricultural journal in Australia during the early 20th century commenced publication in 1891 as *The Australian Pastoralists’ Review*. It was subsequently re-named three times – *The Pastoralists’ Review* in 1901, *The Pastoral Review* in 1913, and *The Pastoral Review and Graziers’ Record* in 1935. No reference to Vigars and his book was located in this journal subsequent to the 1909 review of the third edition.

such reviews and notices began to appear in the accounting literature. The first of these is an anonymous review of the 1914 edition and other publications by Vigars which appeared in *The Accountant in Australia* [February 1932, p. 74]. Significantly, this review described Vigars' *Special Station Ledger* as having been "specifically designed to meet the needs of Station Accountants."

The fifth edition, for which mention has not been found once again in agricultural journals, was reviewed in *The Chartered Accountant in Australia* [1937, p. 20]. It was also listed in the "Publications Received" column of *The Australian Accountant* [1937, p. 7]. Later, Bridges [1975, p. 23] expressed the view, however formed, that "*Station Book-keeping* was written principally for those accountants who made rural accounting their main business." Further evidence of a change in target market is evident from the inclusion of practical exercises in the fifth edition, suggestive of the book's adoption in formal educational programs. In sum, as the book progressed through its various editions, it appears that its target market was refined from a generic group of interested readers for whom station bookkeeping was an ancillary pursuit, towards those for whom it was a principal activity, whether in professional accounting practice, pastoral industry management, or preparatory educational programs for these careers.

Vigars also wrote other publications designed specifically for the pastoral industry. *Special Station Ledger*, based on the station ledger section of *Station Book-keeping*, appeared in 1902 and provided a ready to use ledger for a pastoral station. In 1905, *Shearing Record and Wool Analysis* was published. This, again, was essentially a re-publication of a part of *Station Book-keeping*. In 1910, *Tank and Other Measurements, Also Forms of Agreement* was added to the list of texts for pastoralists. Vigars also wrote and published a short work entitled *Jackeroos, Their Duties and Prospects in Australia* (1918), reprinted in 1936.²² At least the fourth edition of *Station Book-keeping* was also reprinted, with the present authors having discovered a copy including an advertisement for a boarding school (The Scots College, Warwick, Queensland) that was not opened until several years after the edition's initial publication date.

²²For readers not familiar with the uniquely Australian occupation of "jackeroo," the *New Shorter Oxford English Dictionary* [1993] offers the following definition: "a novice on a sheep-station or cattle-station." Typically such employees were involved in assisting with general station tasks. The more recent term of "jilleroo" describes the female equivalent.

Station Book-keeping appears to have been an influential text in the local market over an extended period of time, as the following evidence suggests:

- Vigars himself claimed that *Station Book-keeping* was well accepted. He asserted in the 1936 reprint of *Jackeroos* that 12,000 copies had been sold, a figure also reported by Bridges [1975].²³
- Copies are still held in many public libraries in Australia. The National Library in Canberra has copies of all five editions, and there are multiple copies in the state libraries of New South Wales, Queensland, South Australia, Tasmania, and Victoria.²⁴ CPA Australia and the ICAA both retain copies in their libraries.
- Gibson [1974, p.19] avers that *Station Book-keeping* was the required text at Barker College, Hornsby, New South Wales, in 1912. Scotch College, Melbourne, also used the text in 1925 [Scotch College, 2005].
- Copies are held by pastoral stations in several states. In the course of his research on pastoral accounting in the Western District of Victoria, Carnegie noted at least two stations that retained a copy in private collections. Some 3,500 kilometres (2,200 miles) north, the surviving records of Bowen Downs Station in north Queensland (held by the James Cook University archives) include a copy.
- A search of web-based book sites revealed six copies of *Station Book-keeping* for sale across four sites (Biblioz, Antipodean Vision, Books for Sale, and Abebooks). Copies of other accounting texts of a similar age rarely appear for sale.

Some other publications dealing with farm accounting appeared during the early decades of the 20th century [e.g., Russack, 1905-1906; Wolseley, 1905-1907; Orwin, 1908, 1914, 1924]. However, with the exception of Orwin's *Farm Accounts* [1914], these were relatively brief journal articles. Orwin's book appeared in only one edition, marking it as a minor work relative to the almost four decades' long publication span of *Station Book-keeping*.

²³The sales figure claimed by Vigars has not been independently confirmed due to the relevant publishing records having been destroyed. By comparison, Yaldwyn claimed sales of 4,569 copies of all his publications by the end of 1897 [Carnegie and Parker, 1996, p. 29].

²⁴The British Library also has a copy in its collection.

IMPLICATIONS OF *STATION BOOK-KEEPING*

Consistent with the theoretical premises introduced earlier, the implications of *Station Book-keeping* are evaluated at two levels. First, consideration is given to the role of the book in facilitating a technology transfer which resulted in a significant change in accounting practice within a major Australian industry. Second, the implications of that change for the nascent organized accounting profession within Australia are evaluated.

Technology Transfer: Vigars' *Station Book-keeping* is depicted as a key vector of accounting change within a major Australian industry. The change it enabled was the adoption of comprehensive systems of DEB. Vigars was, as far as can be ascertained, the first local accounting textbook author in Australia to adapt this core technology to a particular industry and, thus, to facilitate and promote its uptake nationally.

Prior studies on the transfer of accounting technology [Carnegie and Parker, 1996; Foreman, 2001] have been guided by a framework of questions posed initially by Jeremy [1991, pp. 3-5] in connection with technology transfer generally. These questions have been summarized by Carnegie and Parker [1996, p. 25] as follows:

1. What inhibiting factors were there, technical and non-technical?
2. What were the vehicles of transfer, the networks of access to the originating economy, the information goals of acquirers, the methods of information collection, and the speed of transfer of the technology?
3. What was the rate of adoption, the networks of distribution into the receptor economy, and the hindrances faced by carriers of the new technology?
4. Was the incoming technology reshaped by economic conditions, social factors, and/or conditions in the physical environment?
5. Were there any reverse flows of the technology?

These questions are again adopted here to provide a framework for understanding Vigars' *Station Book-keeping* as an episode in the complex process of the adaptation and transfer of accounting technology. In what follows, each of the above questions is addressed in seeking to elucidate this process.

Turning to the first of the questions posed above, there were relatively few factors inhibiting the transfer of accounting technology within the British Empire. People of all backgrounds

and occupations, including accountants [see, for example, Johnson and Caygill, 1971; Briston and Kedsle, 1997] flowed freely between Britain and Australia, with many choosing to seek a new life in the great southern land. Those emigrating to Australia during the 19th century for employment and business purposes brought with them an array of knowledge and skills, however acquired, and would add to that expertise by studying the British texts which accompanied them or were purchased locally. Language barriers were few, with the vast majority of the new settlers being native English speakers. The emerging legal system and culture of Australia were significantly influenced by those prevailing in Britain.²⁵

One factor inhibiting technology transfer was the very distinctive geographical and climatic conditions of Australia. The implications of living and operating in this environment were particularly evident in agriculture. Land was plentiful, but rainfall was not, the converse of what usually confronted European farmers, with the result that farming in Australia developed in a radically different way from Europe. While British books on accounting were readily available in Australia in the 19th century, supplemented by locally written accounting texts of a general nature by non-indigenous authors from the early 1870s, Vigars was unique in preparing a book on pastoral accounting for Australian conditions based on his own experience in accounting roles while working in the pastoral industry in New South Wales. Indeed, there seems little likelihood that he could have ever written his book without that experience. *Station Book-keeping* adapted the generic model of DEB to encompass the peculiarities of pastoral stations (e.g., accounting for itinerant labor, livestock, wool production, and shearing costs). Vigars' experience provided the basis for the development and exposition of an accounting system for a specific industry and led him to be both an adopter and an advocate of that system.

One of the key means of diffusing accounting technology in Australia in the 19th century was through the agents, managers, and employees of British firms which were seeking to establish a presence there [Carnegie and Parker, 1996, p. 25]. Pastoral stations in Australia were often out of direct reach of such influence as they were located in isolated regions, such as on "Crown Lands beyond the limits of location" [Carnegie, 1997, p. 11]. Further, they were established by enterprising emigrants, known as

²⁵See Parker [1989] for an overview of how accounting techniques and concepts were imported and exported from one country to another.

pioneers or “squatters,” who were, in the main, not representing British firms. Rather, these pioneer farmers were principals who were guided by their own interests, sometimes with the financial backing of their families in Britain. Hence, station accounting was usually conducted in isolated settings and, for much of the 19th century and extending into the 20th, were often not subject to the administrative procedures associated with company and other formal business structures.

Although the emphasis in this paper is placed upon the contribution of one person, this is not intended to imply that Vigars should be perceived as “heroic” in his endeavors and impacts. Rather, Vigars is depicted as a prominent professional accountant who was active in the Australian pastoral industry from at least the mid-1890s until near the time of his death in 1940. According to Bedford [1966, p. 2], “historically, the process by which accounting procedures and thought have been transmitted from one country to another has been by the physical transfer of accountants.” However, in the case of the intra-country transfer of accounting technique to a specific industry that is under examination here, the primary media were the successive and progressively expanded editions of a book of which the author claims 12,000 copies sold, a very impressive sales figure given the book’s specialist nature and the population of Australia at the time. As well as providing a guide for pastoralists and accountants, there is evidence that the book was used within educational settings. In all, these circumstances suggest a relatively gradual diffusion of technology reflective of the almost four-decade publishing span of the book.

With regard to the rate of adoption, those implementing the bookkeeping system advanced by Vigars were apparently persuaded, whether by Vigars’ book or other proponents, that a comprehensive system of DEB was the “proper” method of accounting for pastoral stations. Direct hindrances to the adoption of such a system would appear to have been few, especially given the often painstaking detail with which Vigars articulated his system and the numerous examples presented to demonstrate its application. However, DEB was regarded as sufficiently complex to constitute a core expertise of the nascent accounting profession.

As outlined above, there is evidence that suggests that the target market for Vigars’ book was altered in the course of its almost 40 years in publication. The early, slim editions were aimed at pastoralists and farmers, as evidenced by its review and advertisement in agricultural journals. By the fourth edi-

tion, however, the pattern had changed. Notices and reviews of the book appear to cease in the agricultural literature and are instead prominent in professional accounting journals. Two general themes become discernible: (1) a continuing advocacy of DEB systems as the "proper" method of accounting for pastoral operations; and (2) an increasing recognition that the implementation of such a system would be the province of a specialist practitioner. The final edition of Vigars' "treatise" contained practice exercises for the novice, seemingly to suggest that expertise in pastoral accounting would be acquired only with effort and practice. A likely consequence of the book is that it caused many station owners or managers, whether by inclination or necessity, to engage at least some supplementary expert assistance in the form of a professional accountant in order to implement the system advocated. Vigars himself may well have been a beneficiary of such arrangements.

The fourth question concerned the influence of local environmental factors on imported accounting technology. As this is not a study of actual pastoral accounting practice, which would require scrutiny of surviving business records, it is difficult to assess the influence of an array of local, time-specific environmental factors on the structure and usage of pastoral accounting information. However, Vigars was influential in adapting a particular bookkeeping technology to pastoral pursuits in Australia. In the introduction to the second edition, for example, Vigars [1901, p. 3] referenced this role saying, a "greater interest will be taken in the study of a work treating on Sheep, Cattle, Horses, and Wool transactions than in ordinary commercial transactions; and, as this is written more especially for those who make Station Products their chief business, it should prove particularly interesting to them." Further, Vigars wrote in the introduction that, "the writer has not deemed it advisable to exclude all technical terms from the present work but has only introduced those which are in most common use; their meanings will be easily discovered by a little thought." Vigars was, of course, adapting the technology for a particular industry, taking into account his experience of participants' ability to understand key technical terms in the content with "a little thought." He also prepared and published from 1902 a special station ledger, specifically ruled and indexed, to assist in facilitating the adoption of DEB within the pastoral industry.

The final question relates to the identification of any reverse flows of technology. Given that the essential purpose of *Station Book-keeping* was to adapt a general accounting technique to the

specialist needs of a particular industry, such reverse flows seem unlikely. In addition, no evidence has been uncovered which would indicate that Vigars perceived there to be an international market for his book. On the contrary, surviving commentaries and promotional material, as well as the content of *Station Book-keeping* itself, emphasize relevance and application only to the uniqueness of the Australian pastoral industry. Consistent with the specialist nature of his publishing project, Vigars was therefore unlike Dimelow and Scouller, both earlier Australian-based accounting authors, who did publish in the “home” country [Goldberg, 1984, p. 29; Carnegie and Parker, 1994]. Rather, as a British emigrant, Vigars was a leading adaptor of the core technology of DEB to the Australian pastoral industry. It appears that he was also the first to do this through a published book, complemented by ancillary publications such as the *Special Station Ledger*.

Organized Accounting Profession: At the dawn of the 20th century, the strongest claim of the nascent accounting profession in Australia to distinctive expertise remained anchored to DEB. In this respect, Vigars’ *Station Book-keeping* seems likely to have served the interests of local accounting practitioners. The timing of Vigars’ publishing career was especially propitious. Organization of the Australian accounting profession had commenced during the last two decades of the 19th century, but a period of consolidation was still required during the early decades of the 20th.²⁶ The successive editions of Vigars’ *Station Book-keeping* which appeared during this time facilitated this consolidation in several ways.

First, as mentioned above, it fostered the adoption of DEB within a major Australian industry which had not previously used that technique extensively. Second, it served to standardize the operation of the technique within that industry, evidencing the reliability of the expertise claimed by accounting practitioners. Third, it provided a means for enhancing and formalizing the education of aspiring professional accountants.²⁷ Fourth,

²⁶Australia’s first professional accounting association, the Adelaide Society of Accountants, was formed in the colony of South Australia in November 1885 [Parker, 1961]. Several more associations were formed in the course of the following two decades [see Linn, 1996, pp. 203-204; Carnegie and Parker, 1999].

²⁷Questions on accounting for agricultural and farming operations were apparently common on examination papers administered by Australian accounting associations during the first half of the 20th century. The surviving examination papers of the ACPA and its successor, the ICAA, are incomplete. However,

Station Book-keeping, with its scholarly epithet of “a treatise,” contributed some much needed intellectual capital, both in substance and appearance, to an occupation that was engaged in an ongoing struggle to demonstrate that its members possessed distinctive knowledge and skills. Fifth, the book served to reinforce to existing and potential clients the importance of “proper” accounting within the pastoral industry. These individual factors also culminated in a growing recognition that the importance and complexity of pastoral accounting would often necessitate the engagement of a specialist practitioner. In this way, the text aided the accounting profession in claiming jurisdiction over work within the Australian pastoral accounting industry.

By the time of the publication of the fifth and final edition of Vigars’ book in 1937, DEB had become normalized within the Australian pastoral industry, and accounting had consolidated its status as a “professional” occupation. *Station Book-keeping* played a significant role in the first of these outcomes and, along with a range of other scholarly books and publications, made a contribution toward achieving the second.

CONCLUSION

This study of Francis Ernest Vigars’ *Station Book-keeping* has examined the contents and influence of a specialist pastoral accounting text and has elucidated aspects of the author’s life and career. Like most of the authors of the generic early accounting texts authored and published in Australia, Vigars was a British emigrant. He gained experience and related specialist skills in pastoral accounting in the period before the appearance of the first edition of his text in 1900. As a specialist, his comprehensive pastoral accounting text was the first book of its kind in Australia.

Vigars’ publications, encompassing five editions of *Station Book-keeping* along with related works, spanned nearly four decades and influenced accounting developments within a major Australian industry. This influence was exerted through Vigars’ adaptation of conventional DEB practices to encompass the peculiarities of Australia’s pastoral industry, as well as his articulation and advocacy of this form of accounting. He believed that a comprehensive double-entry system was the “proper” system of

comprehensive questions in this subject area were included on examination papers for at least the years 1913, 1918, 1919, 1921, 1923, 1942, 1943, and 1946 [ICAA Library].

accounting for this industry and would overcome the inadequacies he perceived in extant pastoral accounting practices. The influence of the book was extended through its use in educational settings.

Accordingly, *Station Book-keeping* has been characterized as a specialist text which enabled the adaptation and transfer of accounting technology. Whether accounting practices were improved in the pastoral industry is a moot point and has not been the subject of investigation here. What is evident is that Vigars' book facilitated a movement away from the single-entry approach previously relied upon for pastoral industry management. This change also had implications for the nascent accounting profession within Australia. The distinctive expertise claimed by members of this profession in the early part of the 20th century centered on DEB. By fostering the implementation of such systems within a major Australian industry, Vigars' *Station Book-keeping* assisted in creating new work opportunities for accountants and contributed to raising the status of their core expertise.

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THE CREATION OF THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA: THE FIRST STEPS IN THE DEVELOPMENT OF AN INDIGENOUS ACCOUNTING PROFESSION POST-INDEPENDENCE

Abstract: This paper applies the theoretical framework proposed by McKinnon [1986] to the creation of the Institute of Chartered Accountants of India (ICAI) which represented an important change to the accounting system in India post-independence. The development of the ICAI is categorized into three phases: source, diffusion, and reaction. Intra-system activity, trans-system activity, and the socio-economic and political environments are shown to influence all stages of the change. Within these phases, the paper focuses on the involvement of the state in the development of the ICAI, credentialism and the importance of the title “chartered,” the disciplinary powers of the ICAI, and the issue of mutual recognition and reciprocity with foreign professional accounting organizations.

INTRODUCTION

This paper applies the theoretical framework of McKinnon [1986] to the creation of the Institute of Chartered Accountants of India (ICAI) and focuses on the involvement of the state in the development of the ICAI, credentialism and the importance of the title “chartered,” the disciplinary powers of the ICAI, and mutual recognition and reciprocity. The paper traces the process of change from the initial proposal to establish the ICAI to its operation in its first years with a focus on the factors influencing the creation of the Institute and its practices. The path of profes-

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sionalization is then compared with similar processes in other post-colonial states.

The research is informed by the accounting history literature, in particular that related to the sociology of professions. Within this literature, there have been two main approaches to the study of professions, a functionalist-based view and a more critical, conflictual view which predominantly informs this paper. The critical view proposes that professions function as self-interested, occupational groups which act in ways to promote themselves and their members in order to gain rewards associated with professional standing. These include both financial rewards and other more intangible benefits such as prestige, status, and influence [Freidson, 1973; Larson, 1977; Abbot, 1988; Macdonald, 1995].

Within this critical approach to the accountancy profession, key themes have included the study of closure in different socio-economic and political contexts; the understanding of the state-profession relationship, including the importance of senior bureaucrats in the development of accounting professions; and the interface between imperialism and accounting professions. Chua and Poullaos [1993], in particular, have called for historical analyses of specific accounting professionalization projects in different economic, social, and political conditions. Their interests include an analysis of the state-profession axis, a more nuanced tracing of the process of professionalization, and an exploration of unintended consequences within the professionalization process.

Within the accounting history literature, there have been a significant number of studies of accounting professions in the Anglo-Saxon context; for example, studies of accounting professions in the U.K., U.S., and Australia [Lee, 1985, 1997; Kedslie, 1990; Chua and Poullaos, 1993, 1998, 2002; Robson et al., 1994; Shackleton, 1995; Walker and Shackleton, 1995, 1998; Carnegie and Parker, 1999; Carnegie and Edwards, 2001; Walker, 2004]. Only recently have researchers started to study accounting professions in non-Anglo-Saxon states and in post-colonial states [Annisette, 1999, 2000; Dyball and Valcarcel, 1999; Susela, 1999; Yapa, 1999; Uche, 2002; Xu and Xu, 2003; Bakre, 2005a, b; Sian, 2006]. Our study seeks to add to this literature with an exploration of the creation of the ICAI in 1949 and a comparison of the trajectory of professionalization in post-independence India to other British colonies.

In the context of a study of accounting professions in post-colonial states, India is important for several reasons. India was

one of the first countries to be colonized by the British and was important enough to have an office dedicated to it, the India Office, separate from the Colonial Office which dealt collectively with all other British colonies. India was also one of the first countries to gain independence from Britain after World War II, and the path of professionalization there showed some interesting features, falling between the processes of professionalization in settler and non-settler post-colonial states. Today, India is the largest secular democracy in the world and is becoming increasingly important in economic terms.

During the colonial period, India was governed by Britain with indigenous Indians having little input on how India was governed. It was only after independence that Indians were able to implement their own approaches to governance. Key developments in the creation of an indigenous institute occurred very soon after independence. The ICAI was established in 1949, just two years after independence. This early period of independence (1949-1955) was an important time for the accounting profession in India. As a time period, this era also differs from other studies in which professionalization has been examined in the late 18th and early 19th centuries or in post-colonial states gaining independence in the 1960s.

There has been one major study on the professionalization of accounting in India, undertaken by Kapadia [1972]. This study extends the work of Kapadia by analyzing the creation of the ICAI using the theoretical framework proposed by McKinnon [1986]. This approach places the analysis of the creation of the ICAI within the professionalization accounting literature and compares the process in India to that of other post-colonial states.

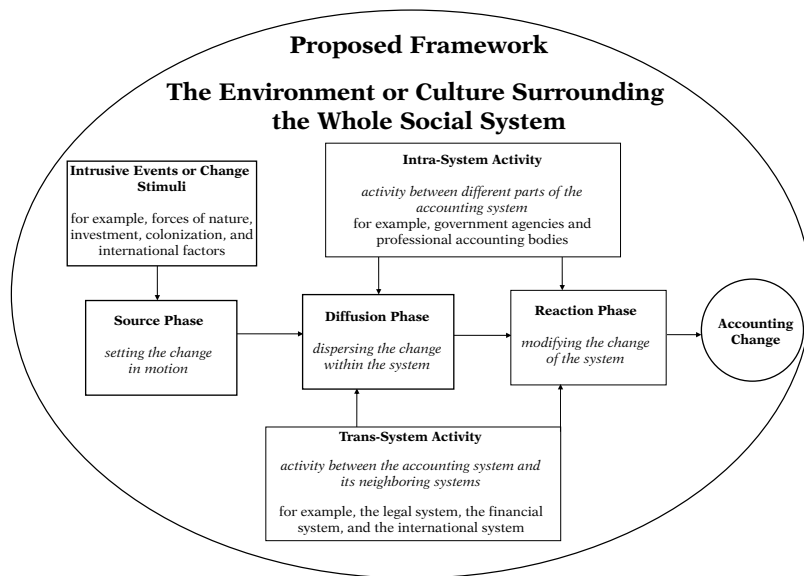
The article is structured as follows. The theoretical framework applied in this paper is discussed next, followed by an outline of the creation of the ICAI. There then appears a discussion of the political, economic, and social environments of India at independence and an analysis of key events in the creation of the ICAI in 1949. Its operations until 1955 within the context of the theoretical framework are analyzed. We conclude by comparing the process of professionalization seen in India with that of other post-colonial states.

THE THEORETICAL FRAMEWORK

McKinnon [1986] has proposed a theoretical framework based on social systems theory for studying accounting change

and development. Within this framework, the accounting system is viewed as one of the social systems in the country of study, neighbored by other social systems which affect and are affected by that accounting system. What is important are not the technical outputs of the system but the interactions within the system and between systems, the institutional environment surrounding the system, and the authorities who formulate regulations and influence the process of accounting change, both from within the accounting system and from neighboring systems. All systems operate within the cultural and social context of the country, which affects both the interactions between different parts of the accounting system and the interactions with its neighboring systems. Explanations for change events are provided in terms of four major aspects: intrusive events, intra-system activity, trans-system activity, and the environment [Harrison and McKinnon, 1986; McKinnon, 1986]. The framework, as applied in this paper, is shown in Diagram 1.

DIAGRAM 1



The source phase encompasses the factors or events causing change to occur. The diffusion phase looks at how change is dispersed and accommodated within the system, and the reaction phase chronicles how the accounting change is modified subsequent to the diffusion phase. Both the diffusion and reac-

tion phases encompass intra-system activity, activity between the different components of the accounting system, and trans-system activity, activity between the accounting system and its neighboring systems.

Intra-system activity involves interactions between regulatory authorities within the accounting system, including government departments directly involved in the regulation of accounting and professional accounting bodies. Trans-system activity involves interactions between the accounting system and its neighboring social systems. It is expected that in any country the social systems that are most likely to affect the accounting system are the political, legal, corporate, economic, financial, and international systems. The political and legal systems and parliament are assumed to exert important influences on the accounting system primarily because accounting regulation in most countries incorporates some elements of statutory regulation. Corporate sector actors as preparers of accounting information are involved in processes of accounting change and, as such, also influence accounting systems. Accounting information can be linked to economic decision making and performance measurement; hence, economic and financial systems may also influence accounting systems. Finally, international systems also influence accounting systems as, for example, the influence of one country over accounting systems in another through spheres of influence [Parker, 1989] or with the influence of international bodies such as the International Accounting Standards Board. The political, economic, social, and/or environmental contexts of the country affect all social systems and all phases of change and, as such, also impact the accounting system.

In this paper, the theoretical framework is applied to the creation of the ICAI in 1949 and to key issues in the first six years of its operation. The paper focuses on the main regulatory authorities within the accounting system and their interactions, as well as interactions between the accounting system's authorities and interested parties from neighboring systems who influenced the ICAI's creation. McKinnon's framework is used to inform, guide, facilitate, and structure the research without constraining the analysis of the relationships between key interest groups involved in accounting change [Chua and Poullaos, 1993, 1998]. Furthermore, the paper explores the influence of the socio-economic and political environments on the process of change.

Data for the analysis of the creation of the ICAI come from several sources: parliamentary reports and debates on

the Chartered Accountants Act, 1949; the Chartered Accountants Amendment Act, 1955; the journal of the ICAI, the *Chartered Accountant*, which has been published monthly since July 1952; and secondary sources on the development of the ICAI. In addition, semi-structured interviews were undertaken in 1998 with different parties interested in accounting in India. Interviewees were asked about different accounting changes in India – what led to the changes, the process of change, and the factors influencing the change. The interviewees were not able to provide direct information on the creation of the ICAI as access to individuals directly involved was no longer possible. However, the interviewees were able to provide supporting information as to the general processes of change in the country and the key parties involved in the process, thus providing valuable support for the archival data. Specifics of these data sources are detailed in the primary sources section of the references.

In the next section, the process which led to the creation of the ICAI and its operations to 1955 is outlined, followed by a brief discussion of the socio-economic and political environments of India at independence.

THE CREATION OF THE ICAI

The creation of the ICAI can be broken down broadly into two periods – the diffusion phase from 1930 to 1949 and the initial reaction phase from 1949 to 1955. The earlier period covers the years leading to the foundation of the Institute while the later period featured those events subsequent to its creation.

The ICAI was established in 1949, soon after independence, by the Chartered Accountants Act, 1949. However, the process can be traced back to an earlier time, in particular to the 1930s when the Indian Accountancy Board (IAB), one of the main institutions involved in the birth of the ICAI, was itself born.

Auditors in India, known as registered accountants, had been required to register with local governments since 1913. The IAB was created in 1932 by the government of India using powers given to it under the Companies (Amendment) Bill, 1930. The role of the IAB was to advise the governor general on all matters of administration relating to accountancy and auditing and to assist him in maintaining the standards of qualification and conduct of persons enrolled on the register of accountants [Companies (Amendment) Bill, 1930].

It was intended by the accountants on the IAB that the IAB would, in time, develop into an autonomous accounting profes-

sion in India, very much along the lines of the British model with an accounting profession independent of the government and other interested parties, headed by an independent accounting institute run by elected members. This had not occurred by the time of independence, and the first aim of the Indian accountants was to implement this plan.

The Indian accountants on the IAB initiated the creation of the ICAI through discussions with the Ministry of Commerce (MC) regarding the possibility of setting up an accounting institute. The initial strategy was to establish an independent private accounting institute run by an elected council of accountants which, it was hoped, would have informal government backing. However, very early on, this process came under the control of the MC which was itself influenced by the Ministry of Finance (MF). What emerged was a very different institutional structure than that envisaged by the IAB. The ICAI was eventually given a parliamentary charter and was operationalized under the Chartered Accountants Act, 1949 [The Chartered Accountants Act, 1949; Indian parliamentary debates on the Chartered Accountants Bill 1948, April 1949; Kapadia, 1972].

The ICAI was born within six months of the Chartered Accountants Act becoming law in May 1949. The council of the ICAI was staffed with elected representatives from the membership plus nominated representatives from the government, both the MC and the MF, as well as from chambers of commerce representing the corporate sector. The council held its first meeting on November 15, 1949, and elected G.P. Kapadia, an important figure in the creation of the ICAI, as its first president.

The ICAI gained some authority from its statutory basis and government backing. However, it still needed to persuade the government and the wider community of its expertise and credentials in accounting. In particular, it wanted to demonstrate to the government and wider interest groups that the ICAI was indeed the leader of a "reputable profession" with strong procedures and processes and which regulated its members effectively. The reasons for this desire were two-fold: first, the ICAI sought to pre-empt any undue interference by the government in their affairs and, second, it wanted to prevent the development of rival professional accounting organizations.

The ICAI did this by seeking to establish a strong, competent secretariat and to develop processes to deal with examinations, education, professional ethics, and discipline. In doing so, the Indian professional institute was able to control entrance into the newly formed organization, to implement its own edu-

cational and training requirements using internally controlled professional examinations and articleship requirements, and to begin the articulation of ethical rules. In practice, there was little interference from the government and others outside the Institute in these matters. In adopting these practices, the ICAI modeled itself very much on the British design, that of a private-sector professional body setting its own examinations and training regulations, but without adopting British accounting qualifications directly.

Throughout the period, there were both formal and social interactions between the ICAI and the government. For example, government officials were represented on the council of the ICAI and were invited to attend key functions. On the whole, there was support for the ICAI. The government expected the ICAI to create a strong, semi-independent, and ethical accounting profession. The corporate sector and other parties interested in accounting supported the ICAI with only a few issues needing to be resolved. The first of these was the issue of mutual recognition and reciprocity, discussed below. The second was the creation of a second professional accounting institute, the Indian Institute of Cost and Works Accountants, which is outside the scope of this paper [Indian parliamentary debates on Chartered Accountants Bill 1948, April 1949; editorials, *Chartered Accountant*, 1952-1960; Indian parliamentary debates on Chartered Accountants Amendment Bill 1955, April 1955].

THE POLITICAL, ECONOMIC, AND SOCIAL ENVIRONMENTS OF INDIA AT INDEPENDENCE¹

India gained independence from the British in 1947 after a long colonial period. The economy inherited by India at independence was in a very poor state, predominantly due to British imperial policies. During the period of colonization, the economy of India had been run mainly in the interests of Britain. For example, it was British policy that India produce raw materials and foodstuffs which were exported to Britain while British manufactured goods, fashioned from these same raw materials, were in turn exported back to India. This import/export policy was very much in the interests of British entrepreneurs. In addition, much of the economic surplus generated by India had been

¹References for the discussion that follows are Panikkar, 1964; Spear, 1978; Kumar, 1982; Kulke and Rothermund, 1990; Jalan, 1992; Rothermund, 1993; Brass, 1994; Brown, 1994; Joshi and Little, 1994; Dreze and Sen, 1996.

exported back to Britain or spent on British administration and the British army. India was left with a predominantly agrarian economy using low-productivity methods with little use of fertilizers and irrigation to improve output.

Foreign capital, especially British firms, dominated industry in India, either directly through ownership or indirectly through managing agencies. Some Indian family-based companies such as the Tata group ran successful businesses, for example in iron and steel, but these were insignificant in comparison to British-run companies. At independence, what little Indian industry there was produced low-technology, low-productivity, low-wage, and labor-intensive goods, concentrated in only a few selected industrial sectors such as textiles. There was little production of capital goods and a lack of infrastructure industries, modern banking, and insurance. Overall, India's economy was very underdeveloped with low per-capita income, poor economic growth, prevalent poverty, and little industrialization. In addition, India also had to deal with problems arising from the partition of India into India and Pakistan. A large and violent migration of people between the two new nation states created a large number of refugees.

India also inherited some advantages at independence, including both tangible and intangible assets. Numbered among tangible assets were a national transport system, some development projects (such as food growing and irrigation projects), and some reserves of foreign exchange. Intangible assets included an established political party, the Congress Party, which had gained much experience while opposing the British rule of India; an attitude of monetary and fiscal conservatism; and an administrative apparatus to run the institutions in India after independence.

The problems outlined above were initially tackled by the Congress Party led by Jawaharlal Nehru, a western-educated, Fabian socialist who held strong beliefs on economic development, social welfare, and foreign affairs, and who dominated the political landscape of India until his death in 1964. Many political, economic, and financial institutions and systems were implemented in this period. The political system adopted by India at independence was similar to that seen in Britain in many ways with a cabinet-style government led by a prime minister and supported by a strong civil service. India chose a federal structure and a system of parliamentary democracy in which there was both centralized and regional government. Responsibility for economic and social planning, trade and commerce,

commercial and industrial monopolies, and trade unions was shared between central and local government.

Despite his Marxist tendencies, Nehru did not lead India towards communism. Instead, he introduced a mixed economy in which there was a role for both private and public enterprise and in which socialist ideals were operated within a secular democracy. The key elements of the economic system that were implemented soon after independence included central planning of the economy, the development of a large public sector, control and licensing of private enterprise, price control within the private sector, the use of import substituting policies, the introduction of a predominantly public financial sector with nationalized banking and insurance, state control of foreign investment, protective tariffs, and prohibition of imports. These were all enacted using legislation promulgated by Parliament and governmental resolutions and ordinances.

Social reform also took place under Nehru with the outlawing of untouchability, the introduction of quotas for ex-untouchables in government services, and the passing of laws improving the rights of women in the Hindu Succession Act (1955) and the Hindu Marriage Act (1956). The Hindu Succession Act gave women equal rights with men in the matter of succession to property, while the Hindu Marriage Act provided women protection and rights in marriage and divorce. Once again much of the social reform took place through legislative means with strong involvement by government bodies.

Despite initial optimism for strong economic growth and rapid social reform in the early 1950s, India started to face many economic problems from the late 1950s onwards. For instance, there was deterioration in the balance of payments which led to India's needing foreign aid, which was explicitly included for the first time in the third five-year plan.

The period 1949 to 1955 was an important time for economic and social development in India. It is in this time period that the ICAI was created.

ANALYSIS OF THE CREATION OF THE ICAI USING THE THEORETICAL FRAMEWORK

The analysis of the creation of the ICAI using McKinnon's framework focuses on four main issues: the state-professional axis in determining the structure of the ICAI, credentialism and the importance of the designation "chartered," disciplinary procedures of the ICAI, and mutual recognition and reciprocity.

THE STATE-PROFESSIONAL AXIS IN DETERMINING THE STRUCTURE OF THE ICAI

The Source Phase: The cause for the early creation of the ICAI in 1949 can be traced to events in the period before independence. The ideal of an autonomous and independent accounting profession had been inherited from the colonial period, and the groundwork for an independent profession, based on the U.K. model, had been put in place with the creation of the IAB in 1932. The IAB had been set up to advise the government on all issues relating to accounting and auditing, including the registration of Indian auditors, and continued in existence until 1949. Initially the members were nominated and represented senior British and Indian accountants; later the IAB contained both nominated and elected members.

The intention of the Indian members of the IAB was to develop an indigenous accounting profession headed by an independent institute, but such a structure had not emerged at independence. The Indian members of the IAB wished to establish an accounting profession based on the U.K. model soon after independence. This vision had been discussed with the government representatives on the IAB with a view to gaining their support for the professional institute.

One of the main reasons that persuaded the government to support the development of an accounting profession came from outside the accounting system. There was the perception in the government that accounting was an important tool for economic development [Report of the Company Law Committee, 1952]. In particular, some of the key aims of the government at independence were rapid economic growth, together with social development leading to a fairer distribution of wealth. The perception held at this time was that accounting could help facilitate both these aims by allowing for the provision of comparable information across the corporate sector, facilitating decision making. It was also thought that the provision of information within the accounting system might help encourage the private sector to act in ways congruent to the government's aims, and that a stronger audit framework would help monitor the actions of directors and perhaps curb abuses within the corporate sector. Finally, it was also assumed that accounting might also provide information for national economic planning purposes [Report of the Parliamentary Committee on the Chartered Accountants Bill, 1948; Report of the Company Law Committee, 1952; Report of the Company Law Amendment Committee, 1957].

The Indian accountants on the IAB were therefore seen as instrumental in changing the accounting system, but it was clear that they would not be able to do this without the authorization and approval of the government. The MC, in particular, had to be persuaded by the IAB that an accounting profession was important. The government became supportive of the accounting profession due to the social and economic concerns of the time.

The Diffusion Phase: During the diffusion phase, intra-system activity between the Indian members of the IAB and the MC, and trans-system activity between the Indian members of the IAB and the MF, influenced the formation of the ICAI and its structure. The Indian accountants on the IAB at independence argued strongly for an independent, autonomous accounting institute and profession, very much along the lines of the Institute of Chartered Accountants in England and Wales (ICAEW) in the U.K. [Kapadia, 1972; Chakravorty, 1994; interviews with senior representatives of the accounting profession]. The senior accountants on the IAB discussed this with the MC representatives on the IAB, but no immediate action was taken. The MC representatives were more cautious about the creation of a completely independent accounting institute and decided to consider carefully the question of an accounting institute and what form this institute should take if considered appropriate.

The members of the IAB continued to argue their case to members of Parliament, government ministers, and government officials and, in 1948, persuaded the MC to agree to the creation of an institute to head the Indian accounting profession. Although the British model would have been preferred by the Indian accountants, the MC was not amenable. The MC proposed a quite different institutional framework, an accounting institute set up under statutory legislation promulgated by Parliament, with government and corporate sector representation on the council heading the institute. The British accounting model was seen as inappropriate in the social and political environment of India at this time. Strong government involvement characterized all areas of political, economic, and social life. Corporate regulation, economic planning, and social affairs were all subject to ordinances, statutes, and involvement of government bodies. As a consequence, an independent profession was not a possibility at this juncture in India. The British model, wherein practicing accountants band together and evolve into an accounting profession headed by an institute through a variety of closure techniques, was not on the cards. Instead, the ICAI was established

by statutory legislation with government involvement in both the process of formation of the ICAI and in the ICAI itself.

In 1948, the MC prepared a memorandum on a scheme for an autonomous association of accountants in India and requested feedback on its ideas. In particular, it solicited opinion on a proposed name for the institute and whether foreign qualifications should be recognized [Kapadia, 1972]. The MC also required the IAB to set up an expert committee to review the proposed scheme. The MC set the terms of reference for the expert committee and required the committee to be subject to its approval. The terms of reference were to embody the tentative scheme for an autonomous association of accountants and to indicate whether the institute could be set up by amendments to existing laws or whether new legislation was necessary. The expert committee was formed on May 1, 1948 by the IAB and approved by the MC on May 13, 1948.

During its review of the MC's proposals for the creation of the accounting profession, the expert committee of the IAB conducted a detailed study of the constitutions of foreign accounting associations and accountants outside India. In particular, it studied the workings of the ICAEW in the U.K. and the Society of Certified Public Accountants of New York. It was also in frequent contact with the MC on the proposals it was considering so as to discuss proposals before they became finalized [editorials, *Chartered Accountant*, 1952-1960; Kapadia, 1972; interviews with senior representatives of the accounting profession].

The IAB's expert committee submitted its report on the autonomy scheme proposed by the MC together with a draft of possible legislation in July 1948. The main recommendations included that a professional accounting institute, called the ICAI, should be set up by a special act of Parliament, the Chartered Accountants Act. The members of the institute would initially be Indian registered accountants, renamed chartered accountants. The role of the ICAI would be to set examinations for ICAI membership, regulate the training of its members, regulate certificates of practice given to its members, and exercise disciplinary procedures over its members. The affairs of the ICAI would be managed by the council consisting of 15 elected representatives, one nominated representative of the corporate sector, and three nominated representatives of central government. The council of the ICAI and the accounting profession would be completely autonomous, free from control from the central government, except in a small number of matters which would be agreed and specified in the Chartered Accountants Act.

During this period, the Indian accountants tried to restrict outside involvement in the institute and tried to minimize the perceived adverse effects of the institutional form that had been imposed on them. Their aim was to retain as much control over the admission, educational, and disciplinary requirements of accountants as was possible in the socio-economic and political climate of India at this time. For example, they obtained an informal agreement that governmental involvement in the new institute would be kept to a minimum and that it was not the government's intention to be involved in its daily operations. In this period, there were two main areas of contention and debate – the use of the designation “chartered,” and the issue of reciprocity and mutual recognition. Both issues were resolved through intra-system activity between the MC and the Indian accountants on the IAB. The former was settled in the diffusion phase and the latter, straddling the diffusion and reaction phases, was finally resolved in the reaction phase.

Once the expert committee had reported, the MC reviewed the report of the expert committee and approved its recommendations to form an accounting institute, the ICAI, headed by a council run by elected members but with governmental representation as well. The MC then prepared a circular on the proposals to set up the ICAI which it distributed to all government departments. At this stage, trans-system activity played an important role in the processes of the proposed accounting institute. The MF, unhappy with the disciplinary procedures of the institute with respect to taxation matters and interactions between the Central Bureau of Direct Taxes (CBDT) within the MF and Indian accountants on the IAB, significantly altered the disciplinary procedures of the proposed institute. Once this issue had been resolved, the Chartered Accountants Act, 1949 was promulgated through the parliamentary system and the ICAI was formed.

Once established, the authority of the ICAI was not completely reliant on its own status and reputation which it developed over a period of time using a variety of strategies to gain a monopoly over competing, would-be accounting organizations. The authority of the ICAI and the accounting profession came, in some part, from statutory authority and governmental backing with approval given to an accounting system more akin to that of some European countries [Bocqueraz 2001; Ramirez, 2001]. Thus, although not an intended outcome, the accounting profession ultimately gained some credibility through the direct involvement of the government. The Indian accountants had to

accept this intrusion and revise their initial professionalization strategy. They had to work with the MC's proposals in order to try to minimize the government's involvement as far as possible [Kapadia, 1972; interviews with senior representatives of the accounting profession].

CREDENTIALISM AND THE IMPORTANCE OF THE DESIGNATION "CHARTERED"

The name of the institute was determined by intra-system activity in the diffusion phase, by interactions between the Indian members of the IAB and the MC. The IAB had suggested that the name of the institute might be "The Institute of Chartered Accountants of India." The MC was concerned about using the name "chartered accountant." It argued that this might cause some problems with the British accounting profession since the name might be deemed to be too similar to that of the ICAEW in the U.K. In particular, after consultation with the Ministry of Justice (MJ), the MC argued that the term "charter" had become associated with a British royal charter and, thus, should not be used by the IAB for the proposed institute. In addition, some Indian accountants who had travelled to the U.K. and qualified with the ICAEW raised some objections to the use of the term "chartered accountant." These accountants argued that this might cause some confusion in the corporate sector as to the institute with which accountants had qualified. The British qualified accountants wished to be distinguished from accountants qualified in India as they expected that they would have higher status and gain more work than Indian qualified accountants [Indian parliamentary debates on the Chartered Accountants Bill 1948, April 1949; Kapadia, 1972; interviews with senior representatives of the accounting profession].

The IAB was able to argue successfully that the name "Institute of Chartered Accountants of India" was appropriate and that no confusion would arise with this name [Kapadia, 1972]. The name was of great importance to the IAB due to the perception of quality, prestige, and status that had become associated with the term during the colonial period as well as the preference for audit work accorded to chartered accountants in this period. Any other term in the IAB's opinion would signal a lower-status profession and was, thus, undesirable. At the request of the IAB, the MC obtained further advice from the MJ, which advised that the proposed accounting institute be set up under a parliamentary charter. Thus, the MC was finally persuaded

that the name of the proposed institute could be the "Institute of Chartered Accountants of India" and the issue was resolved.

DISCIPLINARY PROCEDURES

An important role for the proposed ICAI was disciplinary. The expert committee's report proposed that this was to be undertaken internally by a disciplinary committee. The CBDT within the MF raised objections to the proposal. It was unhappy that the ICAI should have complete autonomy to conduct disciplinary proceedings with regards to income tax matters and argued that it would be too much to expect a relatively new profession to deal with issues such as vested interests and independence. Indeed, other professions with much older traditions and histories than the accounting profession (e.g., the legal profession) were not self-regulating but instead were controlled by the courts. In addition, investigation of cases of professional misconduct in income tax matters by the Council of the ICAI might involve confidential information about assesses which was not desirable and contrary to the Income Tax Act, 1922 [Indian parliamentary debates on the Chartered Accountants Bill 1948, April 1949; Kapadia, 1972].

The CBDT argued in favor of tightening control over the accounting and auditing profession. Specifically, it suggested that the list of persons prevented from being chartered accountants should be expanded to include anyone who had been dismissed from public service and anyone upon whom a final order of penalty had been imposed under the income tax laws. The Bureau also argued that the definition and scope of audit needed to be more tightly defined so that auditor negligence could be more easily determined, that auditors of private companies should possess the same qualifications as auditors of public companies, and that the involvement of accountants in cases of under payment of tax should be classed as gross negligence [Indian parliamentary debates on the Chartered Accountants Bill 1948, April 1949; Kapadia, 1972].

The IAB were particularly concerned about the MF's objections. It wanted as independent an institute as possible which would deal with all disciplinary proceedings and tax-related issues on its own. The IAB defended its proposals arguing that autonomy was important for the profession and that government involvement in professional misconduct matters would seriously affect the standing and reputation of the profession. It also raised the issue that the MF had informally agreed previously to

an autonomous profession and suggested that the Ministry was now being unreasonable by withdrawing its agreement. Finally, it argued that other accounting professions in the world had similar powers to that proposed for the Indian institute by the IAB. Particular reference was made to the accounting professions in the U.K. and U.S. [Indian parliamentary debates on the Chartered Accountants Bill 1948, April 1949; Kapadia, 1972].

The MC considered the viewpoints of both the IAB and the MF before drafting the Chartered Accountants Bill. This bill included most of the recommendations made by the IAB's expert committee with the exception of its recommendations on the disciplinary process. On this issue, the MC initially accepted the MF's suggestions and gave the CBDT and the MF powers to deal with disciplinary matters relating to income tax [Kapadia, 1972].

The Chartered Accountants Bill was introduced into Parliament on September 1, 1948, and was referred to a select committee for review on February 1, 1949. The IAB was unhappy with the disciplinary provisions in the Chartered Accountants Bill as it considered that the proposals would undermine the independence and autonomy of the accounting profession and the institute. The provisions also indicated a lack of trust in the accounting profession which would be detrimental to the interests of the accounting profession [Indian parliamentary debates on the Chartered Accountants Bill 1948, April 1949; Kapadia, 1972]. Thus, there was direct conflict between the IAB and the MF. The IAB considered control over disciplinary matters by the MF to be unacceptable, while the MF thought that ICAI control over income tax cases to be inappropriate.

Meetings were held between Kapadia, a senior member of the expert committee of the IAB and later the first president of the ICAI, the Minister of Commerce, and the CBDT to try and resolve the conflict. Initially, these meetings were not successful. It appeared that the bill might not be promulgated since agreement could not be reached on the disciplinary issue. However, the negotiations continued outside of the formal parliamentary system when Kapadia met with the Finance Minister and a compromise was reached [Kapadia, 1972]. The institute would be given powers to deal with all disciplinary issues through its disciplinary committee. However, the disciplinary process would be monitored by government representatives on the council of the institute. In addition, all disciplinary proceedings relating to income tax matters and other public interest matters would be subject to approval of the high courts which would be empow-

ered to alter any penalties imposed by the institute [Kapadia, 1972]. The IAB was not happy with this compromise but accepted that it was probably the best that it could hope to achieve at this point in time.

The importance of informal interactions in the determination of the outcome of the professionalization project ultimately proved to be more important than the formal interaction between interested parties within the parliamentary system. The importance of the interaction between the government and the IAB was also crucial in determining the outcome of accounting change and the development of the accounting profession in India. In this case, two different government departments influenced the process of accounting change.

MUTUAL RECOGNITION AND RECIPROCITY

The issue of mutual recognition and reciprocity was seen to be important in both the diffusion and reaction phases of the creation of the ICAI.

The Diffusion Phase: In the diffusion phase, the Indian accountants on the IAB were keen that the proposed ICAI should be recognized by the ICAEW and other foreign professional accounting bodies on a mutual recognition basis. The MC was keen for the ICAI to continue to recognize foreign professional accounting bodies, in particular the ICAEW without any conditions attached to this recognition. At first the expert committee proposed that members of foreign accounting institutes would only be recognized by the Indian institute if members of the ICAI were recognized on a reciprocal basis. The MC put pressure on the expert committee to include provisions to recognize foreign qualified accountants, in particular British chartered accountants, with no reciprocity requirement. The MC perceived this as important for their relationship with the U.K. authorities, in particular with the Board of Trade [Kapadia, 1972]. The Indian members of the ICAI rather reluctantly included recognition provisions in their scheme which did not specifically require mutual recognition and reciprocity. However, they also included a provision that the ICAI would recognize accountants with foreign qualifications but typically on a reciprocal basis. This was acceptable to the MC at this stage.

The Reaction Phase: In the reaction phase, the issue of mutual recognition and reciprocity became important once again. The

ICAI initially asked the MC for help in negotiations with U.K. authorities concerning ICAI recognition. In response, the MC initiated discussions with the British authorities on the issue of reciprocity. However, it was not successful and the ICAI was not given mutual recognition status. While accountants qualified with the ICAI were given practicing rights in the U.K., this fell far short of the mutual recognition desired. At this stage, the ICAI wished to withdraw recognition of professional accounting bodies that did not recognize it. The MC was concerned since it perceived that its interests and negotiation position on other issues might be impaired if goodwill with the U.K. authorities was lost over the reciprocity issue. It therefore put pressure on the ICAI to continue to recognize British professional accounting bodies and their qualifications both at meetings of the ICAI council and in written letters directed to the council [Indian parliamentary debates on the Chartered Accountants Amendment Bill 1955, April 1955; Kapadia, 1972].

The ICAI did eventually succumb to this pressure, but it did not do so totally. The ICAI proposed issuing regulations on reciprocity, which would allow the recognition of foreign qualifications, but only conditionally. These included a requirement that the foreign qualified accountant must be resident in India, that recognition would be for five years, that the accountant would not be allowed to vote for or become a member of the ICAI council, and that recognition would usually be accorded only if recognition was reciprocal [Kapadia, 1972].

This was a compromise between the ICAI's and the government's positions. Many members of the ICAI, including council members, felt that they had given in to the government by allowing foreign accountants to be recognized without a reciprocal arrangement. However, they also recognized that the government did have power to regulate the ICAI under the Chartered Accountants Act and that the government had indicated that it would override the ICAI if necessary. Hence, the ICAI accepted that it had little choice in bowing to the will of the government since its position might have been weakened further had the government insisted on full recognition of U.K. qualifications with no reciprocal measures at all [Indian parliamentary debates on the Chartered Accountants Amendment Bill 1955, April 1955; Kapadia, 1972].

Despite the actions of the ICAI, the government was not happy with the reciprocity provisions. In 1955, it amended the Chartered Accountants Act and, contrary to the wishes of the ICAI, the government took the power to specify foreign account-

ing qualifications acceptable in India [Indian parliamentary debates on the Chartered Accountants Amendment Bill 1955, April 1955; Kapadia, 1972]. In the reaction phase, the ICAI was given some autonomy to carry out its activities, but the government proved itself to be more influential than the ICAI on issues which it considered important.

The reaction phase is indicative of the power relationship within the state-professional axis in India. On unimportant issues, such as operational structure, the government let the ICAI progress with little interference. However, on any issue which had wider implications, such as relations with the U.K., the government acted quickly and unequivocally to force its will on the ICAI even if previous legislation had to be amended to achieve this.

DISCUSSION

Recent work on the professionalization of accounting indicates that there are many different trajectories possible and that the outcomes of professionalization projects are varied [Walker, 2004]. It has also been noted that there are particular differences between the professionalization processes in British settler and non-settler colonies post-independence [Chua and Poullaos, 1993, 1998, 2002; Annisette, 2000, 2003].

In broad terms, settler states with dominion rights have seen the development of rival professional accounting bodies which have entered into a variety of inclusionary and exclusionary closure strategies at different periods of time. The process of professionalization has involved both local and metropolitan agencies. What has generally resulted has been the development of local accounting bodies following the British model. However, exact replication of the British model is not in evidence. Instead, a variety of professional structures have developed in different states [Chua and Poullaos, 1993, 1998].

Studies of professionalization have been undertaken in non-settler states where independence was gained in the 1960s and professional accounting institutes were formed in the 1960s and 1970s. While different professional outcomes have occurred in these non-settler states, some commonalities remain. These include the use of legislation in supporting the accounting profession, local professions developing only post-independence, the use of Association of Certified Chartered Accountants (ACCA) qualifications, the importance of both formal and informal interactions, and issues of race and imperialism within the profes-

sionalization process [Annisette, 2000, 2003; Uche, 2002; Bakre, 2005a, b; Sian, 2006²].

India is an interesting case since it falls somewhere between the two identified groupings. The professionalization project in India started before independence with the British Government looking to create job opportunities for Indians. The British Government, deciding that accountancy was an “appropriate” profession for Indians, established qualifications to allow Indian accountants to become registered accountants and to undertake audit work [Companies Amendment Act, 1930]. This is in direct contrast to the treatment of the indigenous population in other non-settler states before independence where accountancy was not deemed suitable for the local population and professionalization only commenced post-independence [Annisette 2000, 2003; Sian, 2006].

As in other colonial states, the U.K. chartered accountancy profession was held up as the ideal professional organization, the best professional model under colonial rule to which Indian accountants could aspire. That an accounting institute was set up so quickly after independence may be ascribed to the existence of an Indian accounting profession which revered the British model. However, this model was not adopted in India since it was not congruent with the socio-economic and political environments at independence when most social and economic reform was taking place with government involvement and the wide use of statutory legislation and governmental ordinances. Models of professionalization are unlikely to be successful if they are not congruent with the socio-economic and political environment of the country.

The state-professional axis was crucial on the path of professionalization with the ICAI established by statute and with governmental membership on the ICAI's council and involved in its disciplinary procedures. The state took early control of the professionalization process; intra-governmental activity influenced the structure of the ICAI. To some extent, the MC allowed the ICAI to operate with the autonomy it desired, but only when the interests of the Ministry were not impacted, as illustrated by the mutual recognition dispute. Throughout the process of establishing the ICAI, informal interactions between key parties were important, a pattern observed in other professionalization studies [Uche, 2002; Sian, 2006].

²The exception is Kenya, a settler colony with more similarities to non-settler states than other settler states.

Credentialism was an important issue for the Indians on the IAB, as for all other professionalization projects, both in settler and non-settler states. The designation “chartered” was adopted after debate with the MC in consultation with the MJ due to the signals of status and quality attached to the term.

British qualifications were not adopted, and ACCA qualifications were not recognized in India. This route to becoming an accountant was therefore not available in India [Companies Act, 1956] in contrast to other non-settler states [Annisette, 2000, 2003; Uche, 2002, Bakre, 2005a, b; Sian, 2006]. Instead, the ICAI council chose to set up its own exams, disciplinary procedures, and code of ethics and did not choose to use British accounting qualifications directly. However, the examination structures were similar to those of the British chartered accountancy profession, indicating the continuance of the imperial influence on the ICAI post-independence. Ideals and practices which had come to be accepted as superior in the colonial period continued to be regarded as superior post-independence.

CONCLUSION

In this paper, the theoretical framework proposed by McKinnon [1986] has been applied to the creation of the ICAI in 1949. The framework appears to be useful in analyzing instances of accounting change in India, in this case in the development of the ICAI post-independence. The analysis of this change to the accounting system into source, diffusion, and reaction phases appears to be useful as different issues and concerns and different interested parties affect the process differently at different stages of change. McKinnon’s framework recognizes the importance of the social, political, and economic environments on accounting and links accounting to other social systems. This is confirmed, in this case, by the taxation system affecting the structure of the ICAI in relation to its disciplinary procedures. The analysis of intra-system and trans-system activity also appears to facilitate the analysis of interactions between different parties interested in the accounting system.

However, the framework does have some limitations. The model is complex and the identification of the diffusion and reaction phases may not always be straightforward. Exactly when one phase ends and another begins is not always clear. In reality, the reaction phase may include some events which themselves could be studied as independent changes. There may be some overlap between the phases. Furthermore, the reaction phase

of one event may become part of the source or diffusion phase of another event. In addition, not all changes will feature all three phases and all types of activity. Nevertheless, for purposes of structuring the analysis, the split into diffusion and reaction phases and the analysis of intra and trans-system activity appear to be useful in this study as is the centrality of the social, political, and economic environments on the creation of the ICAI.

This paper presents one episode in the development of the accounting profession in post-independence India. Further research is needed on the professionalization of accounting in India, both pre and post-independence. Particular issues that need addressing in the pre-independence period include the development of the local accounting profession under colonial rule, the impact and influence of local and imperial agencies on the trajectory of professionalization, and an exploration of the differences and commonalities between the process of professionalization in India and other colonial states. Within the post-colonial period, the study of further episodes in the development of the Indian accounting profession to explore the trajectory of professionalization in this period would be useful. Particular episodes that need to be analyzed include interactions with the Indian Institute of Cost and Works Accountants, standard setting by the ICAI, accounting regulation within the companies acts, and taxation standards.

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Indian parliamentary debates on the Chartered Accountants (Amendment) Bill, 1955

Companies Act, 1956

Report of the Company Law Amendment Committee, 1957

Summary of Interviewees:

three representatives from multinational companies in India

three representatives from Indian companies

three representatives of stock exchanges (two from stock exchanges and one from the Securities and Exchange Board of India)

one representative from an international accounting firm

two representatives from Indian accounting firms (also, former presidents of the ICAI)

34 representatives of the Indian accounting institutes (two from the ICAI, one from the ICWAI, and one from the ICSI)
 two Indian academics
 two representatives from the Department of Company Affairs
 one representative from the tax authorities

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DIGITIZING THE ACCOUNTING HISTORIANS JOURNAL: A SHORT HISTORY

Abstract: The University of Mississippi Library has digitized the *Accounting Historians Journal* from 1974 through 1992, cover-to-cover. The American Institute of Certified Public Accountants' gift of their library to the University of Mississippi was, fortuitously, the impetus for the *AHJ* digitizing project. A complicated chain of events followed which included discussions with the Academy of Accounting Historians for copyright permission, an application for a federal grant, negotiations with software vendors, and decisions about search capabilities and display formats. Each article in *AHJ* is now full-text searchable with accompanying PDF page images.

The story of how the University of Mississippi Library (UML) came to digitize the early years of the *Accounting Historians Journal* (*AHJ*) begins with a fortuitous series of events involving four organizations¹:

- the American Institute of Certified Public Accountants (AICPA), a nonprofit, professional organization
- the Institute of Museums and Library Services (IMLS), a federal government library and museum service organization

¹The abbreviations and acronyms used in this article are listed and defined in Appendix A.

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- Innovative Interfaces, Inc. (III), a private library software company
- the Academy of Accounting Historians (AAH), a non-profit, academic organization that publishes *AHJ*

Over a five-year period, the disparate interests of these organizations converged at the UML and produced, in September 2005, open, public access to the first 19 volumes (1974-1992) of the digital *AHJ*.² For the UML, *AHJ* was the first product in its new Digital Accounting Collection (DAC). Digitally publishing the journal was an intensive introduction to the scarcely charted seas of research collections on the Internet.

THE UML ACQUIRES THE AICPA'S LIBRARY

In September 2000, James Davis and Dale Flesher, respectively the dean and associate dean of the University of Mississippi School of Accountancy, approached John Meador, the dean of university libraries, with an audacious proposition. They proposed that the university enter the competition for the enormous accounting library of the AICPA. The AICPA had decided to divest itself of its venerable library, a collection begun in 1918 [Neloms, 1987; Anonymous, 1998]. According to the Institute's *CPA Letter*, the AICPA was moving "toward providing more services in an electronic environment. Part of the evolution from a paper-based environment to an electronic one includes the relocation of the AICPA library collection" [Anonymous, 2001]. A new home at a major university was needed. A competitive process was established and requests for proposals were sent to major universities with distinguished accountancy programs.

When Dean Davis received an invitation to bid from the AICPA [Rothberg, 2000], he saw a wonderful opportunity to add tens of thousands of items to the university's already large accounting collection. At the library, John Meador was enthusiastic about the prospect of adding a world-class collection to the library's holdings. The two deans approached the University of Mississippi Foundation and Robert Khayat, chancellor of the university. The reception was enthusiastic and the university's resources were pledged to the proposal. The Robert M. Hearin Foundation was persuaded to underwrite some of the expenses of housing and re-cataloguing the collection. A proposal was drafted, "Plan for a National Library of the Accounting Profession: A Proposal to the American Institute of Certified Public

²available at <http://umiss.lib.olemiss.edu:82/screens/dacopac.html>

Accountants” [University of Mississippi, 2000]. The document included plans for maintaining and preserving the collection and for providing the AICPA’s membership with continued access and research services. Also mentioned were plans for the digitization of rare items. Chancellor Khayat flew to New York with Dean Meador to present the proposal to the executive board of the AICPA. Representatives of the AICPA Foundation made site visits to each of the competing institutions.³

In February 2001, the University of Mississippi’s proposal won the award. A collection of 33,000 books, 93,000 pamphlets, 1,300 periodical titles, over 500 photographs, and 191 rare books – the “National Library of the Accounting Profession” – was now the property of the University of Mississippi [Anonymous, 1998; Rothberg, 2000]. When merged with the library’s previous accounting materials, the largest accounting collection in the world had been amassed.

On June 27, 2001, the final contract was signed. Just over a month later, the collection arrived in Oxford, Mississippi. A dozen semi-trucks carrying over 4,000 boxes of material rolled into a temporary warehouse on the outskirts of Oxford. Library staff now had to unpack, process, and integrate the materials into the library holdings. The rare books and photographs were immediately housed with the library’s special collections. New shelving was erected and large sections of the library’s materials were shifted to make room for the new arrivals. Rapid cataloguing of the most frequently used items began. Simultaneously, library staff started providing research service to the AICPA’s membership by answering reference questions and loaning books and articles from the collection (Martin, 2004).

THE IMLS GRANT TO THE LIBRARY

While no formal agreement had been reached between the AICPA and the university in regards to digitizing any of the collection, both parties had discussed the possibility, and the university had included a plan for digitizing a portion of the material in its original proposal [University of Mississippi, 2000]. Soon after winning the award of the AICPA’s collection, the university decided to pursue federal funding for a digitization program. In January 2002, with the assistance of Dean Davis, the UML secured a \$350,000 directed grant from the federal government’s

³Other competing libraries included Baruch College (CUNY), the University of Illinois, Michigan State University, and Ohio State University.

Institute of Museums and Library Services ["An Act," 2212].⁴ For the IMLS, this was an opportunity to encourage an academic library to provide wider public access to its research materials through the World Wide Web. The grant was to be exploratory, designed to provide an opportunity for the library to set up equipment and procedures to start a digitization program.

THE UML'S PARTNERSHIP WITH III

Now that the library had the funding to begin a digitization project, it had to select software to manage the digitized material. Such software handles the housing of the collection, provides public access, maintains the bibliographic records, and provides tools for searching the material. Ideally, the software also integrates smoothly with the library's existing information technology platform.

University libraries often turn to private companies for their integrated library system needs, ranging from basic online catalogue services to federated database searching and circulation management. As libraries' services and goals evolve, companies routinely develop new products, including, in recent years, digital collection management software. The UML's integrated library system platform is provided by III. In 2002, when library staffers were exploring digital library products, they learned that III planned to create a digital collection management suite. The suite was to be built in part upon technology already in use at the library, in particular the online public access catalogue (OPAC). However, part of the suite was still just etherware – it had yet to be created. This was the "Metadata Builder" (MB) core of the product. Other components included Millennium Media Management and a separate database dedicated to the digital collection.

III needed development partners, a small group of university libraries willing to create their digital collections at the same time as the software was being designed. III offered a good price to potential partners, and the University of Mississippi Library accepted the offer. Thus, part of the IMLS grant funded the digital management suite; another piece of the funding went to purchase an additional database dedicated to the new collection.

⁴For readers consulting the statute online, the grant to the University of Mississippi appears in the statute under Title IV: Related Agencies; Institute of Museum and Library Services: Grants and Administration, at 115 STAT2212.

There were advantages and disadvantages to choosing the III product. It had the great advantage of being easily integrated with other catalogue modules the library already uses. Much of the search software and its functionality was copied straight from the online catalogue and so had already proven its worth. Furthermore, joining a software project at its earliest stage allowed the library to influence many aspects of how the product would finally perform. On the other hand, a development partner must spend a great deal of time testing and debugging as the module moves from its raw, rudimentary stages to a polished final product. Indeed, the testing and the reporting of bugs was a continuous part of the process from August 2004 through September 2005.

A PROPOSAL FROM THE AAH TO THE UML

Having acquired a large collection, a sum of money for digitizing, and a software development partner, the next question was what to digitize. The editors of *AHJ* had heard about the library's nascent digitizing project and, in the summer of 2002, an informal group consisting of Bill Samson, Gary Previts, and Dale Flesher approached the library about digitizing the early issues of *AHJ*. For the AAH, this was an opportunity to disseminate early volumes of its flagship journal much more widely. Volumes after 1992 had already been digitally published by commercial firms, but the years from 1974 to 1992 existed only in hard copy. As for the UML, *AHJ* was a cornerstone in its vision for an online historical accounting collection (later baptized the Digital Accounting Collection). The journal offered practical advantages as well. For an initial foray into digitizing, it is preferable to use fairly uniform, easily read material. The individual articles in a journal, far shorter than monographs, allow an easy manipulation of files. Spare copies of the journal were made available for the project, obviating the risk of destroying irreplaceable material while digitizing it. A November 25, 2002 letter from the then AAH president, Bill Samson, provided formal permission for the UML to proceed [Samson, 2002].

PHASE 1: DIGITIZING *AHJ*

In many senses the library had started backwards. It had received a grant to digitize before it had actually outlined a program, chosen materials, or identified any procedures. But now that the Academy had granted permission to proceed with *AHJ*,

the library could select scanning hardware and software and hire staff.

The hardware was quickly purchased – a computer with an enormous hard drive (one hundred gigabytes) and a simple scanner. Large, expensive scanners are available that handle fragile archival material and scan high volumes of material automatically, but the library's initial digitization project did not require such equipment. Indeed, at the earliest stages, no dedicated scanner was used at all. Instead, an existing printer-scanner was used from which files were faxed to the project computer for processing. However, the multiple steps involved proved cumbersome and inefficient, so a separate scanner was finally purchased.

Software required more thought. It would have to perform optical character recognition (OCR), create professional-quality PDF files, including some graphics, and make simple text files. Several software products were considered and tested, with AbbyFine Reader finally selected for the project. AbbyFine proved better than competing software at a number of tasks. It recognized bold and italic text more often, handled varied font sizes better, and more frequently ignored stray marks and flaws on the document pages. It also had a much lower error rate in making the text files; it recombined hyphenated words so they could be found in searches, and it maintained text integrity when images had to be eliminated, so that text was seldom scrambled or lost. For these reasons, AbbyFine Reader required far less manual editing than did competing products. Student workers also found Abby relatively easy to set up and learn.

In 2003, two students were hired, an undergraduate to scan pages and a graduate student in computer science to digitize volumes 1-19 of *AHJ* with AbbyFine Reader. Faculty assisted in these efforts. The PDF files were then checked for errors. Over 3,500 pages were involved in this phase of the project.

The process was a serious hands-on experience both in workflow management and in determining accurately the capabilities of OCR software. For each article in *AHJ*, at least five files were created: a searchable PDF file, a text file, an image file, and two files containing images of the relevant issue cover. The PDF file would be the main document used by the public. The underlying text file, inaccessible to the public, is what the catalogue search engine would use when commanded to search for a particular name or word. For scholarly accuracy, an unedited file containing simple images of the pages in the article would

also be available to the public. Scholars might then immediately check the “original” (i.e., unprocessed) document when questions arose concerning the accuracy of the searchable PDF file. Finally, JPEG files containing images of the issue covers were made to enhance the bibliographic records that were later created.

The ongoing checking of text for errors over the course of a year and a half revealed several points. First, the OCR program was remarkably accurate. Error rates were extremely low, a mistake being located in every three to five pages of text. Mistakes were both substantive (errors in letter and numeral interpretation) and stylistic (failure to identify correctly type size or font). Occasionally, the machine omitted an entire line. Human errors also occurred, including poorly scanned and missing pages, and, rarely, missing articles. Second, some errors were missed even with systematic checking. This was revealed when a second quality control check was performed on most articles. Third, the librarians learned first hand the complexity of a published “text.” *AHJ* was certainly more complicated than anyone had originally thought. Even articles containing nothing but text had a variety of font sizes and styles, foreign words with accents and non-Roman scripts, and special characters and symbols.

Finally, tables, figures, and photographs were more common and problematic than originally expected. Tables generally required extensive manual editing. Figures sometimes could not be read by the OCR program at all and had to be inserted as images. Furthermore, software products that accurately perform OCR often create very mediocre reproductions of images, particularly photographs. Fortunately, the earliest years of *AHJ* had few photographic reproductions, but in later issues, image quality became a serious quality control issue. While AbbyFine Reader’s OCR program works better in black and white, images reproduce best in grayscale. Adjusting for this improved many of the photographs, but clean-up with Adobe Photoshop was still required for others. These images were then reinserted into the digital copies. Whether processed with Photoshop or with Abby, the images were reproduced separately in the end and inserted back into the PDF in the final stage of processing.

The production of a searchable PDF copy of each article in *AHJ* was completed in August 2004. Error-checking, final clean-up, and creating the associated text, image, and JPEG files continued for another three to four months.

PHASE II: CREATING PUBLIC ACCESS TO THE DIGITAL *AHJ*

While one group of librarians was worrying about creating digital images, another group was working on issues of metadata and digital collection management with III in its development of the MB software. In August and September 2004, several preliminary steps were completed. A new database was profiled on the library's server and several new III modules were installed: Advanced Keyword Indexing, Millennium Media Management, and MB. Librarians worked closely with the development team at III from August 2004 through September 2005 to complete the development phase and the beta test phase for MB, the core digital collections manager product.

MB treats standard library catalogue entries as a form of metadata in that they describe the base item, be it a book, an article, a film, or a photograph. MB would allow the librarians to catalogue the DAC by creating a separate bibliographic record for each article or other item (such as tables of contents) in *AHJ*. The Millennium Media Management module would then store all the files for each article, linked to the relevant bibliographic record. The OPAC function would allow users to search the catalogue records, and the advanced keyword indexing function would allow users to search the full text of the documents as well.

The first step for the library in working with MB was the selection of a metadata language in which to make the bibliographic entries. The larger library community had realized that the traditional rules for cataloguing books⁵ were not necessarily the best rules for cataloguing the rapidly expanding digital world, where the full text was often immediately available. A different, briefer bibliographic standard for digital material (i.e., a metadata description) was needed. The Dublin Core (DC) standard, later revised and expanded into "qualified DC," was created in 1995 for this purpose. The UML and III selected qualified DC as the metadata standard for cataloguing the DAC. The qualified DC has about fifty fields and subfields, such as title, creator, publisher, etc. A formal library committee went to work selecting which of the fifty-odd fields to use and devising standard wording for fields pertaining specifically to digital characteristics, such as dots per inch and file size in kilobytes

⁵The traditional standard follows the AACR2 protocol for creating MARC records.

or megabytes. The committee established general guidelines for inputting DC records, wrote a short in-house, how-to manual based on the Western States Dublin Core Metadata Best Practices guidelines [John Davis Williams Library, 2005], and created a template for data entry.

The DC fields also had to be mapped correctly to the OPAC search function. Library catalogues allow users to search for material by title, author, subject, and keyword. Users may also limit their searches by specifying other fields, such as publication date. Which DC fields should be mapped to which search fields? Should article title and journal title both be title searches? Should publication date be the date the electronic copy was created or the date the original article was published or both? Many decisions, once made, are not easily undone after hundreds of records are indexed. These indexing decisions all had to be made before the DC cataloguing for the *AHJ* articles could begin.

Finally, in March 2005, data entry using qualified DC began in earnest. All *AHJ* articles from 1974 through 1992 had bibliographic records using qualified DC by June 2005.

The final piece of the puzzle is presentation. A public interface was needed to guide users through the digital collection. First, there had to be a home web page for the DAC as a whole, with appropriate search engines and explanations embedded. Then there had to be web pages for each of the sub-collections and intermediate pages to display search results. A final set of pages was needed to display the individual catalogue records with links to the full-text PDF files, the files containing article page images, and the JPEG files for the issue covers. Microsoft FrontPage and Macromedia Dreamweaver software were used to create the web pages for the DAC.

ADDING OTHER COLLECTIONS

The core of the university's Digital Accounting Collection, the first 19 volumes of the *Accounting Historians Journal*, was now in place. It was time to add other material. The library and the AICPA had long been looking at a cooperative effort to digitize some of the Institute's materials. After discussing several ideas at the semi-annual AICPA-UML meetings, committee members agreed that the AICPA collection of non-current exposure drafts should be added. This collection consists of some 350 documents, the first drafts of AICPA accounting and auditing standards which were printed and circulated for comment in

advance of issuance as a final, authoritative standard.

The exposure drafts are not widely held since they were never meant to be part of the permanent record. This makes them a particularly useful item to add to an online research collection. The drafts range in time from 1968 through 2004. The collection is limited to non-current exposure drafts; that is, those no longer under discussion because a final standard was issued or the exposure draft was withdrawn from consideration. The exposure drafts represent an important research resource for historians and practitioners exploring the development of standard setting. Currently, only the page-image PDFs of the exposure drafts are being displayed in the DAC.

The third group of materials identified for digitization is the Accounting Pamphlet Collection. The AICPA holdings at the University of Mississippi include thousands of accounting pamphlets, hundreds of which date from the early 1900s (hence, are in the public domain). These pamphlets were published as practical guides for bookkeepers and accountants. They represent valuable insights into the operations of late 19th and early 20th century businesses, industries, and service organizations. Many are unique items held only in this collection. The digital pamphlet collection is currently not large, comprising a little over one hundred pamphlets that have been scanned, digitized, and catalogued using DAC. These range from ten to fifty pages in length and cover the period 1905 to 1924.

Occasionally, in working with a collection, fun items pop up and simply demand to be shared. In the process of creating display cases and brochures for the accounting collection, many images from frontispieces, magazine mastheads, old group photographs, and other illustrations have been located and electronically scanned. As an offshoot of this work, the Accounting Photographs and Images Collection emerged, a small selection of accounting and bookkeeping illustrations from across the ages. Suggestions for other illustrations are welcome.

The DAC now has: (1) the *Accounting Historians Journal* Collection, volumes 1-19 (a completed collection of 450 articles), (2) the AICPA Exposure Draft Collection (eventually about 350 documents, though not all are yet available in the digital collection), (3) the Accounting Pamphlet Collection, and (4) the Accounting Photograph and Images Collection. These collections are all managed and searched by the III software that is used to run major library catalogues around the world. The elapsed project time, from the point students were hired to begin scanning and digitizing the material until the website was publicly

functional, was a little over two years. If the library staff had learned what they needed to know before beginning the project, and if the necessary software had already existed and been debugged, it would probably have taken less than half that time.

THE FUTURE

It has been an eventful five years since James Davis and Dale Flesher walked over to the UML with the AICPA's request for a proposal in hand. Little did anyone realize that accounting history would propel the UML into the realm of digital collections. The UML, already the home of the National Library of the Accounting Profession, has also become the site of a growing Digital Accounting Collection, built on the foundation of *AHJ*.

The ongoing work already outlined will keep the librarians busy for quite a while, but it is always fun to dream of other projects. Not all of these need be purely historical. *The Accounting Historians Notebook* is an obvious contemporary choice. The library's association with the AICPA will also provide opportunities to digitize important documents illustrating the Institute's work and history. Publications from the early years of other accounting organizations, such as the National Association of Cost Accountants, should be on a list of digital projects as well. Furthermore, the library has received the early work papers of Haskins and Sells. Digital images of many of these papers have already been made. Adding them to the DAC would provide access to manuscript materials in the field. Finally, suggestions by users are always the most valuable input as to new items to digitize. Their suggestions will ensure that historical documents important for scholarly research are made accurately and easily accessible online.

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APPENDIX A

Acronyms Used

AAH	Academy of Accounting Historians
AHJ	<i>Accounting Historians Journal</i>
AICPA	American Institute of Certified Public Accountants
DAC	Digital Accounting Collection
DC	Dublin Core
III	Innovative Interfaces, Inc.
IMLS	Institute of Museums and Library Services
MB	Metadata Builder
OCR	optical character recognition
OPAC	online public access catalogue
UML	University of Mississippi Library

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FRANK MUST MARRY MONEY: MEN, WOMEN, AND PROPERTY IN TROLLOPE'S NOVELS

Abstract: There is a continuing debate about the extent to which women in the 19th century were involved in economic life. The paper uses a reading of a number of novels by the English author Anthony Trollope to explore the impact of primogeniture, entail, and the marriage settlement on the relationship between men and women and the extent to which women were involved in the ownership, transmission, and management of property in England in the mid-19th century.

INTRODUCTION

A recent *Accounting Historians Journal* article by Kirkham and Loft [2001] highlighted the relevance for accounting history of Amanda Vickery's study "The Gentleman's Daughter." Vickery [1993, pp. 84-85] challenged the idea that women had moved in the 18th century into a separate sphere, divorcing them from political and economic activity. She points to the evidence contained in the libraries and private papers of "genteel" women that they engaged closely in managing the money of their households – servants' wages, bills, taxes, as well as revenue from home produce. Kirkham and Loft identify the absence from accounting history, including new accounting history "from below," of the private and of the home. Research has been concentrated on the role of accounting in public, in the enterprise, and in production. Yet, women engaged in accounting and management within the domestic sphere, in relation to their own work and also in monitoring the consumption of their households. Vickery's study [1992, pp. 86-88] makes visible their role in the "domestic oeconomy" which was the subject of housekeeping manuals as well as personal records. This is a form of accounting that is "enabling" for women because it allows them to enjoy

the “right of directing domestic affairs” as it was described by an 18th century commentator.

In calling for recognition that accounting took place in the domestic sphere as well as in the enterprise, Kirkham and Loft [2001, p. 71] attack the prevalence in accounting history of “gendered dichotomies,” such as those “between public and private and work and home.” Their commentary on Vickery draws attention to the need for a better understanding of the ways in which women engaged in accounting and to the possible multiplicity of ways of apprehending accounting history, through diaries, letters, and private papers, as well as in accounting and management manuals.

The objective of the present paper is to consider women’s involvement in this kind of domestic accounting and financial management through the works of Anthony Trollope, one of the most prominent and most widely read Victorian novelists. The sources on which we draw are a number of Trollope’s novels, together with critical writing about him, and commentary by his contemporaries and later historians on the relationship between men, women, and property in the mid-19th century. We argue that more attention needs to be given to the importance in his novels of key features of the transfer of wealth within families, particularly through primogeniture, entail, and the marriage settlement, as well as to the critical awareness that Trollope showed in his treatment of them. The ownership and transfer of property are, for Trollope, key aspects of courtship and marriage. His treatment of their impact on men’s as well as women’s power and status deserves further exploration for the light it sheds on the position of women in the mid-19th century. Women’s management skills are shown as extending beyond the economy of the household to the finance of the family from one generation to another. We consider the contribution of this novelistic portrayal to the “history from below” of women’s involvement in accounting.

RELEVANCE OF TROLLOPE

Trollope’s first novel, *The Kellys and the O’Kellys*, was published in 1847; he died in 1882. His career therefore spanned a period in which there was substantial change in the economic rights of women as a result of the Married Women’s Property Acts of 1870 and 1882. It was also a time in which traditional legal influences on wealth transmission, the system of primogeniture and entail, were attracting criticism and creating difficulties for the landed classes. Trollope was a prolific writer,

publishing more than 40 novels in his lifetime. His best known works fall into three groups. The Barchester series, published between 1855 and 1867, dealt with the mythical rural English county of Barchester, centering on the relationships between a number of clerical families, their friends, and neighbors. The Palliser novels, 1865-1876, had a strong political content; their major characters included an aristocrat who became prime minister in the final volume. There are also the "singleton" novels belonging to neither series, of which the best known is perhaps *The Way We Live Now* [Trollope, 1875], presenting the rise and downfall of a fraudulent London promoter.

In the 1850s and 1860s, Trollope was an enormously popular as well as a productive writer. His work was widely distributed via the new medium of monthly magazines such as the *Cornhill*, and through Mudie's and other circulating libraries. *Framley Parsonage* appeared in "the place of honour" in the first installment of the *Cornhill Magazine* which sold 120,000 copies [Glendinning, 1992, p. 259]. A reviewer in *The Leader* in 1859 wrote of his enormous popularity, "among the extremely select few who shine out like a constellation among the unnumbered lesser luminaries of the 'circulating' firmament" [Glendinning, 1992, p. 241].

Trollope is of interest to our study because he was active in a period of social and economic change, because of the recurrence in his novels of issues concerned with wealth and marriage, and because his popularity suggests that he was able to address certain Victorian concerns very effectively.

Our paper does not attempt the massive task of providing a comprehensive study of Trollope's work. It considers a number of his novels taken from different points in his career, including the Barchester and Palliser novels, and also a number of the "singletons," some of them less well known today, such as *The Belton Estate* and *Ralph the Heir*. The novels we discuss deal with different social stations – the aristocracy, the country gentry, the clergy, the professions, businessmen and tradesmen, the wealthy, the comfortable, and the poor. Our intention is to give an overview of the ways in which Trollope shows similar issues confronting a varied population and of the themes which emerge from his treatment of them.

TROLLOPE AND THE DEBATE ABOUT WOMEN'S ROLE

Hewitt [1963, pp. 229, 239] regards Trollope as "a reliable source for historically minded sociologists." What she sees in Trollope's novels about the middle and upper classes is a divided

world in which marriage is seen as the only desirable future for women. "Trollope's novels all fall into two parts ... The men hunt foxes: the women husbands." On one side of the binary divide, men have not only fox hunting as an occupation, but also an interest in land, politics, the parish, or a career; women have only matchmaking, falling in love, and the concerns of marriage and family life. Trollope is not, according to Hewitt, critical of the status quo, although she argues that what the modern reader derives from his novels is a picture of the world of frustration and limitation inhabited by Victorian women.

Later critical writing about Trollope has concluded that he was "conservative in general but liberal in particular" [Nardin, 1989, p. 18] in his view of the problems faced by Victorian women; in other words, that he sympathized deeply with individual women's problems but did not want to see them solved by changes in society. For Barickman et al. [1982, p. 196], he "clearly was not interested in the specific forms the debate about women assumed in the 19th century"; they claim that issues such as the problem of redundant women or women's economic independence are "almost invariably" ridiculed in the novels. We argue in this paper that Trollope's novels did, on the contrary, address women's financial problems, using the stories of successful and unsuccessful courtships and marriages to address Victorian concerns about the distribution of wealth within and between families. This concern was present throughout his career.

VICTORIAN WOMEN: "ON THE MARGINS OF OWNERSHIP"

Hewitt's verdict on Trollope's novels, on Trollope's point of view, and on the world he inhabited, is informed by the doctrine of separate spheres which has until recently predominated among both historians and literary critics writing about the Victorian era. This belief in exclusion has for some time characterized historical writing about the position of Victorian women, with the view that middle-class and aristocratic women could not and did not operate outside the household and the family. Such separation applied to women's careers, participation in politics, and economic independence, summed up by Davidoff and Hall [1987, pp. 15, 275-276]: "Absence of property as capital has been seen as the most powerful element in 'social closure,' that is exclusion from control over one's own life chances." Although Davidoff and Hall admit that some women owned property, they claim that they were "on the margins of ownership"; in particular, marriage "virtually turned legal control of a woman's property permanently over to her husband." Vickery

[1993, pp. 389, 401], who describes “separate spheres” as the “breathless inadequacy model of Victorian feminism,” calls for it to be “discussed and debated” because of its failure to “capture the texture of female subordination and the complex interplay of emotion and power in family life.” Part of this “interplay” is dependent on women’s economic position.

The importance of the separate spheres model in history has supported, and been supported by, literary criticism which has implicated the 19th century novel in the creation of a segregated, domestic realm to be inhabited by women. Armstrong [1987, pp. 17, 253-254], in an influential study, identifies a transformation in the 18th century from the novel as a disreputable form of entertainment to the novel as “part of a specifically female curriculum.” According to Armstrong, the 19th century novel created “a language of increasing psychological complexity for understanding individual behaviour.” Indications of wealth and status “were buried.” Ermarth [1997, pp. 192, 200] endorses Armstrong in her discussion of Trollope’s gift for the “subtleties of gender segregation” and asserts that mid-Victorian novels did not show women as having an “economic function.” Part of the reason why the Victorian novel segregates women from economic activity, it is suggested, is because of the Victorian anxiety about the instability of the new financial system. For instance, Nunokawa, [1994, p. 124] suggests that: “The angel of the house is the still point in an age of capital whose perpetual crises show no sign of waning.” According to this view, the novel rejects money-minded women because society desperately needs the home and family, under the care of “the angel of the house,” to represent a refuge.

LITERATURE AND HISTORY

A study that invokes literature as a means of understanding history raises the question of the relationship between the two. Literature has been recently used as a source for accounting history [e.g., Buckmaster and Buckmaster, 1999; Parker 1999; West, 2001], but it may be overlooked, as by Fleischman et al. [2003], whose methods for “doing accounting history” include the use of “ancient materials” [Vollmers, 2003, p. 60], archives, oral history, biography, and autobiography, but do not include the possible contribution of literature.¹ At the other extreme is

¹Similarly, Napier [2006] identifies textbooks, professional journals, newspapers, and magazines as important sources of historical evidence but does not refer to the possible contribution of literature.

Hewitt's claim, quoted above, that Trollope is a "reliable source" for sociological study, which seems to ignore the distinction between the novelist's creation and a world outside it. The new historicist school would challenge Hewitt's claim on the basis that there is no meaningful distinction to be made between history and literature. Its insistence on "the historicity of texts and the textuality of history" [Brannigan, 1998, p. 84] is based on a perception of history as a web of literary and non-literary texts. There is scope for tracing the intricate connections between the two kinds of text (e.g., between the treatment of women's property rights in literature, in legislation, and in parliamentary debates), but ultimately the new historicism denies primacy to one set of texts. Thus, Trollope is not to be treated as a "source" for factual knowledge; he offers one sort of text to be read alongside others, "literary and non-literary texts circulate inseparably" [Veese, 1989, p. 115].

The opposite view, that there is a distinction to be made between literature and historical facts, between text and context, is made by Fox-Genovese [1989, pp. 216, 221]. She acknowledges that literary texts "derive from political relations from which they cannot entirely be abstracted"; that is, texts are to be understood within their context but must be distinguished from it. She points to the "varieties of evidence" used by historians and insists that the new historicism "flattens historically and theoretically significant distinctions" by its treatment of "price series or coin deposits or hog weights or railroad lines as text." Literary texts must be distinguished from factual data because they are not "factual reports" [Tosh, 2002, p. 64]. Although novels may offer "insights into the social and intellectual milieu" of a particular historical period, they operate in a different realm.

Newton [1989, pp. 154, 165-166] offers a middle way between these opposites when she describes a number of recent works of feminist history as a "cross-cultural montage" of the 19th century in which "women's letters and diaries, women's manuals, women's novels juxtaposed with more traditional and public texts, Parliamentary debates, sociological writing, medical literature, news reports and medical journals." This approach involves "taking the 'material' seriously," but recognizing that it is "always apprehended within representation," i.e., that culture is a key means of accessing the material world, its social, political, and economic parameters. In writing history so as to take account of both the cultural and the material, "women's ... power as mothers, household managers and silent participants in enterprise ... [can be] actively explored."

The objective of the present paper is to explore further Trollope's treatment of the relationship between men, women, and money, taking as a point of departure the growing challenge to separate spheres. If the "interplay" between emotion and power which Vickery perceives is more complicated than the simple exclusion of women from access to and control over property, this is relevant to Trollope's treatment of courtship, marriage, and women's lives after marriage. Trollope was not a champion of women's rights, a point that has been made by Nardin among others. We argue, however, that his treatment of love and marriage points out contradictions between the Victorian model of women as "angels" and their involvement in the distribution and management of wealth. We do not claim that Trollope's novels are an exact replication of Victorian social mores, but we do suggest that they can contribute to an understanding of the changing relationship between women and wealth. Their popularity with Trollope's contemporaries suggests that they struck a chord with his readers and, in what follows, we explore some of the social, legal, and economic structures to which his novels referred.

INHERITANCE: PRIMOGENITURE AND ENTAIL

Inheritance forms a key element in most of Trollope's novels, with primogeniture "an almost holy feature of Trollope's male-dominated world" [McMaster, 1986, p. 15]. This was a particularly English fascination as "primogeniture was applied more harshly in England" than elsewhere in Europe [Erickson, 1993, p. 71]. According to Blackstone, an 18th century codifier and classifier much cited by 19th century lawyers, marriage was an arrangement of property for the propertied and for their children, who were conduits for family wealth [Basch, 1979, p. 350]. The objective was to keep estates intact from generation to generation. Primogeniture, which means that "the male issue shall be admitted before the female, and that, when there are two or more males in equal degree, the eldest only shall inherit, but the females all together," was viewed as the best means for achieving this [Brodrick, 1872, p. 58]. Primogeniture was a means for the maintenance of a landed estate; thus, it was commonly used by the aristocracy and the squirearchy and, as is discussed below, less so by the middle classes whose wealth was likely to include financial assets. The way in which primogeniture was ensured was typically by means of entail, a legal arrangement under which the father had only a life interest in the property, which was then entailed on the eldest son, and, possibly, on his eldest

son thereafter. The sale of entailed property was forbidden from 1285. Entails were generally created through the use of strict settlements.²

A survey of English estates carried out in 1875 revealed that one quarter of all land was held by 710 individuals [Laurence, 1878], suggesting that primogeniture and entail had indeed succeeded in preventing the break-up of large, aristocratic estates. This is the conclusion reached by Stone and Stone [1984, p. 422], when they suggest that the “landed elite” is the sector of English society most aptly categorized as having “*histoire immobile*” – financial resources, background, and position that had changed very little between the 17th and 19th centuries. Advocates of primogeniture, such as Cecil [1895], contrasted English concentration of land ownership with the excessive “*morcellement*” which had happened in France, with the sale of small parcels of land after the post-Revolution break-up of the aristocrats’ estates. But primogeniture also had undesirable effects, identified by reformers such as Adam Smith³ and featured prominently in Trollope’s novels.

The perceived benefits and evils of primogeniture were much debated throughout the 19th century, and elements of Trollope’s plots reflect the issues that were discussed by contemporaries such as Brodrick and Laurence. Primogeniture was defended as crucial to political stability [see, for instance, Morris, 2004, p. 133]. In the novels, the arguments for primogeniture are put forward by such characters as Archdeacon Grantly, in favor of conservation of land and the “position and influence and political power, to say nothing about the game” which went with it [Trollope, 1867, p. 612]. Women are often portrayed as advocates of primogeniture. For example, Mrs. Morton, in *The American Senator* [Trollope, 1876a, pp. 400, 539-540], tells the Squire of Bragton: “A property like this should never be lessened. It is in that way that the country is given over to shopkeepers and speculators, and is made to be like France or Italy.” In contrast, foreign characters are used as critics of primogeniture. For instance Mr Gotobed, the American senator, delivers a critical lecture during a visit to England in which he describes primogeniture as, “the custom which is damnable and cruel [...] backed by law which is equally so.”

²See Stone and Stone [1984, pp. 72-82] for an outline of the relationship between primogeniture and entail.

³See, for example, Smith, in *The Wealth of Nations*, who commented that the “great proprietor” of land is seldom a “great improver,” cited in Morris [2004, p. 115].

One of the two main criticisms of primogeniture at the time Trollope was writing concerned the possible conflict of interest between father and eldest son. Under entail, fathers had only a life interest in the estate and could not sell land to pay off debts. Father and son could, however, agree to break the settlement, using the release to allow them to sell off some property to raise money to pay debts or provide younger sons and daughters with portions. A new settlement then could be made of the remaining assets. Laurence [1878, p. 115], however, argued that this put the father in a false position with respect to his eldest son. Adolphus Longestaffe, in *The Way We Live Now* [Trollope, 1875, part II, p. 115], is strapped for cash. He is unable to sell property, as he tells the financier, Melmotte, since he has "only a life interest. That is customary with family estates in this country." When Melmotte suggests that he would be able to sell if his son joined him in the transaction, Longestaffe replies: "I have not directly asked him; but he never does do anything that I wish."

In contrast to the father's position, Brodrick [1872, p. 98] pointed out that eldest sons whose fathers were alive had both an allowance from the estate on which to live and the ability to anticipate their future inheritance. Entail meant that eldest sons could not be disinherited. Francis Bacon commented that the effect of this entail was that heirs became "disobedient, negligent, and wasteful" [Ross, 1997, pp. 219-220]. In Trollope's novels, they lead a life of pleasure and idleness, with nothing to do in anticipation of inheriting the family estate. They often run up debts which fathers, unable to disinherit profligate heirs, were more or less forced to pay. Very rich families might have sufficient non-entailed property to pay off the debts. However, less fortunate families were obliged to borrow money secured by the property (e.g., Lords Cashel and Ballandine in *The Kellys and the O'Kellys*) or plunder daughters' dowries. Both Lady Laura Standish in *Phineas Finn* and Lady Mabel Grex in *The Duke's Children* are unable to marry the men they love since they have lost their inheritance to pay family debts.

Brodrick argued that reform would strengthen parental authority, allowing fathers to disinherit unworthy sons if they so desired. He compared the primogeniture system with that prevailing in America where parents could leave their assets to whomsoever they chose. Children, in consequence, were dependent on the caprices of their parents [de Tocqueville, cited in Brodrick, 1872, p. 118]. In Trollope's novels, men such as Adolphus Longestaffe in *The Way We Live Now* [Trollope, 1875, part II, p. 59] are examples of weakened fathers, with only life

interests in landed estates and anxieties as to mortgages created by the primogeniture system. Heiresses, as wives for elder sons, provide a solution for families which have squandered their wealth, such as the Cashels and the Ballandines in *The Kellys and the O'Kellys*, the Carburys in *The Way We Live Now*, or the Greshams in *Doctor Thorne*. The narrator in *The Way We Live Now* admits as much: "it is generally understood that matters will be put right by an heiress. It has become an institution, like primogeniture, and is almost as serviceable for maintaining the proper order of things."

The second criticism of primogeniture, particularly from the 18th century, was that it penalized younger sons.⁴ A writer in *The Eclectic Review* in 1852 complained that it consisted of "building up one member of the family, by doing injustice to all the other members in each successive generation" [quoted in Morris, 2004, p. 111]. Stone and Stone [1984, pp. 5-6] claim that "generation after generation, younger sons were left to trickle downwards through the social system." The disparity of wealth between the eldest son and his siblings was "prodigious" [Brodrick, 1872, p. 70]. Failing a fortuitous inheritance from another relative, the alternatives for younger sons under primogeniture were limited. In order to maintain their status as gentlemen, they were restricted to employment in respectable professions such as the civil service, the law, the Church, and the armed forces.⁵ Brodrick [1872, pp. 99-100], a reformer, argued that this solution to the younger son problem, or "shameful jobbery" of the church, army, and civil service, which had been "refuges for the privileged destitute," was no longer available by the 1870s. Open competition made it harder for younger sons to find satisfactory situations in life.⁶

⁴Spring [1993, p. 102] suggests that younger sons did relatively well in mediaval times because they did not have the career opportunities in the professions and civil service which became available to them from the 18th century onwards. The availability of such options made it more acceptable for them to be "cut off with less."

⁵See, for example, *The Three Clerks* for the civil service, *Phineas Finn* for the law, Gregory Newton in *Ralph the Heir* for the Church, and Jack de Baron in *Is He Popenjoy?* for the armed forces.

⁶It is worth noting that contemporary critics did not mention the City as a possible source of employment and Trollope concurred with this view. Working in London was not a gentlemanly profession. Only in desperation did Georgiana Longestaffe in *The Way We Live Now* [Trollope, 1867, Vol. I, p. 59] threaten to marry "some horrid creature from the Stock Exchange." This is in step with the finding by Stone and Stone [1984, p. 281] that only a small minority of younger sons went into the City.

Without gentlemanly employment, some younger sons saw marriage as a way of rescuing their position. Supporters of primogeniture had no difficulty with this solution: "He [the younger son] has special opportunities of adding to his fortune by a judicious marriage with a member of some wealthy family, willing by such an alliance to unite recently acquired riches with ancestral rank" [Laurence, 1878, p. 120]. The advantage of this solution was that the line was not sullied by such intermarriages; children of younger sons stood little chance of inheriting the family estate. Yet, younger sons do seem to have been freer to marry out of their class than the eldest son. Thomas' study [1972, p. 605] of aristocratic marriages shows that in the cohort of sons born between 1840 and 1859, only 17.3% of younger sons married within the peerage, compared with 36.1% of heirs. Trollope's novels have numerous younger sons on the lookout for a steady income through marriage, such as Jeffrey Palliser in *Can You Forgive Her?* and Lord George Germain in *Is He Popenjoy?* The problem was that younger sons were hardly eligible. The chasm between eldest and younger sons was wide. As the fortune huntress, Arabella Trefoil in *The American Senator* [Trollope, 1876a, p. 171] remarks of Lord Rufford: "He's all very well, but what would anybody think of him if he were a younger brother with £300 a year?"

Alternatively, no real need existed for younger sons to get married in order to ensure the family line. That was the responsibility of the eldest son. If no woman with a suitable income was forthcoming, comfortable bachelorhood offered a pleasant alternative. As Lord Aylmer in *The Belton Estate* [Trollope, 1866, pp. 224, 353] tells his favorite second son:

But why on earth you should go and marry, seeing that you're not the eldest son, and that you've got everything on earth that you want as a bachelor, I can't understand ... An eldest son ought to marry, so that the property may have an heir. And poor men should marry, I suppose, as they want wives to do for them. And sometimes, no doubt, a man must marry – when he has got to be very fond of a girl, and has compromised himself and all that kind of thing ... But none of these cases are yours, Fred ... And in the way of comfort, you can be a great deal more comfortable without a wife than you can with one. What do you want a wife for?

Brodrick [1872, p. 100] was more forthright. He ascribed to primogeniture, "the self-imposed celibacy too prevalent among the younger sons of good family in the metropolis ... inevitably

prejudicial not to morality only, but to steadiness and earnestness in practical work." This fashion for "celibacy" is confirmed by Thomas' [1972, p. 101] findings. Of the male aristocrats born between 1840 and 1859, 86% of the heirs eventually married, but only 68% of the younger sons did so.

Another reason not to marry was cost. As Banks [1954, p. 126] points out, marriage in Victorian times was an enterprise that could be costed, balancing extra income from the spouse against additional expenses. Wedlock meant a large number of children and, to avoid the wife turning into a drudge, a large number of servants, nurses, and attendants to alleviate the burden. It also meant a house in a less fashionable part of town than a single gentleman could afford. Adolphus Crosbie, regretting his proposal of marriage to Lily Dale in *The Small House at Allington* [Trollope, 1864, pp. 73, 246], gloomily anticipates "a plain, humdrum domestic life, with eight hundred a year, and a small house, full of babies" instead of clubs and fashionable society. He breaks his engagement to Lily, preferring Lady Alexandrina who, he believes, will help him to "struggle on in his upward path." Gerard Maule, in order to marry Adelaide Palliser in *Phineas Redux*, would have to give up hunting and farm his family estate. Frank Greystock, in *The Eustace Diamonds*, shrinks from marrying Lucy, as this will require him to live in suburban St. John's Wood.

For English gentlemen, unless a promotion, for those who worked, or inheritance, for those who did not, increased their income, marriage meant a substantial drop in quality of life. Trollope was well aware of this, providing graphic descriptions of the likely outcome. In *The Kellys and the O'Kellys* [Trollope, 1848, p. 325], Mrs. Armstrong had brought "a few hundred pounds" to the marriage, but "weak health, nine children, an improvident husband, and an income so lamentably ill-suited to her wants, had however been too much for her, and she had degenerated into a slatternly, idle scold." The Crawleys in *Framley Parsonage* [Trollope, 1861, pp. 189-190] lived on £70 a year with three children. Marriage on too low an income had made the "softly nurtured" Mrs. Crawley skeletally thin, with hair "untidy and unclean," and left Mr. Crawley bitter and resentful.

WOMEN AND PRIMOGENITURE

The desire to pass on estates from generation to generation through the eldest son had implications for daughters as well as younger sons. Primogeniture meant that a relatively small amount was available for division after the elder son had taken

his share and, particularly if the family were large, sisters of rank were liable to end up with portions too small either to attract fortune hunters or to allow them to live independently in the manner to which they had become accustomed. Brodrick [1872, p. 107] hoped that reform would lead to it being thought "a disgraceful thing for a nobleman with £50,000 a year to cut off his daughters, either married or single, with portions of £5,000 or £10,000." If daughters could not provide adequate marriage portions, they were not likely to be attractive as brides. Stone [1977, p. 380] notes that the proportion of spinsters increased from less than 5% of all upper-class girls in the 17th century to 20-25% in the 18th century, suggesting that the size of portions may have had an effect on this change.

There are numerous examples of redundant, upper-class women in Trollope: Frederic Aylmer's elder sister in *The Belton Estate*, Hugh Stanbury's two sisters in *He Knew He Was Right*, the four De Courcy sisters in *Doctor Thorne* and *The Small House at Allington*, Lord Fawn's seven unmarried sisters in *The Eustace Diamonds*, and Sir Marmaduke Rowley's eight daughters in *He Knew He Was Right*. Without a suitable fortune, women such as Lord George Germain's four unmarried sisters in *Is He Popenjoy?* were forced to live in genteel poverty. Even though they had portions of £4,000 capital apiece, this was far too small in income terms to attract appropriate suitors. Aristocratic ladies without money, destined to take on the social status of their husbands, found a powerful taboo against marrying beneath them for money. In *Doctor Thorne* [Trollope, 1858a, p. 446], Augusta de Courcy's cousin Amelia dissuades her from marrying the attorney Gazebe, because he is "a man earning his bread." But such is the scarcity of men that Amelia herself stoops to marry him soon afterwards. Georgiana Longestaffe, in *The Way We Live Now*, appalls her family by threatening to marry a Jewish stockbroker. When that engagement breaks down, she finds herself reduced to a humiliating marriage to a much younger curate.

As well as a long list of poor, unmarried, upper-class women, it is noteworthy that many of Trollope's numerous heiresses and wealthy widows are from the middle rather than the upper classes.⁷ As Thompson [1994a, pp. 146, 150] has pointed

⁷These include Mrs. Golightly (*The Three Clerks*), Mary Thorne (*Doctor Thorne*), Miss Dunstable (*Doctor Thorne*, *Framley Parsonage*, *The Small House at Allington*), Miss Mackenzie (*Miss Mackenzie*), Alice Vavasor and Mrs. Greenow (*Can You Forgive Her?*), Miss Stanbury (*He Knew He was Right*), Polly Neeft (*Ralph the Heir*), Marie Melmotte (*The Way We Live Now*), and Miss Tallowax (*Is He Popenjoy?*).

out, unlike the landed gentry, wealthy businessmen might avoid primogeniture and take the option of splitting their estates more evenly, often between both male and female beneficiaries. This could have the result of dividing a fortune into small fractions, as in the case of Edward Langworthy, who shared his fortune among 16 relatives, but it could also benefit daughters, such as Polly Neefit in *Ralph the Heir*. Brodrick [1872, p. 71] points out that daughters of mercantile families might well have larger portions than those of aristocratic families with the same wealth. Thus, property arrangements of primogeniture threatened aristocratic women with spinsterhood; they also encouraged impoverished young men such as Ralph Newton (*Ralph the Heir*) to marry beneath them. Trollope [1858, p. 91] writes in *Doctor Thorne*: "A man raises a woman to his own standard, but a woman must take that of the man she marries" [Trollope, 1858a, p. 91].

THE MARRIAGE SETTLEMENT

The strict settlement, as outlined above, was a "powerful bulwark" of primogeniture because it created the entail, thus ensuring that the heir would obtain the estate intact. However, it needs to be distinguished from the second type of settlement on marriage, the trust for separate estate. The detail of this was variable, but it was likely to include provision for a trust which preserved some or all of the wife's property as "sole and separate estate" [Erickson, 1990, p. 21], distinct from the amount which she brought into the marriage which was available for the husband's use – her "portion." The trust was administered by male relatives, friends, and professional advisers. The settlement was most often made by the father for his daughter, but a single woman, particularly a widow, might make her own settlement. Separate estate was thus potentially crucial to the economic position of married women until the Married Women's Property Acts (MWPA) of 1870 and 1882 made it possible for them to own property under common law. The marriage settlement plays a significant role in Trollope's novels, and its implications for both the wife and the husband deserve to be explored.

Prior to the MWPA of 1870, the assets a woman brought into a marriage were entirely at the husband's disposal, if not segregated within a trust [Moller Okin, 1983-1984, p. 129]. The marriage settlement, by giving the wife separate property in equity, was therefore important in a number of ways. It provided the wife with capital and income. The terms of the trust determined how much control she had of her wealth during her

lifetime,⁸ as well as whether she would be able to dispose of it freely in her will or be obliged to pass it on only to her husband or children [Holcombe, 1983, pp. 41-43].

In addition to the wife's property held in trust, marriage settlements would make a disposition of the husband's property.⁹ The husband commonly provided the wife with an amount of income ("pin money"), which she could spend during her marriage, and a jointure, property or income which would be available for her use on his death [Holcombe, 1983, p. 39]. In *Ralph the Heir* [Trollope, 1871, p. 423], for instance, Gus Eardham's father is obliged to be "a little hard" in demanding for his portionless daughter a jointure of £4,000 a year, with a house to be found either in town or country, as the widow might desire. Lord Fawn, considering a proposal to Lizzie Eustace, a wealthy widow, in *The Eustace Diamonds* [Trollope, 1873, pp. 114-115], was not sure whether Lizzie's £4,000 a year was "for life or for ever," but was aware that her income and her youth saved him from having to provide for her himself. "But at any rate, she is much younger than I am, and there need be no settlement out of my property. That is the great thing."

Widows were also major users of settlements, to protect from their second husbands the assets they had acquired from their first marriage [Erickson, 1993, p. 234; Morris, 2004, pp. 100-109]. Widow Greenow in *Can You Forgive Her?* [Trollope, 1864-1865, p. 260], with £40,000 of her own, marries the penniless Captain Bellfield, but keeps the financial purse-strings "altogether in her own hands." Mrs. Golightly, the widow of a stockbroker with a thousand a year in *The Three Clerks* [Trollope, 1858b, Vol. I, p. 181], marries Valentine Scott and "kept her income very much in her own hands."

Thus, the settlement was a point at which the financial terms of the relationship between husband and wife could be determined. A bride from a wealthy family might arrive with a large fortune, but a settlement might put a substantial amount of this wealth beyond the husband's reach. As well as securing a wealthy spouse, a man or woman who intended to marry for money needed to be sure that the settlement terms would make this fortune available. Arabella Trefoil in *The American Senator* [Trollope, 1876a, p. 465] uses the complications of settlements

⁸For example, it might well be specified that the income from the trust was for her "sole and separate use." Morris [2004, p. 101] finds numerous examples of this in trusts set up for daughters in middle-class wills.

⁹See, for instance, Jalland [1986, pp. 58-59].

to delay her marriage to John Morton in the hope of snaring the more eligible Lord Rufford. She is well aware that the settlement is part of the negotiating process between the two interested parties and tells Lord Rufford that his sister would not have taken a kiss from a man as she has done from him: "Her cautious nature would have trusted no man as I trusted you. Her lips, doubtless, were never unfrozen till the settlements had been signed."

Some commentators have suggested that the separate estate had very little impact on wives' economic position. Moller Okin [1983-1984, p. 185] concludes that it did little to reduce the economic dependence of wives in the 18th century because of the common practice of making the husband a trustee and because the majority of the wife's property was not usually assigned to the separate estate. Even in the 1860s, she claims: "Trollope paints a picture of women and financial matters as mutually incompatible." Davidoff and Hall [1987, p. 209] take a similar view and claim that wives' separate estates were arranged so as to give "male trustees access to the women's capital ... in the pursuit of their own economic interests." "Many a trustee was in fact the husband." They conclude that the separate estate worked along with other Victorian institutions to make the wife what Vickery [1993, p. 384] calls "a hostage in the home." Davidoff and Hall [1987, p. 451] observed:

It was never the laws of property alone which prevented the myriad middle class women who owned capital from using it actively. Rather, it was the ways in which the laws of inheritance and the forms of economic organization (the trust, the partnership, the family enterprise) intersected with definitions of femininity. The active generation of lasting wealth was virtually impossible for women.

Other commentators assert that separate estate was important in giving wives financial independence. Erickson [1990, pp. 26, 37] concludes that "the principal purpose of a marriage settlement was the protection of a wife's property." Settlements could take a wide variety of forms, as evidenced by the various arrangements she quotes from a legal guide of 1732, *The Lady's Law*. These include a settlement of the wife's estate "entirely at her Disposition after Marriage; except a Part for the Husband," and a settlement "with a Covenant from the Husband, to permit her to make a will thereof." This view is supported by an anonymous contemporary contributor to the *Cornhill Magazine* [1863, p. 673], who described the settlement as "a means whereby to

get the husband to give up for the sake of his intended wife some of the odious powers the law confers on him." The *Cornhill* writer argued that the settlement, though it might protect an unhappy wife from losing her money, was a nuisance in a happy marriage since the terms of the trust might prevent the wife from helping her husband out financially. In practice, the husband gave up his powers to third parties, to trustees who could control the direction of investments.

The point was reiterated by the *Economist* [1870, p. 788]: "The whole theory of equitable settlements has been invented to restrict and almost destroy ... absolute power of the husband over the common property of the family." Jalland [1986, pp. 58, 60-61] quotes the 1893 *Etiquette of Good Society* which stipulated that it was the "father's duty ... to weigh the purse, to speak of deeds – not 'doughty deeds,' but parchment ones – and settlements, and dower" in protection of his daughter. He also cites the example of Lady Selborne who was worried, in 1906, that her future son-in-law was improvident and decided that: "The only thing to do is to tie up all the money we can as tightly as the law will allow us, so he won't be able to completely ruin himself." These comments are a challenge to the claim of Moller Okin and Davidoff and Hall that the husband was effectively empowered to use the wife's money; the settlement appears to have been designed to separate the wife's assets from the husband's for *her* protection.

One of the few critics to comment on the importance of the settlement in Trollope is McMaster [1986, p. 25] who claims that "only wealthy women could afford the protection of equity." This view is endorsed by Davidoff and Hall [1987, p. 209] who describe trusts as "a rough indicator of high income and status." But there is historical evidence that the use of the trust was not confined to the wealthy.¹⁰ The *Cornhill* contributor [1863, p. 668] described marriage settlements as "common, indeed ... nearly universal among the comfortable and moderately wealthy classes." Stebbings [2002, p. 6] finds in a study of the Victorian trustee that: "All sections of the middle classes, and some of the skilled working classes employed the trust. Gentlemen, clerks in holy orders, butchers, printers, merchants and yeomen were typical of middle class settlers." Morris [2004, p. 262] finds the use of trusts in 77% of male wills, in a sample of middle-class wills in Leeds from 1830 to 1834, to transmit wealth to widows,

¹⁰See, for instance, Morris [1998, p. 121], Gordon and Nair [2000, pp. 801-803], and Hunt [1996, pp. 157-162] on their importance to the middle classes.

daughters, sisters, and nieces. Trollope's novels provide support for the widespread use of the settlement. Its creation is important for heiresses such as Glencora (*Can You Forgive Her?*) and Miss Dunstable and Mary Thorne (*Doctor Thorne*), but it is also crucial for the widows Mrs. Prime [Trollope, 1863, p. 7] and Mrs. Smiley [Trollope, 1862, part II, p. 20], both possessed of two hundred pounds a year.

MARRYING FOR MONEY

Collins [1982, p. 315] describes Trollope's novels as "chockablock with adventurers ... and adventuresses." But little critical attention has been given to the number of men in Trollope who are attempting to marry for money, or to the extent that marriage is viewed in his novels as a transaction that men undertake in order to raise money. The effects of primogeniture, outlined above, determine the participants in the transaction. The majority of women pursued are the daughters of the middle classes, and the pursuers are often members of the aristocracy or the squirearchy, frequently but by no means always, younger sons attempting to alleviate their own or their family's indebtedness.¹¹ The search also characterizes the middle classes.¹² Some, such as Phineas Finn, are looking for support in their careers; others see marriage as a way of avoiding a career. Bertie Stanhope, for instance, sees marriage as "a profession indeed requiring but little labour, and one in which an income was insured to him" [Trollope, 1857, p. 399].

In Trollope, these "adventurers" are treated not as wicked men, rather as operating in an environment where it is taken for granted that marriage is an exchange of property [see, for instance, Psomiades, 1999, p. 96]. Trollope constantly identifies marriage as a market in which wares are displayed and people bought and sold. Gerard Maule's father in *Phineas Redux* (Trol-

¹¹A list, by no means comprehensive, would include Lord Ballandine (*The Kellys and the O'Kellys*), Frank Gresham (*Doctor Thorne*), George de Courcy (*Doctor Thorne* and *The Small House at Allington*), Sowerby in *Framley Parsonage*, Lord Fawn (the Palliser novels), Lord Chiltern (*Phineas Finn*), Felix Carbury and Lord Nidderdale (*The Way We Live Now*), Lord Giblet (*Is He Popenjoy?*), and Lord Silverbridge (*The Duke's Children*).

¹²Examples include Moses and Valentine Scott (*The Three Clerks*), Slope and Bertie Stanhope (*Barchester Towers*), Mr. Moffatt (*Doctor Thorne*), Mr. Prong (*Rachel Ray*), Bernard Dale and Adolphus Crosbie (*Small House at Allington*), Miss Mackenzie's three suitors, Captain Bellfield, and George Vavasor in *Can You Forgive Her?*, Mr. Emilius in *The Eustace Diamonds*, and Mr. Lopez in *The Prime Minister*.

lope, 1874, part I, p. 185] holds the view that: "There are women always in the market ready to buy for themselves the right to hang on the arm of a real gentleman." Undecimus Scott, the eleventh child of Lord Gaberlunzie in *The Three Clerks* [Trollope, 1858b, Vol. I, p. 152] had been told by his father that, with his noble origins, he was worth at least £10,000 in the marriage market. More specifically, marriage is construed as a livestock market – Violet Effingham [Trollope, 1874, p. 94] reflects that "a husband is very much like a house or a horse." In *Framley Parsonage* [Trollope, 1861, p. 261], the narrator comments: "A lady who can sell herself ... treats herself as a farmer treats his sheep and oxen."

Trollope, as is noted by Psomiades [1999, p. 98], also compares marriage to a stock market in which women do not merely own financial assets, they are assimilated to them. Lord Nidderdale, in *The Way We Live Now* [Trollope, 1875, part II, pp. 333-334], has been an ineffectual member of Melmotte's board of directors, but he has at least begun to use the language of the City. He decides that wives, like shares, should be advertised in a prospectus: "It is a pity there shouldn't be a regular statement published with the amount of money, and what is expected in return. It would save a lot of trouble." Investment decisions require the buyer to make a detailed appraisal. Guss Mildmay "had no money to speak of, but she had beauty enough to win either a working barrister or a rich old sinner" [Trollope, 1878, part I, p. 114]. Money adds "an efficient value ... in the eyes of most prudent would-be Benedicts" [Trollope, 1861, p. 137]; it is good in itself, and it offsets the drawbacks of age, ugliness, and low social status. The heiress Miss Dunstable, rather plain with frizzy curls, is aware that these need not be handicaps: "They'll always pass muster ... when they are done up with bank-notes" [Trollope, 1858a, p. 186].

There are metaphors in Trollope which reduce wealthy women not merely to shares whose value can at least react to circumstances but to baser inanimate objects. Marie Melmotte is literally a trophy: "It had indeed been suggested to him [Paul Montague] by Mr Fisker that he also ought to enter himself for the great Marie Melmotte Plate. Lord Nidderdale had again declared his intention of running" [Trollope, 1875, 76]. Moses Scott's wife is "a bundle of shagreen spectacle cases in the guise of a widow with an exceedingly doubtful jointure" [Trollope, 1858b, Vol. I, p. 153].

A tension exists between these views of women as property and the ability of Trollope's wealthy women to exert power

through money, before or after marriage. Few hand their wealth over on marriage with no strings attached. The wish to maintain power may even preclude the marriage. When Mr. Prong has proposed to Mrs. Prime, assuring her that his motives “are pure and disinterested” [Trollope, 1863, pp. 118-119, 123, 149] and she goes thoughtfully home, she very soon passes from the idea of being married “in the spirit” to reflections on “the rights of a married woman with regard to money – and also on the wrongs.” Some time later, she is still preoccupied:

She knew enough of the laws of her country to enable her to be sure that, though she might accept the offer, her own money could be so tied up on her behalf that her husband could not touch the principal of her wealth; but she did not know whether things could be so settled that she might have in her own hands the spending of her income.

Mrs. Prime enjoys being “mistress of her money”; Mr. Prong, despite his assurances, wants her estate. The novel was written in 1862 before the first Married Women’s Property Act, and Mrs. Prime realizes that only a settlement will save her capital. The courtship drags on. By the end of the novel, he is still calling occasionally on her, but with no compromise in sight. The settlement would either require her to lose control or him to give up thoughts of her money. Neither of them can bear to give way.

At the other end of the social spectrum, Lady Glencora Palliser does not explicitly discuss the existence of her separate estate: “As regarded money, no woman could have behaved with greater reticence, or a purer delicacy” [Trollope, 1864-1865, pp. 33-34], but she reminds Mrs. Markham that the carriage horses she uses are her own, not her husband’s. This enables her to take them out at night (“it is what they are for”) despite the chaperone’s disapproval. When Plantagenet Palliser becomes prime minister, Glencora distresses him by spending lavishly on entertaining. She spends because she can: “After some fashion, of which she was profoundly ignorant, her own property was separated from his and reserved to herself and her children” [Trollope, 1876b, p. 61]. Glencora has reticence, delicacy, and ignorance of the law as a veil between her and the crude reality of her money, while Mrs. Prime is “delighted in the sight of the bit of paper which conveyed to her the possession of her periodical wealth” [Trollope, 1863, p. 119]. But for both of them, the separate estate represents “uncontrolled possession.”

There is a crucial difference between women such as Mrs. Prime and Lady Glencora, with separate estates, and those who

enter marriage with merely a portion. For instance, in *The Small House at Allington* [Trollope, 1864, p. 174], the Hon. George has “lately performed a manifest duty, in having married a young woman with money” who can pay his debts. She is a coal merchant’s daughter, and after providing the money, she is treated with total contempt by the De Courcys. She is merely “a figure of a woman, a large well-dressed resemblance of a being, whom it was necessary for certain purposes that the De Courcys should carry in their train.” The money has passed from her to George, and she has reverted to the rank of a nobody. By contrast, the separate estate may represent a threat to the husband’s superior role. Lord George Germain in *Is He Popenjoy?* feels resentful of his wife’s wealth. She is a tallow chandler’s heiress, but the marriage settlement ensures that the money remains hers, and George is “only his wife’s husband, the Dean’s son-in-law, living on *their* money and compelled by force of circumstance to adapt himself to them” [Trollope, 1878, p. 129, emphasis added]. The settlement reinforces George De Courcy’s superiority to his wife; it threatens Germain’s.

The settlement or lack of it does not merely destabilize the balance of power; it can also be a disastrous failure for the husband. Nardin [1989] claims that Adolphus Crosbie in *The Small House at Allington* [Trollope, 1864, pp. 112, 338, 447, 452, 528] chooses Lady Alexandrina De Courcy because “she offers an escape from Lily,” who is unattractively clinging, but she omits the importance of money to Crosbie. Lily cannot offer a portion; Alexandrina is not wealthy but she is an earl’s daughter, and Crosbie thinks she represents the means to promotion. As soon as their engagement is announced, however, she has “bound him up hand and foot” in a marriage settlement. The core of the settlement is the purchase of insurance policies, paid for out of his savings and her portion: “If he would only die the day after his marriage, there would really be a very nice sum of money for Alexandrina, almost worthy of the acceptance of an earl’s daughter.” The marriage breaks down within weeks; Alexandrina goes back to her mother, and Crosbie finds himself paying maintenance as well insurance premiums. He began the novel on a salary of £700 a year; by the end, despite promotion, he is on £500. The consequences of the marriage settlement had absorbed the remainder. Crosbie survives his wife, but in a sinister counterpart to the widow’s jointure, the dead woman continues to take his money. In addition to his and her debts, there are the macabre costs of her death in Baden-Baden; e.g., “the embalming of her dear remains” and the bringing home of the body,

“that horrid, ghastly funeral.” One of his creditors, the solicitor who drew up the settlement, now has the insurance policy on his life. The only asset that he salvages is “a mourning ring with his wife’s hair.” The settlement has gradually turned into a lifelong punishment for Crosbie.

As Crosbie’s experience suggests, the settlement persists after one of the marriage partners has died. Here Trollope recognizes a tension between the demands of the present and those of the future. The jointure, intended to support not only the widow but also minor children, is seen as an encroachment on the husband’s estate. In *The Small House at Allington*, Earl de Courcy calls the Countess “names that would frighten a coal-heaver”; life with him is a misery because of his ill-nature and his drinking. Their son-in-law, the solicitor Gazebee, calmly notes that this will be revenged: “He’ll die soon, and then she’ll be comfortable. She has three thousand a year jointure.” The Countess looks forward to her widowhood; her son-in-law Crosbie is ruined by his. In both cases, the settlement is an inescapable element of the marriage.

WOMEN’S MANAGEMENT OF MONEY

When Dr. Crofts proposes to Bell Dale and warns her that they will not be rich, she refuses to discuss money: “I don’t think it quite manly even to think about it: and I’m sure it isn’t womanly” [Trollope, 1864, p. 550]. Many other women characters in Trollope’s novels have nothing to say about money unless they are prompted to do so. Emily Lopez has no idea what her husband does in the City; she has to ask him during their honeymoon [Trollope, 1876b, pp. 236, 258]. The model of separate spheres suggests that Trollope should unambiguously treat this detachment from money as desirable. Certainly, some Trollope women who are very deeply conscious of money are profoundly unattractive, such as Mrs. Van Sievert, the partner in a city loan company and a “a ghastly old woman to the sight.” Mrs. Mason in *Orley Farm* [Trollope, 1862, part I, pp. 64-65] is depicted as a miser, “going as far as she dared towards starving even her husband ... Such a woman one can thoroughly despise and even hate.” The conclusion that could be drawn is that Trollope condemns women who engage with money.

But, between these two extremes, there are many women who are conscious of money and make more or less successful attempts to manage it. Copeland [1979, pp. 162, 167] quotes Jane West’s advice in 1806: “Every girl...should understand the

value of commodities, be able to calculate expenses, and...tell what a specific income should afford." He points out that it was normal for both Jane Austen's heroines and her readers to "know their pounds, shillings and pence." This is also the case for many of Trollope's women. In *The Eustace Diamonds* [Trollope, 1873, part I, p. 323, part II, p. 141], Lizzie Eustace can convert a diamond necklace to income in a moment. Trying the necklace on her companion, she remarks: "How do you feel, Julia with an estate upon your neck? Five hundred acres at twenty pounds an acre. Let us call it £500 a year." Lopez, the London speculator, makes advances to Lizzie and tries to get her to invest in speculative shares and then to go to South America with him. "But Lizzie had £4000 a year and a balance at her banker's. 'Mr Lopez, I think you must be a fool'."

Several Trollope critics have noted the important role played by women in match making and the associated financial arrangements. Some, such as Markwick [1997], refer to mothers or mother figures as playing a major role in "husband-hunting" strategies. Others, such as Koets [1932, pp. 59, 68], see their role in a more favorable light. Most mothers try to persuade their children into marriage which will help the family estate, enhance social status through a title, or provide their children with financial security when they have no fortune of their own. Mrs. Greystock attempts to prevent her son's marriage to the penniless Lucy Morris. She believes that "if only Frank would marry money, there was nothing he might not achieve." Lady Aylmer tries to dissuade her son from marrying Clara Belton: "She will never have one shilling I suppose ... You will be a poor man instead of a rich man, but you will have enough to live upon, – that is, if she doesn't have a large family; which, of course, she will" [Trollope, 1866, p. 217]. In *Doctor Thorne* [Trollope, 1858a, p. 342], Lady Arabella Gresham tells her son Frank repeatedly that he must marry money.¹³ In the most intense of these scenes, Lady Arabella tells him: "'You MUST marry money'. And then Lady Arabella stood up before her son as Lady Macbeth might have stood, had Lady Macbeth lived to have a son of Frank's years."

Trollope was accused by contemporaries of over-idealizing marriage without money as, for example, in the review of *Doctor Thorne* in the *Saturday Review* [1858, p. 77] which was critical

¹³The statement that "Frank must marry money" or a variant thereof is used 18 times in *Doctor Thorne*; eight times by his mother, six by his aunt, twice by his sister, and twice by his father.

of Trollope's atmosphere, "not incapable of being condensed into the moral that people ought to marry for love and not for money, and that wealth and station are in themselves somewhat contemptible." From this point of view, Lady Arabella's hectoring of Frank might be seen as a depiction of neurotic anxiety. However, the novels also flag up the real hardship of those who marry without money, the squalor of poverty-stricken clergy like the Crawleys and the Armstrongs. The inheritance customs of the aristocracy and the squirearchy, as well as the cult of the gentleman, produced large numbers of men unable to fend for themselves without the help of their mothers or their sisters. Hence, Charlotte Stanhope and Mrs. Harold Smith both try to arrange marriages for their brothers, purely and explicitly as exercises in financial planning. Marriage is the only way of saving the men.

A constant theme in Trollope's novels is the dependence of men on women for money; male characters not only need rich wives, but also mothers and sisters to organize their lives for them. Women's management of money is a necessity because of the inversion of the desirable relationship between the sexes. Men need money for a variety of reasons; they have been extravagant, they are younger sons, their families are poor, and/or their careers are likely to be expensive. Sometimes needy men get male support, as when Lord de Guest settles money on Johnnie Eames in *The Small House at Allington*, but Trollope does not provide many examples of a supportive male network. Squire Gresham in *Doctor Thorne* is a muted, apologetic figure because he knows that he has thrown away his son Frank's inheritance. The novels are full of stories of women bearing the consequences of men's inability to deal with money. Far from being cloistered from the economic world, women have its realities forced upon them.

CONCLUSION

Jalland [1986, p. 58] comments that there is "little information in marriage manuals or elsewhere about marriage settlements and the precise financial requirements of a suitable marriage." Trollope's novels contribute to an understanding of the way in which Victorian marriages were organized around the transmission of property. In particular, he casts light on the continuing debate about the role of the marriage settlement. Historians argue about the extent to which it served to protect property for women. Erickson [2005, p. 2] comments that in

the early modern period, "the marriage contract was the most basic and most significant legal and economic contract that most people, men or women, ever made." Trollope's novels are founded on recognition of this significance. Trollope's treatment of the settlement reflects the Victorian view that it was intended to protect assets for the wife rather than for the wife's family. As noted above, Glencora and Mrs. Prime enjoy wealth in their own right.

The marriage settlement, primogeniture, and entail play a crucial role in Trollope's plots, in the creation and transmission of family wealth. Although Trollope's treatment of them is ambivalent, they have negative as well as positive consequences. The portion and the settlement appear as indispensable elements of marriage, but with the potential to undermine the relationship. The novels include wives who are treated as objects once they have handed over their portions and husbands who lose their authority because of their financial dependence on wealthy wives with settlements. In his treatment of primogeniture and entail, Trollope engages with his contemporaries' criticisms of their effects on the family – the impoverishment of younger siblings and the weakening of parental authority, both of which were noted by Brodrick and which appear repeatedly as characteristics of aristocratic families in the novels.

Hewitt [1963], quoted at the beginning of this paper, views Trollope as the uncritical recorder of a world in which men and women pursue completely distinct careers, with the women's limited to marriage and home. Yet, although ingénue heroines like Lily Dale recur in the novels, women play a crucial role in the transmission of wealth, not only as brides but as marriage advisers and promoters. They are not simple matchmakers, rather they are financial managers, reminding younger men and women of the imperative need for money in marriage.

A number of recent historical studies have resulted in challenges to the notion that women were totally excluded from control over their lives by lack of property or by the inability to make decisions about its disposition.¹⁴ There are also signs that this historical challenge to the notion of the primacy of separate

¹⁴These include Moller Okin [1983-1984], Erickson [1990, 1993], Berg [1993], Wiskin [2000], Hudson [2001], and Laurence [2003] on women's ownership of property in the 18th century; Morris [1978, 2004], Hudson [1986], and Green and Owens [2003] on the early 19th century; and Morris [1994, 2004], Gordon and Nair [2000, 2003], Combs [2004], and Rutterford and Maltby [2006] on investment behavior in the later 19th century.

spheres is beginning to be noted by Trollope's critics. Some now recognize that the women in Trollope's novels are not distant from or victims of financial activity, rather that they are actively involved in financial transactions, in particular those linked to marriage. Franklin [2003, p. 509], for instance, protests against commentators' "strict discursive separation of the public and private spheres...Marriage, the epitome of the domestic, is as much a publicly observed transaction as stock investment, and both female and male partners take part in speculations of both kinds." Michie [2001, p. 78], finding in the Victorian novel a reaction to "dramatic changes in economic practice and theory," concedes a place to women as well as to men in confronting that change. Women, she finds, are more "pragmatic" in dealing with economic problems. She quotes Mrs. Oliphant's 1867 praise of Trollope as "the only writer we know who realizes the position of a sensible and right-minded woman among the ordinary affairs of the world."

As Michie [2001] recognizes, Trollope is reacting to the financial and moral upheaval represented by an economy based on stock market investment. However, he is also taking account of other problems in the economic organization of the family. The classes whose wealth was based on land, the aristocracy and the gentry, owned an inalienable asset that could not readily be divided among members of the family. The combination of this with the restrictions of primogeniture and entail put members of the landed classes at a disadvantage compared with the affluent middle classes whose wealth came from divisible financial assets.

Trollope's novels deal with the difficulties of inheritance, "how to provide fairly and reasonably for the children of a marriage while not damaging and fragmenting the core of capital assets" [Thompson, 1994b, p. 17], which produced a large caste of moneyless and unmarriageable daughters and younger sons. He recognizes the crises connected with the transmission of wealth between generations because of the problems associated with land as the main family asset and between families as a result of the conflicts arising through marriage settlements. We argue that women were closely involved in these crises because they had the power to influence the allocation of money both before and during marriage. The betrothal was not just "the one free decision allowed a feminine woman" as Nardin [1989, p. 88] suggests. The marriage settlement could segregate female from male wealth throughout the marriage and afterwards, for the surviving spouse and for the next generation.

The problems that appear in the novels are not accompanied by proposals for solutions, as Barickman et al. [1982, pp. 195-196] point out. Trollope was “not interested in the specific forms [of] ... the debate about women” that suggested institutional change. A recurrent, and pessimistic, feature of his novels is the flight abroad as a means of escaping from insoluble problems at home. In *Orley Farm* [Trollope, 1862, p. 415], Lady Mason and her son, both shamed by her forgery, leave the country. He goes to Australia, for “success in a thriving colony”; she is exiled to Germany. In *The Way We Live Now* [Trollope, 1875, p. 454], Felix Carbury, having totally failed to marry for money, is banished to a kind of limbo in Prussia. Marie Melmotte, after being pursued by Felix and others for her money in London, is persuaded by Fisker to marry him in California where “the laws regulating woman’s property ... are just the reverse of those which the greediness of man has established here. The wife there can claim her share of her husband’s property, but hers is exclusively her own. America is certainly the country for women, – and especially California.” The only way that Marie can escape from fortune hunters is via a different legal regime. Trollope identifies the conflicts that might underlie Victorian marriage, but offers no solutions.

The intention of the present paper has been to identify and discuss the contribution made by a reading of some of Trollope’s novels to our understanding of one facet of accounting history – “history from below.” Kirkham and Loft, as discussed earlier, have made the case that accounting was practiced by women in domestic settings, and that it can be traced in a variety of texts intended for or prepared by women, such as manuals, letters, and diaries. We add to these sources Trollope’s novels. His depiction of women as managers of family and household money, and as marriage brokers, in an era when marriage was a crucial point in the distribution of wealth within and between families, is arguably a challenge to the notion of strict partition between male and female economic roles. Trollope’s women are in touch with a discourse that enables them to exercise a particular kind of economic influence.

Unlike Hewitt (quoted above), we do not suggest that Trollope’s novels are a “reliable source” of information about his readers’ economic world. But the novels put us in touch with some of the concerns that were present to readers, perhaps more effectively because they do not proffer institutional solutions to the difficulties that beset men and women as heirs and heiresses, property owners, and marriage partners. The picture they pres-

ent is of a complicated world in which, although they lacked political rights and were excluded from the world of work, women played a significant role in the transmission of wealth and had a shrewd understanding of the economic significance of marriage. Trollope wrote about women's situation in a way that revealed the contradictions and crises thrown up by their exclusion from economic life and the strategies they adopted to assert some control over their own and their families' lives. We conclude with the suggestion that the history of accounting from below will repay further investigation and that previously neglected texts, identified here and by historians of women and the household, have much to contribute to that history.

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