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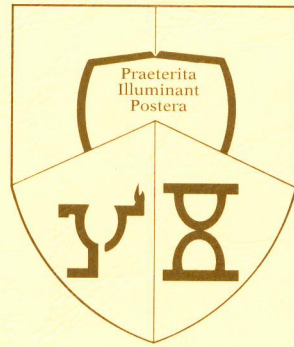
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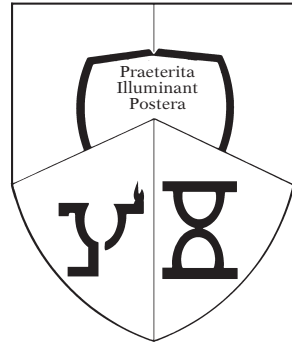


The
Accounting
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Journal

June 2003
Volume 30, Number 1

Research on the Evolution of Accounting
Thought and Accounting Practice

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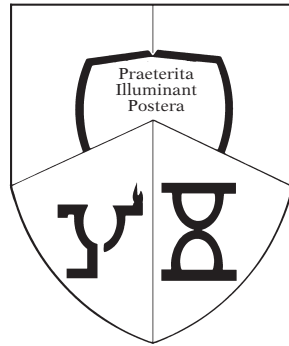
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ACCOUNTING HISTORIANS JOURNAL

Statement of Policy

The *Accounting Historians Journal* is an international journal that addresses the development of accounting thought and practice. *AHJ* embraces all subject matter related to accounting history, including but not limited to research that provides an historical perspective on contemporary accounting issues.

Authors may find the following guidelines helpful.

1. Authors should provide a clear specification of the research issue or problem addressed and the motivation for the study.
2. Authors should describe the method employed in the research, indicating the extent and manner in which they intend to employ the methodology. Manuscripts are encouraged that draw on a variety of conceptual frameworks and techniques, including those used in other social sciences.
3. Manuscripts that rely on primary sources should contain a statement specifying the original materials or data collected or analyzed and the rationale used in selection of those source materials. Authors should provide the reader information as to how these source materials may be accessed.
4. Authors who use a critical or new theoretical framework to examine prior historical interpretations of the development of accounting thought or practice should include a discussion of the rationale for use of that framework in the manuscript.
5. In performing all analyses, authors should be sensitive to and take adequate account of the social, political, and economic contexts of the time period examined and of other environmental factors.
6. While historians have long debated the ability to assign causation to particular factors, we encourage authors to address and evaluate the probable influences related to the problem or issue examined.
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ACCOUNTING HISTORIANS JOURNAL

Guide for Manuscript Submission

Three (3) copies of manuscripts for publication review should be submitted to Professor Stephen P. Walker, Cardiff Business School, Aberconway Building, Colum Drive, Cardiff CF10 3EU, U.K. There is no submission fee, although authors are urged to consider joining The Academy of Accounting Historians by completing the membership application form on the inside of the back cover. Papers which have been published, accepted for publication elsewhere, or are under consideration by another journal are not invited. The *Accounting Historians Journal* will accept a variety of presentation formats for initial submission as long as the writing style is reflective of careful scholarship. Notwithstanding, authors should attend to the following guidelines:

1. An abstract of approximately 100 words on a page that includes the article's title but no identification of the author(s) .
2. A limited number of content footnotes.
3. A limited number of tables, figures, etc., appended at the conclusion of the text, but whose positioning in the narrative is indicated.
4. References are to appear in brackets within the text. Specific page numbers are mandatory for all direct quotes but are optional otherwise.
5. A bibliography of all references cited in the text.

Upon acceptance or an invitation to revise and resubmit, authors will be sent a style sheet which must be followed conscientiously for all subsequent revisions of the paper. Once the article is accepted, the editor will request the submission of a diskette prepared in Microsoft Word. If time permits, authors will be sent galley proofs. However, the inclusion of additional material will be severely limited.

Authors will be provided with 3 copies of the *AHJ* issue in which the manuscript is published. Reprints may be ordered by arrangement with the publisher.

Accounting Historians Journal
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June 2003

From the Editor

I take this opportunity to report on recent developments and thank all who continue to support *AHJ*.

Submissions: the quality of submissions to *AHJ* continues to improve though the rejection rate still remains rather high. An analysis of the reasons why referees suggest that papers be rejected shows that the principal concerns are deficiencies in historical scholarship. Negative comments usually relate to one or more of the following: a tendency to submit purely descriptive papers as opposed to those exhibiting a combination of description, narrative and analysis; a failure to identify the contribution made by the paper (the absence of a research question or historical problem, not answering the 'so-what' question); inadequate gathering of pertinent evidence; disconnection from the relevant literature and inadequate literature review; and, an absence of contextualization. It should be emphasized that weak English and an 'uncritical' approach are seldom reasons for the rejection of papers. If the submission has the potential to make a contribution then concerns about language and grammar can invariably be remedied with assistance from the editor or a kindly member of the editorial board.

Special Sections: The current issue contains an *Autobiographical* section. While *AHJ* is primarily concerned with publishing the results of quality historical research, it is also receptive to submissions which relate the experiences of those who have contributed to the evolution of accounting thought and practice. As source material, memoirs, of course, should be interpreted with much circumspection. However, the paper by George Staubus further illustrates the increasing recognition in accounting history of the need to record personal experiences. Like biographical studies in general, the points at which the individual's life course converges with significant events in accounting are of particular value. Hence, the paper illuminates the development of key concepts such as decision-usefulness and activity costing as well as the work of institutions such as the FASB and the AAA. Staubus' autobiographical account also highlights the contributions of other significant actors, the nature of academic life and accounting research in past decades.

The manuscript referees identified these contributions of the paper and were also impressed by its candid and engaging style.

Richard Vangermeersch (rvang@uriacc.uri.edu) is guest editing a special section on *International Congresses of Accounting* to coincide with the theme of the World Congress of Accounting Historians in 2004. See the *Noticeboard* section (p. 158) in the December 2002 number.

Cheryl McWatters, Reviews Editor, would be pleased to hear from potential contributors to the *Interfaces* section. Authors should identify published works in sister disciplines which have implications for accounting history research.

Prize Winners, 2002: I am delighted to announce that the editorial board have decided that the prize for the best paper in Volume 29 be awarded to Alan J. Richardson for his article on "Professional Dominance: The Relationship Between Financial Accounting and Managerial Accounting, 1926-1986". The following papers were also highly commended: Margaret Lamb, "Defining 'Profits' for British Income Tax Purposes: A Contextual Study of the Depreciation Cases, 1875-1897", and Christopher J. Napier, "The Historian as Auditor: Facts, Judgments and Evidence".

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Trevor Boyns
CARDIFF UNIVERSITY

IN MEMORIAM: ALEXANDER HAMILTON CHURCH'S SYSTEM OF 'SCIENTIFIC MACHINE RATES' AT HANS RENOLD LTD., c.1901 - c.1920

Abstract: In 1901, Alexander Hamilton Church wrote a path-breaking article in *The Engineering Magazine*, entitled 'The proper distribution of establishment charges'. This article, published in six parts, is generally considered to have been one of the most important articles on the subject of overhead allocation and Church's system of scientific machine rates is often seen as a precursor of work which eventually resulted in the emergence of standard costing. Around the same time, Church introduced his system at Renold, a firm of British chain manufacturers, where it was used well into the First World War. Towards the end of the war, however, the system was gradually abandoned in favor of standard costing and budgetary control. Using archival and published sources, this paper examines the factors leading to the demise of Church's system at Renold and, in so doing, throws light on the between scientific management, organizational change and the development of successful costing systems.

INTRODUCTION

In the late 19th and early 20th centuries, there developed, in the Anglo-Saxon world, a literature that began to deal with costing generally and, in particular, the issue of overheads (or bur-

Acknowledgments: I would like to thank the Economic and Social Research Council for their funding (grant no. R000237946) which has made possible the archival research underlying this paper, Renold plc for allowing me access to the Renold archive, and the archivists based at Manchester Central Library, especially Judith Baldry, who have facilitated my research into the archive. I would also like to thank the two anonymous referees for their comments on an earlier draft of this paper, and Richard Vangermeersch for generously providing me with copies of material which he acquired when carrying out his own research into Alexander Hamilton Church some 15 years ago.

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den). Some of this burgeoning literature was produced in the form of scholarly texts which were to be used for educational purposes, while a significant role was played by journal articles, in both the accounting and trade press, illustrating ideas and systems favored, or utilized, by the authors and/or the companies that they represented. One important article, published in the *Engineering Magazine* in 1901, was 'The proper distribution of establishment charges', written by Alexander Hamilton Church. Within 20 years, however, articles had begun to appear on the topic of standard costing, a system which is considered to have had a much greater impact during the 20th century than Church's system of scientific machine rates for allocating overheads. Indeed, Johnson and Kaplan [1987, pp. 127-128] have suggested that although manufacturing cost systems designed to trace costs accurately to diverse lines of products, and hence producing information for assessing efficiency and opportunities for product differentiation, such as that of Church, were available by 1910, they had disappeared by the First World War. It is in this light that the experience of Renold is of interest to accounting historians since this chain manufacturing business adopted Church's system at the beginning of the 20th century, but then subsequently abandoned the system in favor of standard costing and budgetary control. This paper therefore adopts something of the genealogical approach advocated by Miller and Napier [1993], since it focuses in the main upon the factors that led to the failure of Church's costing system at Renold, thereby possibly shedding further light on why this system failed to find widespread acceptance.

This paper attempts to fill in many of the gaps in the details associated with the use of Church's system at Renold, thereby correcting a deficiency noted by Johnson and Kaplan [1987, p. 128], and does this by taking up Vangermeersch's challenge to conduct "a careful mining of the excellent archives at the Renold Company in Manchester, England" [1988, p. 103]. Since Vangermeersch made his comment, the Renold archive has been transferred from the headquarters of Renold plc to the archives section of Manchester Central Library, where it occupies 85 shelves of space. The archive, which is extremely limited for the pre-1909 period, is nevertheless very detailed thereafter, and provides an extremely rich source of material not only for accounting historians but also for anyone interested in the development of scientific management practices in Britain. The differential survival of pre- and post-1909 material reflects a major change in the organizational structure of the company and the

impact of scientific management. From around 1909 the company's management began to embrace Taylorism, both at the shop floor level (e.g. introduction of time studies c.1910/11, the use of functional foremen, etc.) and within the higher levels of management. The latter involved a decisive shift from an organization dominated by the owner-entrepreneur, Hans Renold, to one in which committees began to proliferate and play an increasingly more important role in decision-making [for fuller details see Boyns, 2001, pp. 721-722]. The proceedings of all committees, many of which met weekly, were minuted in copious detail, indicating the nature of discussions and who said what. The various sets of minute books have been preserved and provide a major source of information for this study, though the archives also contain large amounts of supporting material, not least the detailed reports, cost investigations, etc., upon which the committee discussions took place and decisions were based. For certain sets of documents there are also explanatory notes and comments, written some years after the event by Charles Renold, which provide additional contextualization. Most significantly from the point of view of this paper, the survival of records relating to the costing and accounting systems for the period c.1908/09 to c.1920 are reasonably full and informative.¹

In this paper, the operation of Church's system at Hans Renold Ltd., the problems which arose, and the success or otherwise of attempts made to overcome them is examined in the light of the development of Church's ideas, as expressed in his various writings over his lifetime.² In this way, the paper throws light on the relationship between the development of costing theory and practice. Given that Hans and Charles Renold have long since been recognized as pioneers of scientific management in Britain [Urwick and Brech, 1953, pp. 162-169; Boyns, 2001], the paper also throws light on this topic and the inter-relationship between developments in organizational structure, new theories of management and costing methods.

¹ The one major drawback to using the collection, however, is that there is, as yet, no complete catalogue, researchers having to rely on a useful, but limited, card index compiled by the company's librarian prior to the transfer of the collection to Manchester Central Library.

² The second article by Church, 'Organisation by Production Factors', although published in the US under Church's own name, was published in Britain under the nom de plume of H.C. Alexander. Although it is the British version of the paper which is cited here, throughout the text and in the bibliography it is referred to as [Church, 1909/10] rather than [Alexander, 1909/10].

THE COSTING CONTEXT IN BRITAIN, c.1880-c.1920

According to Wright [1962, pp. 3-4], the development of scientific costing systems in Britain can be traced back to the work of John Walker [1875], who developed a system of allocating overheads based on prime costs. Writing at the beginning of the 1890s, John Mann Jr. noted that, in theory, direct overheads varied directly with the labor time occupied on a job and inversely to wages paid [Mann, 1891, p. 635]. While noting that the basis of allocation should be labor time rather than wages paid, a view echoed ten years later by Cowan [1901, p. 90], Mann accepted that for “nearly all practical purposes, however, the *direct expenses may be safely applied in proportion to the wages paid*” [1891, p. 635 – italics in original]. He went on to note that, in practice, direct expenses were often loaded on to both materials and labor. By the beginning of the 20th century, however, Mann [1903, p. 207] noted that there were five different methods in use to spread the expense burden over current work: (1) a rate varying with quantity of material handled, i.e. the unit system; (2) a percentage on cost of wages and materials; (3) a percentage on wages alone; (4) a percentage on time; and (5) the tool basis or machine rate.³ It was the third method that was described as being the most popular in Great Britain at the time [Church 1901, p. 727; Mann, 1903, p. 208], though alternative methods, especially the machine rate method, were finding increasing support from some writers.

The writer considered to have been the most influential thinker on the use of machine rates in the early years of the 20th century was Alexander Hamilton Church. For him, both the percentage on wages and hourly burden methods suffered from a crucial failing: they relied on a single factor for the apportionment of overheads — the percentage system relied on wages, and the hourly-burden system on time. While he accepted that either system might work in situations where there was uniformity, Church noted that, in real life, workshops or factories were often complex entities, with different types of machines and different qualities of labor being employed. In such situations, the percentage-on-wages and hourly-burden systems would prove inaccurate in determining product costs. It was in

³ A similar five-fold classification was presented by Mark Webster Jenkinson [1914, p. 569] just before the outbreak of the First World War: (1) a percentage on prime cost; (2) a percentage on the cost of labor; (3) a fixed sum for each hour of time worked by each man; (4) a fixed sum per hour for each machine; and (5) a fixed sum per unit of weight or quantity.

such a context that Church argued that, "we must seek a method capable of recording [cost] with approximate accuracy under the most complex and difficult conditions" [1901, p. 729]. For him, "the business of costs [is] to represent facts and nothing but facts" [Church, 1909/10, p. 26].

Church clearly had an impact. In 1902, shortly after the last part of Church's article was published, Urie [1902] presented a paper to the Glasgow Chartered Accountants Students' Society on the subject of oncost and its apportionment, providing a brief résumé of Church's system. When Bardsley [1902] likewise presented a paper to the Kingston-upon-Hull Students' Society, he mentioned the machine rate method alongside the other alternative methods. Indicating that each method had its pros and cons, Bardsley suggested that a mix of methods may have to be used within the same business, noting that "I find I have to use two or three of these methods" [1902, p. 1092]. Church's refined machine rate system entered the literature then at a time when certain persons were beginning to push for the development of the use of costing systems. Such systems were seen by their advocates as being part of the scientific approach to business, and it was considered that there was a need for their more widespread application in Britain. One critic of the lack of a scientific approach was the chartered accountant, Harvey Preen, whose book, *Reorganisation and Costings – A Book for Manufacturers*, was first published in 1907. In a second, new and enlarged version, published in 1913, Preen began his chapter on costings by emphasizing the importance to manufacturers of 'correct costings'. To stress his point, Preen provided an example of 'wrong costing', namely a 'system' which determined the selling price of a good by merely taking an estimate of direct costs and then added some guessed percentage to represent estimated fixed charges, and a further guessed percentage to represent profit [Preen, 1913, p. 127]. In his 1907 work, Preen had pointed out that 'adding a bit' was unscientific, and that the "necessity for accuracy cannot be too strongly insisted on" [1907, p. 69].

Preen, by pushing for 'scientific costing' [1907, p. 65], was providing portents of what was to come, though he himself never mentions the use of standards or standard costing, a technique which was gathering strength across the Atlantic. However, Preen did point out that "The past is dead and gone, and what has been, has been, and cannot be changed; it is as a guide to the daily present and future that costings are so useful" [Preen, 1907, p. 65]. Preen, in a short chapter entitled 'The Budget System', also referred to the potential use to management of

budgets. However, as revealed in his text, Preen's concept of a budget was essentially as a backward rather than a forward looking document. Indeed, Preen's budget was more in the form of a monthly trading account, though he does suggest that, echoing his view of costing, it would have forward looking connotations [Preen, 1907, pp. 81-82]:

[The budget system is] a method which will enable the manufacturer at the end of each month to know with comparative exactness how the business stands, what has been occurring during the month, to form a fairly reliable estimate of what is likely to occur in the ensuing month, and also, to enable comparisons to be made with the same trading period, and the corresponding month, in the previous year or years.

The key to his 'budget system' was that the information should be quickly available, i.e. within no more than four days of the end of the month, since otherwise the manufacturer could not act with certainty: "If the preparation is delayed, the information becomes ancient history, and its usefulness is greatly impaired" [Preen, 1907, p. 84].

In the years leading up to the First World War in Britain, the costing literature illustrates an ongoing concern that manufacturers should adopt scientific costing systems. While there is most probably a link here with the development of scientific management, the precise nature of this has still to be investigated, not least because the extent of the use of either within British firms is still too little known. It is generally accepted that the concepts that are most closely linked with scientific management, namely standard costing and budgetary control, were developed in the USA during the early decades of the 20th century [Solomons, 1952; Wells, 1978; Epstein, 1978; Sowell, 1973] though Fleischman [2000] has recently questioned the extent of the use of scientific management in American firms. In Britain, although texts on these topics did not begin to appear until the late 1920s or early 1930s [e.g. Downie, 1927; Willsmore, 1932], British practice may not have lagged behind that of America to the extent that has often been suggested in the past. Indeed, there is evidence that, in the immediate aftermath of the First World War, a number of British companies began to exhibit widespread use of budgets and, to a lesser extent, standard costing [Boyns, 1998a,b; Berland and Boyns, 2002]. Amongst these, and possibly the most advanced, was Hans Renold Ltd. [Boyns et al, 2000].

CHURCH'S SYSTEM OF SCIENTIFIC MACHINE RATES

The rationale behind Church's system, as expressed in the title of his first article in 1901, was a concern for 'The proper distribution of establishment charges'. In this first article, Church considered cost to be made up of four components: material; wages; a shop charge; and a general establishment charge. The first three of these elements gave rise to 'works cost', and for Church, following his mentor, Slater Lewis, the crucial distinction was that between shop charges and general establishment charges. While the former were related to production, the latter were not, being more related to selling. Over time, however, Church modified this categorization so that selling expense was separated from other general expenses, the latter being included with factory cost (i.e. material, direct labor and factory expense) as part of 'warehouse cost' [Church, 1923, p. 382]. The addition of selling expense to warehouse cost produced what Church termed 'Sold Cost'. Although Church generally makes some mention of selling costs in his writings, this is usually only in a cursory manner, his main concern throughout being with shop charges and how they should be allocated to jobs or products.

The key to Church's method of allocation is the independent production center, which forms the basic unit of analysis. This could be a machine or a bench at which a hand craftsman might work, and all of the shop charges that could be identified with that production center would be allocated to it on the basis of an hourly (scientific) machine rate. Machine rate systems were not altogether new, having been suggested at least 50 years earlier, but Church considered them to be limited in their approach since they had concentrated merely on allocating interest and depreciation on each machine. For Church, the approach needed to be extended to cover all shop charges, as far as was possible, in a scientific manner. Thus, for each type of expense that could be attributed to a production center, in addition to the interest, depreciation and insurance charges related thereto, an hourly rate would be determined, these then being aggregated to give an overall hourly machine rate, based on the probable number of hours the machine would work under normal conditions. Church realized, however, that while many shop charges could be 'narrowed down', i.e. allocated, to individual production centers, this was not true of all of them:

In an ideal system, it would therefore be expected that this narrowing down should be carried as far as it was practically profitable to do so, and that only such

expenses as were wholly general and could not by any reasonable analysis be connected with definite points of incidence, should be treated as general shop charges, and therefore left to be averaged on the former basis [Church, 1901, p. 733].

In his 1901 paper, the types of expense which he had in mind for allocation by machine rates were those of the building, lighting, power, interest/depreciation/insurance, and overlooking and supervision. However, this paper only outlined the general method, Church noting that space did not permit a full description of how the method should be applied [1901, p. 235]. This formed the basis of his second article in 1909/10, which provided details of how to determine the production factors, i.e. unit values, for each type of expense, and the basis upon which they were to be calculated. Thus, building costs (including items such as capital cost, interest, rent, insurance, depreciation, heating, ventilation and lighting), for example, were to be calculated on the basis of square footage occupied by the machine, whereas power was to be on the basis of a charge per horsepower hour. These unit values would then become components of the overall hourly machine rates and jobs carried out on any machine would then be charged at the appropriate composite hourly rate for that machine. The total rent charge (i.e. the cost allocated against the job) would thus depend on the rate for the machine and the time occupied by the machine on the job, this amount being credited to the monthly shop-charges account, to be offset against the total expenses of the shop, which would usually comprise more than one production center.

Church recognized that the amounts so credited would not match the total monthly expense: it would be deficient to the extent of those shop charges which could not be recovered since they could not be charged to individual production centers, and those not recovered because machines were idle for some of the time. Church considered that such charges remaining unaccounted for would be small, there being "but one or two items, themselves of relatively small amount, remaining to be treated in this way" [Church, 1901, p. 37], the main item not attributable to production centers being that of the overall works foreman. To take account of the unrecovered, or unallocated, expenses, however they might have arisen, Church advocated the use of a supplementary rate which, he argued, if applied as an hourly burden, could be used as a barometer of efficiency, since the higher the supplementary rate, the greater the time machines had spent being idle [Church, 1901, p. 910]. Although the

supplementary rate concept was clarified further in the 1909/10 article, it was the subject of numerous attacks by contemporaries, and its efficacy/rationale has been questioned by accountants and accounting historians [Vangermeersch, 1988]. By 1930, the idea of attempting to allocate the cost of superfluous services to each job or product was abandoned, in favor of charging them directly to profit and loss [Vangermeersch, 1988, p. 51]. The only purpose left for the supplementary rate, therefore, was as a memorandum or indicator of utilization [Church, 1930, p. 178].

Church's overriding concern in his writings was with the proper allocation of shop charges so as to be able to determine the actual cost of production. While his interest in costs largely ended at the door of the workshop, there nevertheless remained the issue of what, in his first article, he labeled 'general establishment charges' (GEC), i.e. those costs, essentially administrative expenses, over and above those incurred in relation to production. These were considered to include "advertising, travelling, drawings, patterns, catalogues, correspondence department, cashiers and bookkeeping, management and all similar expenditure" [1901, p. 371] and were equated by Church with selling costs. By the time of his 1909/10 article, however, Church no longer makes any reference to GEC, rather he talks of general or administrative expenses. These, he argues, apparently in their entirety, can be accurately split between factory administrative expenses and selling administrative expenses. The former can be allocated to manufacturing cost through various production factors, such as those for 'organization' and 'management and supervision', included in the machine rate, while the latter can be included in the selling expense [1909/10, p. 81]. Thus, by the time of his second article, Church seems to have moved to a position where all general or administrative charges can be allocated, albeit some of them going to selling expense.

But how should selling expense be allocated? Church was well aware that they could not be ignored, since "the question of selling expense is so closely connected [to manufacturing]" [1909/10, p. 875]. Even so, he tended to give them short shrift, often stressing that selling and manufacturing expense bore no relation to one another [1901, p. 368; 1909/10, p. 81; 1929, p. 112]. Thus, in his 1930 work, *Overhead Expense*, which extends to 412 pages of text, the only reference to selling expense occurs in the final three pages of the book. In his first article, Church had been somewhat vague about how to deal with them, arguing that any method of allocation would necessarily be

somewhat arbitrary: "It would be better, of course, if the figures pertaining to general charges were as real and reliable as those of the shop charges. But there seems no possible hope of their being made so" [Church, 1901, p. 374]. Noting three possible methods of distributing GEC, i.e. on wages cost only, on works cost, or on an hourly basis according to the number of hours consumed in the production, he declared the last to be the least worst option for "ordinary manufacturing purposes" [Church, 1901, p. 369]. In his 1909/10 article, Church stated strongly that selling expenses were not amenable to any connection with machine rates [1909/10, p. 875], a view that does not seem to have changed throughout the remainder of his writings, in large measure because he viewed selling expenses as "much less amenable to standardization than is manufacturing capacity" [Church, 1930, p. 410]. Throughout his writings, Church expressed the view that since different products gave rise to different types of selling expense, the only sensible thing to do was to treat products in groups, according to the nature of the selling costs they incurred [Church, 1901, p. 371; 1909/10, p. 84; 1930, p. 411]. In his 1930 work, Church does use the term 'selling factors' [1930, p. 411], but indicates that it is hardly worthwhile trying to calculate such factors, since total selling expense can be influenced by vastly changing activities which can vary greatly from period to period.

While the treatment of selling expenses varies little between his early and later works, Church's attitude towards business growth does change significantly. In his 1901 article, as part of the rationale for the adoption of his system, Church stressed the need for up-to-date methods of shop accounting as part of a modern system of organization, especially in circumstances of business growth, whether it be in a business run by a single proprietor or a joint stock company [1901, pp. 509-511]. It can be implied, therefore, that at this early stage, Church considered his system to be of benefit in a growing business. This issue receives little or no attention in Church's subsequent works, save for a few brief words at the end of his 1930 text. On the final page of *Overhead Expense* he notes that "The whole question of an expanding business is also necessarily left out of account" [1930, p. 412]. The rationale given is that rapid expansion of a business causes great changes in the factory and would therefore result in the need for "Frequent recalculation of schedules . . . Enlargement of a department necessarily disturbs all values concerned from service factors to process rates" [1930, p. 412]. This appears to have been a tacit admission that his system of

scientific machine rates could be put under extreme pressure in times of rapid business change.

CHURCH, SCIENTIFIC MANAGEMENT, STANDARD COSTS AND BUDGETING

Church's early writings during the first decade of the 20th century clearly place him as a contemporary of F.W. Taylor. However, as Vangermeersch [1988, p. 102] has pointed out 'open war' existed between Church and L.P. Alford on the one side, and the Taylorists, led by Barth and Gantt, on the other. For Vangermeersch, part of the explanation for this antagonism stems from the lack of concern amongst the 'Taylor imitators' of any concern for the workers, something which appalled Church and which explains why his science of management "was a much broader concept than scientific management" [Litterer, 1961, p. 220]. Like Taylor, Church was concerned with methods of improving the efficiency of management, as revealed in his numerous writings on this topic, and hence his general approach to matters of organization and efficiency were more holistic than simply finding methods of improving performance on the shop floor. Church's costing system was clearly seen by him as part of an organizational structure which helped to improve managerial efficiency.

In the context of the development of scientific management, it is, of course, standard costing which is seen as being the key accounting change. It seems pertinent to ask, in the context of this study, where Church's system fits in to the overall picture. The choice of term 'scientific machine rate' to describe Church's system suggests a possible link to Taylorism, but it is far from clear that there was such a link. In his 1923 work, *The Making of an Executive*, Church set out what scientific method meant to him [1923, pp. 4-5]: "In general the scientific method depends on taking nothing for granted, and becoming familiar not only with broad or practical results, but also with the infinitely small influences and conditions that go to build up results of all kinds, both successful and unsuccessful. In other words, it is mastery of minute details and of fundamental principles that is aimed at".

Clearly Church's machine rate method was scientific in that it attempted to allocate, as accurately as possible through minute study, all shop charges to individual jobs. Church also indicated that 'production factors' provided "a wider economic value to staff organization, inasmuch as they enable standards

to be set up not only as between today and yesterday in the same works, but as between different works in different places" [1909/10, p. 190]. The combination of the scientific method and standards were clearly inter-related:

Only the accumulation of records and of compared experience can make this possible, but it will be allowed that a *general acceptance of the principle of organization by production factors would have the effect of making known the usual or standard values of such factors under conditions of good practice*, and that therefore as soon as the elements of cost, power, durability, space, and attendance of any new machine were determined, *its nominal rate under conditions of efficiency and economical installation and working would also be predeterminable with sufficiently close accuracy*. In so far as such theoretical rates are not realised in actual practice it would suggest a *prima facie* case for enquiry into causes [Church, 1909/10, p. 86 – italics in original].

Despite generally recognized as having provided a backcloth from which standard costs were developed [Vangermeersch, 1988, p. 35; Solomons, 1952, p. 42], Church himself exhibited an aversion to standard costing. In the second edition of *Manufacturing Costs and Accounts*, Church expressed the view that standard costs could not do anything that could not already be done by his standardized scientific machine rate system [1929, pp. 442-443]. Church's stance appears to have been predicated on his concern with determining actual costs: "Nothing which substitutes ratios or mathematical formulae *for the actual record of actual happenings* can be called cost accounting in the true sense, however useful it may be to efficiency engineers" [1929, p. 445 – italics in original].

In contrast, Church was more favorably disposed towards the use of budgets in business. Indeed, as early as 1923 he was expressing the view that they were "One of the most satisfactory methods of controlling expenditure" [Church, 1923, p. 392]. In Church's view, budgets should be based on "a reasonable forecast of the course of business in the coming year" [1923, p. 393] and control was to be effected through a comparison of actual outcomes with those expected [1923, pp. 394-395]. This early advocacy of the use of budgets for control purposes, at a time when the use of budgets in business was still in its infancy [Marquette and Fleischman, 1992], was clearly in marked contrast to Church's antagonistic views towards standard costing.

Having examined the key aspects of Church's scientific

machine rate system, how Church modified some of his views over time, and the links between Church, scientific management, standard costs and budgeting, it is now time to turn our attention to an examination of the development of costing at the Renold company between c.1901 and c.1920.

THE DEVELOPMENT OF THE HANS RENOLD CHAIN-MAKING BUSINESS, c.1901-c.1918

During the first two decades of the 20th century, the business which became Hans Renold Ltd. in 1903 grew rapidly. Turnover, which had more than doubled during the 1890s, from £14,000 in 1890 to £30,000 in 1900, quadrupled during the period 1900 to 1910, reaching £127,000 by the latter date, and rising to £197,000 by the First World War [Renold, c.1914, p. 224]. Even so, the company remained medium sized, not only by international standards but also by that of contemporary British business. Despite trebling since 1903, employment at the company was still only 1,350 on the eve of the First World War, far below the level of more than 5,000 workers employed by the 100th largest British company of 1907 [Wardley, 1999].

The company's rapid growth up to 1914 necessitated a number of important changes within the business, not least the move to new premises. In 1906, recognizing the need for expansion of the works, then located at Brook Street in Manchester, land was purchased at Burnage, five miles south of the city. Initially it was planned to use Burnage as an overflow plant, but the splitting of operations between Brook Street and Burnage generated logistical and managerial problems. These were overcome by erecting a second Burnage building, commenced in the middle of 1913, thereby allowing Brook Street to be vacated by early 1915 [M501 650.0124 HR903/5, Report of chairman's remarks at the annual meeting, 24 February 1915]. The nature of the problems resulting from production on two sites, while not totally responsible for, no doubt had an important influence on, the company's performance in the late 1900s. Most noticeably, at the same time as the company was expanding, in terms of employment and turnover, its profitability was declining: the ratio of profit to turnover halved from an average of 26% between 1903 and 1907 to only 12.1% between 1908 and 1911 [M501 650.0124 HR903/1, Company Minute Book 1, figures calculated from those in directors' reports to annual general meetings of shareholders].

The company was thus still in something of a state of flux

when the First World War broke out and Hans Renold became a member of the Manchester Armaments Output Committee. On 18 August 1915, at which stage 32% of the company's output comprised munitions, the Burnage works became a controlled establishment under the Defence of the Realm Act [M501 650.0124 HR903/5, Appendix to Company's Minute Book, directors' report to 14th AGM, 22 August 1916]. Within a year, 98.5% of the company's output was made up of munitions, especially shells and fuses but also turnbuckles for aircraft and aero-engine parts [M501 650.0124 HR903/3, Directors' Report for year ended 30 June 1919]. The particular problems associated with incorporating fuse manufacture within the company's existing organizational structure led to the formation of a separate Fuse Department, which later became something of a model for subsequent organizational developments after the war. In the directors' report for the financial year ending 30 June 1919, the extent of the company's involvement in war work was illustrated by the fact that throughout the war period the company had manufactured munitions to the value of £1.75m, a task which had only been accomplished by doubling the workforce to a wartime peak of 2,702 in 1917 [M501 650.0124 HR903/3, Directors' Report for year ending 30 June 1919]. The end of the war led to a rapid fall in the number employed by the company: in June 1918 the figure was only 1,995 (of whom 1,127 were women), a year later it was down to 1,500 and in January 1922 fell to a post-war low of 760 [M501 650.0124 HR903/5, Appendix to Company's Minute Book, Directors' Reports to various AGMs].

THE EXPENSE RATE SYSTEM AT HANS RENOLD AND MAJOR CHANGES THEREIN, c.1908 - c.1915

Although Hans Renold was clearly interested in costing matters, as revealed in an entry in his diary recording observations made during his second visit to the U.S. in March and April 1894 [M501 920 RH 891/1], very little is known of the costing system used by him prior to 1900. At the beginning of the 20th century, however, Alexander Hamilton Church was engaged to install a system of costing based on expense rates [M501 657.471 HR913/9, 1915 Expense Rate Report (hereafter referred to as ERR 1915), f. 66; Lawrence and Humphreys, 1947, p. 30]. While Charles Renold, many years after the event, declared that the system had been introduced from America [Renold, 1950, p. 113], Church, who had been born in England

of an American father,⁴ was clearly residing in Manchester around the time that the system was introduced. According to the 1901 Census [www.census.pro.gov.uk], Church was lodging in two rooms at 922 Ashton Old Road, Manchester, where he gave his occupation as "Expert in Organisation of Factories and Engineering Works". He also described himself as an 'employer' rather than an employee, suggesting that he was engaged by Renold in a consultancy capacity, a fact which may explain why the surviving company records of this period contain no reference to him.⁵ How long Church was engaged in implementing his system at Renold is unclear: some commentators have suggested two to three years [Vangermeersch, 1988; Scorgie, 1993] though Urwick [1956, p. 113] has claimed that he might have been there from 1900 to 1905. According to Vangermeersch [1988, p. 7], Church was introduced to Hans Renold by a close friend and fellow Manchester businessman, Leonard Massey. Apparently Church had been introduced to Massey by his company's auditor, Joseph Bell, sometime in the 1890s and, having put into place a costing system there (the precise nature of which is unknown⁶), then moved on to Hans Renold.

Despite the absence of manuscript records for the period to c.1908/09, knowledge of the Hans Renold costing system in the early years of the 20th century can be gleaned from a number of sources, both published [e.g. Renold (1913-14), Renold (c.1914), Allingham (1921-22)] and archival. The 1915 Expense Rate Report, which was submitted to the board of directors by H.G. Jenkins in December 1915, not only presents a picture of the basic nature of the system c.1915, but also provides indications as to how it had changed up to that time. As Table 1 reveals, the system underwent a number of modifications over 15 years, giving rise to five distinct phases, and was finally replaced, towards the end of the First World War or shortly after, by a completely

⁴ Alexander Hamilton Church was born on 28 May 1866 to Richard Stephen Hamilton Church and Jane Grace Quick Clemence. His parents were subsequently married on 23 October 1867, when the former was 69 years old and the latter 28 (details from a copy of the marriage certificate obtained by the author from the General Register Office).

⁵ The main records to have survived from the early years of Hans Renold Ltd. are the directors' minute books. However, those for the period to c.1908/09 unfortunately provide little useful detail on matters other than those relating to legal issues or of a statutory nature, and contain no mention at all of either Church or of the costing system.

⁶ Vangermeersch [1988, p. 7] indicates that the system was used at Masseys from about 1900 through to 1960.

different system comprising standard costing and budgetary control.

TABLE 1

Key Phases in the Development of the Hans Renold Costing System

1901 - March 1908	<i>Church I</i> : Original 'Expense Rate System'.
March 1908 - 28 July 1909	<i>Church II</i> : Modified System, including the addition of Design Expense Rate (known as Old Basis, Burnage).
29 July 1909 - 30 June 1911	<i>Church III</i> : Three Factor Machine Rate System (addition of Selling Expense Rates and sub-division of general charges between departmental indirect and general works charges).
June 1911 - December 1914	<i>Church IV</i> : 'C' rate system (rates revised in January 1913 and July 1913). ⁸
January 1915	<i>Church V</i> : based on budgeted expenses; included expense rates for general office services and research, and also a material expense rate to cover stores costs.
Mid-1917	Desire to move to a simpler, more direct system which would produce meaningful figures more rapidly.
April 1918	Trial application of standard costing in the Shell Department.

The original Renold expense rate system echoed closely that developed by Church in his 1901 article in *The Engineering Magazine*.⁹ It was based on the concept of scientific machine

⁷ This set of rates was inaugurated after Hans Renold's visit to the USA in 1909 [ERR, 1915, f. 67].

⁸ It is interesting to speculate on the nomenclature used here. One possibility is that there is a link to Church's 1917 book, *Manufacturing Costs & Accounts*, where his own costing system is described as Method C. A more likely explanation, however, is that it is short for 'compound', since the nature of the revised system enabled the generation of both simple and compound machine and labor rates.

⁹ It is quite possible that Church's 1901 article is, in fact, an attempt to set out the system he was still in the process of developing at Renold. In discussing how to deal with building expense, Church notes that the method being described "was first worked out for and applied to a factory which consisted of two parts, one being an old building of five storeys, and the other a modern shop of three" [1901, p. 31]. A photograph of Renold's Brook Street Works in 1890 [Tripp, 1956, between pp. 16 and 17] shows an older main building, five storeys high, with a newer addition of three storeys.

rates applied to independent production centers, which were charged with all expenses that could be reasonably allocated to them, and any unallocated shop charges at the end of each month were distributed over the jobs completed as a supplementary rate, which was used as an index of shop efficiency [ERR 1915, f. 66]. Having established the rates, they remained "operative from 1901 to March 1908, modified by supplementary rate" [ERR 1915, f. 66]. Beginning in 1908, however, changes began to be made to the Church system at Renold. The extent of Church's input to these changes, if any, is unknown, but it is perhaps not merely a coincidence that his second article, on production factors, appeared in 1909/10. Having benefited from the experience gained from introducing and operating his system at Renold, Church may have felt that his system could now be more fully explained to the engineering fraternity. However, the changes made to the expense rate system at Renold from 1908 do not entirely reflect Church's views as laid out in his 1909/10 article, the company apparently attempting to develop the system in ways which went beyond those advocated by Church.

Two important strands can be discerned in the changes introduced into the Renold expense rate system from 1908: an attempt to improve the allocation method so as to reduce the residual amount left to be allocated through the GEC and a concern with identifying the most effective way of incorporating production factors within the machine rate.

GEC: At Renold, the key element in the expense rate system was the fixing of the 'manufacturing rate', comprising the machine and labor rates, plus other elements which varied over time. In the original system it was found that a GEC of about 34% had to be applied to manufacturing cost to cover "General Works, General Office and selling Expenses" [ERR, 1915, f. 66]. As the company grew, and its management structure became more complex, overheads became much more significant "than they had been when the system was conceived" [Renold, 1950, p. 113]. In an attempt to reduce the amount to be arbitrarily allocated under GEC, the company began to experiment with additional expense rates from 1908. First, in March 1908, design expenses were separated from GEC by use of an hourly design expense rate, and the managing director's salary was charged direct to manufacturing. This resulted in a reduction of GEC to about 26% of manufacturing cost [ERR, 1915, f. 67]. Second, in July 1909, general charges were divided into departmental indirect

and general works, and charged at differential percentages on the sum of machine and labor. Third, also in July 1909, selling rates were introduced in an attempt to take account of all technical and commercial expenses. In January 1915, another major revision occurred. Additional rates were added, namely a material expense rate, to enable the cost of stores to be separated from the general works charge, and a rate to cover general office services and research, and a three-fold categorization of the 'manufacturing rate' was adopted: machine direct rate, labor direct rate, and an indirect rate (covering departmental expenses, inspection, general works services and general office services) (see Figure 1).

Although the selling expense rate was introduced to reduce the incidence of GEC, its implementation was the source of many difficulties. Initially it "was applied as a differential percentage on Factory Cost" [ERR, 1915, f. 70] for the various product groups in the manner stressed by Church [1901], that is, to "ensure that each class and sub-class of product got as nearly its fair share as could be determined" [ERR 1915, f. 70].¹⁰ Towards the end of 1912, however, the issue of using a single rate to cover all technical and commercial expenses came under detailed scrutiny, not least because of the large variations that existed between the estimated and actual expenses for 1911-1912. One means of attempting to resolve this issue was "to have these expenses frequently recalculated as part of a regular routine" [M501 650.0522 HR910/3, Board of Trade meeting, 16 October 1912]. A second way of overcoming part of the problem was to change the basis for allocating these expenses, and alternative methods were discussed, notably charging on the basis of invoice entries¹¹ and treating individual items of technical and commercial expenses in a different manner. In 1914, selling rates were determined on a variety of bases: some costs

¹⁰ A list of the main product classes for late 1912 indicates three main ones, namely, chains, wheels and 'machines and tools', with the first of the three classes being sub-divided into cycle, block, roller, silent liner, other silent chains, common, and mortise gear [M501 650.0522 HR910/3, Board of Trade meeting, 16 October 1912]. The selling rate was designed to cover a number of expenses, including those of the selling office, publication, the cost office, the drawing office, royalties (i.e. patent fees), costs of carriage in, etc.

¹¹ At a meeting of the Board of Trade committee held on 6 December 1912, figures had been produced showing that while the average technical and commercial cost per chain order was 18/-, using the percentage on factory cost method meant that orders were being charged amounts varying between 1/- and £20 [M501 650.0522 HR910/3].

FIGURE 1
Machine Rate Card, Hans Renold Ltd.,
30 March 1917

H.R. 131. 3000. 303/17.		191		191		191	
MANUFACTURING RATE RECORD.				DESCRIPTION			
STATISTICS				MAKER			
Rate Based on Budget				Machine Symbol			
Rate Applies from				DEPT.			
Quantity of Machines in Group				Hour Rates			
Actual hours worked by Group				A Machine Direct Rate			
Normal hours worked by Group				1 Machine Depreciation			
Normal hours worked per M/c				2 Floor Burden			
Cost of Group				3 Power			
Machine Depreciation Rate %				4 Consumption			
Machine Depreciation for (group)				TOTAL			
Group Space (incl. handling)				B Labour Direct Rate			
F.B. Direct = (Gp. Space x £.)				1 Operator's			
F.B. Indirect:Dept'l Hour Rate				2 Reward ($\frac{\text{Actual}}{\text{Possible}}$) = %			
F.B. " Unocc. Space H.R.				3 Dept'l Supervision			
HP hour rate				TOTAL			
Machine HP				C Indirect Rates			
Standard Operator's rate				1 Departmental			
Ratio of Opert's Hrs. to M/c Hrs.				2 Inspection			
				3 General Works Services			
				4 General Office Services			
				TOTAL			
				TOTAL () Mfg. Rate = A + B + C			
ENTERED	COMP.	CHECKED	APPROVED	For Details of Machines Included in Group SEE BACK.			

continued to be allocated as a differential percentage on factory cost, but others were allocated as a differential rate per invoice entry, while those to cover discounts allowed to agents were allocated as a differential percentage on selling value and those to cover royalties on all patent Silent Liner Chains as a flat percentage on selling value. Despite all of the changes, selling expenses continued to cause problems. Thus, at the Head Office meeting of 14 April 1916, Dugdale, in charge of the credit and prices section of the selling department, argued that the table of selling rates was unnecessarily complicated and argued in favor of a flat rate charge, but Jackson, who became Sales Director around this time, objected since, in his opinion, the system currently being used was more equitable [M501 650.0522 HR910/7].

Incorporating Production Factors Within the Machine Rate: The composition of the various components of the Renold 'manufacturing rate' also varied over time. Taking the machine rate as our example, prior to July 1909 it comprised four items: depreciation, power usage, consumption of tools and gas, and floor burden (i.e. the machine's share of the buildings cost based on the square footage occupied) [M501 657.47 HR 908/4, Revised Jan 1908 Cost System – reproduced in Vangermeersch, 1988, pp. 26-27]. In July 1909, however, floor burden was moved to general works expenses, but this experiment proved "not good" [ERR 1915, ff. 69-70] and it was restored to the machine rate in June 1911. Even then, the precise method of including floor burden in the machine rate was the subject of on-going discussions, in particular, as to whether it should be charged on the basis of the bare area occupied, this plus a handling area, or with an addition to cover the space around a group of machines [see, for example, M501 650.0522 HR910/2, Burnage meeting, 8 May 1912].

Up until 1909, the method of establishing the machine rate was normal hours, i.e. the number of hours the machine was expected to run under normal operating conditions. For this purpose, it would appear that the norm was established at 2,000 hours per year [Renold, 1950, p. 113].¹² In 1909, however, a

¹² Given this fact, it is somewhat strange that Solomons [1952, p. 42] should argue that Church's machine rate was based on the assumption that machines were worked at their maximum capacity, while it was Whitmore who had the insight that overheads should be spread on the basis of normal machine usage rather than maximum usage. 2,000 hours per annum was clearly less than the maximum possible at Renold, where a 48 hour working week had been introduced in 1896 [Tripp, 1956, p. 74].

switch was made to using actual hours, a move which helped to bring to the management's attention the fact that certain of the medium and large machines were working only a fraction of the possible time [ERR, 1915, f. 69]. When the system was revised again in June 1911, however, while the power and consumption factors of the machine rate continued to be based on actual hours, those for machine depreciation and floor burden (now added back) were based on normal hours [ERR, 1915, f. 71].

One other key change which affected the Renold expense rate system was the switch to calculating expense rates on the basis of budgeted rather than actual expenses, which occurred in January 1915. The benefits to the company of changing to budgeted figures were claimed to be two-fold:

- (a) Calculation of Expense Rates can be commenced before end of Financial year thereby expediting calculation with consequence of less disruption in Cost Dept.
- (b) The possibility of incorporating anticipated Trade Policy changes into Expense Rates, thereby reducing difference between Valuation of Work Done according to Expense Rates and Actual Expenses – a matter of supreme importance [ERR 1915, f. 3].

EXPLANATIONS FOR THE CHANGES TO THE COSTING SYSTEM

The changes which occurred in Renold's costing system can be viewed from two, inter-related perspectives: influences that were of a much broader nature and impinged on the costing system from outside, and problems inherent within the costing system itself. The former includes factors both external to the firm, such as the activities of competitors, the impact of war, etc., and factors internal to the firm. In this latter respect it needs to be recognized that changes to the costing system were strongly inter-connected with the growth of the business and a movement towards the development of an organizational structure, based on committees and departments, broadly in line with the views of Taylor and other exponents of scientific management. Although external factors will be touched upon *en passant*, in this section we focus our attention on three possible internal explanations for the changes noted to the costing system: organizational developments within Renold; attempts to develop a system of accounting control; and problems inherent in the costing system itself.

The Development of the Organizational Structure: In 1879 Hans Renold took over a bankrupt concern in Salford making common chains for textile machinery and, through the invention of improved products, such as chains suitable for use on bicycles and in cars, the business was gradually developed. Even when the business was converted into a limited liability company in 1903, Hans Renold, as Governing Director, retained all the powers of running the business, including that of hiring and firing directors. Towards the end of the first decade of the 20th century, however, the growth in business size, the need to control two separately located factories, and problems of a falling rate of profit on turnover (which Hans Renold blamed on managerial problems [M501 061.51 HR912/20, draft notes for chairman's speech to OGM, 15 February 1912]) all contributed to a re-assessment of the organizational structure of the business.

While Urwick [1956, pp. 48-49] has suggested that Hans Renold was the first businessman in Britain to adopt Taylorism prior to 1914,¹³ an equal claim could also be made for his son, Charles [Boyns, 2001], who was later to become a significant figure in British management circles from the 1920s through to the 1950s. On completing his MA in Engineering at Cornell University in the USA, Charles Renold joined Hans Renold Ltd., becoming a director of the company in 1906. Together, Charles and Hans began to develop a new organization structure for the business, based around committees and the introduction of scientific management techniques, moves that were accompanied by the development of organization charts.¹⁴ Although Hans Renold clearly recognized the need to devolve power to others within the organization, he does not appear to have been overly keen to do so before 1914 and, indeed, retained his powers as Governing Director until the late 1920s.

The single entrepreneurially controlled business thus began to be replaced by an organizational structure comprising a committee style of management from about 1908/09. However, as

¹³ Hans Renold [1913-14, p. 21] claimed to have met F.W. Taylor on three occasions, presumably during his numerous visits to the USA.

¹⁴ A document [M501 651.01 HR906/3] in Hans Renold's hand, dated 1908, shows a sketch of the new organizational structure which was formalized in a printed chart in November 1909 [M501 651.051 HR913/2 - see Appendix Exhibit 1], predating by eight years what Chandler has claimed to be the first table of organization in a British company, namely that of British Westinghouse for 1917 [Chandler, 1990, pp. 240-241].

Charles Renold pointedly remarked on one occasion, the committees were only advisory to his father [Renold, c.1914, p. 233]. During the second decade of the 20th century, although the committee structure underwent numerous changes, these were clearly motivated by the desire to follow largely the principles of scientific management as espoused by F.W. Taylor.¹⁵ In 1912, Charles Renold and another engineer (possibly Henry W. Allingham) were sent to the U.S. to investigate scientific management [Renold, 1950, pp. 109-110], though the company had already carried out a number of time studies of their own by this time¹⁶ and had been moving towards a functional system of organization for some time.

The succession of organization charts produced from 1908/09 (see Appendix Exhibits 1-3) clearly shows the development of the management structure towards a departmental organization based initially on functions, though from as early as 1912 there were discussions about organizing the business according to product-based departments [M501 650.0522 HR910/2, Head Office meeting, 16 January 1912]. In the event, such a development only occurred towards the end of the war, when experience gained during the war in the organization of the separate Fuse Department provided a model for subsequent organizational developments. Having effected major changes to the organizational structure prior to the First World War, further changes were introduced at the beginning of the war. Thus, between April 1914 and September 1915, the drawing offices were taken out of the manufacturing departments, to become a separate design function, with all manufacturing activity, both of chains and wheels on the one hand and machines and tools on the other, being merged into a 'Making' Department. By January 1917, however, design had been incorporated as one of four functions under 'Making', together with 'current work', 'inspection' and 'plant' (see Appendix Exhibit 2). The most significant change effected during 1916 was the appointment of two

¹⁵ It is clear from the company's minutes, however, that they did not always follow Taylor's ideas to the letter. Thus, for example, a minute for 30 July 1912 contains diagrams showing how the Burnage organization differed from that suggested by Taylor [M501 650.0522 HR910/2].

¹⁶ The company's main use of time studies occurred in the aftermath of the appointment as Production Engineer of Henry W. Allingham in November 1911 but at a Burnage Meeting on 12 June 1911 it is minuted, under the heading of piece rates, that "Mr. C.G.R. reported that the essential point is the time study and the setting of times, and this has not been so successfully carried out at Brook Street as we thought" [M501 650.0522 HR910/1].

functional directors to oversee the two divisions of the business: making and selling. 'Making' was placed under the control of Charles Renold, as Works Director, in which function he was assisted by a Works Council comprising four assistant managers, while W.H. Jackson (Hans Renold's son-in-law), as Sales Director, was placed in charge of selling.¹⁷

A further development at the same time was the appointment of the Finance and Employment Managers, H.G. Jenkins and H.R. Lloyd respectively, as an Economy Committee, with a remit to present "independent reports on matters of economy, either on their own initiative or when specially requested by the Board" [M501 650.0124 HR903/5, Directors' Report to 14th OGM, 22 Aug. 1916]. By July 1920 (see Appendix Exhibit 3), Charles Renold had taken over the role of managing director and, in order to free him from day-to-day responsibilities, three executive directors were in place: R.O. Herford (Hans Renold's nephew) as Works Director; W.H. Jackson as Sales Director; and H.G. Jenkins as Finance Director.

Perhaps not surprisingly, the changes to the company's organizational structure were not effected overnight, nor without some disruption and animosity. Although the company always prided itself on its labor relations, went to great lengths to involve key personnel in the changes and attempted, through meetings and lectures, to 'educate' all of its workforce about the nature of the changes taking place, tensions did occasionally run high, even if strikes were avoided. A particular problem which arose from time-to-time concerned the precise role and responsibilities of superintendents and it appears that some of them occasionally opposed the changes in organizational structure and operated in a way that undermined the effectiveness of such changes. Part of the problem seems to have been the almost continuous nature of change, with previous changes being far from sacrosanct, and sometimes overturned or made redundant within a short period of time. As Hans Renold often stressed, a business is a living organism and must therefore be continuously changing, but a question mark can be raised as to whether the amount of change which was effected at Hans Renold Ltd. between 1909 and 1918 was totally warranted. A generous inter-

¹⁷ The new organizational structure obviously involved a greater devolution of power than had previously been the case and it may be this, given the all-embracing nature of Hans Renold's powers as governing director, that explains the apparently significant role played by the company's solicitor, Mr. Dendy, in relation to organizational changes at this time.

pretation would be that here was a company striving to find an ideal organizational structure without a proven blueprint to guide it. Furthermore, the intervention of war in 1914 clearly came at an inopportune time for the company, generating its own forces for change at a time when existing changes had not been fully worked through. In relation to the changes effected over the previous ten years or so, the company's auditor, Joseph Bell, commented in a report into the organizational structure drawn up in 1918, that he was "of the opinion that a fetish is being made of Organization as such without a clear view being maintained of the part that Organization should bear to the Business as a whole" [M501 650.05 HR 918/3 'Notes on Organisation' (December 1918), f. 12]. In Bell's view, directors should be so free of detailed management as to concentrate on policy "and consider the results of the Management (I do not mean by this financial results alone)" [M501 650.05 HR 918/3 'Notes on Organisation' (December 1918), f. 12].

The key element in the changes made to the organizational structure prior to the outbreak of the First World War was the attempt to centralize control of the business in a Head Office Committee, while at the same time providing heads of departments and superintendents with a high degree of autonomy, providing scope for them to exercise their own initiative. As Jackson pointed out in a speech to a meeting of heads of departments and shareholders following the company's annual general meeting held on 24 February 1915, the fundamental aspect of the centralization policy was the encouragement of individual initiative without weakening central control of policy [M501 650.0124 HR903/5]. Such a design obviously had implications both for the accounting and costing systems, which had to make possible both the exercise of individual initiative and provide for effective central control of business operations.

Attempts to Develop a System of Accounting Control: The move to a departmental structure of organization and the devolving of certain powers, first from Hans Renold to other directors and then, subsequently, to heads of departments, superintendents, etc., clearly brought to the fore the issue of control and, with it, that of responsibility accounting. To help make the new managerial structure effective clearly required adjustments to the accounting system and alterations of the perception of the accounting function within the overall organization. It also increasingly brought to the fore the issue of the link between the costing and the accounting system.

The precise nature of the links, if any, between the costing and accounting systems at Renold prior to 1909 is not known. However, there is abundant evidence that, from that time onwards, they became very close and, by 1915 at the latest, appear to have been fully integrated. As successive organization charts from 1909 reveal, the costing and accounting functions were gradually brought under unified control, initially under W.H. Jackson, Hans Renold's son-in-law, who was appointed as director in charge of the commercial management of the business in 1910. By September 1913 all functions under these heads had been collected together in a single 'Costs & Accounts section', one of six sections making up 'General Services' which, during 1914, was placed under the control of the newly appointed chartered accountant, Herbert G. Jenkins, and his assistant, Percy H. Lightbody.¹⁸

More substantive evidence of a coming together of the costing and accounting systems is provided by two pieces of documentary evidence. The first is a diagram dated 1 May 1913, whose original title, 'Costing System', has been amended to 'System of Accounting', and which shows how items of original information pass through the system, are analyzed, enter into the various expense rates, pass through the cost records and generate either changes in the stock accounts, the equipment inventory or enter into customer invoices [M501 657.47 HR913/1]. The second is a set of accounting charts included in Volume 4 of the company's 'J' books, which comprised a series of standard practice instruction manuals [M501 651.02 HR911/4]. These charts, which initially use numeric codes and subsequently, by 1918, a decimal system of accounts, are suggestive of the use of a single accounting system from which costing information could be drawn as appropriate. Indeed, there is much evidence that information from the accounting system was used to determine and check the accuracy of the expense rates which formed the basis of the costing system.

Pressure for greater integration of the costing and accounting systems came from two main sources: the development of the new organizational structure and the declining profit

¹⁸ Little is known of the background of Jenkins, though he remained with the parent company for 35 years, retiring in 1948 [Tripp, 1956, p. 162]. Lightbody, who had been closely associated with the introduction of the Church system at Renold, left the company in the 1920s to join A.H. Gledhill, and subsequently became president of the Institute of Cost and Works Accountants in 1936-37.

performance of the company. Concern over the latter also led to a number of developments within the financial accounting system itself. Thus, between July 1910 and June 1911 the company began to draw up, first, monthly expenditure statements, then monthly accounts and, subsequently, monthly departmental accounts [M501 650.0522 HR910/1]. In October 1912 it was commented that these last were to be used as part of the routine being established to calculate and check the accuracy of the technical and commercial expense rates on a regular basis [M501 650.0522 HR910/5, Board of Trade meeting, 16 October 1912]. In Spring 1912, the company had begun to consult Joseph Bell on the subject of their accounting system. Bell, who had indirectly been responsible for introducing Church to Hans Renold, appears to have introduced his 'patent' system of accounting into the company around this time [M501 650.0522 HR910/2, Head Office meeting, 7 May 1912], though possibly not until after the Manchester firm of auditors in which he was a partner, Parkinson, Mather & Co., had replaced Handley & Wilde as auditors of Hans Renold Ltd. at the company's AGM held on 5 March 1913. It seems possible that it was Bell who was responsible for the introduction of the charts of accounts previously mentioned, though it cannot be ruled out that this was an innovation attributable to H.G. Jenkins.

The organizational and accounting/costing changes which occurred during the First World War were clearly interlinked. The increased centralization of accounting and costing functions led, in particular, to an enhanced role for budgets. Budgets for expenditure on patents and publicity are referred to in the company minute books as early as 1911 and, in 1912, a Mr. Hutchinson was brought in to control expenditure. Following the appointment of Jenkins as Costing Manager in 1914, however, the use of budgets for control purposes became more widespread and, in 1915, a significant development was the basing of expense rates on budgeted rather than actual expenditure figures (see Table 1). Further developments in 1916 and 1917 not only led to superintendents being held accountable for the performance of their departments but also the provision of the monthly financial accounts to assistant managers, in an attempt to widen their vision, give them a better understanding of what they were doing and make them "feel that their responsibility was more real" [M501 650.0522 HR910/9, Head Office meeting, 12 February 1917].

Despite the many innovations introduced by Jenkins and the closer integration of the accounting and costing systems

during the war, it is clear that Hans Renold was far from happy with the information being thrown up by the system. In May 1916 he had complained that the current financial reports “were not that index of the works that he would like” [M501 650.0522 HR910/7, Head Office meeting, 9 May 1916], in part attributing this to a lack of coordination and understanding between the engineers and accountants.¹⁹ A year later, in July 1917, Hans complained in particular about the fact that information showing superintendents the effects of output on costs was taking too long to reach them. Jenkins responded to the implied criticism of the costing department by blaming the superintendents themselves for delays in the provision of the raw data to the cost office [M501 658.5 HR915/2, Works (‘C’) meeting, 11 July 1917]. Thus, when plans to develop a new scheme of cost and account keeping were put forward in 1917, one desirable feature was considered to be a closer cooperation between the costs department and the works [M501 650.0522 HR910/9, Head Office meeting, 14 September 1917].

This new scheme was linked both with moves to re-structure the business around single product departments and the dissatisfaction which had been developing for some time with the Church system of costing. It was particularly desired that the new system should “provide a quick and reliable index of the financial position, and at the same time reflect the efficiency of working” [M501 650.0522 HR910/9, Head Office meeting, 25 September 1917]. To this end, as Jackson put it, “it was important to get ahead with the preparation of more direct costs wherever this was practicable, and dispense altogether with the use of machine rates &c.” [M501 650.0522 HR910/9, Head Office meeting, 31 July 1917]. The new system was based around the drawing up of monthly balance sheets and profit and loss accounts for each department, with general administrative charges only being charged to the company profit and loss account. With superintendents only responsible for direct costs, it was envisaged that this “will ensure a much livelier interest on the part of superintendents, in the success of their departments” [M501 650.0522 HR910/9, Head Office meeting, 25 September 1917]. Six months later the accounts were being reported to

¹⁹ The existence of tensions between accountants and engineers as professional groups, stemming from their different viewpoints, has been commented on in numerous historical works [e.g. Chatfield, 1977], and Church himself, of course, was an engineer who, at times, expressed negative views towards accountants.

Head Office meetings, together with a 'weekly barometer'.²⁰ Around the same time, during the spring of 1918, the company also began to experiment with the use of standard costing in the Shell Department, Jenkins putting forward a scheme for measuring efficiency based on the comparison of 'actual' with 'ideal' costs, the latter being based on time studies [M501 650.0522 HR910/10, Head Office meeting, 7 May 1918].

Thus, towards the end of the First World War, Hans Renold Ltd. had begun to abandon the system of expense rates introduced by Church in the early years of the 20th century, and to replace it by a system which utilized budgets for control purposes and standard costing. Though it was to be several years before the system was perfected [Boyns et al, 2000], the Church experiment had effectively run its course prior to the end of the First World War.

Problems Inherent in the Costing System: The experience of Hans Renold Ltd. in utilizing Church's system of 'scientific machine rates' indicates two major problems: how to reconcile actual costs with those thrown up by the costing system (a problem which was, in part, linked to the growth in GEC at the company); and how to generate meaningful figures for decision making purposes. Let us deal with each of these separately.

Reconciling Actual Costs and those thrown up by the Costing System: Insofar as they attempted to enable the allocation of ever more classes of overheads directly to production centers, the changes made to the Renold expense rate system from 1908 were clearly in accordance with the development of Church's views as reflected in his 1909/10 article. Nevertheless, and despite going somewhat further than suggested by Church, including the review of rates and their method of calculation on an increasingly frequent basis [ERR, 1915], there arose an increasing concern within the company that the costs thrown up, or attributed, by the system often failed to match the actual

²⁰ The use of the term 'barometer' possibly implies a link back to Church who referred to the supplementary rate as a barometer of efficiency. The Hans Renold Ltd. 'Business Barometer' for the first quarter of 1918 contains weekly figures for outgoings and incomings (both divided into actual and commitments), a statement of the difference between the two, plus data relating to the number of employees and overtime hours worked and their cost. The data on wages and the number of employees are divided as between those paid hourly, weekly and monthly, while incomings are divided into different product groups.

expenses incurred in the business.²¹ Even the conversion, in January 1915, to calculating all rates on the basis of budgeted rather than actual expenditure failed to solve the problems. Thus, while it was considered at the time that the changes between 1908 and 1915 had “considerably purified the calculations and the resultant costs” and that the overall accomplishments were expected to “be a considerable help in the future” [ERR 1915, ff. 1-2], in the words of Charles Renold, they simply led to “confusion worse confounded” [1950, p. 116].

Use of Costs for Decision Making: Problems arose here in relation to two issues: (1) producing a new product; and (2) make-or-buy decisions. Let us examine each of these in turn.

(1) Producing a new product. There is clear evidence in the company's minute books that the expense rate system created problems when contemplating the possibility of launching new products, and that this acted as a spur to changing the system. An illustration of this is provided by the case of the 2¹/₄-inch pitch Liner Silent Chain. The minutes of the Head Office meeting on 18 March 1913 indicate a concern on the part of Hans Renold himself that the company, for commercial reasons connected with the activity of its competitors, needed to produce a large chain of this type [M501 650.0522 HR910/3]. The minutes of the Burnage Committee meeting held on 2 April 1913 make it clear that the problem regarding this chain was that, according to the cost system, the product appeared to cost too much and could not be produced profitably [M501 650.0522 HR910/3]. Although ways were discussed as to how cheaper materials and alternative production methods might be used to reduce the cost, the discussion ultimately focused on what was seen to be the fundamental problem, namely the cost system itself. In particular, the use at the time of the percentage on factory cost method of calculating the selling rate for allocating technical and commercial expenses was seen to weigh too heavily on large chains. Discussions as to how to overcome this problem focused

²¹ In October 1912, for example, it was noted that there were “big variations between estimated and actual Technical and Commercial expenses for 1911-12” [M501 650.0522 HR910/3, Board of Trade Meeting, 16 October 1912]. It was not, however, the case that the expenses thrown up were necessarily less than those actually incurred. Indeed, at the meeting of the board held on 3 December 1915, at which Jenkins submitted the 1915 Expense Rate Report, it was agreed “for the present, not to calculate new selling rates as it is known that the existing rates are above actual cost” [M501 650.0522 HR910/6].

on methods which would reduce the cost thrown up by the system to such a level as would indicate that the 2¹/₄-inch pitch Liner Silent Chain could be made profitably, thereby enabling Hans Renold to keep faith with one of his business dictums, which he had borrowed from Mr. Sharpe of Messrs. Brown & Sharpe in the USA, "Never make anything unless it is clear that there will be a profit" [M501 650.0522 HR910/3, Head Office meeting, 5 March 1913]. Hans Renold clearly considered that the company had to make such a chain and was convinced, whatever the figures generated by the cost system, that his company should manufacture the product, and could do so profitably. If the cost appeared too high, the fault lay with the cost system, and it therefore needed to be modified. It was this experience which led to a more complex arrangement for allocating selling expenses, based on differential rates according to their specific nature, being introduced in 1914.

(2) Make-or-buy decisions. For many engineering companies, the choice between making themselves items such as components or tools for their own use, or alternatively purchasing them from external suppliers, was not always an easy one. Making such items could interrupt the flow of finished goods production where this required the use of machines which were normally engaged in such activity, or it might require the purchase of special machines which could remain idle for long periods of time. The problem of idle machine time was one that exercised the mind of many cost accountants at the beginning of the 20th century, but Church's supplementary rate concept failed to provide an adequate method of dealing with it. Bunnell [Vangermeersch, 1988, p. 35], for example, noted that by covering idle time of a big machine through increasing the rates for other machines, the loss incurred by a business through keeping a big machine for occasional jobs was effectively concealed under Church's system. It was in an attempt to overcome the problem of 'hidden' idle time that a shift to the use of actual, rather than normal, hours was made in the Renold expense rate system in July 1909 [ERR, 1915, f. 69].

The use of actual hours, however, was in itself problematic, since those machines operating only part of the time would consequently have a high machine rate and any product or job which used that machine would appear more expensive than the same job taking the same time on a less idle machine with a lower machine rate. Minutes of the Head Office meeting held on 4 December 1911 indicate a clear concern with the fact that idle time was generating high machine rates and hence high costs

[M501 650.0522 HR910/1]. To overcome the problem in relation to make-or-buy decisions it was suggested that two costs should be shown: one based on the machine rate, i.e. including charges for idle time, and the second based on the rate if the machine had been operating full time. A particular example of such a problem arising at the company, that of twist drills, is recounted by Allingham [1921-22]. Initially unable to purchase supplies of twist drills externally, Hans Renold Ltd. had acquired a machine capable of their production. Over time, however, sources of cheap twist drills emerged and, as the company began to purchase outside supplies, the twist drill machine worked less and less, with the result that its machine rate, based on actual hours worked, increased dramatically, making it appear ever more costly for the company to make its own twist drills, and thereby increasingly favoring outside purchases over internal production.

It is clear therefore that several of the changes effected to the Hans Renold expense rate system were made in the light of the fact that it was generating figures that were not helpful for decision making purposes. Nevertheless, the changes did not always provide beneficial solutions and, in many cases, only served to complicate the method of operating the system rather than to improve the quality of the information it produced. Renold [1950, p. 113] described the problem in the following manner: "In producing a cost, bits and pieces of every conceivable kind of expense had gone into the pan, and though each had contributed its flavour, the resulting omelet could not be unscrambled for examination".

Ultimately, those in charge at Hans Renold Ltd. came to realize that for the purposes of studying processes and new product designs, and making decisions in relation thereto, a system which accurately allocated as high a proportion of overheads as possible by product and processes was not necessary. All that was required was a system which enabled a comparison of costs up to producing level. Hence, Hans Renold Ltd. gradually moved to a system of 'direct' costing, that is one which merely allocated overheads to the company's overall profit and loss account, and not to individual departmental accounts [M501 650.0522 HR910/9, meeting of 25 September 1917].

FIVE PARADOXES AND A CONCLUSION

The experiment with the use of Church's 'scientific machine rate' system at Hans Renold Ltd. in the first two decades of the

20th century throws up five main paradoxes. First, although Church advocated the putting in of appropriate costing systems prior to the growth of a business, his system palpably failed the growth test. While it is possible that this may partly reflect the peculiarities of the manner in which Hans Renold Ltd. expanded between 1901 and 1918, e.g. two-stage move from Brook Street to Burnage, adoption of scientific management and the impact of the move over to munitions manufacture during the First World War, in general it appears to reflect an inability of the Church system to cope with periods of rapid business change. Such change renders the expense rates of one period totally inappropriate in the next period. Thus, while the original Church system remained operative at Renold between 1901 and 1908, subsequent developments at the company meant that changes had to be introduced at an increasing rate. The ongoing nature of change, and the unpredictability of conditions during the First World War, finally signaled the death-knell of the Church system. Although Church himself had initially indicated that his system could cope with growth, it was possibly the experience of companies like Renold which, ultimately, led him to recognize that the system could be placed under severe strain by unforeseen developments. At Renold, Church's system collapsed, in part, due to the need for almost continual re-calculation of the increasing number of components that made up the overall hourly scientific machine rate.

A second paradox relates to the fact that while the Church system was designed to generate cost figures which were as accurate as possible, the relevance of the figures which it threw up for making key decisions, especially in relation to make-or-buy decisions and the possible profitability of new products, were increasingly questioned. The changes introduced to try to make the system work more effectively, some of which went beyond the recommendations of Church, merely increased the degree of confusion and, in the circumstances of the First World War, made the system an increasingly less practicable option.

A third paradox is that while Church was concerned with administrative control through accounting [Jelinek, 1980], at Renold, the system failed to provide effective managerial control. In part, as Vangermeersch [1988, p. 28] has pointed out, this was undoubtedly due to the fact that while Church's "philosophy of accounting as a crucial part of overall management control does come through in his efforts", he failed to develop the control or decision making features of his accounting systems to the same extent [Wells, quoted in Vangermeersch, 1988,

p. 24]. At Renold, it was only when an alternative technique was introduced in the Fuse Department that those in charge of the business found a simple, and effective method of control. The way forward proved to be the use of budgetary control and standard costing, techniques which are closely associated with the development of scientific management, in connection with product-based departments [Boyns *et al*, 2000]. Given his antagonistic attitude towards standard costs, and the fact that he did not advocate the use of budgets in business until 1923, Church can hardly have been the source of these developments, though scientific management clearly was. Given the attraction of Hans and Charles Renold to Taylorism [Boyns, 2001], it is possible that if the company had never introduced Church's system, they may have begun to use standard costing somewhat earlier than they did.

There is, however, a further paradox here. A number of writers (e.g. Solomons [1952], Vangermeersch [1988]) have seen Church's system as an important precursor of the development of standard costing but, at Renold, the use of budgetary control and standard costing developed out of the failures of Church's system to cope in a simple and effective manner with the changing needs of the business. Furthermore, under the new system implemented after the First World War, the basis of the method of allocating allowable overhead expenses within the company's 'trading program by product' was that of 'cost scales' derived from special cost studies [M501/ 657.31 HR923/1]. While experience gained by the company's costing and accounting staff in operating the Church system proved beneficial in determining these scales, under them, overheads were to be "related to the wage cost of any item of product or process" [M501 920 RCG 921/1, p. 5]. Thus the experiment with the Church system, the fundamental principle of which was to provide an alternative to simple methods of allocating overheads based on a single factor, be it as a percentage of labor or prime costs, failed, only for the system to be replaced by one in which overheads were allocated in precisely such a manner.²²

²² This finding, therefore, is consistent with that of Johnson and Kaplan [1987, pp. 127-128] who discerned a retrograde move around the time of the First World War from sophisticated systems of overhead allocation aimed at determining the costs, and hence profits, of individual products, to ones which involved aggregated pools of overheads and direct-labor application thereof.

A fifth and final paradox concerns the relationship between the ideas of Church and Taylorism. Although Church's emphasis on the use of accounting to improve the efficiency of management was in line with Taylor's concept of the mental revolution, the use of both Church's method and Taylorism at Hans Renold Ltd., at least at first, does not appear to have been totally in keeping with these ideals. In reflecting on the initial experiments with scientific management some 30 years after the events, Charles Renold commented that: "It is noteworthy that a movement which began with attention focussed on speeding up individual workers ended with attention focussed on management and the means of control, coupled with great attention to the relationship between management and workers" [M501 650.05 HR938/1, f. 5].

It would appear, therefore, that senior management at Renold did not fully realize the implications of the methods they were adopting, at the time that they began to use them.²³ In this sense, Church's warning that new systems would take time to implement was correct,²⁴ but perhaps for reasons additional to those that he suggested, including the need for those adopting them to understand their full implications. Indeed, the full development of budgetary control and standard costing at Hans Renold Ltd. did not occur overnight, and the system was subjected to numerous changes over the succeeding years [Boyns *et al.*, 2000; Renold, 1950].

Conclusion: This study has shown clearly the problems that can be faced by a pioneering user of new accounting systems, especially where the system adopted has not been fully thought through, particularly in respect of its practical application. Various pieces of evidence suggest that Renold may have been the

²³ It is also possible that Taylorism may not have been totally applicable at Renold. Charles Renold indicated that the company had begun to adopt Taylorist ideas such as standardization, time study, incentive payments systems c.1910 in the department producing wheels for chain driving, and this had been extended to other departments between 1911 and 1914 and then during the war to the production of munitions [M501 650.05 HR938/1, Notes on the development of scientific management at Hans Renold Ltd., 24 January 1938, ff. 1-2]. However, Charles went on to note that the method adopted differed between departments, and that the use of functional foremen had led to chaos, the company spending the period 1914 to 1921 "reconstructing the conception of management organisation" [ibid, f. 2].

²⁴ This was also the view expressed by Hans Renold himself just before the First World War [1913-14, pp. 23-27].

initial experimental proving ground of Church's scientific machine rate system and, if this is so, then the result was a negative one. At Renold, Church's system failed to live up to the claims made for it, a fact which may help to explain why its broader, long-term impact in the costing field appears to have been less than that of other systems. It has long been recognized by accountants and accounting historians that Church's system was flawed, especially in regard to the supplementary rate concept [Solomons, 1952, p. 28], but it was also the practical operation or, more correctly, increasing inoperability of Church's system at Renold which led to its replacement by standard costing and budgetary control. It was not that Renold did not give the system a chance. The system was operated for over 15 years, and attempts were continuously made from 1908 to make the system work more efficiently, but the rapidly changing circumstances of the company, exacerbated by the effects of the upheaval to production generated by the First World War, were beyond the ability of the system to cope.

Johnson and Kaplan [1987, p. 128] have suggested that if those operating the system at Hans Renold Ltd. had had available to them computers and electronic measuring equipment then the outcome might have been different. Clearly this would have eased the problem of the increased number of calculations that became necessary over time, not least to reflect changing conditions, but it is our contention that the problems went deeper than this.²⁵ Some aspects of Church's system do not seem to have been fully thought through, e.g. how to deal with selling expenses, the precise way to allocate certain production factors, the role of the supplementary rate, etc., and it was this which led to the breakdown of the system and resulted in calls within the company for a simpler and more effective costing and accounting control system. It was these demands which gave rise to the replacement of Church's system by standard costing and budgetary control. This move, like that of the development at Renold of the use of organization charts and decimal charts of accounts,²⁶ was undoubtedly influenced by the ideas of scientific management. However, these later developments were put into

²⁵ Indeed, at the heart of the problem with Church's system is the question of whether or not there is any way of effectively allocating all overheads to products in a meaningful manner.

²⁶ At no stage did Church embrace such systems and his idea of an accounting chart was a diagram illustrating the flow of information through the various ledgers and journals (see, for example, Church [1929], Fig. 145).

effect not by a 'professional business organizer' like Church,²⁷ but were developed in-house over "a number of years by men grown up and engaged in the business during its existence of 34 years" [Renold, 1913-14, p. 29]. Although the trials and tribulations of the First World War clearly played a part in the rise of standard costing and budgetary control at Renold, it was through the additional impetus that they gave to methods already being developed within the firm to overcome already existing problems and pressures, rather than through any explicit impact of the costing requirements imposed by the Ministry of Munitions.²⁸

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| 920 RCG 921/1 | Paper by Charles G. Renold entitled 'Budgetary Control in the organization of Hans Renold Limited', presented to the International Management Institute, Geneva, 1929. |

²⁷ Indeed, just before the First World War, Hans Renold [1913-14] implied a dislike for such individuals, possibly reflecting his company's experience with Church and his system.

²⁸ While the various minute books of the company's different committees contain much information of a technical nature relating to the production of war materials, there are very few references to the impact of the Ministry of Munitions on costing. One of the few is a minute of the Board, dated 7 March 1916, where it is noted that the company will need to draw up four balance sheets, one each for: the shareholders; income tax; excess profits; and the Ministry of Munitions. Three weeks later, it is clear that the company's method of valuing stocks was causing concern, it being noted that if the Government required the company to re-write its stock values, this would be done "with the Establishment Charges included at 100% of Direct Labour Cost" [M501 650.0522 HR910/7, Head Office Meeting, 28 March 1916]. A week later it was noted that the Ministry of Munitions had no desire to send an Accountant to Manchester to investigate the company's accounts and that, as long as the company had not changed its method of stock valuation during the period of assessment, it would be simpler to leave things as they were [ibid, 5 April 1916].

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APPENDIX

EXHIBIT 1

Organization Chart, Hans Renold Ltd., November 1909

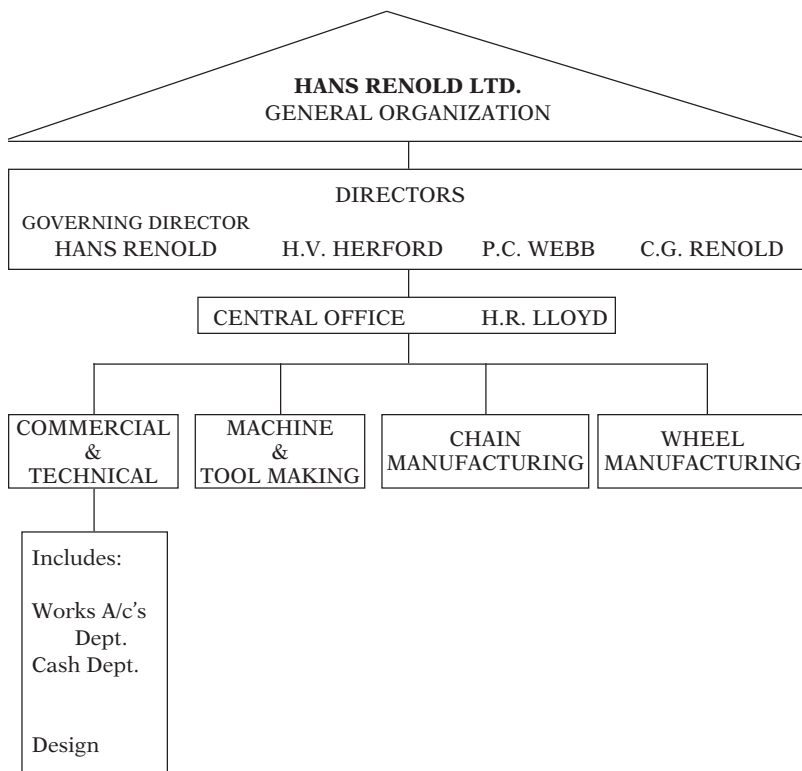


EXHIBIT 2
Organization Chart, Hans Renold Ltd., January 1917

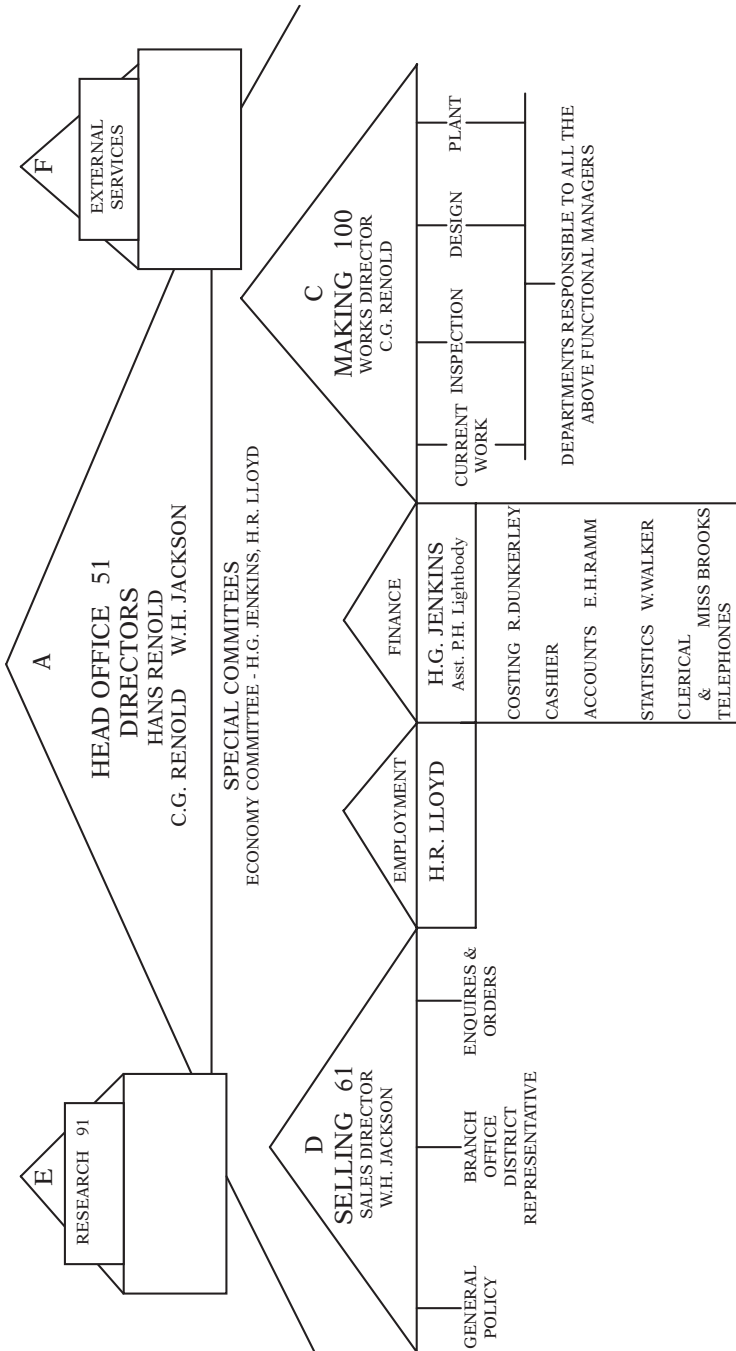
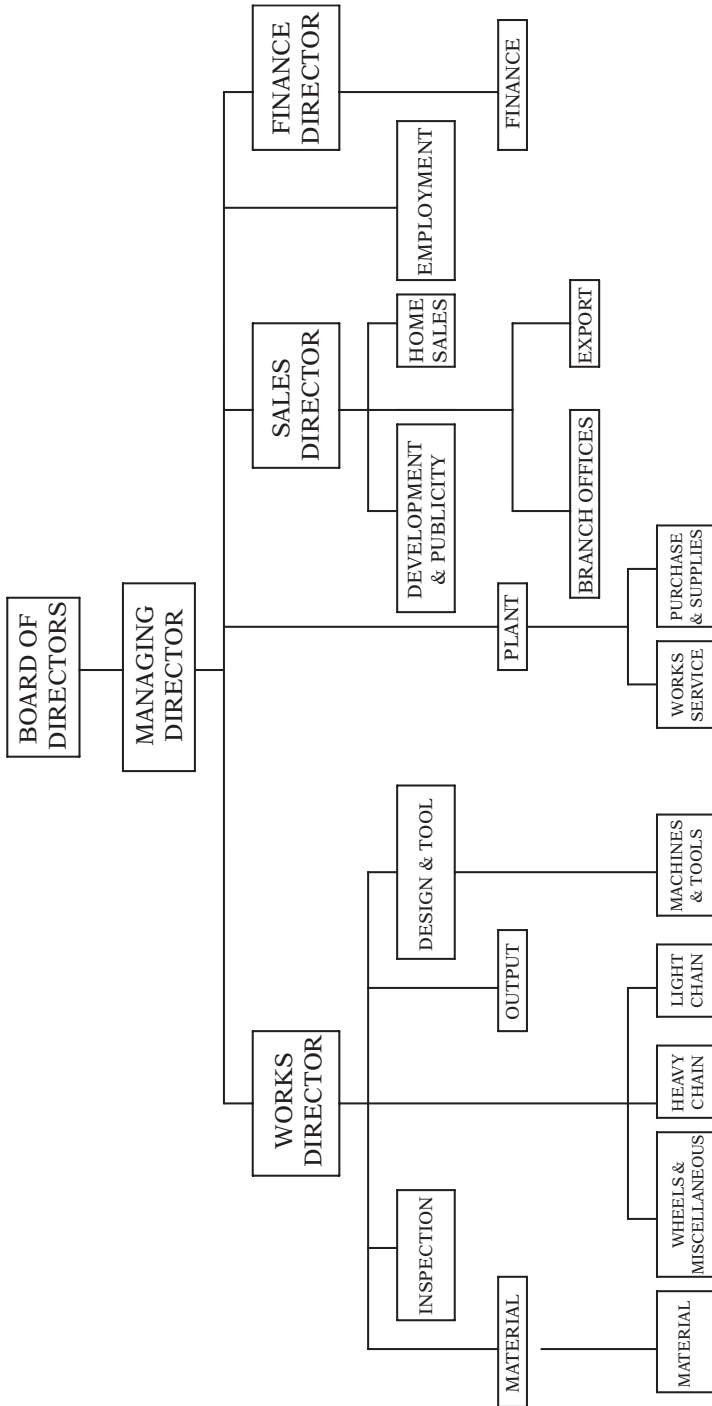


EXHIBIT 3
Organization Chart, Hans Renold Ltd., July 1920



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Susie Brackenborough
UNIVERSITY OF NEWCASTLE

'POUND FOOLISH PENNY WISE' SYSTEM: THE ROLE OF ACCOUNTING IN THE IMPROVEMENT OF THE RIVER TYNE, 1800-1850

Abstract: The relationship between accounting and governmentality, and the increasing statutory regulation of companies by central government during the 19th century have attracted a great deal of attention from accounting historians. Conversely, accounting change within local authorities in this period has attracted far less attention. The paper examines the consequences of the increase in public accountability of local authorities in England and Wales in the context of the Newcastle Corporation, the body responsible for collecting and distributing the town's wealth. During the first half of the 19th century Newcastle Corporation was heavily criticized for neglecting the improvement of the River Tyne. The paper illustrates how the Newcastle Corporation and those opposed to it used accounting as a lobbying tool to promote their interests. Gallhofer and Haslam [2001, p. 29] showed how, in the late 19th century, "radical political activists" used accounting data through the medium of the press as an "emancipatory" practice. In many ways, the case of the improvement of the River Tyne during the early 19th century also reveals the use of accounting as an 'emancipatory' force by opposition groups. The paper finds that the Corporation used accounting data to justify inaction and the opposition used accounting data to promote its objectives. These contests resulted in the control of the River Tyne being taken from the Corporation and placed in the hands of a trust in 1850.

INTRODUCTION

The relationship between accounting and governmentality during the 19th century is a key issue in the accounting literature. For example, Armstrong [1994, p. 41] describes how a

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“second generation of Foucault-inspired work” has explored the role of accounting in facilitating governmental “action at a distance” [see also Callon, 1980; Latour, 1986, 1987; Miller and O’Leary, 1989; Miller, 1990; Miller and O’Leary, 1990; Miller, 1991; Robson, 1991; Rose, 1991; Preston, 1992]. A more recent example is Neu’s [1999, p. 79] study of the indigenous people of Canada in the 19th century, which examined the contribution of accounting to the British military machinery of empire. Neu showed that it was only with the aid of accounting that “distant territories and their occupants” could be governed by the Imperial government in London.

The increasing statutory regulation of company accounts by central government during the 19th century is another area that has spawned many studies. Most historians concur with Edwards et al [1997, p. 4] that “the emergence of the joint stock company gave rise to the need for published accounting information”. An early study by Hein [1978] and a more recent study by Maltby [1999] examined regulation in the context of the development of the accounting profession. Hein stated that it was through statutory regulation that accounting control has often been achieved [p. 75]. Maltby [1999] examined the “factors in the emergence of a new jurisdiction” in relation to the establishment of a statutory framework through the Joint Stock Companies Act, 1844 which provided the first statutory steps towards accountability within companies, and the subsequent climb down in 1856. Storrar and Pratt [2000] enhanced the study of statutory regulation by considering “the causes of secrecy and the circumstances in which it [UK company law] came into conflict with accountability in registered companies in the UK [1844-1904]” [p. 259]. They concluded that there was an increasing acceptance by directors of the need for accountability to investors but this often conflicted with the “perceived need for commercial secrecy” [p. 285]. Jones and Aiken [1995, p. 78], expanding on an earlier paper by Parker [1990], explained changes in the statutory framework in the context of a “distinct cultural evolution”.

Conversely, accounting change within local authorities during the 19th century has attracted far less attention. Studies by the Webbs [1906, 1908] and Fraser [1979] examined local government in Britain from the Glorious Revolution, 1688/9, to the Municipal Reform Act, 1835, and during the Victorian era respectively, from a distinctly political and economic point of view. Moreover, the main accounting studies relating to ‘local government’ have tended to take the form of an overview, some

more detailed than others, of the statutory and accounting changes over the century following the 1835 Act. Most notably, Coombs and Edwards' [1993, 1996] case studies describe the accounting methods of several corporations and explain why accounting changes occurred. They also looked at the accounting procedures implemented by the evolving professional bodies which, by the end of the 19th century, started to form what we now call public sector accountants. Other studies have been produced by Edwards [1992] and Jones [1989, 1992].

There have been a handful of studies of particular corporations. Livock [1965], for example, produced a descriptive analysis focusing on the progress and development of the accounting system of the Bristol Corporation for the years 1532-1835, but did not venture beyond the Municipal Reform Act, 1835. There has been one study of the Newcastle Corporation. Halcrow [1953] wrote two papers in the "Mr. Treasurer" series in the *Local Government Finance Journal*. Her papers provide a descriptive outline of the development of the accounting and administrative role of the Common Council from the earliest extant records to 1835. Halcrow clearly shows that it was the Common Council who controlled the administration of the town's finance by issuing orders "no less than royal charters" [p. 151]. Again, however, the study did not go beyond the 1835 Act and into what Coombs and Edwards [1993, 1996], Edwards [1992] and Jones [1989, 1992] would describe as the 'watershed' years in the way that local authorities approached accounting.

The current study explores the consequences of the increase in public accountability of local authorities in England and Wales in the context of the Newcastle Corporation and the improvement of the River Tyne in the first half of the 19th century, a subject not previously examined. During this period, Newcastle Corporation became increasingly accountable for the river with the publication of accounting data. This data was exploited by an ever-expanding opposition who objected to the continuing neglect of the River Tyne and its port facilities. Even though the majority of the Corporation's income came from the river, only a small amount was expended on its improvement. There had been pressure amongst traders to improve the river early on, but it was only with the publication by the Corporation of annual accounts of receipts and payments that the extent of the neglect became visible and the opposition, comprising members of the press, corporation and interested parties from the localities, gathered forces and change was ultimately achieved.

The study takes the issue of local authority accounting

further. It illustrates how the municipal reforms that took place (most importantly during the first half of the 19th century) allowed both opposition and councils to use accounting as a lobbying tool to promote their interests. As will be seen, opposition to the Newcastle Corporation utilized accounting data to place a great deal of pressure on the Corporation. It did so through the mediums of public meetings, petitioning and, most importantly, voicing claims through the press. Newcastle Corporation, on the other hand, reciprocated by using the accounting data to justify their inaction over the River Tyne. Therefore, the study supports the hypothesis that accounts are used to promote economic interests, irrespective of the explicit purpose for which that information was prepared [Watts and Zimmermann, 1979; Oldroyd, 2001].

The field research for this study consisted primarily of an examination of the archival records and minutes relating to the River Tyne and Newcastle Corporation. These are found in the Tyne and Wear Archives and in the local studies sections of Newcastle upon Tyne Central Library and University of Newcastle upon Tyne Library.

The study is organized as follows. The next section describes the historical background to the study. The third section looks at the development of accounting within Newcastle Corporation and other local authorities in the early part of the 19th century. Section four explains the Corporation's reluctance to improve the River Tyne. The final section draws together the main arguments and focuses on the Corporation's use of accounting data to justify inaction, and the opposition's use of accounting data in promoting their interests. It is argued that the outcomes of this conflict were parliamentary bills and 'Admiralty Enquiries' in 1849 and the eventual decision to place the control of the Tyne in the hands of a trust in 1850.

HISTORICAL BACKGROUND

In 1600, Queen Elizabeth's "Great Charter" gave monopoly control over the coal trade and principal council offices in Newcastle to the Hostmans' Company¹ in return for a shilling tax on every chaldron (a measurement of coal) of coal shipped

¹ Mackenzie [1827, pp. 703-704] traces the Hostmans' Company's origin back to a statute of Henry IV, in 1404 where they "seem to have been a kind of mediator between buyers and sellers". They loaded and unloaded the trade, at this time the bulk of which was coal and stones.

from the River Tyne. Six years later the Hostmans' Company gained the right to exercise Admiralty jurisdiction over the Tyne and with this came the responsibility to improve and maintain the river. Trinity House, which was established in London by royal charter in 1514, had control over the ports in the areas of London, Newcastle, Hull and Leith. Comprised of masters, pilots, seamen and merchant navy captains, its role was to regulate pilotage on the Tyne as well as act as a general lighthouse authority and charitable organization for the relief of mariners. In Newcastle: "The river jury² (who sat in the Court of Admiralty) was formerly composed of the gentlemen of the trinity-house, who were by far the fittest men for the purpose . . . the corporation thwarted the river jury, that the corporation complied with many requests which the river jury had refused to comply with and that, in consequence of all this, the river jury of trinity-house gentlemen gave up in disgust . . . then were succeeded by the cobblers, tailors, saddlers, slaters, smiths and the like [appointed by the Corporation]" [Mitchell, 1823, p. 17].

During the latter part of the 17th century, political allegiance played a large part in the make-up of the Newcastle Corporation. Following the resignation of the brethren of Trinity House, the Corporation was free to use its ancient electionary powers to fill the positions available on the river jury with men from the mysteries and societies³ of Newcastle who favored their views. Consequently, at the time of Mitchell's writing, the river jury was composed of "only two or three . . . [who] know any better how to conserve the navigation than they know how to navigate a ship to New Zealand" [ibid, p.12]. As a result, the River Tyne remained neglected and there was very little change in the way the Corporation was directed and controlled in

² This jury was made up of members from the various trades and bye-trades [see footnote 3]. The majority were not qualified in river matters but made up the corporation committees by virtue of their position in political society. They were responsible and Mitchell [1823, p. 18] implies subservient, to the corporation and for conservatorship of the Tyne.

³ There were 12 Companies called Mysteries, representing groups of traders. These were Merchants, Mercers, Drapers, Skinners, Tailors, Saddlers, Bakers and Brewers, Tanners, Cordwainers, Butchers, Smiths, Fullers and Dyers. The earliest trade incorporated in 1436 (Smiths) and the last in 1621 (Butchers). There were also 15 societies called Bye-Trades. These were not Mysteries. These were Mariners, Weavers, Barber Surgeons, Cutlers, Shipwrights, Coopers, House Carpenters, Masons, Glovers, Joiners, Millers, Curriers, Paviours, Slaters and Glaziers. The earliest trade incorporated in 1426 (Coopers) and the last in 1656 (Paviours).

Newcastle until well into the early part of the 19th century when the political climate started to change.

The Corporation was aware of the navigation problems of the river as large sums of money were spent on assessing the conditions of the Tyne. The most significant report was by John Rennie, canal and river engineer, costing in excess of £2,000. His report as to “the best mode of improving its navigation”, produced in 1816, was to be a “benchmark” for the future improvement of the Tyne [River Committee, 1836]. However, his cost estimate for improving the river of £519,320 (more than ten times their annual total receipts) dominated the Corporation’s attitude towards carrying out any major improvement for years to come. It was recently commented: “The cost of his scheme was of major concern to the city and erring on the side of caution, the report was accepted but no action taken” [Port of Tyne, 1999, p. 43].

The state of the River Tyne, described as a “cursed horse pond” [Mitchell, 1823, p. 27] in the late 18th century, worsened through the inaction of the Corporation. There are numerous accounts of traders complaining to the Corporation that ships were running aground and or unable to get into the port due to the silting up of the river. Damage was being done to ships. The comment of one trader was typical: “It [is] a most difficult thing to charter a vessel in the Mediterranean, though coppered . . . they said they received greater injury to their bottom in the Tyne, than at any other place they went to; and that its repair cost more than any addition which was made to the freight” [Newcastle Town Council Proceedings (NTCP), 1840, p. 9].

Despite such complaints the Newcastle Corporation remained unmoved. As Guthrie [1880, p. 5] explained “The pressing necessity for enlarged harbor facilities to meet the requirements of modern commerce, and to withstand the competition of other ports was, apparently, not sufficiently felt. There seems likewise to have been a . . . great fear that the town’s revenue would be uselessly squandered in embarking on such an enterprise”.

In Newcastle foreign trade started to increase towards the end of the 1830s when the doors were opened to trade with India, China and the Levant. Improved shipping technology and design enabled ships to carry more and at a faster rate, increasing the volume of trade, especially with Germany and Holland. However, the Tyne was not well placed to take advantage of this. One councillor commented that “The River did not afford that accommodation to the increasing commerce and trade of the

port, which was imperatively demanded" [NTCP, 1839, p. 5]. A report of the Newcastle Corporation's Committee on Trade stated "The most obvious means of increasing the trade of the port, within the power of the Council, is the improvement of the River" [ibid]. A comment made in the *Tyne Mercury* [1833], shows that rivers were being better managed elsewhere, such as on the River Clyde where "[River dues] are kept distinct from the Corporation's funds, and are laid out in deepening and improving the river and harbour and in discharging the debt of the trust" [*Tyne Mercury*, 1833].

Trade figures from Johnson and Aughton [1925, p. 40] show that greater improvements occurred after 1850, when, by an Act of Parliament, control of the River Tyne was taken from the Corporation and given to a body named the Tyne Improvement Commission purposely created to control the affairs of the river. The number of foreign vessels trading inwards to the port was 708 in 1843 and 1477 in 1863. The number of foreign vessels trading outwards from the port was 4088 in 1843 and 8074 in 1863.

What the Corporation did spend money on prior to 1850 in the name of improvement was called "Pound Foolish" expenditure because it did not improve the River Tyne. For example, the purchase of a dredger, was described in the press as a "DESPI-CABLE machine which, at an expense of £3,000 . . . is only fit to clean out a gentleman's fish-pond, and perhaps not that" [*Tyne Mercury*, 1838]. Mackenzie [1827] tells us that the Corporation "were so far roused to a sense of their duty" as to employ Rennie and presumably the same went for Cubbit. Engineers, who were asked to report on the condition and improvement of the Tyne, often had little local knowledge and although their engineering abilities could be applied to any locality their commercial and financial knowledge could not: "[They] had not sufficient knowledge of the traffic on the river to offer any opinion respecting it" [NTCP, 1838, p. 6]. These engineers' estimates for improvement, based on vastly inflated London prices, created an over-prudent Corporation and caused it to err on the side of caution. This was the case in Rennie's report of 1816 and in Cubitt's report of 1837:

Extending the quay and applying the dredging machine to the river . . . the sum [required] would alarm the Council . . . Mr Cubitt calculated that the works could not be conducted together at a less annual sum than 10,000*l* . . . (Councillor Doubleday) and the River Committee also, were of opinion that the two designs could

be carried into execution at an annual sum considerably less: and this opinion they grounded on the fact of having made enquiries of builders and others, as to the prices of stone, labour etc. in this part of the kingdom as compared with the prices in London, on which Mr Cubitt had formed his estimates [NTCP, 1837, p. 1].

The River Tyne was seen as requiring huge investment before any great benefit could be obtained, and the Corporation prioritized town and other expenses out of their limited funds. The Corporation often directing whatever expenditure it liked for the improvement of the town:

It had been proposed to build new Town Courts, Corporate Offices and Judge's Lodging House . . . [One councillor] had been astonished to hear one gentleman say, that not only might the ground in question be involved in this expenditure, but that they might expend any sum they pleased upon it — while the river Tyne, from which they derived the greatest portion of their revenues, and upon the improvement of which a large portion should consequently be expended, was to be left entirely out of consideration [NTCP, 1838, p. 22].

Local and resident engineers also produced reports on the condition and improvement of the River Tyne, but perhaps it was felt by the Corporation that these men were not of sufficient standing to arouse opposition to their policy on the river. Consequently, eminent engineers were brought in to survey a river Tyne which everyone recognized was in need of huge investment. The scale of the investment required meant that the Corporation would not be able to avoid debt and reduce costs, a policy they strongly adhered to. All the time and money spent on engineers' reports was arguably wasted as, more often than not, the reports were buried and little, if any, action was taken to improve this vital artery of commerce.

THE DEVELOPMENT OF ACCOUNTABILITY IN LOCAL AUTHORITIES

At the beginning of the period of this study "Corporations were private rather than public institutions, responsible to their members, the freemen, rather than to the citizens at large and committed to property interests rather than to the welfare of the town" [Fraser, 1979, p. 2]. Each corporation had its own approach to accounting. As far as Newcastle Corporation was concerned, accounting techniques were "firmly established in medi-

eval times” and the main focus of its financial management was to avoid debt and minimize costs [Halcrow, 1953, p. 152]. The state of the accounts prior to 1809 “showed the total receipts, total payments and the balance at the end of the year in three lines” [NTCP, 1833, p. 86]. The County Rate Act, 1815 required local authorities to publish their accounts. Halcrow [1953, p. 200] tells us that it was at this time that pressure was placed on Newcastle Corporation to publish its accounts: “In the early decades of the 19th century it was recognized that there was room for improvement in the methods of book-keeping . . . a number of petitions addressed to the Common Council by the Stewards of the Incorporated Companies focused attention on the accounts and prepared the way for change”.

Until their publication in pamphlet form by the Newcastle Corporation from 1818, the accounts could only be inspected by Companies and Freemen⁴ and “only a very few copies of the Corporation accounts are printed annually from a statement given to the stewards by their auditors” [Mackenzie, 1827, p. 640]. There were 24 auditors in total, two from each of the 12 mysteries. The auditors were often elected by “attending the election meeting” [ibid, p. 637] rather than according to ability. They were often the subject of severe criticism:

During many years the auditors placed large sums under one head, without any proper explanation . . . merely signed the chamber-clerks general account, as entered into the book, without examining either bills or receipts . . . (a) consequence of this neglect of duty in the auditors, negligence and corruption began to creep into the revenue department of the Corporation, until at length a spirit of dissatisfaction spread through the whole burghesses [ibid].

In 1809 most of the mysteries nominated men who “appeared willing and qualified to fulfil their oath”⁵ [ibid] and the unsatisfactory accounting procedures of the past were exposed. For example, auditors found substantial arrears due to the Corporation. They also discovered accounts from former years

⁴ All members of the Newcastle Corporation were Freemen and had vested interests in the town. They elected the Common Council and monopolised the powers and offices of town government before the 1835 reform.

⁵ The role of the auditors as defined by the Town Clerk of Newcastle at the 1834 Municipal Corporation Investigation was as follows: “they audit and compare all accounts with the vouchers, and see that there is an order from the governing body for each payment. These are their admitted functions; but they take upon themselves to make recommendations to the common council”.

that had never been closed and on which it was resolved “that the whole accounts be laid before us this year, or we will not sign the book” [1809, Auditors report of proceedings]. After a short dispute with the Corporation, the auditors obtained the remaining books and accounts requested and were able to complete the audit. In 1823 “the accounts were published in a pamphlet form and all the details clearly arranged under distinct heads” [Mackenzie, 1827, p. 641]. Cook [1961] adds that “In 1830 the auditors secured the publication in full of the corporation accounts . . . this was a substantial victory in a battle that had lasted since 1809” [p. 222].

Accounting reform occurred at different times across the U.K. Glamorgan Corporation’s accounts were published in the *Bristol Gazette* in 1793.⁶ Nottingham Corporation’s accounts were available for inspection by local freemen in 1795. Middlesex Corporation first printed accounts in 1815 and Liverpool Corporation did so in 1816 “as a result of popular agitation” [Livock, 1965, p. 100]. The early 19th century saw increasing resentment that political power in the municipalities was in the hands of a wealthy few. This sparked the move for a ‘Municipal Investigation’ and new corporations were formed under the Municipal Reform Act, 1835. This Act applied to 184 English and Welsh boroughs and attempted to bring corporations more in line with the social and demographic changes brought about by industrial progress and ultimately make them more accountable to the ratepayers.

Prior to 1835, charge and discharge accounting was widely used in many boroughs. However, Coombs and Edwards [1996, p. 48] comment that some boroughs also used double entry bookkeeping because “Charge/discharge accounting proved inadequate to meet the needs of municipal corporations due to the number, nature and rapidly expanding range of transactions undertaken during the late eighteenth and early nineteenth centuries”.

After a second statute was passed in 1835, the Municipal Corporations Act, corporations were obliged to produce an annual return of receipts and expenditure and “a full abstract of his [the Treasurer’s] accounts” to be available for inspection and purchase by the ratepayers “on payment of a reasonable price for each copy” [Municipal Corporations Act (MCA) 1835, S.93].

⁶ It is likely that they were published in Bristol as well as Glamorgan because Bristol was the main trading centre in the south west of England.

The Act did not mention the form the abstract should take but did state that it "should show all monies received . . . and disbursed" [ibid, S.60]. Furthering the accountability of corporations, ratepayers could also inspect the corporation's books, accounts and minutes. However, as Edwards [1992, p. 68] tells us "the amount of financial information these contained varied considerably from one authority to another".

One can clearly see from the accounts of the Newcastle Corporation, [see Figures 1-4], great improvement in the level of detailed disclosure, rendering the activities of the Corporation more open to social and political debate. In 1809 [Figure 1] the accounts, in a receipts and disbursements format, show very little detail. Most notable is the disbursement title "General Payments" with a large sum of £16,413 (nearly half the total amount) and no further explanation. By the time of the first publication nine years later, of accounts in a "Receipts" and "Payments" form, there had been some improvement in the level of disclosure [Figure 2]. In 1833-1835, the accounts were headed "Charge" and "Discharge" for the first time and the printed copies contained printed names which acted as a signature of the accounts for the year ending 1835 [Figure 3]. One noticeable feature of the accounts is the attention to detail on the "Payments" side, with added notes of explanation. By the end of the period of study, the level of disclosure was much greater than in previous years [Figure 4].

CONFLICT OF INTERESTS

As a product of the 1835 Act, the newly formed Newcastle Corporation consisted of men from a wide range of business activities — booksellers, tanners, bankers, printers, manufacturers, lawyers, doctors, but only one shipowner. The Corporation had no representation from other towns located on the River Tyne. Towns such as South and North Shields and Gateshead were desperate to see the river improved. Further, the representation of nautical and trading interests on the Corporation willing to voice concerns about the river was not significant. Most representatives enjoyed the power they gained from their corporate position and remained silent on the subject of river improvement to remain popular with the rate-paying voters. The majority of the Newcastle Corporation elect, made up of '56 gentlemen'; had substantial property interests in the town and preferred efficient roadways and local utilities to river improvement: "The Municipal Corporation, which owned and taxed the

FIGURE 1
Newcastle Corporation Accounts 1808/9
CORPORATION ACCOUNTS FOR THE YEAR 1809.

RECEIPTS.		DISBURSEMENTS.	
£.	s. d.	£.	s. d.
Duty on Coals.....	3695 2 3	Interest of borrowed money.....	2795 8 0
Duty on ballast.....	8789 8 2½	Annuities.....	3021 15 2
Duty on Ship and Boat.....	894 3 8½	Conveyance of Ballast.....	3019 7 3
Goods and merchandise.....	642 17 2¼	For Town's Works.....	4195 0 6
Freemen's admissions.....	44 0 0	Salaries.....	4126 4 3
Town's rents, &c.....	15045 17 2	Town Clerk's Bills for Two Quarters.....	300 1 8
Monies raised on annuities.....	2755 0 0	Town Marshal's Bill of Disbursements.....	774 7 9
Monies borrowed on interest.....	3070 0 0	Stationeries.....	104 13 1
Balance of last year.....	124 16 7½	General Payments.....	16413 4 11
Total.....	£35501 5 2	Total.....	£35500 2 7

The State of the Accounts, as closed by the Chamber Clerk, exhibited to and Objected by the Auditors on Friday.

Receipts as above.....	85601 5 2	Rents paid after the books were closed.....	1016 6 10
Payments ditto.....	86500 2 7	Monies remaining due to the Hutch.....	8343 5 11½
Balance.....	£1 2 7	Balance from the Chamber Clerk's Statement.....	1 2 7
		Total Amount carried to next year's Account.....	£9360 15 4½

The Statement obtained by the Auditors on Monday, Oct. 2, 1809.

Source: [Figs. 1-4]. Newcastle Corporation, 1849, *An Account of the gross income and expenditure of the Corporation of Newcastle upon Tyne as published annually for the last forty years*, Newcastle: Hugh McColl.

FIGURE 2
Newcastle Corporation Accounts 1817/8
CORPORATION ACCOUNT FOR ONE YEAR ENDING MICHAELMAS, 1818.

RECEIPTS.		PAYMENTS.	
Dr.	£. s. d.	£. s. d.	Dr.
Balance from last year	2065 10 0½	Paid the poor in the different Hospitals	744 0 0
To Cash for Dues on Coals	5308 18 6	Interest of money vested in the Corporation by sundries	234 0 0
Conveying Ballast	12067 2 10	Annuites on the sum of £49018 17 6	4269 14 9
Dues on Ship and Boat	1320 18 10½	Interest on the sum of £44668	2619 8 10
ditto on Goods and Merchandise	788 14 4	Sundries, being money borrowed upon interest paid off	70198 11 0
for Freemen's Admission	20435 9 0½	Building committee's quarterly bills of disbursements	4727 15 6
for Rents	8417 4 5½	Town Marshal's ditto	879 0 2
for Fines	480 14 7	for conveying ballast	8349 2 8
for Tolls	8013 10 0½	Salaries, gratuities, and law charges	5801 1 4
raised by Annuites	450 0 0	Land-tax for the town's revenues	240 0 0
borrowed upon Interest	7489 18 0	Fee-farm rent	101 15 10
of George Fothergill for Quay and Town Dues...	2075 0 0	for cleaning the streets...	400 0 0
of the Water Bailiff for Ballast Warrants	0664 18 0	subscriptions to charitable institutions and for charitable purposes	418 15 0
of him also, being the balance of his account, for the sale of a ship wrecked in the River, and weighed at the Expense of the Corporation)	636 7 0	disbursements for public works...	2808 11 8
for Mr. Mayor's samples	190 15 8	Tradesman's bills	2887 10 3
of the Town Clerk, for one year's Interest upon his Bond	267 19 8	contingent disbursements	987 14 0
of Robert Clayton, Esq., Mayor, for one pipe of Fort Wine	14 10 0		£42087 1 11
for a dividend in a debt due from Surtzeas, Burdon and Co.	42 0 0		
	120 1 0	In the Bank	£1260 4 0
	416 6 0	Hutch	85 10 4½
		Balance in the Hutch...	1204 14 4½
	£43081 16 3½	<i>Proved in the Hutch...</i>	£43081 16 3½

FIGURE 3
Newcastle Corporation Accounts 1834/5

AN ABSTRACT of the Chamberlain's Accounts of their Receipts and Disbursements of the Revenues of the Mayor and Burgesses of Newcastle upon Tyne, showing the Income and Expenditure of that Body for the year commencing Michaelmas, 1834, and ending Michaelmas, 1835, and ending Michaelmas, 1834, and ending Michaelmas, 1835, and on the 5th day of October, 1835.

	£.	s.	d.	
Balance in the Hutch on the 6th October, 1834		0	19	9
Receipts above the income within the year, viz.—				
On Coal	£7963	0	1	
Ship and Boat	1683	17	4	
Goods and Merchandise	2187	1	1	
for conveying Ballast	8480	15	4	
Ballast Warrants	248	0		
Town Dues	128	10	4	
Quay Dues	764	10	6	
Quaydole Toll	105	0	3	
Mr. Mayor's Stamples	7	10	2	
Toll Thorough	21453	0	1	
Wool Market	529			
Woolmole Market	140	10	0	
Tyfe Market	90	0		
Fish Market	46	9	6	
Fairs and Markets in the Town	127	12	10	
Fairs and Markets on the Moor	65	12	0	
Quay Side	45	8	3	
Butcher Market	27	12	3	
Hay Market	6	11	9	
of Walker Estate	3088	0	3	
other Mr. Mayor's Leases and Tenements	3810	12	5	
Tews in St. Ann's Chapel	7	12	0	
Ballast Hillie David Ground	19	16	0	
Fines	802	19	9	
Fremmen's Admissions	60	13	4	
Annuities, money raised by granting	1100	0	0	
Interest, money borrowed at	2010	0	0	
Newcastle & Carlisle Railway, Interest on Subscription for 50 Shares, to 31st Dec. 1833	117	12	10	
Sir Thomas White's Charity, Loan to F. A. Paterson repaid, (see account marked O post)	20	0	0	
Repayment for Advertising Resolutions relating to the Hutch, and for erroneously charged in last year's account of payments	5	5	8	
+ Available Arrears	1374	7s.	11½d.	
	£30860	3	2	
	£30860	6	11	

	£.	s.	d.
Disbursements, showing the Expenditure within the year, viz.—			
(A) For Fort and Harbour Charges	7001	13	6
N.B. This item includes 4409l. 11s. 8d. paid for conveying Ballast and all expenses incident thereto, besides which, land belonging to the Mayor and Burgesses, of the value of above 6000l. a year, is used for ballast depots, without any charge for rent.			
(B) Rents, Fines, Taxes, Cesses, and Tithes	506	14	10
Annuities in respect of 47086l. 10s.	4511	2	8
Interest on 6400l. 0s. 3d. money borrowed	2583	9	8
Ditto on purchase moun	218	0	0
Ditto on money borrowed at 5 per cent.	480	11	0
(C) Rents, House, and Lanes, making, repairing and strengthening 4004	4	0	0
(D) Trust Money	64	3	4
(E) Hospitals	1618	7	8
(F) Grammar and other Schools	476	13	0
(G) Clergymen, Churches, and Chapels	377	0	0
(H) Mr. Mayor's Salary and Mansion House Expenses	2561	13	7
(I) Mr. Town-Clark's Salary, 525s., & Law Expenses, 219l. 11s. 6d.	744	16	6
(J) Burgesses at Mace, and Town Marshal's Salaries and Police Expenses	806	7	0
(K) Various Salaries and Allowances	1864	14	2
(L) General Repair and Improvements	1040	10	1
(M) Various Taxes	104	11	1
(N) Subscriptions and Donations	871	17	9
(O) Newcastle and Carlisle Railway, Two Calls of £10 a Share each, on 50 Shares	1000	0	0
	30850	12	10

Balance in the Hutch on the 6th October, 1835 20 8 1

(Signed) HENRY INGLEDEW, } Secretaries to the auditors.
JOHN BROWN, }

FIGURE 4
Newcastle Corporation Accounts 1847/8

AN ABSTRACT of the Treasurer's Accounts of Receipts and Payments for the Borough of Newcastle-upon-Tyne, from 1st September, 1847, to 31st August, 1848.		
	£.	s.
RECEIPTS.		
To Balance on the 1st September, 1847	13	19
Income	15	2
For Tolls and Quays Dues	12945	3
For Tolls on the Mill and Boat	2224	11
Town and Harbour Dues on Goods and Merchandise	8	2
Deduct paid conveyors	6441	18
	1669	5
PAYMENTS.		
For Ballast Warrants	549	19
Lessons to Ballast	4498	19
Use of the Steam Boat Ferry	19	2
	5057	5
For Tolls	2571	9
Computation in Lien of Through Toll	2508	12
	5080	17
New Machinery	1348	15
Vegetable do. do.	390	8
Stables and Stables do.	390	8
Cattle Market—For Stables Rents, Wages	407	12
Weighting Scales—For Stables and Stables	9	7
Realty—Of Walker Estate	3253	11
other Lands, Tenements, &c.	571	1
Ballast Hills Burial Ground	23	11
Farms—For Fine on Reversal of Leases	27	9
At Hay Market	2	4
Quayside	3	9
STALLAGE AND PICKLES.		
For Fines and Auction in the Town Moor	39	10
Stables Rents on the Sandhill	136	19
Fine Market	13	4
	188	33
For Freeman's Admissions	27	19
Interest on £20,000, secured on the Lunatic Asylum, Income Tax deducted	4	16
Rents, &c., applicable to the County Rate	114	10
Lighting Rate for anno	2713	19
Lighting Rate for anno	2713	19
Of Newcastle and Hartlepool Railway Company, 1 Year's Dividend on 180 000 shares	188	3
Of Newcastle and Hartlepool Railway Company, 1 Year's Dividend on 30 shares	180	0
Charity—Ym's Memorial on 50 Shares	57	10
OBSCURE INCOME.		
For Property sold	51918	3
Interest on £20,000, secured on the Lunatic Asylum	450	0
Interest on £20,000, secured on the Newcastle-upon-Tyne Poor Law Commission, at 4 per cent, to 31st October, 1847	450	0
Interest on £20,000, secured on the Lunatic Asylum	450	0
Of Newcastle and Hartlepool Railway Company, 1 Year's Dividend on the New	383	11
Of Newcastle and Hartlepool Railway Company, 1 Year's Dividend on the New	18	0
Of Ballast for Interest on Loans	53	5
Of Ballast for Interest on Loans	53	5
For Balance due Bankers, 31st August, 1848	600	0
	28204	18
RECEIPTS.		
Payments Above the Receipts, from 1st Sept., 1847, to 31st Aug., 1848, viz.:		
(A) Four Feet and Harbour Charges, viz.:	9405	5
Salaries and River Charges, viz.:	6439	3
(B) Interest on £1000, secured on the Lunatic Asylum	1300	0
Deduct for Cash sold	2139	3
	10834	9
(C) Trust Money	114	3
Hospital	104	3
(D) Annuities in respect of £25,000, secured on the Lunatic Asylum	1441	3
Interest (including £5000, secured on the Lunatic Asylum)	5004	11
Grammar and other Schools	125	0
(E) Army, Church Expenses	144	11
Mr. Mayor's Allowance and weekly Expenses	1016	6
(F) Serjeant-at-Law, and the late Town Marshal, Salaries and Pension	1041	11
Various Salaries	968	18
(G) Butcher and Vegetable Markets	183	15
(H) New Corn Exchange	7018	0
(I) Streets, Roads, and Lanes, making repairing and paving	3240	7
(J) General Repairs and Improvements	4829	18
(K) Miscellaneous Payments out of the County Rate	6839	6
(L) Watching the Borough	6839	6
(M) Lighting into	3293	6
(N) Farming and Watering Dues	3293	6
(O) Overseas Expenses	3447	16
(P) Property purchased, and Expenditure under the Amended Town Improvement Act	1700	0
(Q) Mr. Thomas White's rent off	30	0
(R) Mr. Thomas White's Charity, on account of	1700	0
	46249	3
	46249	3

(Signed) ROBERT USHER, } Alderman.
GEORGE BURDIS, }
CHARLES MAYNE, } Wm. ARMSTRONG, Treasurer.

harbour represented none of these interests, and by reason of its legal rights to devote the proceeds of its petty customs duties for its own advantage, was even pecuniary biased against them all" [Webb, 1908, p. 724].

An article in the *Tyne Mercury* [1833] clearly shows the underlying reason why the Newcastle Corporation adopted a policy of inaction:

The annual average receipts of the Corporation for the eighteen years immediately preceding 1827, amounted to £38,142 while the annual balance in the hutch⁷ [the amount left-over at the end of the year] never exceeded £2,000. Now if nearly one-half their income were curtailed [i.e. to be expended on the improvement of the river], it is manifest that their power, and various influence, would be considerably broken down . . . [due to less revenue available] this is sufficient to explain what has so long been a paradox to the public, namely, that many members of the Corporation, who are largely engaged in trade and manufactures, and are fully aware of the great general benefit that would result from the improvement of the river, do, not withstanding, in their corporate capacity, refuse their concurrence to any very expensive scheme of amendment, and thus, so far, counteract their individual private interests. They make this sacrifice rather than see the pomp and glory of the Corporation reduced to depend on £20,000 a year, or that their patronage should be in the least diminished.

PROMOTION OF INTERESTS THROUGH ACCOUNTS

The main argument of the paper is that it was the publication of accounts that made the neglect of the River Tyne visible to an emerging opposition (the press, councillors and petitioners mainly headed by the people of Shields). Further, that responsibility for the improvement of the river was taken from the Corporation and, in 1850, as a result of pressure, was placed in the hands of the Tyne Improvement Commission. However, the Corporation also used the accounts to justify its own inaction. The paper now examines these issues under three sub-headings: the

⁷ "A large chest (that contained the town's money) with nine separate locks, each of a different pattern. The mayor and each of the eight chamberlains (they were elected from amongst the burgesses and assisted the clerks of the chamber) had a key so that the chest could not be opened unless all nine were present together" [Halcrow, 1953, p. 152].

case for change, the defense by the Corporation, and the proceedings of the Admiralty Enquiry that, ultimately, dealt the final blow.

The Case for Change: Early accounts of opposition to the Newcastle Corporation's reluctance to improve the River Tyne can be traced to the 17th century when a series of papers titled "Conservatorship of the River Tyne" appeared [published 1849]. The line of argument centered on the physical condition of the river. It was Captain Phipps, a well-respected 18th century mariner, who considered the Tyne to be "capable of becoming one of the finest rivers in the world, but which ignorance, inattention, and avarice" had converted into what he called a "cursed horse pond!" [Mitchell, 1823, p. 27]. In another instance, a call was made for a public general meeting because "the navigation is likely to sustain much further injury" unless action was taken. It was intended that "nobility, gentry, merchants, coal owners and ship owners and all other interested in preserving the navigation of the river Tyne will attend" [Lawson, 1799].

Publication of annual accounts enhanced the accountability of the Corporation to the rate-payers. It was during the 1830s that the financial arguments came to the fore which were to dominate the battle for the power over the River Tyne. A petition was made to King William by the free burgesses of Newcastle upon Tyne in 1832. This was during the election of the Common Council and a majority of the burgesses⁸, tired of the "Toryism in Newcastle" [Cook, 1965, p. 212], were "in favour of upsetting the controlling power of the Common Council" [ibid, pp. 225-226]. The petition asked for an enquiry to be established into the mismanagement and poor state of the river. The petition was littered with proofs and references to the published annual accounts. For example, an extract from the petition read:

It appears from the accounts . . . that from the year 1821 to 1831, both years inclusive, a period of 11 years, the sum of 217,833*l.* 1*s.* 8³/₄*d.* has been received by the corporation of Newcastle (relating to the river income) . . . that the paltry sum of 1,265*l.* 12*s.* 9*d.* only, was during the period, expended in either improving the navigation of the river, or facilitating shipping, trade,

⁸ "An inhabitant charged with the defence of the place in which he lived, and, in return for his military services, was entitled to certain privileges and immunities" [Mackenzie, 1827, p. 652].

and commerce, or in deepening the bed of the river or otherwise . . . [While] a clear revenue of upward of sixteen thousand pounds is yearly drained from the public without any check [Macgregor, 1832, p. 4].

The monetary values used in the petition were based on the authority of Mackenzie's *History of Newcastle* [1827] and stated that: "During the three years preceding 1827, the Corporation received from the river £74,764 . . . out of which was paid £22,472 . . . leaving £49,291 . . . or an average annual income of £17,291 . . . deduct £1,291 . . . for the salaries of the harbour master and petty officers employed on the river, there will remain a sum of £16,000 a year available to the improvement of the river" [ibid, pp.18-19].

Prior to the 1835 Act the Corporation kept all dues and revenues in one general account. With the majority of the revenue generated from the Tyne and no distinction in the general account to the source of this revenue, it was difficult to determine what funds were generated from the river and less likely to be returned. This revenue was administered with "cool and inexorable partiality" towards the town [*Tyne Mercury*, 1833].

However, the neglect of the Tyne in favor of the town became even clearer when the new form of keeping the accounts was made public by the newly reformed Corporation and when revenues were classified under different heads and in more detail. Extant accounting information showed clearly how reluctant the Corporation was to direct any substantial expenditure towards the improvement of the River Tyne [see Figures 1-4], even though there was great pressure from a growing opposition for them to do so: "We cannot wonder that feelings of the public should be most sensitive on a point of such vital importance to the interests of the community at large" [Armstrong, 1836, p. 1]

One of the main activists using the accounting data was William Mitchell. He wrote during the 1820s and 30s in the *Tyne Mercury* under the alias of "Tim Tunbelly" or "Peter Putright". The letters of the former were later compiled and published in a book [Mitchell, 1823]. Mitchell invited comments and promoted awareness through the medium of the press. Gallhofer and Haslam, [2001, p. 29] showed how in the late 19th century "radical political activists" used accounting data through the medium of the press as an "emancipatory" rather than "repressive . . . praxis" and they noted "how few studies have [articulated] accounting in the context of social struggle". In many ways, the opposition in the case of the River Tyne during the early 19th century, also used the press as an 'emancipatory' force. Cook

[1965, p. 213] refers to Mitchell as a "Radical journalist" who was antagonistic towards the Tory regime. Mitchell attempted to increase public awareness of the state of the Tyne, stimulate opposition against current practice and thus encourage positive action to improve the river and benefit Newcastle as a whole. Mitchell [1823, p. 121] commented that: "The corporation has received this year [1822] the enormous sum of £19,148.6s.7d. from dues, &c. from the Tyne. Have they, then, expended a single farthing on the improvement of that river? There is no notice of any such expenditure in the accounts!"

The development of the argument for change can be seen from a petition which was lodged with the Corporation almost 20 years later by 120 of the oldest and most respected mercantile firms, bankers and tradesmen of the borough. They complained that the large proportion of the Corporation's revenue derived from the river but was not allocated fairly. The river was not being improved to enable new trading relations to prosper. From the published accounts the petitioners found that the gross revenue from the Tyne during 1837-1839 was £79,575.6s.4d., and the total expenditure on improvements only £35,168.9s.7d. This meant that there was on average an excess of £14,802 each year from the river but which was spent elsewhere. The petitioners then examined the level of rates levied on the town and found that £10,689 was raised but £28,418 expended on the service of the town, such as improvement, watering, lighting, and scavenging. This meant that on average an excess of £5,909 each year was spent on the town but not raised by the town.

Opposition also came from disaffected councilors who were aware of the the handsome return the Corporation received from the River Tyne. They pressed hard in Corporation meetings for further revenues to be voted to the River Committee. These councillors made liberal reference to the accounts when making their case. One councillor said:

Let then [the Corporation] take the book of their receipts and expenditure, and ask themselves where the revenue which they had to expend came from? In the balance sheet, the first class of receipts were, port and harbour dues on coals, ships and boat, goods and merchandise, and for conveying ballast by which 19,975*l.* were brought to account. Now that large sum came directly out of the river. If the river were dried up tomorrow, not one farthing of that 19,900*l.* would they get [NTCP, 1839, p. 8].

Further, a 'Statement Respecting the Port of Newcastle upon Tyne' by Dyson, Hall and Parkes, Parliamentary Agents, 1840 stated "The complaints made of the present system seem borne by the statements of the official servants of the Corporation (who used the accounts) as well as by their published accounts". Another councillor considered that: "The Council would not find a safer nor a better investment; and he was not alone in thinking that it was to the river they must look for improved commerce and trade in this port; and that they should be careful to augment the great artery which supplied them with the larger part of their revenue" [NTCP, 1845, p. 74].

One councillor in particular (Straker), who was a Newcastle merchant and user of the River Tyne, was a very outspoken member of the Corporation. He used information in the accounts as a basis for his allegations against certain members of the Corporation over a number of years and accused the engineer of the river with mismanagement, misconduct, jobbery, and waste. When altering a road in a field at Walker "which cost a considerable sum, and no account of it in the engineer's accounts" the amount was entered in the groins account, i.e. a river account. Straker held that the alteration had nothing to do with the groins, and thus the river, but was made for the convenience of a public house and should not be placed in this account. The River Committee knew nothing about this expenditure supposedly made by them: "It surely cannot be understood, that when money is given for the river, it is to be wasted in this matter" [NTCP, 1839, p. 103]. The River Committee itself also came under heavy fire, it being "were not particular in the expenditure of the money awarded to them. They gave in an estimate for one thing, and spent the money upon another" [NTCP, 1841, p.122]. Further, "the River Committee had all along mismanaged matters. A great sum had been lost . . . Hunter's Quay had been pulled down four times and rebuilt" [NTCP, 1842, p. 122].

Even though these allegations were not proven, the episode, which was highly publicized at well-attended public meetings and in the local newspapers, increased the distrust in the Corporation's accountability.

Strong opposition also came from interested parties using the Tyne in areas surrounding Newcastle who did not have a voice on the Corporation. The towns of the Shields and Gateshead strongly argued that the river suffered due to the relative financial advantage of the inhabitants of Newcastle over their neighbors. The "petty jealousy of sister towns" influenced

Newcastle councillors who were unwilling to spend what they saw as Newcastle income on other towns on the river [Macgregor, 1832, p. 117]. It was argued that the seaward boroughs "just influence in the confederation [be] heartily acknowledged" and the "incubus of clerical seigniorage put to flight" before any working agreement could be reached [ibid]. "Down to 1848 all Custom business for the port had to be transacted at Newcastle, no matter where the vessel loaded, although North and South Shields together owned more shipping than Newcastle, and the greater part of Tyne based vessels loaded and discharges in Shields harbour" [Hodgson, 1903, p. 199].

It was considered a "great hardship that [the Shields towns] should be compelled to pay for landing goods at Newcastle which do not come within ten miles of it" [NTCP, 1834, p. 47]. The relentless petitioning by the people of Shields finally paid off in 1848 when the Port of Newcastle was split — Port of Tyne and Port of Shields — and an extra controller was established at North Shields. A year later the people of Shields petitioned the House of Commons for total independence from Newcastle on the basis that: "1st, that this body had mismanaged the river; 2ndly, that it had grossly misappropriated its revenue; and 3rdly, that the powers and authorities by which these deeds had been committed, should be transferred to new hands" [NTCP, 1849, pp. 50-51].

The Defense of the Corporation: Just as information in the published accounts was used to attack the inaction of the Corporation, the same accounts were utilized by the Corporation to justify their lack of expenditure on the River Tyne. The accounting data was used in support of the Corporation's "Penny Wise" system of avoiding debt and reducing costs based. One river engineer, Richardson [1836, p.10], reporting on the Tyne commented that "The first report of the Financial Committee has been published and shows plainly enough, that any considerable outlay for the improvement of the River, is wholly impracticable" as the Corporation's funds were not adequate. However, in his concluding comments Richardson acknowledged that "where improvement is practicable, it would be unwise to withhold the attempt given any over scrupulous consideration of expense, for in the preservation, if not the improvement of the navigation of the Tyne, Newcastle is entirely dependent" [ibid, p.15].

The Corporation vote, dominated by the purse holders (the Finance Committee), believed that the river was improved

enough to accommodate increasing trade. The accounts also proved that there was no money to fund further improvement. It was also argued that "They could not borrow money for the river. It was contrary to the letter and the spirit of the Municipal Reform Act. They were not to expend capital for outlay over revenue" [NTCP, 1839, p. 3]. The Municipal Reform Act, 1835 stated that revenues that ought to be applied for the public advantage should not be diverted from their legitimate use, and not be squandered for the benefit of individuals. The 'spirit' of the Act refers to corporations using their revenue appropriately instead of spending it wastefully and making up shortfalls by borrowing. At a Finance Committee meeting, one councillor commented that the Corporation "had expended more than their revenue by 4000*l.* during the last 4 years, and had run that much in debt. Now was it not more prudent to pay off a portion of that balance, than to go on running into more debt?" [NTCP, Dec 1845, p. 60]. This councillor later criticized the River Committee for continuously over-spending their allocated budget. He also claimed that the expenditure of the River Committee brought no benefit: "Why, there was no possibility of binding them down to their allotted revenue; much less to any intelligible or tangible plan of expending it upon the river. The Corporation would not only be condemned, but justly so, if they continued to disburse enormous sums upon the river, year after year, from which, after all, no proportionate or substantial benefit was derived" [ibid, pp. 72-73].

More pressure was placed on the limited funds for river improvement in 1846. The usual policy of the Finance Committee of the Newcastle Corporation, was to estimate total revenue, make allocations for "unavoidable" expenses and divide the remainder (often equally) between the River and Town Improvement Committees. The Corporation was able to justify their policy of revenue allocation through what was considered a "more wholesome principle" to their budgeting system, the creation of a surplus fund of £2,000 to cover any "unexpected calls upon the corporate funds", "public improvement" or to "be applied in the reduction of the debt" [NTCP, 1846, pp. 379-380]. This approach reduced the funds available for river improvement further. However, the policy was overhauled in 1849 due to the far poorer state of the Corporation finances: "The Finance Committee do not think it prudent to appropriate more of that amount than can by possibility be avoided [and so the Committees were], limited as nearly as possible to the amount of their fixed charges. . . . The Finance Committee are aware that such a

limitation would put a stop to all river works" [NTCP, 1849, p.14]. By the end of the 1840s the Corporation's inaction in improving the River Tyne had reached breaking point.

Admiralty Enquiry: Dissatisfaction over the conditions and control of the river became so acute that in 1849 a parliamentary bill was deposited by the people of Shields opposed to the Newcastle Corporation's inaction. This proposed to take river dues and control of the Tyne out of the hands of the Corporation of Newcastle and entrust them to Commissioners elected for the purpose. The Corporation, seeing the opposition's bill as a threat to what they viewed as their "hereditary rights to river dues", and fearful of losing the voting power and revenues from the river to a Commission representing interested parties outside Newcastle, framed their own bill — The Tyne Improvement Bill, 1849. In the latter it was argued (as before) that under the concept of prudence, there were insufficient funds to increase expenditure on the river and in any case the Corporation were doing enough. The opposing bills sparked two 'Admiralty Enquiries' in 1849. The minutes of Newcastle Corporation during the time of the first 'Enquiry' typically show the Corporation's attitude:

... it is evident that change is going on [to the river] ... the assertion that the expenditure upon the river formed a good investment for money, involved a bad principle ... investments should be made advisedly, not incidentally ... he believed that [the river would not be taken from their control] unless the Council became lax and inattentive [NTCP, 1849, p. 47].

Captain Washington headed the investigation into the management and condition of the River Tyne. He gave an account of the various river dues collected by the Corporation and the manner in which they had been expended. Ultimately, it was accounting data that was chiefly drawn on in these investigations. The enquiry found:

That on average for the past seven years the income derived from the river has exceeded 26,000*l* a year, while the sum laid out in improvements has been less than 5,000*l* a year. ... From an inspection of the Corporation's accounts of the last year it seems that the receipts from the river were 27,907*l* and the expenditure, including salaries &c. 10,824*l*, showing a balance otherwise appropriated of rather more than 17,000*l*. In

the column of payments it will be seen that the cost of watching the borough for the past year was 6,229*l*, whereas the rate levied for watching was only 3,774*l* . . . thus showing a deficiency of rates of 17,447*l* [A.E., 1849, p. 3].

Captain Washington concluded that:

According to an abstract of accounts which had been put in by the Treasurer to the Corporation, the whole amount received from the river since 1809 (when the accounts were first printed) had been 957,973*l*; whilst the whole sum laid out on the river; including all charges for conveying ballast, salaries, management, &c., during that period, had been 397,719*l* — the difference between those two sums, exceeding half a million of money, having been appropriated to the lightening, paving, watering and scavenging the streets of Newcastle [AE, 1849, p. 4].

A report in the *North and South Shields Gazette* shows the influence of this investigation on the fate Tyne:

The evidence of gross mismanagement of the River Tyne and misappropriation of funds levied for its conservation was so perfectly astounding to the Admiralty Court . . . that the conclusion arrived at by the Admiralty was that such evidence had never before been heard respecting any river, and that this important harbour and river should not be trifled with any longer [1850].

Ultimately, it was decided by Parliament that, under the River Tyne Improvement Act, 1850, the control of the River should be taken from Newcastle Corporation and placed in the hands of a trust called the Tyne Improvement Commission. This Commission “embarked upon a major series of port improvements which enabled the Tyne to survive as a major port” [McCord, 1979, p. 77]. The Commission successfully controlled the Tyne over the next 100 years. The Commission’s success can be seen clearly by the following comment: “One of the most far-reaching changes in human history took place between 1850 and 1914, when the volume of international trade probably increased ten-fold in this relatively short period . . . [aided by] the more sophisticated harbour facilities” [Newcastle City Libraries, 1969, p. 1].

CONCLUSION

The paper has focused on the use of accounting data by Newcastle Corporation and its opponents in the debate over the improvement of the River Tyne. Significant municipal reform took place in early 19th century Britain. Corporations were made more accountable to the ratepayers of their districts under the Municipal Reform Act, 1835. The provisions of the Municipal Corporations Act, also of 1835, made the neglect of the River Tyne clearer when a new form of keeping accounts was adopted and made public by the newly reformed Corporation. It has been shown that opposition fuelled by the increasing availability of accounting data put greater pressure on the Corporation. The Corporation's "Pound Foolish, Penny Wise" system was made visible and was no longer tolerated.

The marginal improvement that the Corporation did make to the River Tyne was, as one councillor put it in 1845, like "illustrating the old proverb of putting money into a bag of holes". "All the time, labour, and money, bestowed by the Corporation during this period may be said to have been almost barren of beneficial results" [Walker, 1905 p. 6]. The published accounts were used against the Corporation to campaign for river improvement, and it was with these accounts that the Corporation tried to justify inaction. Gallhofer and Haslam [2001, p. 29] showed how in the late 19th century "radical political activists" used accounting data by the medium of the press as an "emancipatory" force. Significantly, a key factor enabling the opposition's campaign for the improvement of the Tyne was the press and the use accounting data in the same 'emancipatory' way.

This research into the use of accounting in a single corporation suggests the potential for further historical investigations. How the accountability of other corporations changed after the municipal reform of 1835 would also be useful area of research. It would be interesting to know if the Newcastle case was exceptional and whether the increased accountability through the publication of accounts placed any other corporations in compromising situations where they were stripped of control over key assets.

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Robert Fonfeder
HOFSTRA UNIVERSITY
Mark P. Holtzman
SETON HALL UNIVERSITY
and
Eugene Maccarrone
HOFSTRA UNIVERSITY

INTERNAL CONTROLS IN THE TALMUD: THE JERUSALEM TEMPLE

Abstract: We examine the Hebrew Talmud's account of internal controls in the ancient Jerusalem Temple (c.823 B.C.E. to 70 C.E.) This far-reaching enterprise involved an extensive system of sacrificial offerings, management of three annual pilgrimages, a court system and maintenance of a priestly class. We outline the annual process of collecting half-shekel and other donations, withdrawals from the Temple treasury and the sale of libations. The Talmud describes numerous internal controls: donations were segregated according to their specific purposes and donation chests were shaped with small openings to prevent theft. When making withdrawals from the Temple treasury, the priest-treasurer was required to wear specific clothing to prevent misappropriation of assets. The Treasury chamber itself had seven seals, requiring the presence of seven different individuals, including the king, in order to open it. The process of selling libations and meal offerings required purchasing and then redeeming different tickets, which were specifically marked to prevent fraud. In explaining the reasoning for this tight system of internal controls, the Talmud reveals that an individual "shall be guiltless before G-D and before Israel" [Numbers 32: 22], so that a sound system of internal controls prevents both theft and any *suspicion* of theft, thus establishing the fiscal credibility of the Temple institution in the eyes of its congregants. Such an approach indicates that accounting did not represent a profane, secular vocation at odds with the Temple's mission. To the contrary, a system of accountability formed integral steps in the Temple's ritual processes.

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There are three crowns: the crown of learning, the crown of priesthood, and the crown of kingship, but the crown of a good name must be upon each of them [*Mishnah Pirkei Avos*, 4: 17].

INTRODUCTION

As it discusses the operations of the ancient Jerusalem Temple (circa 823 B.C.E. to 70 C.E.), the Hebrew Talmud reveals a strict set of accountability mechanisms designed to safeguard assets. The Talmud describes a far-reaching institution overseeing an extensive system of offerings, three annual pilgrimages, a court system and a priestly class. The needs of this enterprise — supported almost entirely through voluntary donations — would have been extraordinary. The focus of this paper is to examine the nature of the internal controls documented in the Talmud.

Research about the relationship between accounting and religion can provide new insights into how organizations use accounting [Birnberg, Turopolec and Young, 1983] and how societal needs influence organizations' accounting [Hopwood, 1983; Hopwood and Miller, 1994, Puxty 1998]. Recent accounting research with respect to the Church of England [Laughlin, 1994], New England Quakers [Fuglister and Bloom, 1991], a 19th century U.S. religious commune [Flesher and Flesher, 1979], U.S. churches [Duncan, Flesher and Stocks, 1999], the Australian Church [Lightbody, 1999], Islamic religious organizations [Abdul-Rahman, 2000], the Iona Community of Scotland [Jacobs and Walker, 2001], the Salvation Army [Irvine, 2002], and Ancient Egypt [Ezzamel, 2002; Mattessich, 2002], suggests increased interest in the interface between accounting and religious institutions. The Hebrew Talmud has much to contribute to this growing body of research. Its description of the operations within the Jerusalem Temple demonstrates how a strong system of accounting internal controls could build and maintain the confidence of religious adherents. Moreover, such a system would have formed an integral part of ancient religious ritual.

Using techniques of traditional Talmudic scholarship, we identify many specific internal control processes discussed in the Jerusalem Talmud tractate named *Shekalim*. We also refer to related passages in other sections of the Talmud. These controls deal with a national system for collecting contributions, safeguarding the Temple treasury, and the sale of libations and meal offerings.

One would expect the Talmud to simply rebuke those who would commit theft — “Thou shalt not steal” Exodus, 20: 13; Deuteronomy, 5: 17]. Presumably, then, pious people commanded not to steal would be deemed trustworthy, so that any controls instituted within the Temple would be unnecessary and therefore minimal. However, we find the Talmud to be so concerned with preventing any suspicion of financial malfeasance, that controls are designed to prevent even any appearance of theft. Furthermore, the Talmud commends individual families who went to great lengths to avoid any suspicion that Temple-owned ingredients were misappropriated. The Talmud’s inclusion of these processes suggests that they would have been widely studied in their time, reinforcing public confidence in the Temple’s operations. We conclude with an unexpected insight: controls not only protect stakeholders’ property, but also protect the integrity and credibility of those entrusted with stakeholders’ property.

THE ORIGINS OF THE TALMUD

The Talmud consists of oral teachings passed down through generations of ancient scholars. Jewish tradition holds that many of these teachings were received by Moses at Mount Sinai, while others were collected through the ages. In the 3rd century C.E., Rabbi Yehudah haNassi classified these teachings into the *Mishnah*, which consists of 63 tractates (“*masechtos*”) that were organized into six orders (“*sedarim*”).¹ To respect the custom that talmudic law should be transmitted orally, from teacher to student, the *Mishnah* included only highly concise summaries of basic principles, all written in Hebrew. To provide more intensive explanations for the *Mishnah*, later generations of scholars redacted two different versions of the Talmud:

- 1 Beginning in the 3rd century C.E., Rabbi Yochanan and his disciples redacted the Jerusalem Talmud (“*Talmud Yerushalmi*”) in Tiberius, near the Sea of Galilee;² and

¹The following two complete English translations of the *Mishnah*, with commentaries, are available: Blackman (1963) and Kehati (1994). Furthermore, many tractates of a new translation/commentary are now available, published by Artscroll/Mesorah Publications of Brooklyn.

²Jerusalem Publications of Brooklyn, NY, has translated certain tractates of the Jerusalem Talmud to English, including *Shekalim*, cited in this paper.

- 2 In the 6th century, Rabbi Ashi edited the Babylonian Talmud (“*Talmud Bavli*” in Babylon, in modern-day Iraq).³

Neither version of the Talmud was completed, each omitting several tractates of the *Mishnah*. For example, the Jerusalem Talmud, but not the Babylonian Talmud, explains the *Mishnah* to the tractate *Shekalim* (as cited in this paper). In response to traditions that Talmudic Law should be learned orally from a teacher, the two versions of the Talmud were written in an extremely concise and cryptic form of ancient Aramaic-Hebrew. Critical words and phrases were often omitted and other terminology was intentionally made to seem ambiguous, so that it would be impossible for the prospective student to simply read a passage of Talmud and understand it without help from a teacher.

In this article, we outline certain Temple operations and illustrate notable examples of internal controls over them, as described in the Talmud and related commentaries.

INTERNAL CONTROL

Internal control is defined as “a process — effected by an entity’s board of directors, management, and other personnel — designed to provide reasonable assurance regarding the achievement of objectives in the following categories: (a) reliability of financial reporting, (b) effectiveness and efficiency of operations, and (c) compliance with laws and regulations.” [Auditing Standards Board, SAS 55 and 78].⁴ As such, modern internal control objectives provide a framework for helping achieve substantive integrity in meeting these objectives, as well as those corollary to them, such as protection of the entity’s assets. Modern organizations employing internal controls benefit not only from greater assurance that their substantive objectives will be met, but also from the appearance of credibility afforded them by the existence of internal controls, conditions necessary for raising capital from outside investors [Auditing Standards

³ A complete English translation of the Babylonian Talmud is available from Soncino Press, Brooklyn, NY. Many tractates of two new translation/commentaries are available: published by Artscroll/Mesorah Publications, of Brooklyn, NY, and Random House, NY (Adin Steinsaltz, editor).

⁴ For purposes of internal control definitions used, we describe Generally Accepted Auditing Standards, governing the practices of independent certified public accountants in the United States.

Board, SAS 1]. This appearance of credibility appears to have been of primary concern in the Jerusalem Temple.

Prior accounting research describes numerous cases of accounting functions in the ancient world. Hird [1975] hypothesizes that as individuals in prehistoric societies learned to specialize, they needed to develop some notion of cost in order to trade different specialist products. The woodcutter and hunter could establish how many logs of wood were equivalent in value to one animal carcass. Therefore, as Swanson [1984] asserts, accounting may have preceded counting and mathematics. The development of coins created the need for bookkeepers to maintain transaction records.

Stevelnick [1985] offers an analysis of ancient accounting records found in Egypt and Iraq. Similar records are examined in greater detail by Garbutt [1984], Mattessich [2002] and Ezzamel [2002]. Costouros [1978] describes an intricate system of auditors in ancient Greece. Afosa [1985] documents the accounting records kept by the Ashanti tribes in 16th and 17th century Ghana. Hagerman [1980] cites scriptural passages which suggested the need for financial accounting, managerial accounting and internal controls. Mann [1984] quotes Talmudic passages regarding income tax policies in ancient Hebrew law. In this paper, we seek to augment this body of research. We document the integration of "secular" or "profane" controls into "sacred" ritual, and we identify the importance attached to reputation effects in an ancient religious institution.

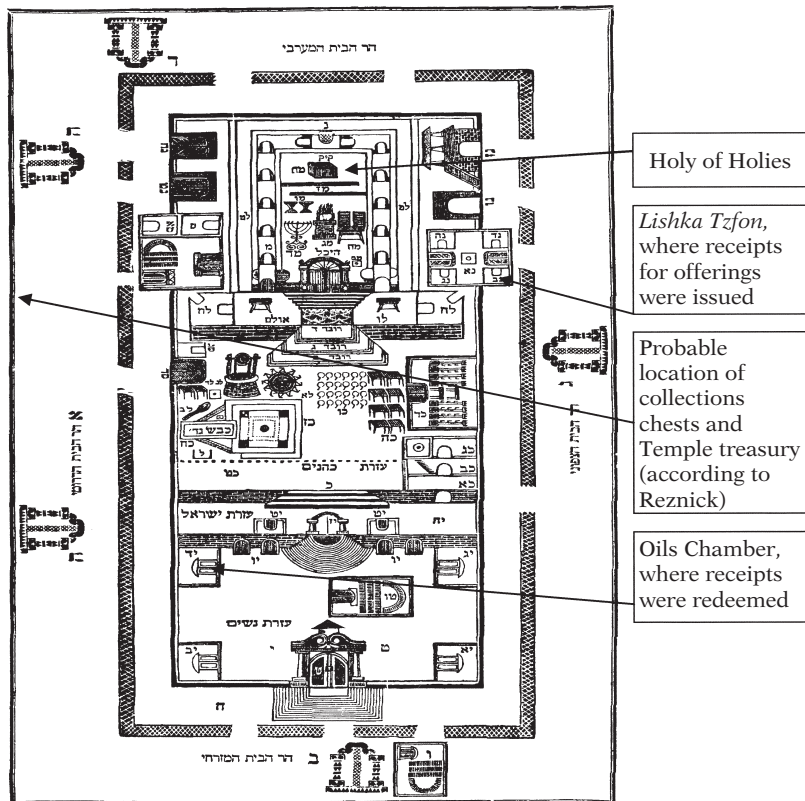
INTERNAL CONTROLS IN THE JERUSALEM TEMPLES

According to traditional Talmudic sources, the Israelites constructed the Tabernacle as a center for their program of offerings, one year after they had left Egypt (1309 B.C.E.). This Tabernacle, a tent made of wood, metals, tapestries and hides, was disassembled, moved, and reassembled numerous times as the Israelites migrated through the desert to the Holy Land. In 830 B.C.E., to permanently replace the Tabernacle, Solomon began construction of the First Temple in Jerusalem [Reznick, 1994, p. 195]. According to biblical accounts, its construction was a tremendous undertaking, requiring the services of 10,000 woodcutters in Lebanon, 80,000 stonemasons, 70,000 porters moving building materials to the site, and 3,300 supervisors [I Kings, 5: 29]. By 823 B.C.E., the First Temple was completed and formed a religious, social and judicial center for the Israelite nation. Authorities forbade offerings to be made in any other

location, and all Israelites were required to make three annual pilgrimages to the Temple. Furthermore, the Great Sanhedrin, a national court handling religious and civil matters, met in the Temple complex.

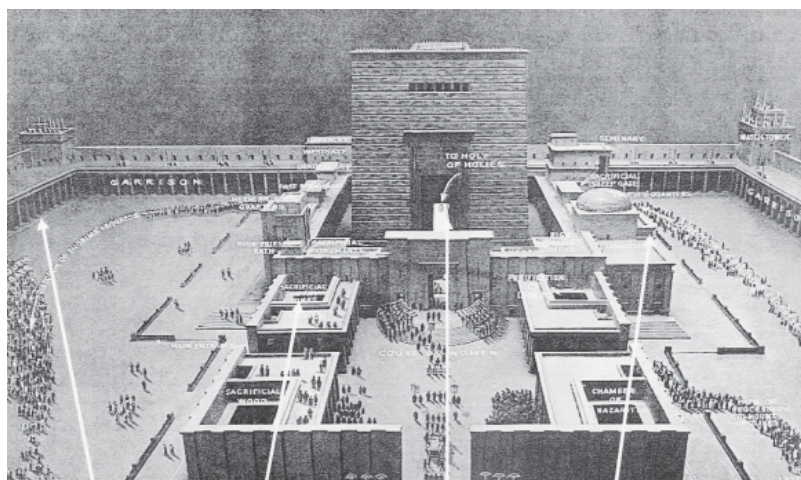
In 420 B.C.E., armies of the Babylonian Emperor Nebuchadnezzar destroyed the First Temple. Following the Babylonian exile, the Second Temple was completed in 346 B.C.E. This was similar to the First, but lacked the Ark of the Covenant, which could not be located. In 16 B.C.E., Herod enlarged and rebuilt the Second Temple, which was destroyed by armies of the Roman General Titus in 70 CE. Figure 1 provides a floorplan of the Second Temple, as recorded in the Babylonian

FIGURE 1
Floor Plan of the Second Jerusalem Temple⁵



⁵ According to Babylonian Talmud Tractate *Midos*, From *Talmud Bavli* (Jerusalem, Israel: Telman). English annotations by the authors.

FIGURE 2
Model of the Second Jerusalem Temple⁶



Probable location of collections chests and Temple treasury (according to Reznick)

Oils Chamber, where receipts were redeemed

Holy of Holies

Lishka Tzfon, where receipts for offerings were issued

Talmud Tractate *Midos*. Figure 2 offers a photo of a modern reconstruction of Herod's Second Temple, as presented at the World's Fair in New York, 1939.

The wide-encompassing objectives of the Temple's operations necessitated a nationwide fund-raising movement and a complex system for maintaining and expending Temple assets. Talmudic sources list many specific internal control processes over the Temple treasury, including those over collections of biblically-mandated half-shekel donations, withdrawals from the Treasury, and distributing offerings, all premised on the idea that public confidence in the workings of the Temple was sacrosanct.

⁶ by Architect Yakov Yehuda, presented at the 1939 New York World's Fair. From "Background on the Daily Daf," Kollel Iyun Hadaf of Har Nof, Israel. <http://www.dafyomi.co.il/meilah/middos04.htm>. Annotations at bottom by the authors.

Collections of Half-Shekel Donations: The book of Exodus commands every adult male Israelite to contribute exactly one-half Shekel each year to the Tabernacle [30: 12]. These moneys would be used to fund communal offerings.⁷ The Jerusalem Talmud tractate “*Shekalim*” (literally “shekels”) explains how these coins were collected, how they were accounted for, and other aspects of the Temple’s administration. The beginning of the tractate states that on the first day of the final month of the year, called *Adar*, announcements would inform the people that the annual collection of half-shekel coins was about to commence [p. 2a].⁸

The Jerusalem Talmud then proceeds to dissect this statement. It first asks why the announcement was made on the first day of *Adar*, answering that this announcement would give people one month to contribute before the moneys would be expended from the Temple treasury, on the first day of *Nissan*, the first month.⁹ These collections would then fund all public offerings to be made in the next year, beginning in the month of *Nissan*. The Talmud derives that the Temple’s fiscal year begins on the first day of *Nissan* by citing a scriptural passage from Exodus: “And it was in the first month of the second year on the first of the month, that the Sanctuary was erected” [Exodus, 40: 17].

If the Sanctuary was erected on the first day of the first month, the Talmud reasons, then this must be the beginning of the Temple’s fiscal year.

⁷Talmudic commentaries differ on the actual weight of a half-shekel coin. Goldwurm [2000, p. 161] derives that a half-shekel would weigh either the equivalent of 160 or 192 barley grains, which would translate to 0.256 or 0.215 troy ounces.

⁸Unless otherwise indicated, we paraphrase the concise Talmudic passages. All translations are by the authors. To give the reader a taste of the Talmud’s style, here is a more literal translation of the above-cited passage: “On the first of *Adar* they announce on the shekels” [p. 2a]. In citing Talmudic passages, we use the name of the Talmud tractate, followed by the page number, as published in the traditionally-used “Vilna” edition. In situations where the name of the tractate is already provided the text, we provide only the page number. When citing *Mishnah* passages, we provide the chapter and sentence numbers, separated by a colon.

⁹Today, in traditional Jewish congregations, the Sabbath preceding (or falling on) the first of the month of *Adar* is called “Sabbath *Shekalim*”. On that date, Exodus 30:11-16 and II Kings 11:17-12:17 are publicly chanted. Two weeks later, in commemoration of the ancient *shekalim* collections, congregants donate one-half unit of the modern-day currency designated for the upkeep of the synagogue.

The Talmud describes the collection process in detail. On the 15th of *Adar*, Temple messengers would arrive in the towns of ancient Israel, to collect donations and change different types of currencies. According to Maimonides, the messengers were to “ask softly” for the half-shekel, but had no authority to coerce people to pay. On the 25th of *Adar*, according to the *Mishnah*, the messengers sat near the Temple Mount, and were permitted to seize collateral from people who still had not paid.¹⁰ However, they could not seize collateral from women, slaves, minors under the age of 20, or members of the priestly class. For women, slaves and minors, the half-shekel donations were optional. While priests were legally obligated to pay, they were not coerced because of the voluntary services they provided to the Temple [p. 3b].

Procedures were in place in case the half-shekels were lost or stolen while in the possession of the Temple messengers. The messenger was required to swear a three-fold oath that (1) he was not negligent, (2) the objects were not in his possession and (3) he had not personally used them [p. 5a]. Taking such an oath would have been a serious matter because its violation would profane the Third Commandment — “You shall not take the name of the L-rd your G-D in vain” [Exodus 20: 7 and Deuteronomy 5: 11].¹¹ Prior to the counting of the Shekels on the first of *Adar* (see below), the messenger would take an oath in the presence of the townspeople, who would then be required to donate half-shekels for a second time. However, after the first of *Adar*, once the half-shekels had been counted, then the lost or stolen half-shekels were considered to belong to the Temple. The messenger would take his oath in the presence of the Temple Treasurer, and the Temple would have to absorb the loss [p. 5a].

¹⁰This raises the question: were half-shekel donations voluntary or mandatory? For Israelite males older than 20 years of age, they were mandatory. However, these half-shekel donations probably represented only a small fraction of the resources necessary to maintain an extensive system of communal offerings and to support the priestly classes. Israelites were also required to contribute *t'ruma* (tithes) from a percentage of crops grown, first fruits, certain first-born animals, and other assets to the priestly class. However, the Temple also relied on private donations in the form of crops, precious metals, coins, land, or other assets.

¹¹In Jewish Law, spelling out a Divine name adds sanctity to the document onto which it is written, requiring that the document not be used or disposed of disrespectfully. Accordingly, we use the commonly-used convention of abridging these names with hyphens.

The messenger could choose to shirk from an oath by contributing the lost currency without any admission of guilt.

If the missing half-shekels were subsequently found or recovered, then they were forwarded to the Temple. Any donations made in their stead were also kept by the Temple and, the *Mishnah* explains, their donors were not given any type of “credit” toward future donations [p. 5a] because funds originally designated for offerings in one year could not be used for offerings in a subsequent year [*Yoma*, 13a].

In the Temple Mount, there were 13 chests, described as “horns” [*Shekalim* 15b], labeled for different purposes and arranged in a circle.¹² These chests were labeled for:

- 1 “New” shekels (donations for the current year’s collection of shekels).
- 2 “Old” shekels (donations owed from previous years).
- 3 Nests (to be spent on dove offerings).
- 4 Young Pigeon burnt offerings.
- 5 Wood (to be used for fire on the altar).
- 6 Frankincense (to be used toward the incense).
- 7 Gold for the utensils.
- 8 Remainder of sin offering.
- 9 Remainder of the guilt offering.
- 10 Remainder of bird offerings.
- 11 Remainder of nazirites’ offerings.
- 12 Remainder of lepers’ offerings.
- 13 “Donative” offerings (general contributions for offerings to be made when the altar was unoccupied) [Goldwurm, 2000, p. 116].

Chests 8 through 13 were used to collect surpluses earned by the Temple from the sale of different types of offerings.¹³

Like modern collection boxes, each chest was angled to be narrow on top and wide at the bottom, creating physical controls to prevent theft.

The *Mishnah* prescribes how to handle coins found between the chests:

¹²These chests were most likely in a chamber outside of the Temple itself, but within the Temple Mount complex [Reznick, 1994, p. 72]. We contacted Reznick, who felt that the chests and the Temple treasury were located in a courtyard north of the Temple, within the Temple Mount complex. See Figures 1 and 2.

¹³The *Mishnah* specifically names only chests 1 through 7. Chests 8 through 13 are enumerated in Maimonides’ commentary to the *Mishnah*.

If coins are found between the new shekels chest and donative offering chest and they are closer to the new shekels chests, they should be placed into the new shekels chests. If they are closer to the donative offering chests, they should be placed into the donative offering chests. If they are equidistant between the two, they should be placed into the donative offering chests. If coins are found between the wood chest and the frankincense chest . . . The general rule is that we decide where to place fallen coins based on proximity. However, in a case of equidistance between two chests, we decide for stringency [where, in the above order, donative offerings are most stringent and new shekels are least stringent] [p. 19a].

Withdrawals from the Temple Treasury: Coins were withdrawn from the Temple treasury three times a year, two weeks before each of the three major festivals: *Pesach* (the early spring festival Passover), *Atzeret* (the late spring holiday Pentecost) and *Chag* (the autumn festival of Tabernacles) [p. 7b].¹⁴ Such withdrawals were made under very tight controls. According to the *Mishnah*, the priest-treasurer withdrew three chests, individually labeled with the first three letters of the Hebrew alphabet, in sequence. This priest-treasurer could not wear a hemmed garment, shoes, sandals, phylacteries traditionally worn on the arm and head, an amulet, or any other garment that could conceal coins [p. 8a]. As the Talmud explains, these controls protect the reputation of the priest-treasurer. If he one day became poor, it would not be suspected that his poverty resulted from divine retribution for stealing from the treasury. On the other hand, if he became

¹⁴The Talmud does not state where the Treasury was located. Perhaps secrecy over its location was maintained as a control over theft. However, it is also possible that the locations of chambers outside the Temple, but within the Temple Mount, were insufficiently important to be included in the Talmud. According to Reznick, the Temple treasury was most likely located in a courtyard north of the Temple, within the Temple Mount complex [telephone interview]. See Figures 1 and 2. Josephus records that Pompey entered the Holy of Holies, "which no one was permitted to enter but the high priest, and saw what it contained . . . sacred money totaling 2,000 talents" [1959, p. 47]. This suggests that some Treasury monies may have been kept in the Holy of Holies. However, the Holy of Holies could not have also served as the Treasury Chamber referred to in the Talmud because the treasurer would have been forbidden to enter it. Rather, surpluses may have been stored in the Holy of Holies, either on a permanent basis or for safekeeping during the Roman siege.

wealthy, people would not suspect that his wealth came from the Treasury.

The Talmud goes on to provide scriptural sources for this principle of avoiding acts that might create suspicion [p. 9a]: “You shall be clean before G-D and before Israel” [Numbers, 32: 22]. “Find favor and good understanding in the eyes of G-D and man” [Proverbs, 3: 4].

The first quote includes “Israel,” and the second includes “man” in order to emphasize that people must not only satisfy an all-knowing G-D, but also must satisfy “the eyes of man,” who may suspect the priest-treasurer, or, for that matter, any person with fiduciary responsibilities, of wrongdoing, even mistakenly. On the same folio page, the Jerusalem Talmud again cites these verses adding a third verse, from Joshua: “L-rd Almighty G-D, He knows, and Israel shall know, if in rebellion, or if in transgression against the L-rd . . . Let the L-rd himself demand reparation” [Joshua, 22: 22].

The Jerusalem Talmud then recalls that Gamliel Zuga asked Rabbi Yosi ben Rabbi Bun, which verse is the most relevant of them all? He answered him, “and you will be guiltless before G-D and before Israel” [Numbers, 32: 22] [p. 9a]. Rabbi Sirilio, cited in Rabbi Yaakov Shulman’s translation/commentary, explains that the quotation from Numbers, “and you will be guiltless before G-D and before Israel” best supports this principle because it refers to financial transactions, while the quotation from Joshua refers to idolatry, and the verse in Proverbs is a general admonition [Shulman, 1998, p. 9a(3)].

In reference to the responsibilities of a charity collector, the Babylonian Talmud cites this same scriptural verse from Numbers. If a charity collector collected an excess of funds, but had no poor recipients to whom to distribute the funds, what should he do with rust-prone copper coins? He must change them for silver coins, but may not do so with his own money. Similarly, if a communal meal for the poor had left-over food, the meal’s supervisor must sell the excess food to others, and not to himself. This is because the scripture states: “And you should be clean before G-D and before Israel” [Numbers, 32: 22] [*P’sachim*, 13a]. One could suspect that the charity collector or meal supervisor personally profits from communal acts of goodwill. As in the prior examples cited from the Jerusalem Talmud, the ancient law demands that individuals with fiduciary responsibilities maintain an appearance of propriety.

In what context is the verse “And you should be clean before G-D and before Israel” written? When the Israelites were wan-

dering in the desert, the Israelite tribes of Reuben and Gad approached Moses, asking to settle in Gilead, a territory already conquered east of the Jordan River, instead of the Land of Israel proper. Moses, however, expressed concern that the tribes would subsequently avoid fighting alongside their brethren to conquer the Land. Therefore, he required that the two tribes settle in Gilead only after they helped conquer the entire Land of Israel. Only then could they be “clean before G-D and before man”. In this sense, the verse directs one to behave in a manner “beyond reproach” by the standards of both G-D and society. How could Reuben and Gad reassure the Israelite tribes that they would not abandon their battles to conquer the Land? By refusing to settle in their territory until the entire Land was conquered. Similarly, how could the priest-treasurer reassure the public that Temple assets were not misappropriated? By observing a strict system of internal controls. The following proverb in the *Mishnah* tractate “*Pirkei Avos*,” refers to a similar principle: “[Rabbi Chanina ben Dosa] used to say: He who is pleasing to his fellows is pleasing also to G-D; and he who is displeasing to his fellows is displeasing also to G-D” [3: 13].

The Jerusalem Talmud notes additional controls over the priest-treasurer’s withdrawals, explaining that withdrawals should not be made by a “*kovetz*,” defined as a curly-haired person. Before he could perform the withdrawal, his hair would have to be untangled to make it more difficult to hide coins, a physical control to safeguard assets. Alternatively, Maimonides, in his authoritative redaction of the Talmud called the *Mishnah Torah*, states that a *kovetz* is a poor person who, in order to avoid suspicion of fraud given his arguably greater temptation to steal, should not perform the withdrawals. Such controversies are common in Talmudic literature, and reflect the diversity of knowledge transmitted through many generations of oral teachings.

In order that he could not store coins in his mouth, the priest-treasurer making the withdrawal was required to talk during the whole withdrawal process — another physical control over assets. Alternatively, the Jerusalem Talmud suggests that they could have filled his mouth with water. However, this would have prevented him from reciting a necessary blessing. Rabbi Yaakov Wehl, in his 20th Century commentary *Ikva Aharon on Shekalim*, indicates another possible way of preventing theft: one or more witnesses might accompany the priest-treasurer, an independent check on the performance. This he rejects, however, reasoning that if the witness became poor,

people might suspect that his poverty was divine retribution for stealing from the Treasury, or for assisting in the priest-treasurer's fraud. Therefore, witnesses were never allowed into the Treasury chamber [Shulman, 1998, 9a(2)].

In its organizational structure, the Temple emphasized the sharing of responsibilities and segregation of controls. For example, at any given time at least three treasurers and seven supervisors were appointed over the Treasury. In general, the Talmud tells us, any fiduciary responsibilities were assigned jointly to at least two people [p. 14b].

Other Physical Controls over the Treasury: As an example of these tight controls, the Jerusalem Talmud explains the process for opening and sealing the treasury chamber. When sealing the chamber, the treasurer would affix his seal. Then, the trustee, the controller, the high priest, and the king would each affix their seals. When opening the chamber, the king, the high priest, the controller, the trustee and the treasurer would each examine his seal to make sure that it had not been tampered with, and then open it [p. 14b].

A Budget: Furthermore, the Talmud provides a budget detailing how the Temple's collections should be expended. First, daily offerings were purchased followed by additional offerings (with libations), the Omer offering, the two loaves (offered in the Pentecost festival), the twelve loaves (placed in the Holy of Holies every Sabbath), and all public offerings. Guards hired by the Temple to watch over its fields of crops were also paid for their services [p. 9b]. Furthermore, the red heifer (with other supplies necessary for its preparation) and the scapegoat offered on the Day of Atonement (*Yom Kippur*) were paid for. Any remaining funds were used to pay for a ramp for transporting the red heifer, a ramp for the scapegoat, supplies necessary for offering the scapegoat, maintaining canals running under the Temple, city walls and towers maintenance, and other needs of the City of Jerusalem [p. 10b]. Any remaining surplus was spent on wines, oils and fine flours to be resold by the Temple for use in offerings, at a profit. In the Talmud Rabbi Akiva disagrees, stating that the Temple did not invest its own money or that of the poor [p. 11a]. Rather, any remaining moneys were spent on gold sheets to plate the Ark in the Holy of Holies [p. 12a].

One scholar cited in the Talmud, Abba Shaul, argues that the High Priest himself, not the Temple, paid for the ramp used to transport the red heifer [p. 10b]. Abba Shaul's argument indi-

cates that there was an awareness of an entity concept — certain costs fell within the jurisdiction of the Temple, while others did not. Maintenance of community property in Jerusalem was considered to be, in part, the responsibility of the Temple. However other expenditures, including possibly the red heifer's ramp, were the responsibility of others.

Controls over Sales of Libations and Meal Offerings: As outlined in Numbers [15: 2-10], certain Temple ceremonies required wine libations and meal offerings made of flour and oil. According to the *Mishnah* and Jerusalem Talmud, a complex system of internal controls was instituted to sell and distribute items.

Four types of receipts for the purchase of libations or meal offerings were available, each inscribed with one of the following words: "calf," "male," "kid" or "sinner". Each receipt would entitle its purchaser to the necessary libations or meal offerings required for different ceremonies.

First, the *Mishnah* tells us, a person in need of a libation would pay Yochanan, the receipts administrator, and receive a receipt. Yochanan (or one of his predecessors or successors) could be found in the Receipts Chamber (called *Mizrach Tzfon b'Vais haMoked* — See Figures 1 and 2). The person in need of libation would then walk to Achiyah, the libations administrator, submit his receipt, and receive the appropriate libation or meal offering. Achiyah would have been located in the Oils Chamber (called *Lishkas Bais haShemanim* — See Figures 1 and 2). Separation of functional duties of transaction authorization from execution was thus achieved. At the end of the day, Yochanan and Achiyah would meet and count the receipts and coins collected. The *Mishnah* literally states that the Temple would have the "upper hand". If there were more coins than receipts, the Temple kept the excess. If, however, there was a shortage of coins, Yochanan would have to pay the deficiency out of pocket [p. 15a].

Furthermore, there was a procedure in place in case of a lost receipt. Each evening, the administrators would count the coins and receipts. If, corresponding to a claim, there was a difference between the coins and receipts, Achiya would provide the claimants with a libation or meal offering. If there was no corresponding difference, the claimant would receive nothing, thus achieving "protection of assets" in the spirit of goodwill.

The Jerusalem Talmud explains that, in order to prevent fraud, each receipt was inscribed with the day of the week, the name of the week, the month, *and* the name of the priestly

rotation on duty that week.¹⁵ The Talmud explains that, because of the low probability of the weekday, week, month and priestly rotation, the Temple officers were not concerned that a person could subsequently use an old receipt to purchase libations or meal offerings [p. 15a].

PROTECTION OF ESSENTIAL INGREDIENTS

As commanded in Leviticus [24: 5-6], 12 loaves of bread (“the showbreads”), requiring specific expertise in baking, were placed on the table in the Temple each week. Furthermore, Exodus [30: 34-38] prescribes the burning of a uniquely-mixed incense, which could not be appropriated for non-Temple use. It was deemed essential that these activities be strictly controlled.

The *Mishnah* assigns responsibility for baking showbreads to the Garmu family, and the preparation of the incense to the Avitnas family. Each family practiced certain stringencies to make sure that others could not suspect them of misappropriating Temple-owned ingredients. The Jerusalem Talmud praises the Garmu family, responsible for the Showbreads, because at home they would not bake with the type of light-colored flour used by the Temple, so that people should not say that they ate from the ingredients owned by the Temple [p. 14a]. In order to avoid suspicion that they misappropriated the showbread flour, the Garmu family used a different-colored flour when baking bread for themselves. In this way suspicions were allayed.

Similarly, the Jerusalem Talmud praises the Avitnas family, which was responsible for the preparation of the incense. The women of this family did not wear any type of perfume. Furthermore, when a woman married into this family, she would agree, in writing, as a condition of marriage, not to wear perfume, so that people should not say that members of the Avitnas family perfume themselves with the precious ingredients designated for the Temple incense [p. 14a].

IMPLICATIONS FOR RESEARCH IN ACCOUNTING AND RELIGION

Initially, we expected the Talmud to deem Temple managers G-D-fearing and trustworthy, requiring minimal internal control processes over them. However, we found the Talmud to teach

¹⁵ Priests were reservists, divided into 24 watches by family, who would each serve for one weekly period during each 24 week cycle.

that a tight system of internal controls will protect the integrity and reputation of the pious, building the integrity of the institutions for which they are responsible. Similar conflicts between control and trust can be illustrated by financial management in the modern Church of Australia, as described by Lightbody [1999]. Lightbody identifies two strategies of guardian behavior — “storing” and “shielding” — through which religious leaders set aside and protect funds for their own pet jurisdictional uses. Such strategies may explain why controls must exist over trustworthy, pious individuals. Goal incongruence may encourage such individuals to focus on their own provinces, even at a cost to the institution as a whole. The Talmud alludes to religious institutions’ problems in allocating scarce resources by providing a list of spending priorities, and describing the system of charity collection boxes to be found inside the Temple courtyard.

Recent studies by Ezzamel [2002] and Irvine [2002] explore later religious institutions’ role in redistributing wealth. Within the Talmudic tradition, land holdings were linked with wealth. After Joshua’s conquest, all tribes received land except for Levi [Joshua, 13: 14]. As part of the tribe of Levi, the priestly class did not receive any land holdings. Therefore, many sacrificial offerings were designated for the priestly class, and required donations of crops and animals were designated for the Levites. As such, landholders supported the Levites, the priestly class, and, in as much as the Levites and priests served the Temple, landholders also supported the Temple’s operations. However, the half-shekel donations described earlier were designated specifically for the Temple’s operations.

To further redistribute wealth, agriculturalists were required to make portions of their fields available for harvesting by the poor, a system described in the Talmud tractates *Pe’ah* and *D’mai* and illustrated in the book of Ruth [2: 2]. Furthermore, the jubilee year, declared every 50th year, permitted each family to regain ownership over the land holdings that it claimed in the time of Joshua alleviating many wealth imbalances.

In his study about the Church of England during the late 20th century, Laughlin [1988] discusses how religion seeks to distinguish the sacred from the profane, so that sacred institutions establish themselves as strongholds against the profane. The Talmud makes similar distinctions. For example, Talmudic law distinguishes individuals by both birthright and ritual purity. In order to enter the Temple, individuals must be ritually

pure, being required to avoid contact with leprosy, menses and the dead for a period of time, and then immersing in a ritual pool. Furthermore, descendants of the Biblical Aaron and Levi have special privileges and responsibilities within Temple rituals. Certain crops and livestock were also designated for the Temple's operations and were forbidden to be used otherwise. Even certain ideas, such as those rooted in idolatry, were considered to be so anathema to the prevalent philosophy that they would have no role to play in the functioning of the Temple or the prevailing court system. Accordingly, because ideas of accountability were not explicitly commanded by Scripture, one might assume that they would be deemed profane or idolatrous, and unworthy of practice within the Temple's precincts. To the contrary, the Talmud's extended discussion of internal controls indicates that systems of accountability formed an integral portion of the Temple's rituals. There was no separation between secular accounting processes and sacred service, so much so that actions that might raise suspicion of theft could have been deemed akin to theft itself. Furthermore, judging from the fragmentary nature of the Talmud's redaction, it is probable that the tight physical controls described in the Talmud represented only a small fraction of the controls in place over the Temple's operations.

CONCLUSION

In this study we have explored internal controls over the collection of half-shekel donations, withdrawals from the Temple treasury, entry to the Treasury, the sale and distribution of libations and meal offerings, and the protection of ingredients essential for religious purposes as described in the Jerusalem Talmud. One would expect the Talmud to admonish its students against theft, but not to implement minimal controls over a priestly class deemed pious and trustworthy. To the contrary, the Talmud describes what appears to have been a tight system of physical and operational controls. Since the *Mishnah* and Jerusalem Talmud are written redactions of teachings passed down through generations of scholars, and studied during the times of the Jerusalem Temple, we can presume that these teachings would have increased peoples' confidence in the workings of their central religious organization, providing assurance that donations were expended appropriately.

During our research, we found no mention of record keeping. This does not necessarily indicate that no record keeping

took place. For example, in *The Jewish War*, historian Josephus records specific amounts taken from the Temple treasury:

Pompey and his staff went into the Sanctuary . . . and saw what it contained . . . sacred money totaling 2,000 talents [p. 47].

For the campaign against the Parthians, Crassus removed all the gold from the Sanctuary in Jerusalem, including the 2,000 talents Pompey had not touched [p. 51].

As the survivors fled in terror the [Roman] soldiers swooped on the unguarded treasury of God and carried off about four hundred talents; what they did not steal Sabinus collected [p. 125].

However, if Temple records were unavailable to Josephus, he would have received these counts from the Romans. Furthermore, it is possible that Talmudic material explaining such record keeping practices may have been lost over the millennia. However, its apparent omission suggests that record keeping and reporting was of low priority.¹⁶ While the Talmud tells us how donations should have been spent, it is possible that no reporting mechanism existed — or was deemed necessary — to describe how donations were actually spent.

Most surprising, however, in the course of this research, is our finding that piety may have compelled fiduciaries to accept stronger, rather than weaker controls over their actions. The tendency may be to trust the religious person, on the presumption that a G-D-fearing person will not steal. To the contrary, the Talmud teaches that tight internal controls protect the integrity and reputation of the pious, and of the institutions for which they are responsible.

In this study, we have explored one of many links between Jewish tradition and accountability. Other studies may lead to interesting insights into the interface between religion and accounting in historical contexts. These include Talmudic systems of taxation, computation of tithes, explicit accounting records in the Bible, and philosophies of individual accountability before the Divine.

¹⁶Financial record keeping was possible given the careful calendar records mentioned elsewhere in the Talmud.

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Lúcia Lima Rodrigues
UNIVERSITY OF MINHO
Delfina Gomes
UNIVERSITY OF MINHO
and
Russell Craig
AUSTRALIAN NATIONAL UNIVERSITY

CORPORATISM, LIBERALISM AND THE ACCOUNTING PROFESSION IN PORTUGAL SINCE 1755

Abstract: This paper introduces some significant developments in the history of the Portuguese accounting profession. It does so with a view to providing a facilitative foundation of knowledge upon which further analysis and critique can be undertaken. Five developmental periods since 1755 are identified: (i) Corporatist Absolute Monarchy (1755-1820) (ii) Liberal Monarchy (1820-1890) (iii) Waning Liberalism and Rising Corporatism (1891-1926) (iv) Corporatist Dictatorship (1926-1974) and (v) Emerging Liberal Democracy and Neo-corporatism (1974 until the present). The accounting profession's chequered history is analysed through episodes of regulation and de-regulation. These episodes are associated with Portugal's pervading social, economic and political context and are dichotomised broadly as either "corporatist" or "liberal". Relationships between episodes of regulation and periods of "corporatism" are highlighted, together with associations between episodes of de-regulation and periods of "liberalism". A better understanding emerges of factors instrumental in the emergence of a well respected and rapidly growing accounting profession in Portugal.

INTRODUCTION

For much of the period from about the 15th century to the first half of the 17th century, Portugal was one of the world's

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great colonial powers and the home of some great merchants and traders. In recent centuries, Portugal has been overshadowed by Spain, France, Holland and Britain, and it has languished in terms of economic influence and cultural development. But now, with the support of European Union [EU] initiatives, and prudent national economic management, it is developing at a rapid rate. An instrumental part of the force currently propelling Portugal has been an accounting profession¹ that has developed considerably in status and performance, particularly in recent decades.

Despite the increasing importance of accountants in the commercial infrastructure of Portugal, there has been little documentation of how the vocation of accounting has evolved and matured, and about the significant formative influences involved. This paper aims to fill that void (and provide an exposé that is intrinsically interesting from an accounting history perspective) by reviewing the regulatory development of the vocation of “accountant” in Portugal over the past two and a half centuries. It is a response, in part, to calls by Carmona and Zan [2002, pp. 291, 300] to “map” a broader “variety in the history of accounting . . . by expanding the dimensions of time [beyond the current emphasis on 1850-1940] and space [to include Africa, Continental Europe, Islam, Latin America]”. We seek to provide a foundation upon which further understandings will emerge of how and why the accounting profession evolved in Portugal; and, to a lesser extent, of how accounting knowledge was propagated in Portugal. In a sense, we are embarking on “a new voyage in search of the profession” [Walker, 1999, p. 1] with a view to providing part of the map of “the disparate socio-economic, legal and cultural landscapes through which accountants arrived at destination profession” [Walker, 2002, p. 377].

The reforms in 1755 of the Prime Minister, the Marquis of Pombal, are taken as an appropriate starting point for our analysis.² We divide the period since 1755 into five significant

¹ We acknowledge the difficulty in “pinning down” exactly what a profession is. Carnegie and Edwards [2001, p. 302] have argued that “the point at which any occupational community genuinely deserves the description of profession is almost certainly impossible to identify, and is probably of no great significance per se”. Nonetheless, what we chronicle in this paper, for a large part of the analysis period, might best be described as a “professionalization process”.

² In 1755, a devastating earthquake struck Portugal. It destroyed about 10,000 buildings in Lisbon, including the commercial heart of that city and much of the commercial record-keeping infrastructure in Portugal — for example, that maintained in the Customs House (Birmingham 1993, p. 65, Saraiva

developmental phases, based on the nature of the Portuguese state, its dominant ideologies and its approaches to decision making:

- *Corporatist Absolute Monarchy* (1755 to 1820)
- *Liberal Monarchy* (1820 to 1890)
- *Waning Liberalism and Rising Corporatism* (1890 to 1926)
- *Corporatist Dictatorship* (1926 to 1974) and,
- *Emerging Liberal Democracy and Neo-Corporatism* (1974 to present).

Our labeling should be non-controversial. The terms used to describe these periods are consistent with those adopted commonly by writers of Portuguese history [for example, Birmingham, 1993, Lloyd-Jones 1994a, 1994b, 1994c].³ A chronological overview, summarizing significant events in the development of accounting in Portugal is presented in Appendix 1.

Our analysis proceeds by broadly classifying the pervading mood of Portugal in the period under review as consistent, in varying degrees, with the principles of “corporatism” or “liberalism”. But first, we wish to enter a caveat. Our “Corporatism/Liberalism” framework is not developed in exhaustive detail and requires further development. Nonetheless, it seems useful to introduce such a classificatory perspective. By doing so, we seek to demonstrate the insights that can be provided to the ebbs and flows and phases of development in the processes of professionalization of accounting over a 250 year period in Portugal. In settings classified as “corporatist”, we do not analyze the complexity of arrangements and the dialogue that may have taken place between the state and bodies representing accountants. This would require in-depth analysis of archival sources — a task unmanageable in a single introductory contribution such as this, and one better suited to exploration in future research papers.

1983, Moreira de Mendonça 1758, p. 129). The Tribunal de Contas (n.d.), *Fundo Antigo*, Vol. I, book 2, sheet 62 refers to the losses of “books and papers” and the “receipts and expenses books, and papers of all treasuries of the Court”.

³Nonetheless, scholars who have attempted to identify phases in the historical development of accounting in Portugal have not agreed on an appropriate classificatory nomenclature. Carvalho *et al.* (2002), for example, draw upon an analysis of “the inventory of accounting books published in Portugal since the eighteenth century” to identify the following three phases: (i) Bookkeeping (until 1929) (ii) Patrimony (1929 to 1977) and (iii) Standardization (1977 to the present). Other developmental period schemas have been proposed by da Silva (1984) and Tua Pereda (1995).

Corporatism: This is a term that “has been characterised by ambiguity, imprecision, and a liberal, rather undisciplined usage” [Molina and Rhodes 2002, p. 306]. Here, by “corporatism”, we mean a mode of regulation based on an ideology or a system of ideas about how to organize an economy by “making professional and trade corporations the basis of the commonwealth” [Theimer, 1939, p. 70]. We regard corporatism as seeking “continuous and structured participation of interest organizations in policy-making . . . and policy implementation” [Molina and Rhodes, 2002, p. 307]. As Puxty *et al.* [1987, p. 284] have pointed out, a corporatist state:

. . . does not simply license the existence of organised interest groups but incorporates them into its own centralised hierarchical system of regulation. In doing so, the state simultaneously recognises its dependence upon these associations and seeks to use them as an instrument in the pursuit and legitimation of its policies.

Thus, we regard the political apparatus established in 1933 by Portugal’s Prime Minister, António Salazar, as corporatist: “the upper house or senate was replaced by the Corporative Chamber, a consultative body in which the main aspects of the nation’s life were to be represented; economic, professional and intellectual” [Livermore, 1976, p. 333]. The interests of employers were to be drawn together in interest groups or associations known as *Federations*; employees’ interests were to be brought together through associations of *National Unions*; and the interests of the professions were to be effected through the formation of *Orders* of professionals [Livermore, 1976, p. 333].

Schmitter’s⁴ definition of “corporatism” is instructive, for it highlights some of the key characteristics (italicized and underlined here) of the system of interest representation in a corporatist state:

. . . in which the constituent units [including professional associations] are organised into a limited number of singular, *non-competitive*, hierarchically ordered and functionally differentiated categories, recognised and *licensed* (if not created) by the state and granted a deliberate *representational monopoly* within their re-

⁴Schmitter distinguished between three models of organized interest participation: “Pluralism”, “Societal corporatism” and “State corporatism” (Lane and Ersson, 1999). In this paper we focus on “State corporatism”.

spective categories in exchange for observing certain *controls* on their selection of leaders and articulation of demand supports [Schmitter, 1979 cited by Lloyd-Jones, 1994c, p. 8].

The broad aims of corporatism have often been achieved by “restrict[ing] competition” [Lloyd-Jones, 1994b, p. 6] and effecting a “community of interest” between the proletariat and the bourgeoisie. In a corporatist state, “truly integrated corporations”, like professional associations of accountants “perform a variety of functions, many of them executive ones devolved to them by the state. For example, the corporations would be responsible for not only making policy through the state, but also for enforcing that legislation amongst their members by means of sanction and reward” [Lloyd-Jones, 1994, p.34, citing Schmitter, 1979, pp. 34-36].

“Corporatism” has a long tradition in Portugal. Its roots have been traced from Roman Law and to the concept of society enunciated by Thomas Aquinas, based on the “. . . idea that government authority should be exercised in the pursuit of the common good by natural ‘organizations’ within a ‘hierarchical [and] . . . compartmentalised society’” [Wiarda, 1977, pp. 57-58].⁵

Liberalism: “Liberalism is a way of thinking about humanity and politics [and a term that] has seemed impossible to define [because] it has appeared in various shapes in different times and places” [Miller, 1991, p. 285]. Nonetheless, by “liberalism” here we mean an ideology in which belief in individual rights is paramount, the merits of unfettered competition and the pursuit of material wealth are revered, and there is little compassion for material inequalities in society. Constitutionalism, tolerance of competing religions and commercial activity are highly regarded. Political authority is questioned with a view to reform rather than evasion [Miller, 1991, pp. 285-289].

Our expectation is that periods of “corporatism” will be characterized broadly by the *regulation* of professional endeavor, whereas periods of “liberalism” will be characterized broadly by the *de-regulation* of professional endeavor. Consistent with Puxty *et al.* [1987, p. 274], we regard the development of

⁵For further explanation of the operation of corporatism in Portugal see Robinson [1979, pp. 128-134], and Lloyd-Jones [1994 a,b,c]. For further understanding of the nature of corporatism and the professionalization of accounting within a corporatist regime, see Cooper *et al.*, [1989], Richardson [1989] and Walker and Shackleton [1995].

accounting [such as in Portugal] to be “associated with the distinctive histories and institutional specificities” of Portugal.

CORPORATIST ABSOLUTE MONARCHY (1755-1820)

In this period state initiatives were undertaken to enhance the pursuit of the common good through advancements in trade and economic performance. This was to be accomplished, in part, by a better-trained and more competent cadre of accountants who would emerge from the state’s establishment of a School of Commerce (with typically corporatist monopoly powers) by its Board of Trade.

Although Portugal experienced a period of prosperity in the 15th century, arising from the exploits of Henry the Navigator, and those of Vasco da Gama (who pioneered the sea route to India via the Cape of Good Hope in 1498), Portuguese affluence declined in the reign of *Dom João III* (King John III) between 1521 and 1557. A major reason for this was that the Portuguese Inquisition⁶ prompted many Portuguese Jews to leave the country, thereby depriving it of much capital and entrepreneurial skill. Foreigners began to dominate Portuguese commerce. By the first half of the 18th century there were few Portuguese merchants: they had little capital, poorly developed business acumen and low levels of literacy [Azevedo, 1929]. In about 1750, there were few privately owned factories, other than the one that subsequently became the Royal Silk Factory.⁷ The view that Portuguese industry could not be developed successfully was held widely, especially by foreigners who conducted business in Portugal. There were few indigenous accountants. Most accountants in Portugal were Italian or French.⁸ The double entry bookkeeping system was almost unknown to Portuguese merchants.

⁶Permission to conduct an Inquisition was successfully sought from the Vatican by the Portuguese court in 1531 (Livermore 1976, p. 47). Although interest in the Inquisition began to decline markedly from about 1682, it was not formally dis-established until 1821. [*Dicionário Enciclopédico da História de Portugal* (1990, pp. 345-346), Publicações Alfa, edited by Selecções do Reader’s Digest, SA].

⁷The Royal Silk Factory was established in 1734 as the *Companhia da Fábrica das Sedas* (Silk Factory Company). It became Royal property in 1750. In 1757 the Board of Trade assumed responsibility for its administration. It operated until 1835 [Sousa 1995, pp. 9-10].

⁸The first bookkeeper of the *Grão-Para e Maranhão* Company (1755) was a Frenchman who later taught the Portuguese who replaced him. In 1756, Italians were the first general bookkeepers of the *Junta do Comércio* (Board of Trade) and the woollen manufacturer of Covilhã [Oliveira, n.d.].

Drastic measures were needed to address this state of indigenuous commercial naivety. The driving force in doing so was the Marquis of Pombal, the Chief Minister of *Dom José I* (King Joseph I) between 1750 and 1777. The Marquis of Pombal was a “canny statesman and diplomat” [Tyson-Ward, 2002, p.21], also known for his heavy-handed “dictatorial methods” [Birmingham, 1993, p.79]. He was a worldly-wise,⁹ well-traveled man who had been the Portuguese ambassador to England from 1739 to 1743 [Maxwell, 1995, p.4]. There he witnessed the important facilitative role played by a nascent English middle class in the early stirrings of the industrial revolution. The Marquis of Pombal was aware that the Portuguese economy lagged behind the economies of other European countries. He attributed much of Portugal’s economic sluggishness in trade to the absence of a well-trained cadre of Portuguese technicians who were capable of managing the commercial affairs of merchants and industrial concerns. The Marquis of Pombal was an economic protectionist and a “patriotic modernizer”. Consistent with corporatist ideals, he was eager to develop an “indigenous commercial bourgeoisie” and a merchant class to “control the country’s own destiny” [Almodovar and Cardoso, 1998, p. 36; Birmingham, 1993, pp. 80-84].

The Board of Trade and the School of Commerce

The Marquis of Pombal issued a Royal Decree on 30 September 1755 creating a *Junta do Comércio* (Board of Trade). He intended this body to foster commercial activity, and in particular, to improve the management and administration of new factories [Ratton, 1813]. In a significant initiative on 19 May 1759, the Marquis established the *Aula de Comércio* (School of Commerce)¹⁰, under the ambit of the Board of Trade.¹¹ The School of Commerce was Portugal’s first formally constituted

⁹Pombal “showed his compatriots a new instrument of table manners: a fork. It was he, it appears, who for the first time used a fork at a table in Portugal, where up till then, even at Court, the nobility and gentry had put their hands in their plates and eaten with their fingers” [Trend, 1957, p. 173].

¹⁰A strict translation of this term would be “Class of Commerce”. In 1759, the expression “school” was not used widely. But the *Aula de Comércio* was a school. In keeping with the preponderance of translations of this term into English [for example, Maxwell, 1995, p. 77] we have adopted the term “school”.

¹¹At this time, he was also responsible for significant reforms in higher education, including reforms in science, mathematics, engineering, medicine and surgery [Birmingham, 1993, p. 83; Maxwell, 1995, pp. 95-107].

establishment for professional education. According to Maxwell [1995, p.77] “this school was to teach Italian double bookkeeping [sic] methods and was to give preference to sons of Portuguese businessmen in its three year degree”. In a remarkable claim, Corrêa [1930, p.113] and Azevedo [1961, p.6] have contended that it was the *world's first* official professional technical establishment specializing in the teaching of accounting.¹²

By establishing the School of Commerce, the Marquis sought to provide an educational infrastructure to promote the commercial astuteness of merchants and potential industrialists. The hope was that this initiative would help industry to flourish and make Portugal strong and independent. Prior to the creation of the School of Commerce there were no specialist accountants in Portugal. In the first ten courses conducted by the school (with intakes of students from 1 September 1759 to 10 November 1794) there were approximately 1933 enrolled students of whom about 1014 graduated successfully [Santana, 1989; Cardoso, 1984; Rodrigues *et al.*, 2003a, 2003b]. All of those who attended the School of Commerce were trained to be successful merchants, and, importantly, to be proficient in double entry bookkeeping.¹³ As a consequence, the number of Portuguese who were versed in accounting (both in merchants' businesses and public institutions) increased significantly in ensuing years. The need to rely on foreign accountants diminished.

The Letter of Law of 1770: Over the following decade, some jobs were preserved exclusively for students who had undertaken courses offered by the School of Commerce. For example, the Letter of Law of 30 August 1770¹⁴ imposed restrictions obliging the public service to only recruit graduates of the School of Commerce. This was one of the first regulatory controls on the occupation of accountancy in Portugal — and it was a monopoly right consistent with corporatist ideology.

¹²This claim is one that has garnered much support in Portugal. Francisco Felisberto Dias da Costa, for example, writing in French in 1900, has contended that “*Portugal est une des premières nations, sinon la première nation où a été établi l'enseignement officiel du commerce*”. We are currently investigating this claim.

¹³Statute 15 of the School indicates that it focused on double entry bookkeeping [*Estatutos da Aula do Comércio de 10 de Abril de 1759 e Alvará de Confirmação 19 de Maio de 1759*; and see Azevedo, 1961].

¹⁴Copied from the transcription made by PIMENTA, Pedroso — “O Marquez de Pombal regulamentou as profissões de técnicos de contas”, *Revista de Contabilidade e Comércio*, Oporto, Vol. II, No. 8, 1934, pp. 289-295.

The Letter of Law emphasized the importance of facilitating commerce and assisting merchants to develop their trading activities. For example, *Dom José* (King Joseph) observed that “for some years until now there is the absurdity that someone without the requisite knowledge can put himself forward and call himself a Businessman, without having learnt ethical principles, mercantile calculations, reading and writing, and ignoring, in that way, a so necessary and noble profession” [Letter of Law, 30 August 1770].

All merchants, bookkeepers, cashiers, business houses, corporations, and public or private societies were required to be registered with the Board of Trade (Points 1-4) — a form of licensing consistent with corporatist ideals. Persons not registered were to be disbarred from practice and from obtaining public posts and were to suffer the further indignity of having all accounts recorded by them rejected in the courts. Points 12 and 13 pre-established a fixed salary per year for the first three years of activity for each bookkeeper. (First year: 72,000 *réis*; second year: 96,000 *réis*; and third year: 120,000 *réis*.) Thereafter, bookkeepers were free to charge whatever they liked for their services.

Access to diverse public posts was reserved for graduates of the School of Commerce who possessed an approval letter from the Board of Trade (Points 5 and 11). These posts included clerks in naval vessels, army clerks, and officers administering the *Real Fazenda* (Royal Finances), bookkeepers and cashiers. *Dom José* (King Joseph) acknowledged the positive impact of the School of Commerce (in the Letter of Law of 30 August 1770) with the self-commendation and observation that “the three courses to graduate from the School of Commerce have shown the righteousness of this Royal policy. The large number of students graduating from the first two courses has been successfully employed in several offices of my Royal Civil Service”.

The prestige of the School of Commerce continued into the 19th century. Ferreira Borges, in his *Commercial Juridical Dictionary* of 1833, makes it clear that to become a bookkeeper one had to be a graduate of the School of Commerce and be certified by the Board of Trade [Perdigão, 1950]. The School of Commerce continued to be an influential stepping-stone to careers in commerce in the Portuguese public sector for many years.¹⁵

¹⁵It was reformed on 20 September 1844 and affiliated with the Lisbon High School, where it was known as the *Escola de Comércio* (School of Commerce) or *Secção Comercial* (Commercial Section).

Cardoso's [1984] examination of the vocational employment destinations of graduates of the School's third and fourth courses (commencing in 1767 and 1771 respectively) revealed that of 130 graduates 52% went into "accounting and bookkeeping activities"; 21% were involved with "emigration activities (Brazil and India)"; 19% were employed in general "commercial activities"; and 8% were involved in "other" activities (mainly in military and religious pursuits).

LIBERAL MONARCHY (1820-1890)

Portugal was de-stabilized by the French invasion of 1807, led by General Junot. The Portuguese court of the Prince Regent fled to Brazil, diluting the power of the monarchy.¹⁶ The French were expelled by a British military force in 1808 and the British became military rulers of Portugal until 1820 "when restiveness at British overrule" prompted a "French-style" revolution that continued intermittently for 31 years [Birmingham, 1993, p. 96]. Nonetheless, British influence in external affairs, and in the wine industry, remained very strong. But a significant transformation in the mood of Portugal, often described as a "liberal revolution", commenced about 1820. This mood was reflected in the Portuguese constitution of 1822, which enunciated support for individual rights and liberal ideals (e.g., in articles 1 and 27; Miranda, 1976, p. XIV). French attitudes of *laissez faire* and liberalism became popular in some quarters. Portugal, in keeping with much of Europe, was caught up in a tide of liberal ideas. This was especially the case after the liberal revolutions in Europe in 1830 and 1848.¹⁷ A major effect on commerce was that, to a large extent (there were exceptions), monopoly privileges, licensing, interest group representation and regulation were viewed with less favor. Consequently, the period witnessed some de-regulation of arrangements governing accounting.

The Portuguese Commercial Code of 1833: Intuitively, one might expect this code to contain de-regulatory manifestations of the

¹⁶The Prince Regent had acted in that role from 1792 after *Maria I* (Mary I) was declared insane. He was formally declared Prince Regent in 1799 and became *Dom João VI* (King John IV) in 1816.

¹⁷Manifestations of liberal ideals were in proposals to tax the nobility and clergy, undertake agricultural reform, abolish feudal privilege, reform arrangements governing land tenure, institute parliamentary democracy, and broaden civil rights [Birmingham, 1993, pp. 104-109].

liberal attitudes that were gaining ground in Portugal — especially as the code's principal architect was Ferreira Borges, a lawyer and economist who was an important figure in the liberal revolution in Oporto¹⁸ in August 1820. Ferreira Borges wrote this Code on his final return from political exile. (He was exiled, principally in the United Kingdom, from 1823 to 1827 and from 1828 to 1833). But rather than the Code containing liberalizing de-regulation, it imposed rules on accounting activities. The books that merchants were required to keep were specified, as was their mode of organization. The accountant who prepared the books of a merchant was required to be publicly registered.

The reasons for such seemingly paradoxical, aberrant behavior — regulation in a period of liberalism — are not easy to explain. One seemingly plausible explanation is that the paradox was a manifestation of the uncertainty, precarious mutability and volatility of the times. Although the 1820 liberal revolutionaries (including Ferreira Borges) were, in the main, “large merchants whose interests coincided with the British trade which they did not want to hinder” [Birmingham, 1993, p. 126], views on trade and related commercial matters (e.g. accounting regulation) were far from universal in Portugal. Liberal views took time to gain hold across the country. Many in the farming and manufacturing sectors in Portugal, for example, wanted non-liberal “French-style economic nationalism . . . [and] . . . tariff protection against imports” [Birmingham, 1993, p. 126]. Thus, the regulations imposed in the 1833 Code could be explained as a reflection of the heterogeneity of views on trade and commerce that were held within a developing liberal state. They could also have been occasioned by the positive influence that regulatory developments in the UK had on the Code's author, Ferreira Borges, during his exile in London. Another explanation could be that the regulations in the Code provided a framework that would help business to flourish: this could be seen as liberal behavior, in contrast to other types of regulations that were clearly intrusive controls.¹⁹

¹⁸This is the second largest city in Portugal. It is known in Portuguese as “Porto”, but in English as “Oporto”. Both of these terms are used interchangeably here in referring to this city. The choice of term is dependent on context.

¹⁹We are indebted to Dick Edwards for drawing our attention to the latter point. Jose Carvalho has conjectured that there was possibly a great difference between law and practice at this time. That is, that whilst these regulations existed in a *de jure* sense, they were not complied with in a *de facto* sense.

The Letter of Law of 1838 and the Commercial Code of 1888: These were two important milestones in the evolution of the accounting profession in Portugal. Article 9 in the Letter of Law of 7 April 1838 indicated that certain professions and artisans were to be subject to a 10% *decima* (income tax) [Moreira, 1944]. In paragraph 11 of Article 9, bookkeepers are mentioned specifically as being subject to the tax. The requirement that a bookkeeper be registered with the Board of Trade or be a graduate of the School of Commerce was relaxed. This was in keeping with the [by then] pervading ethos of economic liberalism: the government believed it unnecessary to interfere with the professions, with the registration of professional persons, and with the organization of professional bodies.²⁰

The enactment of the *Código Comercial* (Commercial Code) in 1888 provided a clear example of the influence of liberalism on de-regulation. It allowed all merchants and joint-stock companies to conduct their own accounting, or to authorize (either expressly or tacitly) any other person to do it, irrespective of that person's skills (articles 30 and 38). Thus, all business records could be kept by either a bookkeeper or a cashier, or merchants themselves, irrespective of the keeper's skills, formal training and official registration [Perdigão, 1950].

WANING LIBERALISM AND RISING CORPORATISM (1890-1926)

By the beginning of the 1890s it was becoming increasingly apparent that de-regulation and continued adherence to economic liberalism was not in Portugal's best interests. The Portuguese economy, beset by a stagnating wine industry, was too weak to face free competition from Spain and Britain. There was a major financial crisis in 1891-1892 when Portugal could not meet interest payments on foreign loans and was forced to raise new loans at big discounts and to pledge vital national assets (such as the tobacco monopoly) as security. In effect, the country was on the verge of bankruptcy. Public debt ballooned and the trade deficit worsened [Livermore, 1976, p. 309]. Portugal began to turn to corporatist, protectionist policies to sustain

²⁰ Nonetheless, there were some exceptions, particularly in the public sector. For example, by article 74 of the decree of 20 September 1884, only those students with a diploma from the School of Commerce or those who had completed the correspondence course at Oporto's Polytechnic Academy [Azevedo, 1961] were eligible for positions in the Public Treasury and Customs House.

its domestic economy and colonial interests. As a consequence, there was a gradual accommodation (if not replacement) of ideas of economic liberalism with centralist corporatist policies. This was abetted by corporatist advocates like the anti-liberal *Movimento Social Católico* (Catholic Social Movement) that believed in a strong state and a clearly defined hierarchical structure in society.

The early years of this transition period were ones of conciliation between the two ideologies and hence, some ambiguity. However, the assassination of *Dom Carlos I* (King Carlos I) and his son in Lisbon in 1908 and the establishment of the Republic in 1910, heralded a hardening of attitudes to liberalism. These were fuelled by lingering memories of the financial crisis of the early 1890s and ensuing allegations of business corruption. Attitudes hardened further as the political administration passed through the hands of 45 governments between 1911 and 1926: there was a transition from democratic republicanism (for example, of Afonso Costa in 1913) to military authoritarianism (for example, of the corporatist, Sidónio Pais in 1917) [Birmingham, 1993, p. 150]. The period was known as the *rotativismo* (rotation) period and was characterized by a lack of “any coherent ideology” [Lloyd-Jones, 1994c, p. 3].

Regulation of Joint-stock Companies and Accounting Experts: Consistent with the renewed popularity of corporatism, it was not surprising that as joint-stock companies became increasingly important, new mercantile associations appeared and new regulations were imposed. The most significant regulatory developments in this period occurred in 1911. Article 35 of a statute promulgated on 13 April 1911, for example, required joint-stock companies to submit to official audit and inspection. Directors were prohibited from serving as bookkeepers of any company they administered. The concept of mutual liability was introduced: in the event of any fraudulent acts concealing the truth of any individual component part of a balance sheet, all bookkeepers, managers and other participants in the administration of joint-stock companies were to be regarded as accomplices [Perdigão, 1950].

In 1911, a law dealing with “accounting experts” was introduced, requiring accounting to be undertaken by “capable technicians” (*Government Diary*, n° 124, 29 May 1911). The provisional government of the Portuguese Republic decreed also that the Ministry of Justice create two widely-representative Chambers of Accounting Experts, one for the north and one for the

south of the country (Article 1).²¹ In the spirit of corporatism, the Chambers were collegial associations whose main objective was to supervise the provision of commentary on, and verification of, the various balance sheets and accounting reports and related documents presented to general meetings of companies. They also examined evidence referred to them from commercial, criminal and civil trial proceedings.

CORPORATIST DICTATORSHIP (1926-1974)

In 1926, the military, led by General Oscar Carmona, overthrew the incumbent democratically elected government. In 1932, President Carmona appointed António Salazar as Prime Minister — a position Salazar held for 36 years. Salazar was a “dry, humourless, religious, intellectual” [Lloyd-Jones, 1994a, p. 7] who had held academic posts at the University of Coimbra. His appointment has been described as “Professor of Political Economy” in 1918 [Robinson, 1979, p. 45]; “Professor of Economics” in 1926 [Livermore, 1976, p. 331]; unqualified emergency lecturer in financial law who “wrote articles on national bookkeeping for the press” [Birmingham, 1993, p. 157]; and also as a “lecturer in accountancy” [Birmingham, 1993, p. 159]. Salazar’s regime was “totalitarian, police-run, *corporative*, anti-liberal, anti-democratic, anti-parliamentary, anti-collectivist, and disdainful of opponents whom it was willing to eliminate physically” [Georgel, 1981, p. 302, translated, cited in Birmingham, 1993, p. 159, italics applied].

Salazar’s power and *Estado Novo* (New Estate) regime was entrenched by the new constitution of 1933, in which Article 5 defined Portugal as a “unitary and corporative republic”. Salazar sought to “reduce, if not indeed eliminate all popular involvement in the actual process of government” [Lloyd-Jones, 1994a, p. 3]. But whereas Salazar was a supporter of corporatism, for several decades the bureaucratic apparatus of his regime was cumbersome and inefficient in implementing corporatist ideals effectively. Nonetheless, in the early years of his [and

²¹ The Chamber for the North was composed of twelve individuals (four each from the Court of Commerce, the Commercial Association of Oporto, and the Industrial Association of Oporto). The Chamber for the South was composed of 24 individuals (chosen by the following institutions: Court of Commerce, Lisbon’s Commercial Association, Portuguese Industrial Association, Lisbon Shopkeepers’ Association, Portuguese Agricultural Association and the Lawyers’ Association).

Carmona's] regime, some important professional organizations were established by Government Order. There was a Lawyers Order (1926), an Engineers Order (1936) and a [medical] Doctors Order (1938).²² But it was not until 1972 (under Caetano's regime) that another professional association was granted an "Order", the Pharmacists Order. In 1968, Salazar suffered a debilitating brain clot. The reins of his administration were taken up by a like-minded lieutenant, Marcelo Caetano.²³

Salazar, intent on centralizing power, took corporatism to an extreme. He was opposed to free-reigning associations of individuals with a common purpose, such as professional associations and labor unions. He wanted such associations to be "corporatized" under firm state control. In 1933, he introduced a *National Labor Statute*. This banned all free unions and professional associations, and set up in lieu, a system of "National Unions" (covering both former professional organizations and labor unions). These "National Unions" were to be controlled absolutely by Salazar and his apparatchiks.

In 1934, in keeping with corporatist philosophy, Salazar's Ministry of Commerce, Industry and Agriculture commissioned a study of how to best regulate bookkeepers and accountants. It was conducted by a committee comprising representatives of the Ministry, the Superior Institute of Economic and Finance Sciences of Lisbon, the Portuguese Industrial Association, the Merchants' Association, National Union of Accountants and Bookkeepers from the Oporto district, and selected graduates from Accounting Institutes or equivalent courses. The Commission's report was never published.²⁴

National Union of Accountants and Bookkeepers from the Oporto District [NUABO]: This body, founded in 1934, sought to guarantee correct and strict professional conduct by accountants and thereby enhance their prestige. NUABO was a "free union" [as opposed to one of the Salazar state's "national unions"]. It sought to advance accounting technique by organizing study sessions, developing libraries, creating accounting schools, and,

²²The Orders are the most prestigious and elitist corporatist organisations in Portugal. Other Orders issued since then in Portugal are the Architects Order in 1998, the Economists Order in 1998 and the Auditors Order in 1999.

²³Salazar died without recovering his powers, in July 1970 [Livermore, 1976, p. 358].

²⁴Our knowledge is obtained from an article by Pedroso Pimenta [1950], a Professor of the Commercial Institute of Lisbon.

in other ways, promoting the professional interests of members. It quickly became influential. On 28 June 1936, the Ministry of Corporations and Social Welfare, consistent with corporatist philosophy, prohibited owners of businesses in Portugal from employing accountants and bookkeepers who did not belong to NUABO or who did not possess an accrediting “professional letter” from it (Article 2, Edit n^o 23712). Thus, the “Professional Letter” from NUABO became essential as a licensing credential for persons wanting to practice as accountants and bookkeepers. At this time, NUABO was the only accounting organization of a corporate character in Portugal [Sousa, 1933].²⁵ Hence, it fulfilled a national, rather than a regional, responsibility. Its important role in defending and promoting the interests of the profession was strengthened further by subsequent government decrees.²⁶

Proposals for the Regulation of the Accounting Profession by the Academic Association of the Commercial Institute of Oporto: These proposals, put forward on 8 November 1940, although never implemented, are important indicators of the corporatist mood of the time. They categorized “accounting technicians” variously in the hierarchy of “bookkeeper”, “accountant” or “accountant expert” (Part I). A *bookkeeper* was regarded to be a technician who *executes* recording operations. An *accountant* was defined as a technician who *supervises, organizes, guides and conducts* the services of accounting and the administration of a public or private organization. An *accountant expert* was defined to be a technician responsible for *inspecting and verifying* the accounting and management facts of economic organizations.

Part II of the proposals related to the use of titles by members of NUABO. The designation *bookkeeper* was available to individuals of either gender, who were at least 19 years old, had a degree from an accepted course of commerce offered by an

²⁵In 1942, the Lisbon District intended also to have a similar “Accounting Union”. But the State Secretary of Corporations refused to allow its formation, arguing that NUABO was an error, and that errors must not be repeated. In other Portuguese districts, accountants were included in unions of Office Clerks. NUABO was the only organization of its type representing accountants.

²⁶For example, Edit 28220, 24 November 1937, included “accountant expert” in the Chart of Liberal Professions. Edit 29931, 15 September 1939, considered the “professional letter” given by NUABO to be compulsory for those wanting to practise the profession.

Institute of Commerce (or official equivalent courses recognized by law), and at least two years of experience using a double entry bookkeeping system. The designation *accountant* was available to individuals of either gender, who were at least 21 years old, graduate accountants with a degree from the Institutes of Commerce (or equivalent courses recognized by law), and with at least one year of experience in accounting using double entry bookkeeping.²⁷ The title *accounting expert* was available to individuals of either gender who were over 25 years of age, graduates in accounting from an Institute of Commerce (or equivalent courses recognized by law) and with at least six years experience using double entry accounting. Joint-stock companies, banks, autonomous state organizations with private accounting, and administrative corporations with revenue and expense movements larger than two thousand *escudos* were required to have an accountant supervising and conducting their accounting (Part III).

In Part IV, accounting technicians were to be held liable if they signed balance sheets that did not follow the “rules and principles of accounting”;²⁸ made accounting entries that were not properly justified or were contrary to established legal principles; signed any page that did not correspond to what they examined; did not comply with appropriate standards of professional ethics; or failed to comply with the law. Part V established the *Conselho Superior dos Técnicos de Contabilidade* (Superior Board of Accounting Technicians) to administer, discipline and supervise the affairs of accounting technicians.²⁹ Responsibility for monitoring the use of titles and the practice of the profession of bookkeepers, accountants and expert accountants was given to the national unions in Part IV.

In June 1943 there was a setback to the progress of the regulatory development of an accounting profession. The

²⁷Individuals who, at the date of the promulgation of the regulation, had been in charge of accounting in any bank, limited company or public organisation, could also request to use the title “accountant”.

²⁸There were no accounting standards at the time to offer guidance. The principal point of reference for accountants was to the theoretical principles and operating rules that were promoted as good practice in accounting texts and educational curricula.

²⁹It was composed of a President, together with a teacher of accounting from each of the Superior Institute of Economic and Finance Sciences, the Intermediate Institutes of Commerce, the Professional Schools of Commerce, together with one expert accountant, one graduate accountant and one graduate bookkeeper elected by the National Union of Accounting Technicians.

Ministry of Corporations and the Welfare State dissolved the “free union” NUABO [Bulletin of the National Institute of Work and Providence, no. 11, 15 June 1943, Decree N° 23050, 23 September 1943]. Accountants and bookkeepers were forced to join a heterogeneous union controlled by the Salazar regime, the National Union of Office Clerks. There was thought to be no need for a *private* professional union of accountants and bookkeepers.

The NUABO episode (1934-1943) seems likely to provide rich fare for more detailed archival analysis of the dialogue between an emerging professional association and the bureaucracy of a corporatist state. (See further comment on this point in the “Discussion” section).

The Portuguese Accounting Society: On 28 January 1945 the Portuguese Accounting Society [PAS] was founded to advance knowledge of the “science of accounts”. The PAS promoted conferences, disseminated accounting know-how, published the *Boletim da Sociedade Portuguesa de Contabilidade* (Bulletin of the Portuguese Accounting Society), established libraries, provided research facilities, and awarded scholarships and prizes. Members of the society were classified as “effective”, “affiliated”, “honorary” and “correspondent”. *Effective members* were graduates of an accounting course provided by the Commercial Institutes (or equivalent intermediate courses). They could also be eminent individuals who had produced works of recognized value in the field of accounting, or accounting technicians occupying high posts in industry and commerce. *Affiliated members* were foreign graduates living in Portugal who had qualifications from teaching establishments deemed to be of equivalent status. *Honorary members* were national or foreign individuals who had provided valuable service to the society, or who were famous for other work in accounting. *Correspondent members* were nationals or foreigners who, whilst out of Portugal, had distinguished themselves by studies in accounting or by important service to society.

The PAS fought strongly for the reform of technical teaching and for the regulation of accounting technicians. In 1946 it introduced a proposal into the *Câmara Corporativa* (Corporative Chamber) for the reform of accounting. Principally, it sought to harmonize and improve the teaching of accounting. Three levels of teaching were proposed “professional”, “complementary” and “superior”. (The proposal is reproduced in *Sociedade Portuguesa de Contabilidade*, 1946, pp. 261-274). In 1949, the PAS also pro-

moted a series of lectures titled: “The Advantages for Accounting from the Professional Regulation of Accounting Technicians”. In one of these lectures, a prominent lawyer, Azevedo Perdigão [1950], argued that regulation was needed to protect the interests of all users of accounting information. Not surprisingly, one of the major users of accounting information (the Tax Administration) prompted the next major milestone in the evolution of the accounting profession in Portugal.

Industrial Tax Code of 1963: A Código de Contribuição Industrial (Industrial Tax Code) of 1963 placed a tax on entity profits that had been calculated by accounting systems. Consequently, the implementation of this tax reform required rigorous accounting, performed by an approved accounting technician — one who was over 21 years of age, of good character, and who possessed an approved accounting degree or similar credential.³⁰ Those who had practiced as an accountant or bookkeeper for five years, but who did not have an accounting degree or similar credential, could obtain temporary registration as an “accounts technician” and be formally recognized as a full member after passing a qualifying exam.³¹ The Industrial Tax Code led to a significant increase in the importance assigned to professional accounting skills.

Two government orders [No. 20317, 14 January 1964; and No. 21247, 27 April 1965] enabling the implementation of the Industrial Tax Code were significant because they formally introduced the expression *Técnicos de Contas* (Accounts Technician). These orders made accountants responsible for accounting in enterprises, and enhanced their dignity, legitimacy and respect. These developments led to the establishment of a “professional nucleus” of accounting technicians within the heterogeneous [state-run] National Union of Professional Office Clerks to lobby for the interests of accountants.

³⁰These included holders of a degree in either Finance or Economics or an approved course in Commercial Administration or Finance offered by the Superior Institute of Economic and Finance Sciences; graduates with a degree in Economics from Oporto’s Economics Faculty; and graduates from other courses offered by the Superior Institutes of Commerce.

³¹From the inception of the Industrial Tax Code in 1963 through to until 1995 approximately 45,000 accountants have been registered [Carqueja, 2001]. Professional entry exams were made mandatory by government authorities in 1979.

The Commission Established by the Ministry of Corporations and Welfare, 1964: In December 1964, the Ministry of Corporations and Welfare established a commission (which had no formal title) to study professional qualifications, and how best to regulate and legally constitute a profession of accounting technicians.³² The commission presented its report to the ministry in October 1970.³³ Generally, its proposals were considered to be reasonable, sensible and dignified. The commission was mindful of the sensitivities of the many accounting professionals who did hold degrees. One of its most significant recommendations was to propose that the term *Técnicos de Contas* (Accounts Technicians) be changed to *Técnicos de Contabilidade* (Accounting Technicians). The intent was to create an official, compulsory designation for practicing accountants, that of “accounting technician”. This was to be conferred principally on professional persons who had practiced bookkeeping, accounting or auditing for more than five years. Prior to 1970, the majority of registered accounts technicians were members of a variety of national, centrally controlled labor unions in banking, insurance, administrative services and other clerical pursuits. The commission regarded such widespread membership as inappropriate for effective professional development. It proposed that all accounting technicians be registered in a mooted National Union of Accounting Technicians — a *professional* union rather than a *labor* union.

Although the Commission’s recommendations were pioneering, their significance did not emerge for some years [Fernandes Ferreira, 1995, p. 296]. This attempt to enhance regulation did not produce the desired progress in the profession. Implementation of the recommendations was slow, partly because of the distractions of the wars Portugal was fighting in

³²Government Order No. 20691. The commission was made up of one representative each of the DGCI; National Education Ministry; Work Corporations Head Quarters (President); Social Security Services of the Ministry of Corporations and Providence; Working Development Fund; National Union Federations of Offices’ Clerks, together with a graduate in economics; and an accountant-expert.

³³In the meantime, in 1968, the *Jornal do Técnico de Contas e da Empresa* (Accounts Technician and Enterprise Journal) was founded. This journal and the *Revista de Contabilidade e Comércio* (Accounting and Commerce Review) (published from 1933 to 1986 and from 1992 to the present) made important contributions to the evolution of accounting in Portugal. The “Accounting and Commerce Review” was founded by José Henriques Garcia and Francisco Caetano Dias (Professors of Accounting in Lisbon).

its colonies (especially in Angola), the notorious “snail’s pace” of Portuguese bureaucracy, and political vacillation by the Caetano regime following the demise of Salazar. Nonetheless, a significant positive evolution in accounting and auditing regulations emerged in 1972, when a Governmental Order formally recognized an auditing profession — but not through an official Order. Auditors were designated as *Revisores Oficiais de Contas* (Official Accounts Revisers). They were to operate under the umbrella of a *Câmara dos Revisores Oficiais de Contas* (Official Accounts Revisers Chamber). In 1999, the Auditors Chamber was granted an official Auditors Order. Its official designation was *Ordem dos Revisores Oficiais de Contas* (Official Accounts Reviser [or Auditor] Order).

EMERGING LIBERAL DEMOCRACY AND NEO-CORPORATISM (1974 TO PRESENT)

Following the overthrow of Caetano’s government (1968-74) in the *Revolução dos Cravos* (Carnations Revolution) in 1974, General Spínola was unable or unwilling to shake off the legacy of four decades of Salazarian corporatism. Gradually, a series of democratically elected governments, variously moderate socialist or moderate social democrat, came to power. They were prepared to share political power, with grace, in a pluralist fashion, in accordance with the will of the electorate, and to recognize the basic human rights of citizens. Gradually, there was a transition to more liberal economic policies (such as privatization, agrarian reform and free trade), especially under Prime Minister Cavaco Silva. Portugal began to emerge as a liberal democracy.³⁴

*Proposals by Accounts Technicians of the Office Clerks’ Union (Lisbon) Concerning the Regulation of Accounting:*³⁵ In October

³⁴Portugal was facing developmental trends similar to those experienced elsewhere in Europe. Carrera *et al.* [2001, p. 803] describe how, in Spain for the period 1942-88, “the environment of the Spanish audit profession witnessed the peaceful transition from a dictatorship to a fully-fledged democracy as well as the emergence of a free market economy from a system characterized by stiff economic autarchy and an overriding intervention of the state in the economy”. Caramanis [1997] outlines the impact of “liberalization” on auditor behavior in Greece after 1992.

³⁵The details of these proposals were published in the *Jornal do Técnicos de Contas*, March 1975, pp. 74-77; April 1975, pp. 109-111; May 1975, pp. 143-145; June 1975, pp. 192-196; November 1975, pp. 342-344; December 1975, pp. 376-378; and February 1976, pp. 39-40.

1974, the Accounts Technicians in the Office Clerks' Union (Lisbon) [ATOCU], proposed to the Finance Ministry that the conduct of accounting in companies should be performed by a person with "proper" qualifications, such as an "accounts technician". The proposals advocated reserving the practice of accounting to legally qualified individuals, in order to guarantee technical competency.

ATOCU considered that neither a government "Professional Order" nor a labor union was the appropriate body to represent the interests of accountants. A professional "Order" was regarded as too elitist because it would tend to represent only accountants with tertiary educational qualifications. Although labor unions would have the advantages of accommodating individuals with different education levels, it was felt that they would be unsuitable structures for developing and enforcing deontological principles, professional disciplinary mechanisms and compulsory registration procedures. Accordingly, in March 1977, ATOCU established a non-official *Câmara dos Técnicos de Contas* (Chamber of Accounts Technicians) to represent the interests of accounts technicians. It was composed of a General Assembly, Fiscal Board, Disciplinary Board and Technical Board and had *effective*, *honorary* and *merit* members. *Merit* and *honorary* members were those who served in the Chamber. *Effective* members were account technicians who were proposed by the board and whose membership was approved by a General Assembly.

ATOCU campaigned for legal regulation of accounts technicians and for official recognition to be accorded to its Chamber. ATOCU rejected the expression *guarda-livros* (bookkeepers) as the generic label for accountants, on the grounds that it conjured an outdated, negative, inaccurate and demeaning image of accountants as tedious, menial, procedurally-focused, procrastinating, bureaucrats. The title "accountant" was also rejected. It was deemed too "academic" and prone to arouse resentment from those not possessing tertiary educational qualifications. The designation, "accounts technician", was preferred over "accounting technician" because the former term had been used in Portugal since the enactment of the Industrial Tax Code in 1963.

Portuguese Accounting Association and the Portuguese Association of Accounts Technicians: The revolution on 25 April 1974 and the ensuing growth in personal freedom and democracy unleashed a pent up desire by the average Portuguese (who had been 'silenced' by four decades of Salazarism) to participate in

the decision processes of modern Portuguese society. There was a keen *espírito associativista* (associative spirit) at the time, which encouraged the growth of organizations representing a wide variety of social and professional interests. Several professions (such as doctors, lawyers and engineers) were already represented by professional bodies formally recognized by government through “professional orders”. The ambient mood of the time prompted economists and architects to seek similar recognition. Two major professional associations in accounting were soon formed.

On 3 March 1975, the *Associação Portuguesa de Contabilidade* (Portuguese Accounting Association) was founded. Membership was restricted to graduates of *Institutos Superiores de Contabilidade* (Superior Schools of Accounting). The association sought to defend the exclusive right of members to use professional titles; to promote professional updating and cultural development among members by means of colloquia, conferences, seminars, and publications of interest; to foster creativity and innovation among its associates; to stimulate research in accounting; and to participate in the teaching of accounting at all levels. In 1976, the Portuguese Accounting Association contributed strongly to developing intermediate accounting schools into superior accounting schools. In March 1986 the Portuguese Accounting Association was instrumental in establishing Courses of Specialized Higher Studies, thereby elevating the intermediate accounting diploma to a bachelor’s degree.³⁶

1977 was an important year in the development of the profession. In March of that year, the *Associação Portuguesa dos Técnicos de Contas* (Portuguese Association of Accounts Technicians) [APOTEC] was created, free of the yoke of state control, and with membership open to all accounts technicians. APOTEC sought to raise widespread awareness of the importance of accounting and its technicians; and to improve the skills, knowledge and efficiency of accounting technicians. In April 1977, APOTEC³⁷ commenced publication of its monthly

³⁶In December 1997 the association changed its name to *Associação Portuguesa de Peritos Contabilistas* (Portuguese Accounting Experts’ Association). It did so, to harmonize with the European professional designation, *Fédération des Experts Comptables Européens*.

³⁷In 2000, APOTEC had 8311 effective associate members. Also noteworthy is its establishment of a Center for the Study of the History of Accounting. See website www.apotec.pt (last visited 6 June 2002).

bulletin, *Jornal de Contabilidade* (Accounting Journal) — a journal still in publication. 1977 also saw the approval of the *Plano Oficial de Contabilidade* (Official Accounting Plan). Gradually, the regulatory accoutrements and paraphernalia of a mature accounting profession began to be put in place. In 1983, a *Comissão de Normalização Contabilística* (Accounting Standards Board) was established.

Portugal was accorded “a badge of democratic respect” [Birmingham, 1993, p. 190] by its admittance to the European Community (now the European Union) in 1986. Portugal’s entry required it to be “bound by European accounting directives, common education and training requirements, compulsory mutual recognition of qualifications and more” [Harding, 2000, p. 593] and also indicated clear affirmation of its preparedness to accept liberal principles of free competition.

Tax Reforms of 1989: These reforms were implemented through significant new codes covering personal income tax and profit-based taxes for business entities (*Código do Imposto sobre o Rendimento de Pessoas Colectivas* and *Código do Imposto sobre o Rendimento das Pessoas Singulares*) and were prompted, in part, by Portugal’s entry into the EU. Although the Industrial Tax Code of 1963 was revoked, accounting-based profit remained the critical measure upon which tax was levied. Somewhat paradoxically, due to an apparent legislative oversight [Carqueja, 2001] or perhaps due to the subtle, implicit, conditioning effects of an emerging and an engulfing liberalism, it was no longer compulsory (as it had been since 1963) to have the signature of an accounting professional in tax declarations.³⁸ Consequently, the importance of the accounts technician for businesses was diminished.

Statutes of Official Accounts Technicians, 1995: The Fiscal Reforms in 1989 were a response to the new competitive demands of the European single market and the urgent need to rein in public deficits. This prompted the Portuguese state to begin another flirtation or dalliance with corporatism, as Molina and Rhodes [2002, p. 309, italics applied] have noted:

... at the same time, older, traditional *corporatist structures* and relationships were being adapted, rather than

³⁸ Nonetheless, the legal apparatus supporting the fiscal system recognized this oversight. Between 1 January 1989 and 17 October 1995 it required that “organized accounting” be the direct responsibility of an “accounts technician.”

abandoned, in those countries where they were always most important [. . .] To varying degrees, the Netherlands, Ireland, Portugal, Italy, and Spain have implemented social pacts, based on peak-level concertation, to adapt to new economic policy challenges.

One such adaptation involved recognition of the importance of a professional cadre of state licensed chartered accountants to assist in achieving economic and monetary union objectives. In 1995 the Statutes of Official Accounts Technicians were issued. These statutes required all business entities to have an official accounts technician. Entities were to be taxed on their profits, calculated in accordance with Portuguese GAAP — principally comprised of a *Plano Oficial de Contabilidade* (Official Accounting Plan) and specific *Directrizes Contabilísticas* (accounting directives and standards) issued by the *Comissão de Normalização Contabilística* (Portuguese Accounting Standards Board). Because they were obliged to have *contabilidade organizada* (organized accounting), accounts technicians were not dispensable. The activities of accounts technicians were of a public nature and their regulation became an important public matter.

The statute led to the establishment of an *Associação dos Técnicos Oficiais de Contas* (Association of Official Accounts Technicians) [ATOC]. Persons eligible to become an “official accounts technician” principally were those with a bachelor’s degree in one of accounting, administration, business, management, finance and economics, from teaching institutions at superior level, either private or public, recognized by the Ministry of Education. But study of cost accounting, Portuguese taxation and financial accounting was to have been completed successfully.³⁹

The objectives of ATOC were to defend the dignity and prestige of the accounting function, to promote respect for ethical principles; to defend the interests, rights and prerogatives of members; and to promote and improve professional training, principally through the organization of courses and colloquia. With one or two minor exceptions after the creation of ATOC, a bachelor’s degree became the minimum level of scholarly preparation required. ATOC changed its name in November 1999 to

³⁹ Also eligible were those individuals with a minimum of three years work experience in accounting services who had a secondary education and who had completed a designated qualification course.

Câmara dos Técnicos Oficiais de Contas (CTOC). The English translation of this name on the “international version” of the official CTOC website (www.ctoc.pt/intver/associacao.html, last visited August 9, 2002) is “Chamber of Chartered Accountants”.⁴⁰

1999 was also a significant year in that the Auditors’ Chamber was granted an official Auditors Order, part of the paraphernalia of a corporatist state, thereby reflecting Portugal’s mood of affection for neo-corporatism.

The Contemporary Picture: Commencing in March 2003, registration as an effective, permanent member of CTOC will depend not only on appropriate academic skills, but also on a professional internship, and an exam. The website of CTOC (www.ctoc.pt last visited August 9, 2002), cites various legal codes and ordinances which emphasize the public nature of the profession of accountant, and the role of accountants as “privileged interlocutors’ between taxpayers and the Tax Administration and ‘ordinary guarantors’ of the ‘tributary truth’”. It also stresses that accountants must perform their duties with “technical strictness, ethical capacity and total independence”.

Currently, the specific subjects of scholarly preparation required for CTOC accreditation have been regulated. CTOC has pre-established 11 subject areas that are regarded as a fundamental base of knowledge. These are partitioned into *key subjects* and *instrumental subjects*. The *key subjects*, requiring a minimum total of 300 hours study are: Financial Accounting (120 hours), Cost and Management Accounting (90 hours) and Portuguese Taxation Law (60 hours). The *instrumental subjects*, requiring a minimum total of 360 hours study, include a choice of five of eight defined subjects: Other laws, Auditing, Financial Analysis/Business Finance, Business Organization and Management, Economics, Computing and Information Systems, Statistics, and Financial Matters/Financial Calculation.

The creation of CTOC and the introduction of the designation “chartered accountant” have been important steps in advancing the profession. In 2002, CTOC was by far the largest

⁴⁰The similarity of names (in Portuguese as least) between the private organisation, *Câmara dos Técnicos de Contas* (Chamber of Accounts Technicians) and this newly established *Câmara dos Técnicos Oficiais de Contas* (Chamber of Chartered Accountants), an official entity, prompted the private organization to change its name to *Instituto de Apoio ao Técnico Oficial de Contas* (Institute of Support to the Official Accounts Technicians).

Portuguese professional accounting body: it had 71,509 members (42% of whom were female and 69% of whom held a bachelor's degree).⁴¹ There is a growing presence of accounting in the Universities too.⁴² A general feeling is emerging in the ranks of the profession that finally accountants are beginning to be accorded the mantle of dignity, prestige and social importance they deserve.

DISCUSSION

In the last quarter of the 20th century accounting began to emerge as a mature profession in Portugal, on a par with its international counterparts. The implementation of the Official Accounting Plan in 1977, together with the creation of the Accounting Standards Board in 1983, and admittance to the EU in 1986, were all instrumental in providing the necessary conditions that led to the Statute of Official Accounts Technicians in 1995 and to the establishment of CTOC in 1999.

The first term used to designate accounting professionals in Portugal was "bookkeeper". But attempts to regulate the profession through the years have found favor with the broader designation of "accounts technician" — a generic term which in early times included "bookkeeper", "accountant" and "expert accountant". In recent years the Portuguese equivalent of the term "chartered accountant" has become popular.

There have been at least four major spurs to the emergence of a mature accounting profession in Portugal. First, there were the professional regulations arising from reforms instituted by the Marquis of Pombal in the 1750s and the impetus provided by the establishment, in 1759, of the School of Commerce. Many of these professional regulations were undone by the tide of liberalism that engulfed Portugal in the nineteenth century. Second, there was the interest in professional regulation during the corporatist regime of Salazar. Third, there were the requirements of tax administration and neo-corporatist politics in the latter half of the 20th century. These required entity accounts

⁴¹This information was supplied by the national headquarters of CTOC in June, 2002.

⁴²In 2002, specialist undergraduate degrees in accounting are offered only by the polytechnic institutes. However, accounting remains a major stream of study in undergraduate degrees in Economics and Management in most Portuguese universities. Three universities (Aberta, ISCTE, Minho) offer specialist post-graduate courses in accounting.

(upon which tax was levied) to be prepared by a qualified accountant. Fourth, there have been the “flow on” effects of Portugal’s entry into the EU in 1986.

The Portuguese experience sets the stage for further research. There is ample scope to draw upon the analysis provided here in an explicitly comparative study, similar perhaps to that conducted by Baker *et al.* [2001]. Additionally, Portugal provides an excellent setting for enquiry into the facilitative role of accounting in state domination. How was accounting and the accounting profession implicated in the Salazar regime’s social control? What would a review of articles published in the *Accounting and Commerce Review* from 1933 reveal about Portugal’s accounting and the use of accounting as a means of social domination? An excellent opportunity to pursue such lines of enquiry is provided by the operations of NUABO, 1934-1943. Analysis of archival records of the dialogue between NUABO (an association representing accountants) and the Ministry of Corporations and Social Welfare seems likely to enhance understanding of NUABO’s legitimacy, its willingness to accept monopoly control, the policy objectives the State sought to achieve by tolerating the existence of NUABO, and the extent to which NUABO influenced State policy. Such research could draw strength from the study by Walker and Shackleton [1998] of relationships between the accountancy profession and the state in the UK between 1957 and 1970.

The development of accounting in Portugal since 1755 has been characterized by episodes of regulatory advancement located in periods where corporatist state ideals were popular. These periods have been interspersed with episodes of de-regulation at times when liberal ideals were in vogue. (For a summary, see Appendix 1). Many potential insights to accounting professionalism and its history seem likely to be gained by further investigation of the developmental episodes outlined above.

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APPENDIX 1

**A Chronology of Some Significant Events in the
Development of Accounting in Portugal Since 1755**

Date	Event	Significance
	Corporatist Absolute Monarchy	
1755	Major Earthquake in Lisbon	Destruction of many commercial records
1755	Board of Trade [BoT] established by Marquis of Pombal	Fostered commercial activity and improved business education
1759	School of Commerce [SoC] established	Portugal's first formal educational institution offering instruction in accounting
1770	First regulations governing the accounting profession	Some public service posts in accounting-related fields to be available only to SoC graduates
	Liberal Monarchy	
1833	First Portuguese Commercial Code	Merchants' bookkeepers to be registered and to be graduates of the SoC, certified by BoT
1838	Profession of "bookkeeper" recognized in tax laws	Requirements for "bookkeepers" to be SoC graduates, certified by the BoT were eased, although some public posts were restricted to SoC graduates.
1888	Commercial Code	Permits merchants and companies to have anyone, irrespective of skill, complete their accounting.
	Liberalism and Corporatism	
1910	The Republic of Portugal declared in Lisbon. Constitution approved on 20 August 1911.	Portugal implemented measures to become a modern state and to restore its economy.
April 1911	Joint stock companies were required to submit their accounts for official inspection. Directors prohibited from serving as bookkeepers.	The concept of "mutual liability" introduced in respect of "fraudulent accounting acts".
May 1911	Decree requiring accounting by "capable technicians". Two "Chambers of Accounting Experts" established to verify accounting reports and examine accounting evidence.	Return to corporatism
	Corporatist Dictatorship	
1933	New Constitution of the Portuguese Republic	Portugal implemented measures to become a modern state and to restore its economy
1933	National Statute of Labour introduced	All free unions and professional associations were banned and replaced by a system of "National Unions" controlled by the State.
1933	"Accounting and Commerce Review" first published	
1934	Government establishes commission to study the regulation of bookkeepers and accountants	The need for sound state regulation of bookkeepers and accountants recognized by Salazar.

Date	Event	Significance
1934	National Union of Accountants and Book-keepers from Oporto [NUABO] founded.	A free union that sought to enhance the prestige of accountants and bookkeepers.
1936	Business owners prohibited from employing accountants or bookkeepers not possessing a "Professional Letter" from NUABO.	This "professional letter" became essential for practicing as an accountant.
1940	Proposals for regulation of the emerging accounting profession by the Academic Association of the Commercial Institute of Oporto.	These proposed regulations were important indicators of the ambient corporatist mood.
1943	Government dissolves NUABO. Interests of accountants to be assumed by the National Union of Office Clerks.	Salazar's control of unions damaged the interests of accountants.
1945	Portuguese Accounting Society founded	
1963	Introduction of <i>Industrial Tax Code</i> , requiring tax to be based on entity profits calculated according to GAAP.	Need for more rigorous accounting, performed by "accounting technicians" (a new term). Led to formation of a "Nucleus of Accounting Technicians" in the National Union of Professional Clerks.
1968	"Accounts Technician and Enterprise Journal" first published	
1970	Report of the commission established by the Ministry of Corporations and Social Welfare to study professionalization arrangements in accounting	Recommended change in designation from "Accounts Technician" to "Accounting Technician". Required registration in a newly established "National Union of Accounting Technicians"
1972	Government recognition of the auditing profession, but not through a formal Order	Accounting experts and the auditors to be organized in a separate Chamber.
Apr 1974	Revolutionary overthrow of the regime of Caetano (Salazar's successor)	
	Emerging Liberal Democracy and Neo-corporatism	
1974	Proposals from the Office Clerks Union (Lisbon).	Recommended that company accounting be conducted by persons (such as "accounts technicians") with technical competence and "proper" qualifications.
Mar 1975	"Portuguese Accounting Association" founded	
Mar 1977	"Portuguese Association of Accounts Technicians" [APOTEC] founded.	Active advocate and lobbyist, seeking to raise professionalism and respect for accountants.
Mar 1977	Chamber of Accounts Technicians established by the Clerks' Union	Campaigned vigorously for the legal regulation of accounting
Apr 1977	APOTEC commences publication of its monthly "Accounting Journal"	
1977	Official Accounting Plan approved	Compulsory for all companies except those in banking, insurance or with specific accounting plans

Date	Event	Significance
1980	Accounting Standards Board established	Issues accounting standards and guidelines in accord with EU directives and International Accounting Standards
1986	Admitted to the EU	Adoption of 4th and 7th Directives implied adoption of a new Official Accounting Plan in 1989
March 1986	Commencement of "Courses of Specialized Higher Studies" in accounting	
1989	Fiscal reforms introduced new tax codes, requiring profits-based tax for business entities.	Paradoxically, it was no longer compulsory for accounting professionals to attest to fiscal declarations. The profession of "accounts technician" disappeared.
1995	<i>Statute of Official Accounts Technicians</i>	Businesses, taxed on profits, required to have an "official accounts technician" and "organized accounting". Led to establishment of ATOC, "Association of Official Accounts Technicians", use of the term "chartered accountant", and compulsory registration to practice as an accountant
1999	Auditors Order granted	First official "Order" recognizing the auditing profession
Nov 1999	ATOC changes its name to "Chamber of Chartered Accountants" [CTOC].	

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Yin Xu
OLD DOMINION UNIVERSITY
and
Xiaoqun Xu
FRANCIS MARION UNIVERSITY

Vangermeersch Manuscript Award
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BECOMING PROFESSIONAL: CHINESE ACCOUNTANTS IN EARLY 20TH CENTURY SHANGHAI

Abstract: This paper examines the experience of Chinese accountants transforming themselves into a profession during the early 20th century. It delineates how the experience was shaped by an intersection of economic development, the political culture and the nationalist movement in semi-colonial Shanghai. Chinese accountants responded to the daily manifestations of these larger historical forces by combining their professional self-interests with a nationalist agenda and by adapting to the changing political environment. The history and legacy of this experience provides a point of reference for observing the re-emergence of the accounting profession in China since the end of the Maoist era.

INTRODUCTION

After forced de-professionalization during the Maoist era (1949-1976), the accounting profession, along with the legal profession and other professions, re-emerged in China with increasing social and economic significance. Long before, and especially after, the entry of China to the WTO in 2001, the Chinese government emphasized the imperative of conforming

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to international norms in economic fields. This offered professions an increasingly important role to play. An underlying need for Chinese accountants was to commit themselves to professionalism. Profession and professionalism are not entirely new concepts in China. They were present in early 20th century China and contributed to the development of the accounting profession at that time. Unfortunately, due to political and ideological suppression during the Maoist era, the legacy of the accounting profession in the Republican era (1912-1949) has been largely forgotten in China and has received little attention from historians. Based on primary sources in the Chinese language and through historical interpretation, this paper seeks to unearth that history and explore the professionalization of Chinese accountants in the early 20th century. Our primary interest is not in the development of accounting techniques, but the way in which notions of profession were conceived and actualized at that time by Chinese accountants in the pursuit of a professionalization project.

PROFESSION AND PROFESSIONALIZATION IN THE CHINESE CONTEXT

‘Profession’ and ‘professionalization’ are contested concepts whose definition involves much sociological debate. For working purposes here, we will define ‘profession’ simply as an occupational group that is recognized by the state and the public as having special knowledge and expertise in a particular field. We take ‘professionalization’ as the process by which such a group obtains status and the privileges of a profession. Behind these working definitions, of course, lies a large body of literature on professions. Of this we can only give a very brief review.

The early paradigm that dominated the study of profession and professionalization in the West was the ‘taxonomic approach’. This had two variants — the trait model and the functionalist model [Saks, 1983]. Under these models, the claims of certain occupational groups, such as their knowledge and expertise, public-serving ethics, and self-regulation, were taken as ‘attributes’ or ‘traits’ and applied to defining professions and specifying their roles in society. In response to the taxonomic paradigm, a ‘process model’ or ‘power analysis model’ emerged. This model emphasized the analysis of professionalization as the process by which occupational groups strive to gain power, status, and privilege and to monopolize the market of their services. The process was mediated by the class structure, the role

of the state, and the acquisition and use of power by professions [Povalko, 1988, pp.19-29].

The new process/power analysis paradigm led to a number of approaches that were action/agency oriented rather than structure/function oriented, including neo-Marxian, neo-Weberian and critical approaches. The critical approach significantly revised our understanding of how professional organizations, such as those of accountants, were motivated, established and sustained [Willmott, 1986; Walker, 1991, 1995]. The notion of 'professionalization project' or 'professional project' contains a neo-Weberian thrust by stressing the ways in which certain occupational groups built up a monopoly of a special body of knowledge and the services based on it through the mechanism of social closure [Macdonald, 1995, pp. 1-35]. But closure and monopoly were often more the intention or strategy of professional actors as opposed to the results they achieved [Chua and Poullaos, 1998]. The history of the Chinese accounting profession is to be examined in light of such a theoretical framework.

Most studies of professions based on the process model have been biased towards Anglo-American experiences. Scholars tended to discount the experiences of professional groups in continental European countries [Larson, 1977, pp. xvii-xviii; Freidson, 1983, p. 26; 1986, pp. 30-38]. Recent scholarship on professionalization has corrected this bias. As one authority has conceded "there was and there is more than one model of professionalization" [Larson, 1990, p. 29] Indeed, more recent studies such as those by Macdonald [1995] attempts a comparative approach, considering professions and professionalization in France and Germany as well as in Britain and the United States. Studies on the accounting professions in countries such as Australia, Canada, South Africa [Chua and Poullaos, 1993, 1998, 2002] have been augmented by research into locations such as Spain [Carrera, Guiterrez and Carmona, 2001] and China [Hao, 1999]. It is in these different cultural and historical environments that manifold issues relating to professionalization — such as the role of the state, class structure, class formation, social closure, social stratification, stratification within professions, bureaucracy and professions, nationalism, and gender — have been profitably explored and analyzed.

Of all these issues, the role of the state is probably the most crucial, even though it would come in various way, shape, and form in different cultural and historical environments. None of the other issues can be fully understood without an analysis of the role of the state. Even in the Anglo-American context recent

scholarship has found evidence of professions using state power to reinforce their monopoly of services and control of the market [McClelland, 1991, p. 7; Lee, 1996]. In other contexts a pattern of negotiation and cooperation between professions and the state has been identified [Willmott, 1986; Macdonald, 1995; Chua and Poullaos, 1993, 1998].

With regard to China, it has been pointed out that a symbiotic relationship existed between the state and the emerging legal and medical professions during the Republican period (1912-1949). The Chinese state actively promoted and regulated the legal and medical professions, thus bringing public recognition to those occupations while placing them under state supervision and control to serve modernization objectives [Xu, 2001]. The present study will show that the same relationship was present in the case of the Chinese accounting profession. In a recent study, applying the model of interaction among state, market and community (profession), Hao [1999] argued that the state was the most important factor in the rise of the accounting profession in post-Mao China (1976-). The emergence of the Chinese accounting profession in the early 20th century, on which this study will focus, analyzes an antecedent to Hao's case, and relates the very different set of domestic and international circumstances under which professional development took place.

Accountancy as a profession grew directly out of the 'modern' sector of China's economy. Shanghai was the pre-eminent center of industry, banking and financial services in early 20th century China. Chinese accountants, who were relatively fewer in number than their counterparts in the U.S., Britain and even Japan, were concentrated in Shanghai. Focusing on Chinese accountants in Shanghai (to be called 'Shanghai accountants' hereafter), we seek to examine the features of accounting professionalization in China and the historical conditions under which it occurred in the period 1912-1937.

Broadly speaking, the first important condition for the rise of the accounting profession was the development of modern industry, banking, finance and education. The second was the dominant foreign presence in semi-colonial Shanghai which provided both a model and a source of competition for Shanghai accountants. The third condition was the promotion and regulation of the professions by the state. This provided both opportunities and pressures on Shanghai accountants. The ways in which Shanghai accountants responded to these conditions in their strive for professional status may be summarized as

follows. Shanghai accountants consciously formed a professional association which emulated overseas accountants as well as the Shanghai Bar Association. Accountants both contributed to and utilized the nationalist sentiment against foreign privileges in China, particularly where this impacted on their professional self-interest. Accountants participated in certain episodes of the contemporary nationalist movement. They negotiated with the government to establish terms under which they would operate independently as apolitical professionals. In the following sections we detail these developments.

CHINESE ACCOUNTANCY AND THE SHANGHAI ACCOUNTANTS' ASSOCIATION

Long before Western accounting (double entry method) was introduced to China in the second half of the 19th century, native bookkeeping methods had been used. From the 15th to the 18th centuries, the Chinese gradually developed double entry bookkeeping [Gao, 1985; Lin, 1992]. Yet, before the introduction of Western accounting methods, most small and medium sized Chinese firms as well as traditional Chinese banks, continued to use single entry bookkeeping. Only a limited number of large commercial firms used more elaborate Chinese double entry bookkeeping [Gao, 1985; Gardella 1992]. During the second half of the 19th century even the presence of foreign commercial firms and the Chinese-owned modern enterprises in treaty ports such as Shanghai failed to encourage the widespread use of Western accounting in China. However, following the founding of the Chinese Republic in 1912 Chinese firms and modern banks did adopt Western-style accounting [Gao, 1985; Chen, 1998]. Throughout the Republican period both the Chinese methods of bookkeeping and the Western type of accounting were practiced in different enterprises [Gardella, 1992].

This persistence of traditional Chinese bookkeeping methods and their relative simplicity ensured that bookkeeping was regarded as a job that did not require higher education. Thousands of bookkeepers in Chinese businesses, traditionally called 'men of account office', had not attended schools of business. They were able to handle their tasks by virtue of being functionally literate (able to read and write about 2,000 Chinese characters) and by practicing as apprentices first. This pattern continued to hold true in small and less modernized Chinese businesses throughout the Republican period.

On the other hand, in the 1910s and 1920s, a number of

Chinese schools of business were established following Western and Japanese models. There were also Chinese accountants who had been trained abroad or worked in organizations which practiced Western-type accounting. The first person who used the title of 'accountant' (*kuaijishi*, literally accounting master) was Xie Lin, the Chief Accountant of the Bank of China, who introduced Western-style accounting from Japan [Xu, 1933; Gao, 1985]. During the 1910s the Chinese accountants who practiced Western-style accounting were, however, few and were not a visible group of professionals. Ordinary people did not know the difference between this new type of accountant and the traditional 'man of account office'. Neither was there official recognition of the existence of an accounting profession [Xu, 1933].

Not until September 1918 did the Chinese government take notice of the emergence of accountants. In that year the Ministry of Agriculture and Commerce enacted Provisional Regulations on Accountants which recognized and regulated the accounting profession for the first time. Under the regulations it was established that an accountant should be at least 30 years old. He should either be a graduate of a Chinese or foreign university or of a specialized school having followed a three-year program which included accounting as major courses. Alternatively, an accountant could have work experience as a chief accountant for at least five years in a bank or firm with assets of at least 500,000 yuan (Chinese currency). Accountants were required to register with and be licensed by the Ministry [FD, 1924, p. 1170]. The action of the Ministry of Agriculture and Commerce was significant. It clearly showed that the government was instrumental in bringing about the professional identity of Chinese accountants by regulating and thus recognizing the occupation.

In spite of official recognition, the accounting profession grew slowly. In Shanghai there were no public accounting firms until 1921. As late as 1926 licensed accountants in the country numbered 183, and 54 of them worked in Shanghai [SKGN, 1926, pp. 115-122]. By 1933 the number of accountants in the country reached around 1,800 of whom half operated in Shanghai [Xu, 1933]. Only licensed accountants were called *kuaijishi*. These often established or worked for independent public accounting firms. Those who did not register as licensed accountants but performed accounting and bookkeeping in business enterprises or government agencies were still called 'men of account office' or 'men of keeping books'. They made up the majority of the 1,434 'accountants' identified by the census of the

Shanghai Municipal Council of the International Settlement in 1935 [ARSMC, 1935].

Although Shanghai accountants were a small group compared with other occupations, they developed a strong sense of professional identity and community in a relatively short period of time. This was manifested in the formation in 1925 of the Institute of Chartered Accountants of the Chinese Republic, which later changed its name to the Institute of Chartered Accountants of Shanghai (ICAS) (the English translation was used by the organization at the time). The idea of founding the association originated one year earlier. On 20 July 1924, 23 founders gathered for a preparatory meeting in a restaurant. Nine were elected as preparatory officers [SB, July 22, 1924, p. 6]. One week later the group sent the Ministry of Agriculture and Commerce a request for permission to found the association and submitted draft by-laws for approval. In the accompanying correspondence they explained the purpose and significance of the proposed association as follows:

The system of accounting is the product of economic evolution. As business organizations are getting ever more complex in this age of industrial and commercial growth, the design of starting [a business], the regular audit, and the liquidation at the foreclosure, all depend upon the work and advise of accountants. Like lawyers and doctors, they appear where needed and are in a detached position with an independent spirit to verify the true conditions of the financial world, to build society's confidence, and to provide service to the public . . . One must have three indispensable qualifications to become an accountant. The first is knowledge; the second is experience; and the third is ethics. [The measurement of] knowledge and experience are regulated by the government and by the law, but personal ethics can not be maintained by the law only. This is why besides the regulations on accountants, there has to be a trade association to work with. The regulations lay down the general principle and the bylaws of the association detail the specifics. The combination of both will result in all benefits for pursuing [the goals] [SB, July 28, 1924, p. 5; SKGN, 1926, pp. 3-4]

The use of the term "trade association" indicates that at this point Shanghai accountants had not considered it important to differentiate themselves from the terminology applied to this more traditional form of occupational association. Yet, they clearly perceived themselves as a professional community in the

same category as doctors and lawyers. The above statement emphasized two points: one was the importance and integrity of accountants as professionals, which implied a special status of the profession; and the other the necessity of a professional association, which claimed the legitimate autonomy of the association in self-regulation. This represented a serious effort by Shanghai accountants to elevate their professional status and earn public recognition by organizing a professional association.

After demanding some minor revisions in its draft by-laws, the Ministry of Agriculture and Commerce granted permission for the establishment of the ICAS [SB, August 4, 1924, p. 5]. The association went into operation immediately, but it was not until 15 March 1925 that its founding meeting was formally held [SB, March 16, 1925, p. 3]. Under its by-laws, the ICAS was an organization of accountants practicing in and around Shanghai. Its mission was to foster mutual affection, exchange knowledge, seek the enhancement of accountants' status, and to promote the healthy development of China's economy. The by-laws limited membership to those accountants who were licensed by the Ministry of Agriculture and Commerce, and set a one-time admission fee of 30 yuan and annual membership dues of 24 yuan. The by-laws also contained provisions for the professional conduct of accountants, such as a prohibition on purchasing any firms one was auditing or acting as accountant for, collecting excessive fees, and disclosing confidential information without the client's consent [SKGN, 1926, pp. 5-13].

One institutional feature of the ICAS was its dinner gatherings. In October 1925, five months after the ICAS was founded, three members proposed the practice. It was felt that formal meetings were too limiting. To foster mutual affection and exchange of knowledge, as the ICAS's by-laws prescribed, the members required more opportunities to socialize. It was proposed that the members gather for a dinner once a month and members took turns, two each time, to act as host [SKGN, 1926]. The proposal was well received. Beginning in November 1925 the monthly dinners became part of the ICAS's regular activities. Many issues were raised and discussed at dinners and the board of directors often took action in accordance with the opinions expressed there. The proceedings of these gatherings were recorded just as those of formal meetings. Not all members of the association attended the gatherings, however. Those who regularly participated were the most active members of the association, including most members of the board of directors [SKGN, 1928]. This practice indicated how a 'modern' profes-

sional organization would continue to operate with some traditional cultural trappings in the Chinese context.

Soon after its founding the ICAS began to express its dissatisfaction with the Provisional Regulations on Accountants. In March 1925 Xu Yongzuo, a well-known accountant and leading member of the ICAS, proposed that the regulations be revised to toughen the qualifications for licensed accountants and to include more specific provisions on professional conduct. Upon the proposal, the ICAS appointed a committee to study the issue which decided to petition the Ministry of Agriculture and Commerce for a revision of the regulations. In the proposed version of the revised regulations written by Xu Yongzuo, a licensed accountant would have to pass an examination administered by the Ministry. Those eligible to take the examination would be graduates majoring in business or economics from Chinese or foreign universities or specialized schools with two-years' work experience in accounting firms or three-years' experience in business enterprises and government agencies. An accountant could not practice until he had received a license from the Ministry of Agriculture and Commerce and been registered in the general directory of accountants kept by the Minister. Accountants could not assume public office or other paid public duties except as members of the parliament or provincial and local assemblies, or as faculty in government-supported schools. Accountants' associations should be established in various areas and accountants could practice only as members of such an association [SKGN, 1926]. In short, the general thrust of the proposed revision was to raise the qualifications for entering the profession, to strengthen the self-regulating mechanism within the profession, and to codify professional conduct. All represented essential aspects of professionalization.

Of the provisions in this proposed revision, two were quite controversial among accountants. One was the requirement for an accountant to join an association to practice, and the other was the prohibition against owning a business while practicing as accountant. In March 1926 the ICAS general meeting discussed the proposed revision and voted to adopt both provisions, but modified the second by suggesting that accountants be allowed to own a commercial firm if it did not conflict with one's accounting duties [SB, March 16, 1926, p. 3]. The controversy on the second point reflected the fact that some accountants were not full-time professionals and engaged in other businesses. The proposed revision took into consideration their interests while pushing for further elements of professionalization.

zation. The central government, the Beiyang regime (1912-1927) did not act on the proposal before it was replaced by the Guomindang (GMD) regime. Yet, most of the provisions put forward by the ICAS in 1925 were to be included in the new regulations on accountants enacted under the GMD government.

PURSUING PROFESSIONAL STATUS IN THE PUBLIC ARENA

In early 20th century China the political culture was such that the status of an organization as a public association was related to the role it played in the political arena (Xu, 2001, pp. 12-13). The recognition of an organization's role in the public arena could be taken as an indication of its legitimacy. In the mid-1920s accountants were recognized as experts in business affairs, but they did not succeed immediately in establishing themselves as a profession or a public body in society at large. As a newcomer to the public arena, their association was not taken seriously as a significant player unlike other organizations such as the Shanghai Bar Association, the Shanghai General Chamber of Commerce and many trade associations. Since its political role was associated with public perception of its professional stature, during the years following its founding, the ICAS made strenuous efforts to ensure that as a legitimate professional association, its voice on political issues be heard. In the 1920s the association took public stands on political issues on several occasions, and in each instance it was motivated by the desire to enhance accountants' public profile and thus professional stature.

The mid-1920s was a period of political turbulence and warlord fighting in China. Following the fraudulent election of a president in October 1923 and the Jiangsu-Zhejiang War in September 1924, the second Zhili-Fengtian War broke out in the same month. In October 1924 General Feng of the Zhili clique mutinied and occupied Beijing and as a result the Zhili forces disintegrated at the front. In the interest of national unification, Feng and his rivals jointly asked General Duan, another warlord, to act as the executive of a provisional government. Feng also invited Sun Yat-sen, the leader of the Guomindang (Nationalist Party), based in Guangzhou, to go to Beijing for a discussion on peace and unification. In his 'Manifesto on Going to the North', issued on 10 November 1924, Sun Yat-sen proposed to convene a national congress to work out a plan for national unification. The country responded with enthusiasm and various voluntary associations took an active part in preparing for the congress.

They hoped that it would give them an opportunity to participate in ending the political chaos of the country [Lai, 1983].

The ICAS was deeply disappointed, however, that the organizational regulations of the proposed national congress did not provide seats for representatives of the accounting profession. In early 1925, before the ICAS was formally founded, its leaders had telegraphed the government in Beijing, demanding that accountants as government-licensed professionals and their organization as a professional association, have a place at the congress [SB, February 25, 1925, p. 3; March 10, 1925, p. 3]. Shortly after its establishment on 15 March 1925, the association sent another telegram to Beijing for the same purpose. The proposed congress, it argued, was to design a fundamental plan for national reconstruction by collecting wisdom and opinions from all classes in the country. The profession of accountants was sanctioned by the government according to the law and was regulated by codified qualifications, and thus it was part of the intellectual class. The exclusion of legally established accountants was not only unreasonable but also contradictory to the purpose of the congress. Since the strength or weakness of the country depended on its economic system and since accountants were most familiar with concrete economic problems, they should be given a formal role in the congress and contribute to national reconstruction [SB, March 27, 1925, p. 3]. Because of Sun Yat-sen's untimely death on 12 March 1925, and of General Duan's resistance to the idea, the national congress was never convened. But in demanding to be heard on this occasion, Shanghai accountants displayed not only their professional identity but also a sense of their public role as professionals.

In its efforts to earn recognition as a profession and a voice on political issues, the ICAS sought to equate the professional status of accountants with that of lawyers. In the mid-1920s the Shanghai Bar Association (SBA) was already a well-established professional association with visibility and high reputation. When the ICAS appeared, there was some dispute with the lawyers over the boundary between the two professions. In 1923, for instance, a member of the Shanghai Bar accused an accountant of usurping the privilege of lawyers by acting as a witness to contracts [SB, February 25, 1925, p. 3; March 10, 1925, p. 3]. In spite of such friction, Shanghai accountants generally looked to the SBA as a professional model. They consciously emulated the SBA and sought the same status. This was evident in the ICAS's 1924 correspondence to the Ministry of Agriculture and Commerce quoted earlier, in which it likened accountants to

lawyers and doctors. It was also a major motive behind ICAS's quest in 1925 for a voice at the national congress. Other instances would follow.

In 1924-1926 the SBA and its political arm, the Society for Promoting the Rule of Law, championed the drive to promulgate a provincial constitution as the solution to the political chaos in the country [Xu, 2001, pp. 245-249]. In early 1926 the movement was revived and a Jiangsu provincial congress was planned for drawing-up the constitution. The SBA elected two members as delegates to the congress. Other local bar associations and professional groups such as journalists and doctors were also included as invitees to the congress. However, once again the ICAS was left out due to the neglect of the Preparation Committee of the congress. On 16 April the ICAS sent a protest to the committee. The ICAS argued that the provincial congress on the constitution was organized by all provincial and county assemblies and legally established professional associations. The accounting profession, and its association as one of the legally established professional associations, should have the right to send delegates to the congress. The ICAS demanded that the committee should respect the association's civil rights and give equal treatment to all professional associations. However, like the proposed national congress of 1925, the provincial constitutional congress did not materialize. In the fluid political situation brought forth by the Northern Expedition that started in July 1926 and aimed at national unification, the movement for a provincial constitution died out. But the ICAS once again demonstrated its commitment to the pursuit of a professional status that was no less than that of the SBA.

The ICAS not only emulated the SBA in seeking the recognition of its professional status, but also echoed views of the SBA on some important political issues of the day. This not only encouraged good relations with the SBA but, more importantly, reflected shared interests between the two professions, as will be seen below.

ADVANCING PROFESSIONAL INTERESTS THROUGH A NATIONALIST CAUSE

In asserting their professional status and identity, Shanghai accountants not only had to win over the Chinese public, they also had to contend with the dominance of foreign interests in Shanghai that presented both a model and a source of competition. When Chinese accountants came into being, they con-

sciously followed the example of their western counterparts in pursuing a professional project. Xu Yongzuo stated in 1933 that CPAs in the United States and chartered accountants in Great Britain were licensed only after strict examinations and a period of practice:

On the surface they seem to be senior accountants employed by commercial firms, but their status is vastly different [from other employees]. They are not solely employed by any particular stores or companies, but are entrusted by society and the public. Occupying an independent position, they are not restricted by outside influences. Although they are paid for their services, they freely perform their duties with fairness. That is where the word "public" comes from [Xu, 1933, p. 144].

Such was the model for Shanghai accountants. Institutionally, the ICAS was also a duplication of professional associations of accountants in the West and its by-laws were largely copied from the same sources. The English translation of the association's name was also a copy of its counterparts in Great Britain. The purpose was to make the association sound 'professional' to the Chinese and, more importantly, to foreigners, as Chinese accountants competed keenly with foreign accountants in Shanghai. The competition was such that even the British government felt compelled to intervene in a seemingly trivial matter. In April 1925 the British representative in Beijing sent an official note to the Chinese Ministry of Foreign Affairs, saying that to use 'chartered accountant' as the translation of the Chinese term '*kuaijishi*' was confusing and inappropriate, because the accountants in Britain were called 'chartered accountants' with strict standards. He asked for rectification of the situation. It may be assumed that this action was in response to lobbying by the Institute of Chartered Accountants in England and Wales, in view of how that organization jealously guarded its privileges in the British colonies (Chua and Poullaos, 2002). Scottish chartered accountants were also anxious to defend their monopoly of the credentials 'CA' (see Walker, 1991).

The Chinese Ministry of Foreign Affairs referred the matter to the Ministry of Agriculture and Commerce, and the latter in turn sent the message to the ICAS. The ICAS forcefully defended its right to use the name. In its reply to the Ministry, the ICAS refuted the British objection and argued its case with skill and logic. First, Chinese accountants were licensed by the government according to established qualifications, which were roughly equivalent to those of the chartered accountants in

Great Britain. The term 'chartered accountant' was the best translation of *kuaijishi*; otherwise, why did British chartered accountants in China call themselves *kuaijishi* in Chinese? Second, it was argued that it had already become customary for 'chartered accountants' to refer to those Chinese accountants licensed by the government, while other terms such as 'public accountant' or 'registered accountant' did not have that connotation. To use the latter alternatives would be more confusing, the ICAS argued. Besides, if the American term 'Certified Public Accountant' was adopted, the American government might object for the same reason as the British had done. There would be no end to the controversy. Third, the term 'chartered accountant' was not a monopoly of the members of the Institute of Chartered Accountant in England and Wales, but was used by other associations of accountants in Britain, Canada, and France. Why did the British only intervene in the case of the Chinese? Fourth, even if British law prohibited other people from using the term 'chartered accountant', the law only applied in Britain and had no force in China. The association asked the Ministry of Foreign Affairs to explain these points to the British government [SB, May 8, 1925, p. 4]. Although there were no immediate responses to this communication, the revised by-laws of the association in 1930 changed the English translation of its name to The Chinese Chartered Accountants Association of Shanghai (we continue to refer to the organization as ICAS) [KZ, 1,1 (1933), pp. 140-151].

The ICAS's arguments on this occasion are worth citing, not only because these points were well argued, but they also demonstrated very clearly the organization's intention to keep their professional status visible. They wanted to make it known to all that they were *kuaijishi*, accountants licensed by the central government, as distinguished from those unlicensed 'men of account office' or 'men of keeping books'. They also wanted to make sure that foreigners were aware of that difference too. Their point was that they were as qualified as foreign accountants to do accounting work in Chinese business firms in Shanghai's foreign concessions. This competition with foreign accountants would also explain the active participation of the ICAS in the movement to recover the Mixed Courts.

For the period from 1844 to 1943 Shanghai was a divided city in terms of administration. The International Settlement and the French Concession were under foreign administrations independent of the Chinese authorities which controlled only the Chinese sections of the city. The Mixed Courts were foreign-

dominated judicial institutions in the two foreign concessions. They resulted partly from the semi-colonial structure of the treaty port and partly from an extra-legal usurpation by the foreign authorities of the concessions. These courts tried all cases occurring in the concessions which involved the Chinese or foreigners and their final decisions were not subject to appeal. After the founding of the Chinese Republic in 1912, successive Chinese governments tried and failed several times to bring the Mixed Courts back into the Chinese judicial system. In early 1926 the SBA and the Shanghai General Chamber of Commerce spearheaded the initiative for the Jiangsu provincial government to negotiate with foreign consuls in Shanghai in order to effect a swift return of the Mixed Court in the International Settlement to Chinese jurisdiction (Xu, 2001, pp. 232-234).

On 20 May 1926, the ICAS's board of directors held a meeting to discuss the issue and decided to telegraph the central government and the Jiangsu provincial government in support of the proposed local negotiations. In the association's view, under the 1868 treaty the Mixed Court was within the jurisdiction of Shanghai prefecture and its administrative superior was the Jiangsu provincial government, it was therefore appropriate for the Jiangsu provincial government to take up the negotiations. Some related issues that had to be settled by the central government could be reserved for later resolution after the court was returned. The ICAS urged that when public opinion was in favor of the return of the courts and foreigners were conscious of the situation, the provincial government should seize the moment to proceed aggressively. The ICAS specifically pointed out that on this issue it was in agreement with the SBA and other organizations [SB, May 21, 1926, p. 3; SKGN, 1928].

When, in mid-July 1926, the draft agreement on the return of the Mixed Court in the International Settlement prompted foreign lawyers in Shanghai to launch a campaign opposing the agreement, the ICAS joined the SBA to counter foreign lawyers' attack on China's government and judicial system. At a dinner on 18 July the ICAS members discussed the American Far East Bar Association's statement opposing the return of the Mixed Court and decided to issue a public refutation. In a declaration published on 21 July, the ICAS summarized the history of the Mixed Court and reiterated the justice of returning the court. It pointed out that the negotiations had been productive in that the foreign governments recognized that the will of the Chinese people could not be ignored and that opposition from foreign lawyers was motivated by a concern over their jobs. The ICAS

declared that it could not remain silent about the American lawyers' statement; its preposterous language, its insults to Chinese government officials, its interference with China's administration, and its opposition to the return of the court, all of which infringed upon China's sovereignty. The ICAS also telegraphed the associations of accountants in Beijing and Tianjin, asking them to make their views known to foreign ministers in Beijing and help assure the signing of the agreement. On 29 July the ICAS sent a telegram to the State Council and the Ministry of Foreign Affairs in Beijing and urged the government to protest over foreign lawyers' interference with China's domestic politics [SKGN, 1928].

Shanghai accountants took a strong position on this issue along with the SBA because they too had a stake in it. The SBA's interest was to see foreign lawyers driven out of practice in Chinese lawsuits. Similarly, Shanghai accountants wanted to exclude foreign accountants from Chinese businesses in Shanghai, particularly those within the foreign concessions where the majority of residents were Chinese and both foreign-owned and Chinese-owned businesses were concentrated. Since foreign accountants resided and operated in the concessions long before the emergence of the Chinese accounting profession, they were able to take and hold the market of auditing for not only foreign but also Chinese businesses there. In addition, because the Mixed Court of the International Settlement was under foreign control, British accountants monopolized the position of Forensic Auditor for the Court, a situation Shanghai accountants wanted, above all, to change.

The association of accountants in Beijing and Tianjin first suggested to the ICAS that the issue of foreigners illegally usurping the privilege of Chinese accountants be presented to the government so that it might be settled with the return of the Mixed Court. The ICAS held a discussion on 15 August 1926 and decided to take action. In a telegram sent to the Jiangsu provincial officials, the association noted that the Mixed Court always appointed a foreigner to examine accounts in lawsuits and the job was prone to irregularities. If foreigners were still in charge of this and other duties after the return of the court, there would be problems. The ICAS wanted the authorities to ensure three things with the return of the Mixed Court: 1) the court should appoint auditors from among Chinese accountants, 2) the court should not appoint non-licensed accountants as the court auditor, 3) court decisions in all civil and criminal cases between the Chinese that involved auditing should have no legal effect unless

they were handled by Chinese accountants [SB, August 17, 1926, p. 3; SKGN, 1928]. These demands spelled out the professional interests of Shanghai accountants in the return of the Mixed Court and best explained why they got actively involved in the matter.

The appeal to the government on this issue brought positive responses. On 19 August 1926 the Shanghai Foreign Affairs Office replied to the ICAS that its three demands of 15 August had merit and would be taken into consideration [SKGN, 1928]. The ICAS then began to lobby the Shanghai General Chamber of Commerce to enlist support. On 24 September the ICAS sent a letter to the Chamber as well as to the provincial and municipal governments. It criticized the current practice of appointing foreigners to examine accounts in lawsuits and proposed two measures to establish a new set of procedures to increase the role of the ICAS [SKGN, 1928].

The Shanghai General Chamber of Commerce came to the aid of the ICAS and pressed the government on behalf of the latter. In late October, through the Jiangsu Department of Industry, the Chamber of Commerce received a directive from the Ministry of Agriculture and Commerce reporting the response of the Ministry of Foreign Affairs on this matter. According to the latter, there was no way to prohibit foreign accountants from practicing in the foreign concessions. But if Chinese law prohibited foreigners from working for Chinese businesses outside the concessions, judicial and administrative agencies should take action to stop them. There was no need to raise the issue with foreign ministers in Beijing, it added, and whether the issue was related to the return of the Mixed Court would be determined by the Jiangsu Foreign Affairs Officer's investigation and dealt with accordingly [SB, October 25, 1926, p. 4]. The ICAS continued to keep close watch over the negotiations on the return of the Mixed Court and constantly engaged with the Foreign Affairs Officer, the General Chamber of Commerce, and other voluntary associations over this issue. Such discussions were in turn reported at the ICAS's dinners and formal meetings where new courses of action were hammered out [SB, December 16, 1926, p. 7; SKGN, 1928].

After the Mixed Court was returned and reorganized as the Provisional Court on 1 January 1927, the ICAS expected the exclusion of foreign accountants to be carried out immediately. It was not to be that easy, however. On 13 January a civil case involving a bankrupt furniture store was tried at the court and the judge allowed a foreign accountant to examine the accounts

in question and give testimony. Upon hearing the news of this event, the ICAS petitioned the Ministry of Agriculture and Commerce as well as the Provisional Court. In its view, the earlier directives from the Ministry of Foreign Affairs had expressed the government's willingness to prohibit foreign accountants from practicing, but Chinese authorities lacked the means to enforce this in the foreign concessions because the Mixed Court had not been returned. Now that the court was returned and reorganized under the jurisdiction of Chinese authorities and the Chinese law was applied in the court, the prohibition of foreign accountants from acting in the court did not need further investigation or decision and should have been enforced immediately. The ICAS warned that the judge's conduct in the above-mentioned case set a bad precedent, damaging not only the accounting profession but also China's national sovereignty and its judicial system. It demanded that the Ministries of Justice and of Foreign Affairs order the Provisional Court and the Foreign Affairs Offices to: 1) enforce the earlier directives, 2) invalidate testimonies given by foreign accountants, and 3) appoint ICAS members to act in the court so as to uphold China's judicial rights [SKGN, 1928].

The persistence of the ICAS paid off. The Ministry of Agriculture and Commerce ordered that Chinese business firms and factories not to hire foreign accountants. Meanwhile the Ministries of Justice and of Foreign Affairs ordered courts and foreign affairs offices to enforce the prohibition. In March 1927 the ICAS followed up these measures by sending correspondence to all trade associations in Shanghai to inform them of the prohibition. This stated that all Chinese business establishments should hire Chinese accountants only, to uphold the nation's sovereignty [SB, March 4, 1927, p. 6; March 10, 1927, p. 6]. It is conceivable that given the lax enforcement by the authorities, not all foreign accountants were subsequently driven out of Chinese businesses, but they did lose the right to act in court in cases involving Chinese business. The ICAS's efforts on this issue had met with success.

DEALING WITH POLITICAL CONTROL AND PROFESSIONAL REGULATION

March 1927 was a turning point in the history of the ICAS. With the GMD regime settling down in Shanghai, the ICAS and other urban voluntary associations entered a different era. The GMD was bent on controlling all social organizations and sup-

pressing political dissent (Xu, 2001, pp. 95-105). In order to preserve its gains in the new political environment, the ICAS needed to make itself politically acceptable to the regime.

On 25 April 1927, at a regular dinner of the ICAS, one accountant revealed that someone from the GMD Shanghai Municipal Party Headquarters (MPH) had approached an accountant to invite members of the association to join the party. The accountant was then asked to provide details. "Since Shanghai is now under the rule of the Nationalist Government," said the accountant, "accountants serving the country and society should be directed by the party-state. Currently the MPH is planning to invite members of this association to join the party, so as to unite our comrades, foster participation in the revolution, help the party to rake out and punish evil gentry and local bullies, and carry out the Three Principles of the People". Upon hearing these words, all those who were not GMD members reportedly expressed their immediate readiness to join the party [SB, April 26, 1927, p. 7]. The speaking accountant was probably a GMD member, judging from the political jargon he used. But it is not known how many Shanghai accountants did subsequently join the GMD. It seems that the GMD was consciously trying to get a hold on the professionals whose services were important to the functioning of the state. Also clear is the willingness of the ICAS to accommodate and not offend the new regime.

Under the GMD government political control and professional regulation went hand in hand. On 22 August 1927, the GMD government enacted the Regulations on the Registration of Accountants. The new regulations were more detailed than the regulations enacted in 1918. It stipulated the duties, qualifications, licensing procedures, disciplinary measures, rights and obligations of accountants. Under the regulations, accountants' associations were to be established in areas where there were 20 or more accountants and accountants were required to join an association to practice. The accounting profession was to be subject to supervision by the Ministry of Finance. The new regulations lowered the age requirement for accountants from 30 to 25. The categories of persons to be disqualified included those who committed 'reactionary deeds'. Yet by far the most remarkable provision in the regulations was that one should be a GMD member to qualify as accountant. Not until October 1927, after the ICAS petitioned the Ministry of Finance, was this provision dropped, which may be an indication that not many ICAS members joined the GMD as they had promised [SKGN, 1928].

Despite its reservations, the ICAS duly reorganized itself in

accordance with the regulations. The major organizational change was the replacement of the board of directors by an executive committee [SB, November 1, 1927, p. 5]. In early 1928 the Ministry of Finance ordered a re-evaluation of accountants' credentials and re-licensing of the profession. After repeated requests from the ICAS, the deadline for submitting credentials was extended twice to 15 March 1929 [SB, December 17, 1928, p. 6].

In January 1930 the Ministry of Industry and Commerce enacted a new set of Regulations on Accountants to supersede the Ministry of Finance's regulations. The accounting profession now came under the supervision of this ministry. The new provisions were almost identical to the old ones. They did not require GMD membership as a qualification for licensing but still disqualified anyone convicted of 'reactionary deeds'. The regulations were soon followed by four sets of detailed rules on their implementation [GZG, Nos. 380-381 (January 1930)].

During these years the ICAS moved further towards the self-regulation of the accountancy profession. In October 1928 the association issued a standard schedule of fees for accountants for the first time. Under the schedule, the rate for accountants' work was ten yuan per hour and 30 yuan per day (time exceeding four hours be counted as one day). If fees were paid by case, the minimum was 100 yuan per case. It also set the rates for contingent fees, the minimum for consulting fees, and travel and meal allowances for accountants. Public accounting firms in Shanghai adopted this schedule as their standard for charging clients [Xu, 1933; LKSG, 1932]. But our sources are silent on whether all accountants followed the fee schedule in their practices.

The services provided by public accounting firms and individual licensed accountants were wide ranging. According to the publication of the Lixin Accounting Firm, the practice would, on behalf of public agencies, firms or individuals: 1) design, manage, verify, investigate, straighten, liquidate, authenticate, and testify various accounts; 2) serve as auditor, liquidation executor, bankruptcy property supervisor, will executor, and other entrusted persons; and 3) handle tax payment and registration and prepare financial and other business documents for clients [LKSG, 1932]. All these services were authorized by the Regulations on Accountants. Xu Yongzuo noted in 1933 that some of these services would be provided by lawyers in the U.S. and by chartered secretaries in England [Xu, 1933, pp. 149-150]. It was the provision of this wide range of essential services that al-

lowed Chinese accountants to perceive themselves as important participants in the nation's economic reconstruction.

During the same period the ICAS's membership grew steadily. In 1928 the association had 75 members. By January 1932 the membership had risen to 216. Within one year the number increased to 262 [SKGH, 1928]. Thereafter the membership of the ICAS showed only small increases. As of January 1936 the association had 272 members [ShB, January 19, 1936, p. 14]. To put the number in a comparative perspective, according to the 'Journal of Accounting' (*kuaiji zazhi*) published in Shanghai, licensed accountants in Japan numbered 6,644 in 1935 [KZ, 7,1 (1936), p. 126].

Another development in Chinese accountancy was the founding in Nanjing, the national capital, of the China Accounting Research Society (CARS) in 1934, with the blessing of the GMD government [KZ, 5,1 (1935), pp. 125-135]. Three leading members of the ICAS, Xu Yongzuo, Wen Yiyu, and Pan Xulun, were elected to the nine-member board of directors of the CARS, a national organization. The difference between the new organization and the ICAS and other accountants' associations in China was that the CARS was explicitly described as a "purely scholarly association" as opposed to the ICAS which was a professional association. The mission of the CARS was "to promote accounting scholarship, improve accounting practices, and foster the character of accountants" [KZ, 5,1 (1935), p. 130]. This event represented further official recognition of accountancy as a field of knowledge and expertise that required specialized research. It also indicated the GMD government's willingness to orient Chinese accountants towards professional and academic pursuit and the country's economic development.

During the 1930s the ICAS's activities were largely oriented towards professional rather than political issues. On only a few occasions did it join the national salvation movement brought forth by the Japanese aggression. During the Sino-Japanese hostilities in Shanghai in early 1932, for instance, the ICAS decided to donate 3,000 yuan to Chinese troops fighting the Japanese. It asked its members to donate money and materials too. Its delegates participated in the anti-Japanese rallies organized by other urban associations in Shanghai [ShB, February 1, 1932, p. 8]. In June 1932, after a cease-fire between Chinese troops and the Japanese took place in Shanghai, the ICAS issued a declaration demanding that the government ask Japan to compensate the Chinese people in Shanghai for economic loss suffered during the hostilities [ShB, June 26, 1932, p. 8].

Between 1932 and 1935 the ICAS was relatively quiet. It did not rejoin other voluntary associations to issue public statements until the height of the national salvation movement in 1936-37. It chose not to play the prominent role it had taken in the return of the Mixed Court in 1926. On the other hand, the ICAS did play along with GMD-sponsored political campaigns to show its conformity. In 1936, for example, it urged its members to participate in the so-called civic training organized by the GMD supposedly in preparation for the promised constitutional government [ShB, May 29, 1936, p. 11]. In May 1937 the ICAS belatedly organized its New Life Movement Committee, although the movement sponsored by the GMD government was already three years old [ShB, May 26, 1937, p. 13].

Shanghai accountant's more limited political activity indicated the success of their professionalization. By the early 1930s Shanghai accountants and their professional association had established their position in society and vis-a-vis the state. They no longer needed of campaign for their professional status by acting on political issues in the public arena. Nor did they want to jeopardize their professional position by active participation in political movements. In other words, they appear to have hid behind their professional pursuits to avoid any political confrontation with an authoritarian government, the GMD regime, which was keen to suppress real or perceived political dissent. Another factor is that Shanghai accountants perceived themselves as practitioners of national salvation through industry. Unlike lawyers, in their daily work accountants were not confronted with political issues. In short, if the ICAS's relative silence on public issues in the 1930s reflected a different political culture under the GMD party-state, in a sense it also reflected the success of Shanghai accountants in achieving professionalization and their satisfaction with the social and professional status they enjoyed.

CONCLUSION

As we have seen, the professionalization of Chinese accountants was shaped by historical conditions of the early 20th century. The trend towards modernization entailed an economic transformation which encouraged the advance of accountants. The foreign presence and dominance in semi-colonial Shanghai provided a professional model and a source of competition for Chinese accountants. The state promotion and regulation of professions provided both opportunities and pressures. Chinese accountants acted in that complex economic, social, and politi-

cal environment to increase the identity, status, and standards of their profession by negotiating and utilizing the conditions they encountered.

The story of Shanghai accountants in the early 20th century provides a meaningful comparison with the history of accounting professionalization in the West. An inescapable conclusion is that although the historical conditions were rather different, the broad outline of professionalization projects are essentially similar in the Chinese and Western cases. As we have seen, the ICAS proved to be the kind of political body that Willmott (1986) analyzed in tracing the accounting profession in Britain. That is, it functioned to advance the self-interests of practitioners by identifying its goals with public interests, by responding to market opportunities and by negotiating with the state. The profession in Shanghai sought to enshrine conditions for entry to the profession and draw the line between licensed and unlicensed accountants. It pursued a closure strategy based on credentialism that was familiar in the Western context (e.g. Walker, 1991). It would ride on political tides to pursue the agenda of elevating its public profile and therefore enhancing its image as a professional community. In particular, it would utilize nationalism to its advantage in competing with foreign accountants in Shanghai and in interacting with the state: a strategy also seen in the rise of accounting organizations in Scotland in the mid-19th century (Walker, 1995). One can only speculate as to whether Chinese accountants would have pursued their professionalization project in the same way without the presence and influence of their Western counterparts inside and outside China. Nevertheless, the comparison is revealing and instructive.

Inasmuch as accountancy was a new field of professional endeavor and represented a new orientation of the educated Chinese towards a pursuit of technical expertise, the experience of Shanghai accountants illustrates a profound historical change in the role of the educated in China's social-economic transformation of the early 20th century. While other educated Chinese were trying to find their place in China's modernization and national salvation and seeking to balance their political and professional roles, accountants seem to have resolved that issue by the 1930s. They determined that their best contribution to national wellbeing was the pursuit of their profession and thereby working for economic recovery and industrial development. The success story of the Chinese accounting profession was for the most part interrupted by the Sino-Japanese War of 1937-1945,

the Chinese Civil War of 1946-1949, and the Maoist era of 1949-1976. The re-emergence of the Chinese accounting profession in the post-Mao era has resumed the pattern of a state-profession negotiation and cooperation for mutual benefit (Hao, 1999). The way in which Chinese accountants seek to revive professionalization under the radically altered economic, social, and political environment of the early 21st century will be intriguing.

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AUTOBIOGRAPHICAL

George J. Staubus
UNIVERSITY OF CALIFORNIA, BERKELEY

AN ACCOUNTANT'S EDUCATION

Abstract: This is a review of how various experiences in my career have contributed to my understanding of accounting. I recall the circumstances surrounding several of my efforts towards the development of accounting theories, viz. (1) decision-usefulness theory, (2) activity costing, and (3) market simulation accounting, as well as my excursion into (4) market association research in seeking to validate decision-usefulness theory and (5) a search for the effects of firms' economic environments on the development of enterprise accounting in the 2nd millennium, C.E. I give my impressions of several of the important players in the evolution of accounting thought in the 20th century with whom I was closely associated, such as Vatter, Moonitz, Chambers, and Sterling, as well as other prominent figures in the broad field of accounting. Some of my gains from associations with three institutions—the American Accounting Association, The University of Chicago, and the Financial Accounting Standards Board—are identified. I conclude with a few summary thoughts on what I have learned.

Education is a life-long process—and includes learning that clichés can be useful—but waiting until the end to write about it does not seem to be a sensible plan. So I shall prepare an interim report, not in the belief that my experience is to be recommended, but in the hope that the preparation of such a report will yield a modest increment to that life-long process. I might learn something from this exercise.

Much of my teaching and research can be thought of as pieces of my education. I developed the decision-usefulness theory of accounting because I did not know how to account to investors successfully. I embarked on my lonely and frustrating quest for empirical evidence of useful accounting information in a search for answers to several accounting questions raised by decision-usefulness theory. Activity costing was the product of my concern that I did not know how to produce decision-useful

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cost information. Later on, market simulation accounting grew out of a search for a concise theory of accounting measurement in the context of generally accepted accounting principles. *Economic Influences on the Development of Accounting in Firms* [1996] is the product of a senior academic's search for an understanding of how accounting got to be what it is. All of it has been educational—for me. Other scholars have become interested in several of those quests.

In this report, I shall review the development of my thinking in those five subject areas as well as lessons from my associations with a few great figures in the 20th century history of accounting (Wixon, Vatter, Moonitz, Chambers, Sprouse, Sterling, Gellein, and Carsberg) and with several important institutions: the University of Chicago, the American Accounting Association, and the Financial Accounting Standards Board.

IN THE BEGINNING

My “formal” education commenced inauspiciously: in a one-room country school in northern Missouri, where I skipped the third grade for questionable reasons. High school was limited, too: no foreign language, emphasis on vocational agriculture, and poor results in “freshman algebra”. When I graduated from high school, I did not have a very good base for higher education and I was too young (barely 16) for university. The fifth (postgraduate) year was more productive, including chemistry, bookkeeping, and a flourishing social life, for a change. Then, after a one-year delay, my university undergraduate years started (by courtesy of the U. S. Navy—during “the war”) with two semesters of fairly general required courses, followed by four semesters of business-oriented courses, including considerable accounting (in which I gradually lost interest). In my last (post-navy) undergraduate year, several chance events turned me towards an academic career: an economics of transportation course that turned out to be technical microeconomics because the graduate student instructor was interested in the latter and unprepared to teach transportation; an interesting course in what is now called organization theory from a professor who gave me my first academic appointment, as a paper grader in another course; a public finance course by a stimulating economics professor in which I wrote my first analytical paper (on the incidence of a general sales tax); and a tip by a former navy roommate that led to a full-time teaching appointment (after

one quarter of graduate work). That, in a nutshell, describes my first 16 years of organized education—to the point where I began to learn by teaching.

The University of Buffalo (now State University of New York—Buffalo) was the scene of my first teaching effort. Hired as a full-time, full-charge instructor at the age of 21 armed with a Bachelor's degree, a new level in my education began. I seriously question what my students got from me during my two years at Buffalo, but I can say that I got a good start on my higher education. Rufus Wixon was the new young chairman, straight from William A. Paton's program at Michigan. "Wix" subsequently moved to Wharton for a long career. All of the young instructors took his year-long seminar and learned accounting theory according to Paton. Paton and Littleton's *An Introduction to Corporate Accounting Standards* [1940] was Wix's bible but it was completely new to me. Matching costs and revenues made sense, and costs surely should be attached to the asset to which they were applied. I even understood the difference between expired and unexpired costs—for a while; later I dismissed it [1987]. I don't think I was nearly as clear about revenues as the product of the enterprise and rejected that notion when I got to my dissertation. Indeed, over the next ten years or so I relaxed my firm embrace of Paton and Littleton, relegating it to the status of one of my old friends. Wix also taught us price level adjustments. My biggest disappointment came on the final exam in the second semester: a young lady whom I thought understood less than I did trounced me in that exam. I was discouraged, but found a good solution the following year: "If you can't beat them, join them". Sarah and I have now been married long enough for me to learn a great deal from her, including some accounting.

Meanwhile, I spent three summers in the University of Chicago MBA program with excellent instruction by Cletus Chizek and Kullervo Louhi in the customary advanced practical accounting courses, including some repetition of material I supposedly had covered in my undergraduate courses. Clete was a partner in Crowe, Chizek and Co. in South Bend, Indiana who took the train into Chicago on his teaching days. Kullervo was the best all-around unpublished faculty member I have ever known, who soon moved to Michigan State and quickly became the dean there. Unfortunately, his poor health was to cut his life short.

In retrospect, I see that my education to this point could be characterized as haphazard, much of it not consciously chosen

by me, but with a gradually increasing sense of direction on my part. My interests were beginning to take shape.

UNIVERSITY OF CHICAGO, 1949-1952

Approaching the end of my second year at Buffalo, I visited Chicago in connection with my application for the Ph.D. program. William J. Vatter was the *de facto* leader of the accounting faculty who introduced me to various colleagues, the most memorable of whom was Willard Graham. After listening to my background, which took about ten seconds, Willard exclaimed: "Green as hell, huh?" I acknowledged the accuracy of his observation, and we got along fine thereafter, although I did not see much of him. One relationship involved technical discussions when Willard was chairman of an American Accounting Association committee on price-level adjusted accounting, a subject that I knew well, thanks to Wixon's instruction at Buffalo. Willard's main job during my time in the Ph.D. program was managing the Executive Program; I never had a course from him. Later, he moved to North Carolina and became president of the AAA.

The accounting group on the third floor of Haskell Hall was a friendly bunch. David Green and I, as students and instructors, mixed well with Paul Kircher, Kullervo Louhi and Bill Vatter. I shared an office with Paul, who came from Michigan and went on to UCLA, and took his Accounting Theory course. My main paper for that course was my first publication: "Payments for the Use of Capital and the Matching Process," *The Accounting Review* [1952]. Paton and Littleton and Wixon had taught me that costs (which, from my residual equity point of view, included interest) attach and should be matched with revenues, a view that I stuck to right through my work on capitalization of interest at the Financial Accounting Standards Board (FASB) and in *Activity Costing and Input-Output Accounting* [1971]. Bill Vatter was the intellectual stimulus, Kullervo Louhi the reliable master of all relevant trades whose solutions to the dozens of major "accounting problems" that we taught in the advanced problems courses as well as in managerial accounting were treated as of biblical origin by the rest of us. We gathered in Bill's office every afternoon to share the coffee that he made and for wide-ranging conversations that always included Bill's strong views, whatever the topic. That close knit group—only five since Willard Graham spent most of his time in his downtown office and his campus office two

floors below us—worked as a team and excelled in intragroup communication, a learning opportunity that was never matched at the University of California.

Vatter and Managerial Accounting: The most exciting developments in accounting thought in that setting were encompassed in Bill Vatter's managerial accounting. We saw Bill bang away at his old manual typewriter for hours in the morning, typing directly onto Ditto masters as he composed his thoughts. Then, five minutes before his class time he dashed into the adjacent closet and cranked out enough copies on the Ditto machine to provide one for each student, distributing them *sans* collation. A Prentice-Hall editor got wind of this development and talked Bill into permitting the printing of a "temporary edition" of *Managerial Accounting* [1950]. As it happened, Bill and his wife, Rose, were in our student apartment for dinner one night when I asked him, "Well, how do you like the looks of the book?" "What book?" "Managerial Accounting." "I haven't seen it". So I showed him my copy. It was probably the most influential textbook ever published in accounting—at least since 1494. Other books sold many more copies, of course, but I doubt if any other book in managerial accounting could be considered seminal. It marked the birth of the subject—and the withering of cost accounting as a course title. Over the next few decades, managerial accounting, or management accounting took over. *Managerial Accounting* was dropped by Prentice-Hall and Vatter after 17 printings—presumably a record for a temporary edition—without ever being revised as a permanent, cloth-bound book. Bill could not be bothered to dress it up for the occasion.

The heredity of managerial accounting at Chicago—"management accounting" in many other places—is worth noting. J. O. McKinsey, a prolific author on accounting, management, and managerial accounting subjects in the 1920s, and head of a growing consulting firm, was the University of Chicago accounting professor who introduced some of the ideas; others came through the well-known Chicago economist, J. M. Clark, whose *Studies in the Economics of Overhead Costs* [1923] especially Chapter IX, the title of which included the phrase "Different Costs for Different Purposes," continues to be recognized as an early milestone in managerial accounting. Vatter's book was especially important as "the teacher's book" in the 1950s; it was too difficult to be popular with students. The task of making managerial accounting readily accessible was picked

up by Charles T. Horngren, whose *Cost Accounting: A Managerial Emphasis* [1962], must be familiar to virtually every person teaching in that area in the U.S. today, or who has taught the subject in the last 40 years, as well as most teachers in other English-speaking countries. Chuck, the great communicator, took my desk as a new Ph.D. student and instructor when I left Chicago in 1952, so he had the benefit of five years of intimate association with Vatter until Bill moved to Berkeley in 1957. He has always acknowledged his debt to Bill. Indeed, when I undertook to raise money for a Vatter Room in Berkeley's new business school building in the early 1990s, Chuck, long dedicated to Berkeley's archrival in sports, Stanford, was the largest contributor.

My *Activity Costing and Input-Output Accounting* [1971] might also be recognized as a minor step in the development of the Chicago School of managerial accounting—possibly the most practically significant development of accounting thought in the 20th century.

Prior to *Managerial Accounting*, popular cost accounting textbooks were focused on the calculation of unit product costs in job order, process and standard cost systems. Those cost numbers were visualized as necessary for the preparation of financial statements and, secondarily, for control. Bill painted a different picture in his Chapter 5, "The Nature of Managerial Accounting." "The other view—with which we are here concerned—is that accounting data and procedures are intimately connected with the processes of operation and management of the business enterprise; that *accounting is a part of management*. The data upon which a large part of the fact-finding associated with *managerial decisions* is based are largely accounting data; policies, strategies, and other plans are seldom established without some reference to accounting records" [p. 97, emphasis added]. And [p. 102]: "(T)he decisions of management are always forward-looking in the sense that history is irrelevant except in so far as it may be a basis for forecasting". It follows that ad hoc cost calculations—different costs for different purposes—were a major part of managerial accounting. He gave a great deal of emphasis to management's need for information about parts of a business entity, and he saw the accountant as part of the management team, not as an adversary residing in an ivory tower. This view is well understood now, but it was not before Bill Vatter came along.

I think it was clear to those of us working with Bill in the early 1950s that his greater interest and his strength lay in

managerial accounting. Yet, his interest in and contributions to external reporting were also noteworthy. To many—scholars not working in managerial or cost accounting, such as Maurice Moonitz—his *Fund Theory* [1947] was Bill's most important work, and one that graced the reading lists of most "Accounting Theory" courses in the third quarter of the 20th century. I think I shall never see a more eloquent case for theory than its first paragraph:

Every science, methodology, or other body of knowledge is oriented to some conceptual structure—a pattern of ideas brought together to form a consistent whole or a frame of reference to which is related the operational content of that field. Without some such integrating structure, procedures are but senseless rituals without reason or substance; progress is but a fortunate combination of circumstances; research is but fumbling in the dark; and the dissemination of knowledge is a cumbersome process, if indeed there is any knowledge to convey [p. 1].

The absence of such a conceptual structure has driven me for half a century.

Bill also introduced the "Direct Method for Preparation of Funds Statements" [1946] which, over succeeding decades (accounting has never been accused of rushing, except by vested interests resisting changes in GAAP), gradually became a popular working paper approach for preparation of funds and cash flow statements. I am sure that today's students and practitioners have no idea how much they owe Bill Vatter for that ingenious, now obvious, practical invention. Another illustration of the man's breadth was his monograph on tax planning for The Controllershship Foundation [1951], the first such work to be published, to my knowledge. I had the privilege of working as a research assistant on that project, which certainly gave me an appreciation for the importance of tax planning.

Bill's hobbies were wide ranging, starting with his choice of music as a career. He studied string instruments and French Horn at the Cincinnati Conservatory of Music (while studying other subjects at the University of Cincinnati) but the only instrument I heard him play was the piano. By contrast, he loved to work on his cars, which included a Lincoln and a Packard, among others, at different times. He did not collect them. His travels included driving to Alaska from Chicago and a Fulbright Award to Australia, where he was commissioned to advise on education for careers in accounting. His life has been reviewed

more carefully by Chuck Horngren [1991] and Rodney Rogers [1993].

Bill was firm in his convictions about accounting and never hesitated to disagree with views that seemed wrong. He was not always diplomatic, was sometimes blunt, and could be obstinate, as Maurice Moonitz found him in an AAA committee meeting. He was a modest man with no exalted opinion of his own work. As chairman of the accounting group at Berkeley when Bill reached the mandatory retirement age in 1972, I wanted to have some sort of celebration of his career. Recognizing that Bill was associated with Chicago more than with Berkeley, I asked Chicago's Sidney Davidson to cooperate; he, of course, was quite willing. Then I sought Bill's cooperation when he and his wife, Rose, were at our home one evening. He complained that no one would be interested: "I know what they'll say. What did that old Vatter ever do anyhow?" Sarah and I were incredulous. I pushed on, describing the type of conference that Sidney and I had in mind. Bill's definitive response was: "I won't come. And if you trick me into it I'll walk out". After some more pleading, Rose said: "I think he means it, George." So it never happened. Bill retired, moved to southern California near their daughter and family, taught one semester at The University of Southern California, wrote a substantial review article for *The Accounting Review* [1979], and died September 15, 1990. He received the AAA Outstanding Accounting Educator award in 1984. The William J. Vatter Conference Room in the Haas School of Business, University of California, Berkeley is a modest monument to his memory.

At this point in my life, my education had made a lot of progress. I had been exposed very substantially to the Chicago philosophy: the Great Books and Robert Hutchins and Mortimer Adler approach to liberal education, the value of breadth and of freedom of thought, and the role of an educator as taught by Paul Klapper, a former president of Queens College, in a campus-wide, year-long seminar for future academics. For better or for worse, the University of Chicago was by far the most important of the five institutions of higher education that I attended in shaping my approach to teaching and research, including the fundamental ideas that teaching and research should reinforce each other, that asking the right questions can be productive, and that major contributions must be heretical. Without that training, I don't see how I could have had even the modestly successful academic career I have had.

THE DECISION-USEFULNESS THEORY OF ACCOUNTING

Many episodes in the development of the decision-usefulness theory have been noted elsewhere [Staubus, 2000]. These include its origin in a draft of my dissertation [1954]; rejection of much of it by my dissertation committee; articles in *The Accounting Review* in the 1950s presenting parts of it [1958, 1959]; numerous revisions of the whole; and a lengthy struggle for publication (1956-60). Eventually it was published under the title *A Theory of Accounting to Investors* [1961]; was developed further [1970, 1971, 1972]; was presented in its most complete form as *Making Accounting Decisions* [1977]; and eventually was accepted around the world by English-speaking accounting standards setters and academics (but not by preparers of financial reports). These are the milestones that are matters of fact.

Here I offer a few more speculative observations and some personal opinions. Acceptance of new theories in social sciences typically is a slow process. I once wrote [1975, p. 164] that publishing a new theory in accounting is like dropping a rose petal into the Grand Canyon and waiting for the echo. An early start and good health increase the chances of seeing results in one's lifetime. Like many other ideas in the broad field of economics, decision-usefulness theory may be seen as "no big deal" because it is so obvious. I must say, however, that when I was seeking a conceptual base for a serious study of revenue in 1951, the complete absence of an objective of accounting in the literature struck me as a major handicap—one that I must overcome. Feeling the need for a general objective led me to the idea that financial information should be useful in making decisions. I am not sure I would have reached that point in my thinking in any environment other than that of The University of Chicago.

Accounting did have objectives before 1951, but they were, according to my search, never made explicit. Even the so-called stewardship objective did not appear in the literature until later, and it was never used as a basis for a theory. If anyone had analyzed it or tried to build a theory on the stewardship objective, both the objective and the GAAP tied to it surely would have been found seriously deficient. For example, GAAP measurements were easily "gamed" by managements bent on manipulating earnings—a deficiency that remains substantially intact to this day. Stewardship cannot be evaluated using out-of-date measurements at both the beginning and end of the reporting period.

A study of the history of accounting with an eye to inducing objectives suggests that one of the first reasons for recording aspects of economic events was to aid the human memory; a merchant needed to keep track of who owed him how much, of how much he owed specific creditors, etc. Perhaps one reason for closing the loop with a genuine equation was a businessman's interest in his own wealth and his success in enhancing it over time. When partners were added, the entity's income had to be known before it could be divided. With branches and other delegations of managerial responsibility, accounting's contributions to control must have been valued. Later, the roles of financial statements in bank financing and taxation became important. But by 1951 the uses of financial reports by absentee investors—both creditors and owners—could no longer be neglected if the profession were to serve the public to anywhere near its potential. These various reasons for accounting were occasionally identified, but they had never been consolidated and used as a base for a theory. The decision-usefulness objective encompasses all of them, brings uses by investors to the fore, and builds on the core objective: to provide information useful in making a wide range of decisions.

Once I had come up with that objective, building a coherent theory based on it was an exciting activity to me—one on which I concentrated for several years and returned to from time to time for 25 years, before I felt it was substantially complete. In the 1950s, editors were not easy to convince, so publications came slowly. Roughly speaking, ten years elapsed between the time I hit on the decision-usefulness objective and the publication of *A Theory of Accounting to Investors*. In the meantime, parts of the theory, especially the beginning point—the statement of the objective of accounting—appeared in my dissertation and in two articles in *The Accounting Review* [1958, 1959]. But its influence in the literature was almost nil.

There were, however, two cases of recognition of the decision-usefulness objective during the decade of my struggles, both published in 1955. One was Ray Chambers' "Blueprint for a Theory of Accounting" in which he explicitly stated the decision-usefulness objective but did not proceed to review users' needs, the focus on residual equity holders, their interest in cash flows to themselves and to the firm, etc—a gap that, in my opinion, was the fundamental reason for the divergence between his conclusions and mine in the measurement area, in which he was deeply interested. (See below for more on our differences.) The other was the AAA's Supplementary Statement No. 8. That

statement gave decision usefulness a central role in *disclosure* but did not apply it to accounting *measurement*. I wish I had inquired regarding how the decision-usefulness objective got into that disclosure statement. To my knowledge, none of the committee members had exhibited any recognition of or interest in that objective prior to publication of the committee report or soon thereafter. I am left with the speculation—perhaps a long shot—that the chairman, Tom Hill from the Massachusetts Institute of Technology, had gotten interested in it from my interview presentation on his campus in 1952. Neither Chambers nor any AAA group built a coherent theory on the basis of that objective in the 1950s.

The real turning point was the publication by the AAA of *A Statement of Basic Accounting Theory* in 1966. It was mailed to all Association members, had the prestige of the Association behind it, was brief and well written, and seems to have been well-timed. That document contributed immensely to the acceptance of the decision-usefulness theory for two reasons, in my judgment. First, it included significant components of the theory—five of the most basic of the 20 that I include in my diagrammatic outline [2000, p. 9]. Secondly, it was widely distributed. All of a sudden, nearly everyone writing on any topic in the general area of financial accounting theory explicitly or implicitly accepted the decision-usefulness objective. Key components of the remainder of the theory quickly became familiar to readers of academic accounting journals.

I have no first-hand information to explain why the AAA committee suddenly adopted the decision-usefulness theory. I should have made enquiries at the time; now it's too late. Looking at the make-up of the committee, I see that none of them had written on the subject, but I find two members that surely had some familiarity with the theory. My colleague, Lawrence Vance, had to have some knowledge of my work after 14 years of association in such matters as curriculum discussions, workshops, and my candidacy for promotion. The committee member most certainly acquainted with decision-usefulness theory was George Sorter, who had reviewed *A Theory of Accounting to Investors* for *The Accounting Review* and who, as a Ph.D. student at Chicago under my chairman (Vatter) might have read my dissertation. Indeed, his own dissertation and his interest in classification of accounting events appear to have been influenced by my detailed classification of accounting events in Chapter IV of both my dissertation [1954, 1980] and *A Theory of Accounting to Investors*. Furthermore, George's powers of per-

suation and articulation of his thoughts have long been recognized by acquaintances as unsurpassed. Therefore, I speculate that he deserves much credit for the Committee's adoption of decision-usefulness theory. (Unfortunately, the committee report shows no literature search and no references to previous literature.)

After 1966, there seemed to be no resistance *in academic circles* to the decision-usefulness theory. Meanwhile, the Accounting Principles Board (APB) of the American Institute of Certified Public Accountants (AICPA) had foundered in the marketable securities sea and other dangerous waters and a new approach to establishing and changing GAAP was sought. The first step towards a new conceptual basis for establishing accounting standards was an enquiry into accounting objectives by the Study Group on the Objectives of Financial Statements, chaired by Robert Trueblood and assisted by George Sorter as research director. Again, I suspect, George's persuasive powers had their effect, but the voting members of the committee had minds of their own and included men who had been deeply involved in the accounting issues of the time, such as Oscar Gellein of Haskins & Sells, Frank Weston of Arthur Young and The University of Chicago's Sidney Davidson, as well as Trueblood himself. I am confident that they believed in the decision-usefulness objective. Furthermore, I have heard Martin Gans, the study group's administrative director, say, in an interview with Stephen Zeff, that the finance man in the group, Reed Parker of Duff, Anderson & Clark, pushed strongly for the future cash flow orientation—a key step in decision-usefulness theory. By that point in history (1971-1973), with the APB's troubles in everyone's mind, the time was ripe for a progressive-minded body of practitioners to follow the lead of the academics. Stewardship and historical cost were no longer acceptable to those few thought leaders who had been asked to apply themselves to the issue. The result was that the decision-usefulness theory was presented to a much wider readership. The report, like the AAA's, shows no evidence of a literature search, although my Australian study, *Objectives and Concepts of Financial Statements* (with John Kenley, [1972]) was mentioned, along with four other works, in the background section. By that time, the original hard-to-find, hard-to-read works on decision-usefulness theory were indirect sources. The Group's objectives became the starting point for the Financial Accounting Standards Board's "conceptual framework project" which carried through with much of the theory—until it got to the measurement part—but

acceptance across the entire profession has still not been achieved.

After acceptance of *A Theory of Accounting to Investors* for publication in 1959, I turned my attention to a number of more limited topics that fit the D-U paradigm. My serious return to the theory came in 1969-70 at the University of Kansas. Bob Sterling had invited me to fill the Arthur Young Chair as a visitor and to participate in the "Kansas Conference" where my role was to make a case for present value measurements alongside Yuji Ijiri (historical cost), Philip Bell (current replacement cost), and Ray Chambers (exit value)—to my mind, very exalted company. Oscar Gellein was asked to discuss my lengthy paper—an assignment that may have resulted in his subsequent support of my appointment at the FASB and tied into his leadership role in the development and promulgation of the FASB's conceptual framework. David Solomons—the right person for the job—played the role of appraiser of the alternatives. (I am sure I beamed when David said, as he launched into his evaluation of the ideas presented: "I suspect that from here on I'm going to sound a lot like George Staubus"). And from then on, I was more confident of the future of my theory.

As so many authors do, I interpreted my Kansas Conference assignment broadly. My paper included much further development of both the set of measurement methods available to accountants and the criteria for choosing among them. In *A Theory of Accounting to Investors* I ranked the various measurement methods on the relevance criterion, and I pointed out the need for other criteria (reliability, cost), but here I developed the "multiple criteria" approach to choosing a measurement method much more fully. The Kansas paper also developed the role of types of evidence of value and the linkages in the surrogate chain: the economic reasoning that permits net realizable value to be substituted for present value, replacement cost to be substituted for net realizable value, and historical cost to be substituted for replacement cost. The supply adjustment (what difference will it make?) approach to the cost of using a resource, which features so prominently in Activity Costing [1971, p. 17], was also started in that paper. I was pleased with the results of the conference; it gave me confidence that the D-U theory would eventually prevail. The paper was published in two parts: *Abacus* [Staubus, 1970] and the conference volume edited by Sterling [Staubus, 1971a].

I continued to develop decision-usefulness theory in various journal articles until 1975 and in the monograph I did for the

Australian Accountancy Research Foundation in 1972 (with John Kenley). Then I saw that a lot had been added since 1959, so I wrote a completely updated version of decision-usefulness theory, including a substantial collection of reprinted works and study questions, because I felt I (and perhaps others) needed a book that could serve graduate students better. (*Making Accounting Decisions* [1977]).

One of the building blocks of decision-usefulness theory that got a lot of attention in the 1970s was “inflation accounting”. I had just barely managed to keep in my dissertation the reporting of gains and losses on net monetary assets or liabilities and the real gain or loss on nonmonetary assets, an innovation that was not widely recognized until the 1970s. Inflation and specific price changes were treated more fully in *A Theory of Accounting to Investors* and they got a lot of attention during the inflationary period in the U.S.—1972-1981—during which time I was deeply involved in those areas at the FASB. If I was “expert” on anything while at the FASB it was accounting for changing prices and I had a great deal of success in convincing the Board on much of the content of Statement 33. (I return to this subject below.)

The increasing acceptance of the decision-usefulness objective in the 1960s and 1970s was gratifying. It became generally accepted among academics, then among standards setters—folks who have reasons to think about that sort of thing. I also observed a few auditors working with standards setting bodies who seemed to accept it. However, the general failure of corporate managers and their sympathizers in the auditing profession to apply the decision-usefulness objective in practice has been disappointing; perhaps I should have foreseen it by trying to put myself in their positions. When I try to think about how I would look at reporting on my own performance, I can see that it is fanciful to expect managers to be objective. And when I recognize that auditors spend much of their work time and social time making friends with client’s management personnel, it is clear that they, too, should be expected to lack objectivity. In this context, the few rogues that we see should not surprise us; the surprising phenomenon is the majority of conscientious accountants in preparer and auditor roles. It is easy to stand on principle when dealing with strangers; to do so against the perceived interests of your friends takes courage.

It has long been clear that the myth of auditor independence has been a weak link in the financial reporting chain. The three-party system in which *managers* hire friendly *auditors* to

report to external, unknown *investors* should not be expected to serve the latter well. In present-day corporate America, there is a strong tendency for managers to control the board of directors and the auditors, instead of the shareholders controlling the auditors and the board and thereby, indirectly, the managers. The classic model of the corporation—shareholders over board over management—is hard to find in public companies in America at this time. Corporate governance is in a sad state. I am not optimistic about the near-term futures of corporate governance and corporate reporting in America.

Finally, I have no favorable comments about those journalists and politicians who fail to distinguish between the vast body of dutiful accountants and auditors, the few genuinely rogue accountants and auditors, and the mix of helpful and unhelpful rules that make up generally accepted accounting principles. Let us be specific in handing out praise and criticism of “accounting”. Is it the whole body of accountants, the few rogues, accounting standards in general, or the standards that have not been revised in the interests of financial statement users that we are criticizing? And who has stood in the way of such revisions?

“EMPIRICAL” RESEARCH

I use this heading to cover research on the association of financial accounting variables and securities values. In the course of my normative work in the 1950s I began to realize that I should try to find ways of providing empirical evidence on the merits of methods that my reasoning indicated “ought to be used” if one sought to provide financial statement information that could be used by investors to make better decisions than they could without it. Because I placed a great deal of emphasis on the relationship between cash flows from the enterprise to its investors and net cash flows to the enterprise, I felt that I could not be sure that depreciation accounting (and amortization of intangibles) improved the usefulness of a net operating flow measure. A major concern was that I could find no connection between (1) the amortization of historical cost according to a semi-arbitrary formula and (2) an economic cost to owners. Neither could I believe that, under the stable price level assumption, limited-life assets retained their original market-established values. That posed an extremely important accounting question: Is net income after deducting depreciation per GAAP superior to net income with no deduction for depreciation as a measure of

operating success for use in making investment decisions? That is, is depreciation accounting, as practiced, helpful? I did not know, nor did decision-usefulness theory tell me; it did not help me choose between two defective measures: income with an expense missing, or income with a poorly measured expense.

I had had one undergraduate course in statistics, but it did not cover the coefficient of correlation, *r*-squared, and least-squares methodology. I was, to say the least, statistically challenged. Unaware that I did not know how to carry out such a research project, in the summer of 1959 I hired research assistants—one of whom (Clarence Houghton) later became partner in charge of the Northern California practice of Deloitte, Haskins & Sells and, since his early retirement, has served with distinction as an adjunct professor at Berkeley—and we started collecting data on a random sample of companies to ascertain which of those variables—earnings or “cash flow”—was the more closely associated with the discounted values of common stocks. I was interested in *ex post* discounted values—assuming various holding periods from one to 12 years—of the dividend streams and terminal market values as a surrogate for value, as opposed to current market price, which, I reasoned, reflected current fads and misperceptions. At that time, allowing for varying risks among the stocks in the sample was not feasible as I, like other accountants, was unaware of beta as a measure of risk.

The work expanded to the testing of other accounting hypotheses—LIFO vs. FIFO, other versions of cash flow, tax allocation, nonrecurring items, as well as dividends and book value as indicators of investment value—and it went very slowly. The desk calculators of the time, later punched cards and then an IBM 701, were time-consuming for a novice quantitative researcher. Chicago’s “CRISP” data were not available. Development of an alternative to the seriously limited least squares methodology (the median deviation percentage), a one-year leave of absence, and the learning of enough statistics to muddle through took additional time. Nevertheless, the seven years of work yielded some understanding of empirical research; several fairly convincing results, and several inconclusive results, including that pertaining to the original depreciation accounting issue; a few journal articles [Staubus, 1965, 1967a, 1968a, 1968b]; and some ability to follow the subsequent market association tests made by much better qualified researchers commencing in the late 1960s and continuing by the thousands since then. The totality of that effort is summarized in an un-

published report: "Testing Accounting Hypotheses" [Staubus, 1966].

I might add that I also learned that an insecure academic should not attempt research for which he/she is not qualified—without a qualified partner. If only I had had some training in research methods—even if far short of the great skills used so effectively by "the Chicago Boys" of the late 1960s, including the king of empirical research and all-round accounting scholar, William H. Beaver. To some of my friends, the most incomprehensible aspect of my struggle was that my office mate in the early stages was Tom Dyckman, who was teaching statistics as well as accounting—obviously exceptionally well-qualified for such work. As I look back on it, my failure to enlist his aid must have been due to a combination of my being too ignorant to understand fully how badly I needed help and Tom's lack of confidence in me as a possible partner. I guess I proved that I was a loner; I've only collaborated on two occasions. Later, when I was at the FASB, I did engage Tom to do a research study on the market response to the oil and gas exposure draft.

ACTIVITY COSTING

During the many years that I was working on what turned out to be *A Theory of Accounting to Investors*, I felt that the complete accounting academic should, over the course of a career, work on accounting to investors, accounting to managers, and accounting to government, thereby covering the major users of enterprise financial information. Two of the three is the best I can do, I'm afraid. My early acquaintance with managerial accounting *a la* Vatter and my ongoing work on developing the curriculum at Berkeley gave me some feel for cost accounting but no satisfaction with its state. In the late 1960s, I was spending a majority of my time teaching and writing on managerial accounting topics, and at some point I settled down to work on a major study of cost accounting—an example of a research project growing out of teaching. The immediate impetus was the raging argument over direct costing vs. full costing and especially a pair of articles by Horngren and Sorter in *The Accounting Review* [Horngren and Sorter, 1961; Sorter and Horngren, 1962]. I entered the fray with "Direct, Relevant, or Absorption Costing?" [1963] to which *The Accounting Review* editor appended Sorter and Horngren's "A Reply to a Postscript". It was the type of measurement issue that I should be able to answer. As in the case of my serious look at financial accounting for my

dissertation, I found no solid foundation on which to work. That's when I came up with the idea that management decisions tended to focus on *doing things*, on choosing from among alternative courses of *action*—in short, on *activities*. I proposed that *products* should not be treated as objects of costing but that *producing* commodities and/or services was commonly the focus of decisions so should be the objects of costing. Managers need to know the cost of making a product, of acquiring a resource, of using resources—in general, the costs of performing activities.

My interest in microeconomics affected my thinking a great deal, as did the importance of a future orientation as emphasized by Vatter. Cost must be thought of as an economic sacrifice resulting from the decision to do something. It followed that (1) the objects of costing must be activities, (2) cost data must be as relevant to the future (as current) as possible, (3) the cost of using a resource must include all required inputs, such as holding costs (including cost of capital) between acquisition and use, (4) the resources being used were not necessarily direct materials, direct labor and overhead; each significant input should be identified and costed separately to facilitate managers' decisions regarding mix of inputs, (5) decisions are made regarding activity increments of various sizes (calling for a range of cost concepts from marginal costs to life cycle costs, i.e., tailor-made incremental costing), (6) cost data must be free of aberrations that are not predictive (standard costs). This reasoning led to such developments as supply adjustment analysis to determine whether the cost consequences of using a resource would be its replacement (replacement cost), reduction in its sale (net realizable value), or less use in another enterprise activity (value in alternative use). Variable rate costing was emphasized—an approach that is getting a lot of attention these days by folks interested in “peak-load pricing” of electricity, bridges and roads, and airline seats. All of this called for a real-time integrated system that was kept up-to-the minute by cost accountants so as to provide managers with current information on the cost of using any internal resource, such as machine time, or of replacing products sold to the outside world. If all of this could be done, the managerial accountant would indeed make himself/herself a valuable member of Vatter's management team.

Activity Costing and Input-Output Accounting was completed in early 1970 before I left the University of Kansas, and was published by Richard D. Irwin with the date January, 1971.

Robert N. Anthony at Harvard had some responsibility for advising the publisher on accounting books at that time, and he strongly recommended its publication. As in the case of decision-usefulness theory, activity costing received little attention in the early years following its publication. In the 1980s and 90s, "activity-based costing" has become popular. As I see it, ABC typically incorporates the emphasis on activities in that it treats service activities in a manufacturing setting as providing fairly specific resources to "producing" activities—a more careful approach to accounting for overhead—but the other features of activity costing have not become popular. That may well be defensible from a cost-benefit viewpoint. I wonder what the future holds.

MARKET SIMULATION ACCOUNTING

My work on market simulation accounting [1985, 1986] marked an about face in my theory approach. In my previous efforts in financial reporting theory and managerial accounting I had adhered strictly to a normative approach; I loved telling readers what accountants ought to do. I think it is fair to say that normative work by an individual scholar reflects considerable conceit; by applying my reasoning powers I can ascertain what financial information would contribute most to achievement of users' objectives. Descriptive research, such as market association tests, may involve less dependence on imagination; perhaps that is a strength.

I became interested in describing accounting practices in 1983. I noticed that the literature of accounting included no major work that could be identified as a descriptive theory of financial accounting. For example, the FASB's conceptual framework was not intended to be descriptive. Indeed, the Board intended to establish a set of long-range goals—a target for standards setters to aim at over years of work. In other words, it—the Board's version of decision-usefulness theory—was/is a normative theory. But no concise statement of a theory of GAAP was available. According to Vatter's above-quoted paragraph, every science, methodology, or body of knowledge must have a conceptual structure; I sought to find it, not to establish it.

My analysis of measurement methods applied in GAAP employed seven qualities of accounting measurements—essentially the criteria for evaluating alternative accounting methods from Chapter III of *Making Accounting Decisions* but omitting the

relevance criterion—emphasis on simulated market prices takes care of that. My observations uncovered three additional criteria that seemed important to the profession: flexibility and control of income measurement by management; stability of income statement numbers over time; and conservatism. I found that stability of income numbers and conservatism appeared to be weighed most heavily and that reliability, economy, comparability, and understandability were valued less highly; flexibility and control of income measurement by management fell in between.

These rather mundane results were not terribly satisfying; I was hoping for a central objective of GAAP comparable to the decision-usefulness objective in normative theory. Then another look at the measurement methods in use showed a commonality: some version of a past or present market price is nearly always the starting point for each method. Those market prices, however, typically were adjusted, tinkered with, or revised to accomplish—what? Two considerations became apparent. One, to make the market price a more relevant measure of current market value. Two, to temper the result by the above-mentioned criteria prized by the profession, especially stability of the series of income numbers. For example, amortization typically produces a stable charge to expense, and, under GAAP's stable price level assumption, tends to produce a balance sheet number for the used asset that is closer to its current market value (than unamortized historical cost). Similarly, the discounting of future cash flows, providing for uncollectibles, and the practice of combining costs of various resources going into a product—such simulation techniques produce liability or asset values closer to what both economic reasoning and observations suggest would be market value in a complete and perfect market. So I concluded that the central objective of GAAP measurement was to simulate the price for an asset or liability that would prevail in a regime of complete and perfect markets. That requires recognition of the *specific setting* in which the asset or liability exists. All observable market prices are defective as measures of entity wealth because no observable price reflects the exchange of money at the precise measurement date for the rights/obligations associated with the net asset item in its existing unique setting. I visualized the accountant as attempting to simulate the setting-specific market value of a wealth item, and that requires using whatever techniques can be applied with acceptable reliability. I recognized that the observable *anomalies* are so material that the market simulation theory of accounting measurement is hard to swallow. Also, the MSA view fails to

account for jointness just as do other views of accounting measurement. I would say, however, that the rough trend in standards setting is consistent with the market simulation hypothesis, despite the roadblocks thrown up by those who place a high value on stability of the series of reported income numbers, conservatism—forms of secret reserves available for smoothing?—and flexibility and control over income measurement.

In sum, accountants have little choice but to record newly-acquired assets at their (historical) cost (current market value); they could not reasonably ignore the cash disbursement or incurrance of liability, or record a gain or loss on acquisition. They could conceivably continue over time to report historical cost, but they do not, except in minority cases such as land and certain investments in financial assets—practices explained by the preferences of preparers of financial statements. Instead, they amortize it or write it down, or less frequently, write it up, in the interest of more relevant, even though often less reliable, measurement. Nominal amounts of financial assets and liabilities are discounted, amortized, and/or adjusted for estimates of uncollectibility. All of those changes in measurements are intended to improve the item's measurement as an estimate of current fair value. They attempt, without articulating it and in crude ways, to simulate market values, and standards setters are staggering towards that intuitive objective without seeing the target.

ECONOMIC INFLUENCES ON THE DEVELOPMENT OF ACCOUNTING IN FIRMS

This book [Staubus, 1996] continued to reflect the descriptive interest that produced market simulation accounting. How did accounting get to be what it is? My economics orientation led me to study the economic environment in which accounting developed in past centuries. In studying the nature of the firm, I learned a lot from Ronald Coase, Oliver Williamson and many other economists. The result was to emphasize bounded rationality, self-interest and opportunistic behavior, firm uniqueness, externalities, information losses in transmission, and indivisibilities (and economies of scale in acquisition of resources) as the most fundamental, "tier I" influences. Then came cost of information, asset uniqueness, performance evaluation and incentive plans, and (especially) conflicts of interests. Finally, size of firm, vertical integration, diversification, and form of organization were found to be important direct influences.

Consider bounded rationality, perhaps the greatest influence on accounting. If the ancient merchant had been able to remember all of his debtors and creditors, he might not have gone to the trouble of keeping records of them. Similarly, there can be little doubt about the influence of self-interest and opportunistic behavior on the development of such control devices as double-entry bookkeeping. Conflicts of interests call for auditing, and so on. Some of these influences, such as indivisibilities in acquisition of plant assets (e.g., buying a ten-years supply of machine services in one transaction), represented serious challenges to accounting—solved in practice by allocation to time periods. Others, such as the great size of some enterprises, were primarily positive. This study significantly improved my understanding of why accounting is what it is. I also note that recent history has shown the importance of clear recognition of just how critical asset uniqueness—consider intellectual property—and conflicts of interests, as manifested in the financial scandal *du jour*, are as challenges to accounting. That investigation gave me a much better understanding of extant accounting.

Thinking about the historical development of accounting in relation to the decision-usefulness objective is appropriate at this point. Accounting has always had objectives, or reasons for being. Helping a merchant manage his rights and obligations, controlling the assets and operations of a branch, and dividing profits among partners were good reasons for accounting. Recognition and articulation of a decision-usefulness objective may not have been helpful. We can see now that achievement of the above-mentioned objectives involved using accounting information for making decisions, but it was not necessary to call the reasoning of managers using that information “decision-making”. Investing in a joint merchandising venture may seldom have been based on accounting information since such an investment typically would have been made before there was any record of that venture, although the promoter’s records of previous ventures might have been relevant. According to my limited reading of history, the type of bank lending activities that seem to have become common in the 19th century in Europe and North America might have been the first common situations in which it would have been natural to speak of using accounting information as a basis for making financial decisions. The widespread development of share ownership in the 20th century extended that use greatly, of course. It is not surprising that the language of using accounting information in making financial decisions did not develop in those centuries in which the use of

joint stock companies with numerous absentee owners was uncommon. Also, there is no reason to criticize pre-20th century accountants for not thinking of the processes of using accounting information in running the enterprise as decision making. In my opinion, the decision-usefulness objective could have been identified, and used productively, by the rapidly developing accounting profession much earlier in the 20th century than it was but its lack of identification and articulation before nineteen hundred need not be lamented. Indeed, its contribution to date in a world of antipathetic preparers may not be detectable by financial statement users.

MY GREATEST INTELLECTUAL DEBTS

The positive influences of two senior colleagues and teachers—Rufus Wixon at Buffalo and Bill Vatter at Chicago—have been noted above. They contributed immensely to the development of my thinking on accounting issues. The third such influence was Maurice Moonitz. Perry Mason was the senior professor in the accounting group when I arrived at Berkeley in 1952, but he left two years later to join the American Institute of Accountants staff in New York. That left Maurice and Lawrence Vance as the senior full-time professors in accounting. Maury had the greater interest in financial accounting theory. The two-volume textbook in use at the intermediate/advanced level at Berkeley at that time was by Moonitz and Charles Staehling [1952], who had just retired. The unique feature of that book was the “valuation experiment” in which the authors and students worked through two periods’ financial events for a firm with only monetary assets and liabilities subject to present value measurement. It was difficult for the students, but I took to it like a duck to water. It fit nicely with the cash flow orientation of the decision-usefulness theory that I was working on at the same time. Present values of future cash flows were recognized as the most relevant to investors’ future cash flow-oriented decisions of all measurement methods in Chapter III of *A Theory of Accounting to Investors*. (Now, I would state my preferences slightly differently, in the context of market simulation accounting [Staubus, 1986]).

More generally, Moonitz set a high standard of reasoning and was more devoted to research than most of my colleagues in the 1950s. His AICPA monographs, *The Basic Postulates of Accounting* [1961] and *A Tentative Set of Broad Accounting Principles for Business Enterprises* [1962] (with Bob Sprouse) prob-

ably are his best-known works. Like Vatter, he is a musician, continuing to play violin parts in quartets to the age of 90. (Come to think of it, Perry Mason was also a musician, but when I became group chairman, that requirement was dropped.) Coincidentally, Moonitz, like Vatter, grew up in Cincinnati, they attended the same high school (Vatter five years ahead of Moonitz), and both started their higher education at the University of Cincinnati. His was a consistent voice for economics-based theory and has been a good friend to this day, even though he was slow to climb aboard the decision-usefulness train.

Aside from colleagues, the two accounting writers that I admired most in my formative intellectual years were Paton and Canning; I know I am in good company as admirers of their works. W. A. Paton's greatest contribution was his *Accounting Theory* [1922] which included certain principles that he temporarily ignored under the influence of 1930s economic conditions and A. C. Littleton. He subsequently returned to those more progressive views. Canning's *Economics of Accountancy* [1929], which was his dissertation at the University of Chicago, emphasized the lack of logic in accounting measurements in practice and the logic in present value measurements. For example, I was impressed by his cynical version of the profession's definition of financial position: "That which the balance sheet is intended to reflect" [p.180].

A little later in my career I came to admire the works of Raymond J. Chambers and Robert R. Sterling as progressive thinkers who embraced the decision-usefulness objective. They were the most brilliant creative writers of accounting literature in the second half of the 20th century, in my opinion. I remember, shamefacedly, my belated discovery of Ray in the summer of 1958 when I read his "Asset Revaluations and Stock Dividends" article in the *Journal of Accountancy*. I thought it was the most exciting accounting article I had ever read and I wrote him a fan letter telling him so (December 29, 1958), including recognition that our thinking was similar. That was the start of a rewarding (for me) professional relationship that included working together at Kansas in 1970, his visits to Berkeley and the FASB, and my visits to Sydney, among other contacts. Later, I discovered that I had overlooked several earlier and more fundamental works by Ray, especially his thought-provoking blueprint articles [1955, 1957]. My failure to read them earlier reveals, I'm afraid, a weakness that has cost me a lot of time and possibly ill will over the years: not keeping up to date on published litera-

ture (and pre-publication drafts) of colleagues whose work deserved recognition and could have been helpful to me. This observation is relevant to my disappointment in the level of intra-group communication at Berkeley and my tendency to work as a loner.

I studied Ray's and Bob's works carefully once I caught on to their consistently high quality. Bob's works that impressed me most were his devastating journal articles. Ray's major monuments that serve as bookends for hundreds of other good pieces were his 1966 and 1995 books. I learned the most from *Accounting, Evaluation, and Economic Behavior* [1966] because of its contributions to areas of special interest to me, but I think my greatest admiration is for his thesaurus [1995], which shows a lifetime of scholarship that is unsurpassed in the accounting field as far as I know. I wrote him another fan letter when I discovered it.

It is common, I believe, for a person greatly devoted to his/her work to cast an especially critical eye on those works closest to his/her own. So it is with my views of Ray Chambers' work. Overall, I think he was the greatest. I also think he would have had more influence if he had not gotten stuck on a single-value theory. As decision-usefulness theory became more accepted, the superior relevance, to cash flow-oriented decisions, of current measurements over old measurements became widely recognized. Furthermore, many agreed that *properly chosen* exit prices were likely to relate more closely to the future course of the asset than entry prices—that they typically would be more relevant and so, given equal reliability and measurement cost, preferable. That brings us to the divergence of views. Some of us did not believe exit prices typically were as reliable and economical as entry prices. And of course prices in an unlikely course of action, such as current liquidation of assets generally thought of as integral to ongoing operations, simply did not seem to us to rank high on relevance to users' cash-flow oriented decisions. Ray and a few others liked to think of the decision facing the owner/manager of an asset who was faced with the decision to sell or hold that particular asset. The majority of users of external reports, in my opinion, were more concerned with the decision facing external, noncontrolling owners and creditors faced with the choice of whether or not to hold an investment in the company. They are the users of financial statements on which I focused. To such decision-makers, I reasoned, the cash flow potential of assets in their most likely future course (typically not current liquidation) was the more relevant

measure. In most nonmonetary asset cases, such a value-in-use or likely course measure had to be rejected on reliability and cost grounds. That steered us back to the less relevant measure—replacement (current) cost—as our choice in many nonmonetary asset cases. Personally, I referred to the “gap chart,” which I first used in my original dissent [Staubus, 1967b] to Chambers’ views, as illustrative of the economic relationship between cost and selling price that showed the logical surrogacy of current cost for net realizable value when the latter failed the reliability test—and the relevance test if the exit price under consideration was related to an unlikely future course for the asset. This reasoning can be adapted to liabilities as well.

Another way of looking at our difference is to note that Ray was concerned with the asset owner’s sell or hold decision and he recognized the need for valuation of the sell side. I looked at the present or prospective external investor’s choice of whether or not to hold an ownership or creditor interest in the enterprise and saw the opportunity for enterprise financial statements to inform the hold side of that choice. Those external investors rarely have a decision to make about either selling or holding a company’s specific asset or about liquidating the enterprise. To me, the liquidation values of assets owned are quite relevant to assessing the enterprise’s *liquidity*, an important concern to which cash flow statements and net “quick assets” are relevant, whereas balance sheets should be relevant to assessing the enterprise’s ongoing wealth under the most likely future course.

In fairness to Ray, I must address his greatest concern about my approach: lack of additivity. He felt that the amount of one asset measured at present value, another at replacement cost, a third at net realizable value and a fourth at historical cost produced a sum comparable to the addition of US dollars, pounds sterling, Australian dollars, and Swiss Francs. My view was, and is, that none of those accounting measurement methods is perfect. All reflect *a market’s estimate of an asset’s value*, at some time, somewhere, so are additive. Differences in estimation techniques do not destroy additivity, although the addition of dollars of different sizes (from different dates) is highly questionable, so the omission of historical cost from the tool kit is a great leap forward in logic.

In my opinion, Ray could have had more impact on accounting thinking if he had been more in tune with finance theory where concepts such as enterprise continuity, present value of cash flows, and best use of assets are more imbedded in contemporary thinking. In the practitioner community, I believe

that Ray's underestimation of the reliability weakness in current exit values and his unwillingness to address the problem (foreseen by many) that acquisition of nonmonetary assets typically would require reporting a loss were viewed as demerits of his proposal. Indeed, that is a good, although not overwhelming, reason for objecting to the current treatment of home-grown intangibles in GAAP. Nevertheless, Ray Chambers was a powerful force for progress and discipline in accounting thought.

THE AMERICAN ACCOUNTING ASSOCIATION

Now I turn to two institutions with which I have had rewarding experiences. The AAA is the only professional organization in which I have maintained membership throughout my career. The first annual meeting that I attended was at the University of Michigan in 1949. In those days, universities were hosts and their faculties made arrangements for the logistics and the program. Attendance, of course, was much smaller than it is now, perhaps partly because employers were not as liberal with expense reimbursements and travel was more difficult. More importantly, there were fewer accounting teachers then.

Among the several committees on which I served, I learned the most from the other members of the Committee on Concepts and Standards for External Financial Reports during the 1973-76 period, despite my frustration at its inability to settle on decision-usefulness theory as the most helpful theory for accountants to embrace. We presented three "basic theoretical approaches" to accounting: "(1) classical ('true income' and inductive) models; (2) decision-usefulness; and (3) information economics" [AAA, 1977, p. 5]. A 21st century reader may be surprised at such indecisiveness; only decision-usefulness has provided significant guidance since 1977. Kermit Larson and Larry Revsine served effectively as successive chairs. Jim Boatsman, Joel Demski, Jack Kennelly, Bob Sterling, Jerry Weygandt and Steve Zeff all contributed significantly as members.

My association with the AAA has been rewarding to me in two other respects. I was selected to serve as the outgoing Distinguished International Lecturer in 1982 to visit Japan, Korea, China, Hong Kong, Thailand, Singapore, and Indonesia. Sarah and I added periods of teaching at the Beijing Institute of Foreign Trade. Two anecdotes have stayed with me. When we visited the railroad office in Beijing to arrange for train transportation, a clerk looked in a file for information on us, which

he did find. I never knew how the railroad office got it; we had never made plans to travel by rail. Second, when I arrived at the Shanghai University of Finance and Economics to arrange for my lecture there as agreed by the AAA office the chairman asked me to give five three-hour sessions on Activity Costing. When I questioned whether I would be able to prepare satisfactory materials in time, he said: "That shouldn't be hard; you wrote the book". So I did the best I could: preparing hand-written transparencies each evening; meeting with the interpreter in the morning; and delivering the lecture in the afternoon. The assigned interpreter was having a difficult time with the sequential translation, with frequent second-guessing by members of the audience. After two such sessions, we were able to get one of the latter—a Touche, Ross & Co. staff member from Canada whose native dialect was Shanghaineze—to take over the interpretation duty. Needless to say, I did not see much of Shanghai.

My other satisfying association with the AAA is the reception that its flagship journal has given to my writings. I have had more material (pages) published in *The Accounting Review* than any other living author (but not as much as an early editor, the late A. C. Littleton). Naturally, I consider *The Accounting Review* to have been the best of the accounting journals, even if I find little of interest in it these days.

As an aside here, Berkeley's involvement in the AAA, and AICPA, is noteworthy. AAA presidents who were students or professors at Berkeley include Henry Rand Hatfield, Perry Mason, Lawrence Vance, Robert Sprouse, Maurice Moonitz, Thomas Dyckman, Gerry Mueller, and Michael Diamond. Furthermore, 14—that's right, 14—AAA presidents have served as visiting professors at Berkeley, several of them in summer sessions in Henry Rand Hatfield's era. Four alumni or ex-faculty (Michael N. Chetkovich, John F. Forbes, N. Loyall McLaren, and Louis H. Penney) have headed up the AICPA or its predecessor, the American Institute of Accountants. We have a long history of professional involvement.

THE FINANCIAL ACCOUNTING STANDARDS BOARD EXPERIENCE

My association with the FASB was truly a learning experience although I never did learn why I was chosen to serve as Director of Research and Technical Activities. My speculation is that the two board members who knew my work, Bob Sprouse (vice chairman) and Oscar Gellein, who has been widely recog-

nized as one of the most valuable members the Board has ever had, were most influential in the Board's choice. Bob had been my next-door colleague at Berkeley for seven years and Oscar had served as discussant of my paper at the 1970 Kansas Conference. As a conscientious discussant—and every task that came Oscar's way was done conscientiously—he was thoroughly familiar with decision-usefulness thinking. Bob was, I believe, a late 1960s convert; his monograph with Maurice Moonitz in 1963 did not adopt decision-usefulness theory (much to my dismay). In any event, I was invited to interview in November 1975, and served part-time on a traveling basis until July 1, 1976 when I started full time.

This may be an appropriate point to note that I was following a well-established Berkeley tradition when I went into the business of establishing accounting principles, or standards. In the 1930s, Berkeley's Henry Rand Hatfield, the first full-time professor of accounting in the U. S., had worked with T. H. Sanders and Underhill Moore in writing *A Statement of Accounting Principles* [1938], commissioned by the Haskins & Sells Foundation and published by the American Institute of Accountants. The intention of the Foundation was to establish "a body of principles which will become useful in unifying thought and which by its acceptance will serve to standardize accounting practices" [p. xi]. Perry Mason moved from Berkeley to the AICPA office of accounting research in 1954, followed by Maurice Moonitz as Director of Accounting Research in 1961. Reed Storey (Ph.D., 1958) served in that same office, succeeding Maurice Moonitz as Director of Research, then moved to the FASB staff when it was established. Bob Sprouse, long-time FASB vice-chairman, was a Berkeleyan for seven years and board member Gerhard Mueller came out of our Ph.D. program (1962).

The "conceptual framework project" was a prominent activity during the time I was there, having been selected by the Board as one of the original seven projects it would undertake. The "Trueblood Committee," more properly the Study Group on the Objectives of Financial Statements, had submitted its report in October 1973, and the Board used that report as its starting point. Sprouse, Gellein and staffer Reed Storey were actively in charge of the project. It would be reasonable to speculate that I had some influence on the development of the conceptual framework during the period I was in Stamford, but that would be wrong. Any influence I had came earlier and worked through others. The fact of the matter was that the trio running the

project were so active and so well-qualified and had such a good start that there was nothing for me to do in that area. There was one exception. I commissioned David Solomons, who was recognized as the primary author of the "Wheat Commission's" original design for the FASB, to write a report that served as a starting point for SFAC No. 2, "Qualitative Characteristics of Financial Information" (1980). The Board was happy with his work. My only complaint was that it should have been called "Criteria for Making Accounting Choices" but the Board was already committed to qualitative characteristics.

Those with an active interest in the development of accounting standards in the mid-1970s remember the intense argument that went on for several years. The opposition to decision-usefulness theory was well organized and active. Robert K. Mautz was the accounting guru partner in Ernst & Ernst who led the opposition. He was a member of the Board's Conceptual Framework Task Force, so had full access to all of the materials being gathered and developed. Then, as now, the Ernst firm had a special relationship with the Financial Executives Institute which welcomed Mautz and allies as speakers against the FASB at many FEI meetings. They also wrote papers stating their position. As I saw it, FASB opponents believed, quite rightly, that acceptance of the decision-usefulness objective would lead to acceptance of current values when they could be measured with acceptable reliability and cost. That would mean the loss of a great tool for managing earnings—the ability to convert noncurrent values to realized gains or losses as needed. They did not give high priority to informing investors, and who can blame them? We all give high priority to our own interests. Managers' interests in how to report on their own performance will always conflict with investors' interests in information for decisions and the Ernst firm sided with their client managements, not with financial statement users. That's why a regulatory body is needed. But many accountants do recognize the concept of social responsibility.

Mautz and company fought tooth and nail against the conceptual framework and did succeed in delaying it somewhat. But the case for decision usefulness eventually carried the day through most of the conceptual framework. Even at the end, the acceptance of alternative measurement methods to fit varying cost and reliability circumstances fits the theory, in my opinion. However, we progressives must not feel too satisfied. In practice, the forces of resistance to informing investors continue to win battles, as in the cases of valuation of marketable securities,

treatment of the costs (to stockholders) of stock options, and accounting for costs of pensions and other post-employment benefits. As I write, the U.S. Congress is holding hearings on the financial reporting at Enron, which may serve to shine a bit more light on the difficulty in getting managements to inform investors.

When I arrived in Stamford, the Board was busily engaged in several other contentious projects, notably those pertaining to exploration and development costs in the extractive industries, the restructuring of troubled debt, and leasing. The public hearing on the restructuring of debt was held in New York at the end of July 1976. Banker after banker—Walter Wriston of Citicorp, David Rockefeller of Chase Manhattan, Norborne Berkeley of Chemical Bank—told the Board how hard it would be for important borrowers to get loans if bankers knew that those loans would have to be marked to market if they ran into trouble. They cited the nearest they could find to heart-rending potential cases—friendly foreign governments, municipalities (New York City was at that time very publicly broke), and fledgling minority businesses—to convince the Board of the potential adverse *economic consequences* of a tough standard on the restructuring of debt. Personally, I was more concerned about the economic consequences of not requiring lenders to bite the bullet when loans went bad. In the end, the Board compromised—and lenders have continued to take great risks, often being bailed out by taxpayers. Think of the financial disasters associated with Mexico, Indonesia, Argentina, savings and loans, etc.

The economic consequences argument, i.e., the concern about adverse effects on managers' and/or investors' decisions of a significant change in a financial reporting standard, was brought up in opposition to changes in the reporting of leases and in other projects on which the Board worked during my tenure. The granddaddy of them all, in terms of the efforts expended by opponents to change, was the oil and gas project. The "successful efforts" method, to which most of the board members were leaning, required taking a hit to the income statement for the costs of a dry hole. The "full cost" method was more liberal in capitalizing and amortizing the costs of all drilling, thus typically yielding a smoother series of income numbers. The "Ad Hoc Committee for Full Cost Accounting" was chaired by the late J. Stanford Smith, the chairman of International Paper Co. which had a large oil and gas subsidiary. We saw him as an enemy of the Board. I remember a dinner party at our home that happened to include as guests Don Kirk (Board mem-

ber) and a young lady neighbor of ours who worked for International Paper. We were amused when she told us the story of how John S. Smith became J. Stanford Smith. She reported that John Smith held a contest among his friends to find the most impressive alternative name. The winning entry was J. Stanford Smith. My staff also was able to get a copy of Smith's employment contract showing the dependence of his earnings on the company's reported earnings. All of this helped Board personnel understand "where J. Stanford Smith was coming from".

The Board's exposure draft (ED) "Financial Accounting and Reporting by Oil and Gas Producing Companies" favoring successful efforts accounting was issued in July 1977. I commissioned two research studies to detect possible adverse effects of successful efforts accounting on producers' ability to raise capital. A market response study by Tom Dyckman was unable to find any lasting, statistically significant effect of the exposure draft on the prices of companies using full cost accounting—those that would have to switch to more conservative accounting if the ED were to become GAAP. Horace Brock interviewed officers of 27 successful efforts companies in the Southwest and found that none of them felt that successful efforts accounting had hindered their capital-raising activities. But the ad hoc committee for full cost accounting continued its resistance, working the Washington beat intensely. It also hired Dan Collins of the University of Iowa to do a market response study. Surprise!? He found that the ED did hurt the prices of full cost companies' securities. The conflict between Dan's and Tom's results surely did not boost the stock of market response research, nor did Dan's sway the Board nor Tom's influence the SEC. As many remember, the Board went ahead with its standard favoring successful efforts [1977]; the SEC issued a statement [1978] canceling the GAAP status of the Board's standard; and the Board issued a revised standard [1979] rescinding its requirement for successful efforts accounting. So much for the power of an independent, private sector standards-setting body!

Economic consequences got special attention at the FASB during the oil and gas imbroglio. The issue had risen to such a prominent level in intercourse pertaining to major projects, and was so heavily weighted as an argument by many respondents, that I felt more light should be shone on it. I was familiar with the reasoning supporting consideration of economic consequences because it (under the name "effects via other parties") was a criterion an evaluator with a special interest might use in choosing an accounting method as discussed in Chapter III of

my *Making Accounting Decisions* [1977]. Prem Prakash at Pittsburgh and Al Rapport at Northwestern, among others, were writing about it [1976]. I discussed the issue with Al, then got Board Chairman Marshall Armstrong's approval to issue a call for papers and hold a conference on the subject. I sent letters to many organizations whose members might be interested and had notices published in several journals inviting one and all to submit research papers that might shed some light on the issue of possible economic consequences of financial reporting. It is interesting that, despite their frequent citing of possible economic consequences as a basis for objecting to proposed changes in accounting standards, when the opportunity came for them to show something specific about possible adverse economic consequences, not one of the Financial Executives Institute member firms submitted a paper. In fact, the Institute's president, Charles Hornbostel, was exceptionally vociferous in complaining about my call for papers and plan for a conference.

In due course, I received 22 papers—mostly from academics, none from the most vocal complainers—and my committee of six judges (research directors of the FASB's six sponsoring organizations) picked five for presentation at our conference and one more for publication in the related book [FASB, 1978]. The one-day conference, which I chaired, was held on March 23, 1978. As I had anticipated, no one was able to show that financial reporting standards adversely affected the economy through either managers' or investors' decisions. In my opinion, that effort substantially weakened the economic consequences argument, although it certainly did not stop it from being dredged up by those opposed to a position taken by the Board. The points became clear to many: (1) economic consequences of financial reporting can be favorable or unfavorable for the economy; (2) the economic consequences of financial reports that include irrelevant or unreliable measurements or that misrepresent risks being taken by the entity can be unfavorable, whereas financial reports with the opposite characteristics are most likely to have favorable economic consequences. It would be a rare case in which the Board should pull its punches because of possible adverse economic consequences.

When Marshall S. Armstrong, the Board's highly respected first chairman, retired, Donald J. Kirk succeeded him. Marshall permitted Don to reorganize to suit his own style before the official handover, at which point Don brought in a more managerial type of person—Michael Alexander—to replace me as Director of Research and Technical Activities. I was switched to

full-time work on the “inflation accounting” project, where I might have been more valuable and which I certainly found more satisfying. During my term as director, each of the major projects was under the supervision of a board member—an arrangement that probably served best at the beginning because it gave those board members an opportunity to learn about the various phases in the development of a project. Also, much of a board member’s time when the organization got into a steady state was spent on matters pertaining to public hearings, responses and deliberations on exposure drafts and final statements, matters requiring little board member time in the organization’s youth. That arrangement meant that the Research and Technical Activities director did not provide much direction to the staff; most of them worked more closely with a board member. Later, when Jim Leisenring and Tim Lucas served as Research and Technical Activities directors, the job became more of a chief operating officer position. In my term, however, technical advisor was a better job description; I did a great deal of reading and commenting on project managers’ drafts, especially on a couple of projects that were not supervised directly by a board member. One of those was capitalization of interest cost, which was issued as Statement No. 34. That topic had been of great interest to me since my first published paper, in 1952. I was pleased to see it become part of GAAP.

One minor duty of the Director of Research and Technical Activities was to interact with other research directors of North American accounting organizations in a six-member organization known as the Council of Accounting Research Directors (CARD). We met every six months to exchange ideas and keep each other up to date. I especially recall attending one of those meetings in Toronto. Two or three other members were based in New York and it so happened that we all traveled to Toronto on the same flight. We chatted in the waiting room, then boarded together. On the plane, however, we parted. One of the privileges of the FASB research director was first-class travel. I found my seat in the first-class section but the others went on to economy class. My embarrassment was heightened by my awareness that the members of their organizations were funding the FASB, so I was traveling first-class at their expense. From that date forward, I forewent my first-class privilege. Another lesson in the education of an accountant!

A more time-consuming duty was recruiting, which was much more difficult than I had anticipated. In one case I rejected an applicant who later became an effective board mem-

ber, fortunately after I had left the organization. I'll never know if he would have made a good project manager. It's safe to say that the sets of personal qualities required for the two jobs are far from identical. To a large extent, qualified people were partners or heading for partnerships in accounting firms, enjoying similar success in industry, or full professors at universities. By academic standards, FASB personnel were well paid, but the salaries were only competitive with those in other fields, and many applicants did not see much upside potential. Temporary positions—as industry fellows, practice fellows, or academic fellows—could be filled more easily, and we were fortunate to attract some good people for those roles. The qualities needed for senior staff—technical knowledge, writing ability, and interest in evaluating accounting alternatives—were not so easy to find in people willing to join that peculiar, risky organization, the FASB. I can think of senior staff members who were nearly worthless to the FASB who went on to great successes elsewhere. But we also had some outstanding people, such as Jules Cassel, whom I believe is the longest serving staff person at the FASB, having started well before I came and continuing as I write.

My most successful recruit was Bryan Carsberg, who came in 1978 and became my partner on inflation accounting. I first met Bryan when I was at the London Business School in 1967 and Bryan was a graduate student and lecturer at the London School of Economics and Political Science. Will Baxter invited me over to the LSE to lecture on divisional performance measurement. I structured my lecture to start with a possible but poor measure of performance, point out its weaknesses, then move on to a better measure, etc. Each time I would pause for questions before suggesting the preferable measure, Bryan would raise his hand and say something like “but I would have thought (what I was about to suggest as the preferable measure) would work better”. Naturally, I thought that young man was very smart.

As chairman of the accounting group at Berkeley in the early 1970s, I invited Bryan to spend a term with us as a visitor, which reinforced my judgment. At the FASB, we worked together on the specific technical content of the inflation accounting statement until the time came to draft the exposure draft. Bryan asked if I would like for him to have a go at it; I agreed. He worked on it two evenings at home, writing in longhand and bringing the work to me in the morning. I was astounded. Not only did he seem to have never needed to cross out any of his

first choices of words, but I could not find any editorial suggestions to make either. In one week he joined the ranks of such top technical writers as Reed Storey and Paul Pacter. And his understanding of the technicalities of the subject, once again, agreed precisely with mine. Bryan stayed with the Board for three years during which period he was promoted to assistant director. That experience may have contributed to his later successes in leading major regulatory bodies of Her Majesty's Government (Director-General of Telecommunications (OfTel) and Director-General of Fair Trading) as well as the British and international accounting standards-setting bodies. I am sure that the skills he polished at the FASB have served him well in all of those positions. Will Baxter and the LSE should be proud of Sir Bryan.

Of all the projects in which I was involved at the FASB, I surely made the greatest contribution to Statement No. 33, "Financial Reporting and Changing Prices". including the title, which I chose as the best I could think of to cover both specific price changes and changes in the (price of the) measuring unit—the U.S. dollar. I drafted an exposure draft on general price level adjustments that was issued in March 1979, but which the Board did not expect to finalize; it followed through with an approach that was started earlier but was already deemed unacceptable: accounting for inflation without updating measurements of specific net asset items. The technical features of that ED did, however, carry through to Statement 33, including my definitions of monetary and nonmonetary assets and liabilities, which were stated carefully so were difficult to understand. That has been characteristic of much of the writing in FASB work: we/they have not always struck the balance between precision and readability that many readers would have preferred. The Board has insisted on "getting it right technically". Subsequently, the staff has developed ways of helping readers comprehend technical standards by providing supplementary educational materials.

From the above comments, I am sure the reader can see that my FASB experience contributed heavily to my education. I added much to my technical competence, although I would not claim to have reached the level of such genuine experts as Oscar Gellein or Tim Lucas. I acquired the habit of arguing two or more sides of issues, of seeking counterarguments, of presenting as whole a picture as I could. Because the Board was determined to work within the logic of GAAP rather than overturn the whole structure, reasoning by analogy within GAAP became

important. High quality writing was admired and I sought to improve my own, and I gained some experience speaking to groups that I did not know as well as students and fellow-academics. I learned to think about the background for a person's—especially a critic's—point of view and to recognize that no one was completely objective, not even my admired academic friends, or myself. All of the Board's constituents had special interests; advocacy of those interests is not an evil act, but it does impede the performance of a body established to work in the interests of the general public. The Board's mission was to represent the latter; in my opinion, Board members have consistently sought to do so.

My admiration for Board members I have known, while I was there and subsequently, has been quite general, although not universal. Marshall Armstrong was the type of steady, calm leader that the first Board needed. Don Kirk, a younger, vigorous man, provided a stronger style of leadership and added an emphasis on business-like efficiency, including individual work plans and monthly reports, in the operations of an organization of some 100 people. Bob Sprouse served as vice-chairman for nearly all of his 13 years on the Board and consistently offered balanced, well-reasoned views; he had served with distinction as president of the American Accounting Association and was the ideal choice for the first academic position on the Board. Oscar Gellein, who came from Haskins and Sells, was greatly admired by all who knew him, as nearly as I could tell. His reasoning often made the difference in the conclusion reached by the Board. In an environment in which nearly every professional felt pushed by the work load, Oscar once told me, "I like this job; my only complaint is that there is not enough to do". Just a little later, Ralph Walters and David Mosso became very effective members. I enjoyed reading the transcripts of David's well-crafted, highly literate speeches. In general, the Board Members made the transition from their special interest positions to representatives of the public interest quite effectively. I never felt that any of them exhibited special interest bias. Unfortunately, the Board was subject to a modest degree of "regulatory capture," but far less than what one sees in such U.S. regulatory bodies as the SEC and the Federal Communications Commission, or the auditing profession.

My views of the FASB have changed a bit over the years. As one board member explained to me when I inquired about the change in his position on an issue after moving from a corporate financial officer position to the Board: "Where you stand de-

depends on where you sit". I was, naturally, loyal to the cause when I was a part of it but in later years I have been disappointed in two aspects: speed and independence. When the chronological length of projects is counted in decades, as in the cases of pensions and other post-employment benefits, consolidations, and financial instruments, I cannot be proud of it. And the repeated cases of yielding to pressure, including by delays, have been discouraging. It surely is difficult to make a case that the Board's standards involving restructuring of debt, pensions, other post-employment benefits, marketable securities, and stock options are consistent with the conceptual framework. The trend of board decisions surely has been in the direction of providing more useful information to investors, and I think the Board deserves to have reached the greatest age of any U.S. accounting standards setting organization, but still the record is not one deserving strong accolades. On balance, however, it is a force for good in financial reporting.

I am pleased to see that recent legislation has provided for financing the Board from fees paid by public companies to the SEC, thus eliminating the threat that unhappy corporate managements might withhold contributions to the privately financed Financial Accounting Foundation that has funded the Board in the past. I am convinced that that threat has influenced Board members' judgments on controversial issues. Members of Financial Executives International have been the most frequent and politically strongest opponents of proposed changes in financial accounting standards; their agents in the auditing profession have also been poor supporters when the chips were down. None of the sponsoring organizations, however, have good records of support, including the generally apathetic AAA. I would not object to the Board's supersession by the International Accounting Standards Board. One way of meeting the widespread concern that detailed "cookbook" standards are too easily "loopholed" is to adopt the "general principles" approach that many critics of the Board and the IASB prefer and to establish an advance opinion service that would, for a fee, provide an ex ante opinion on a company's proposed reporting. The auditor would then be required to call attention to any deviation from that opinion. Should the SEC do this?

CONCLUSIONS

Academic accountants have shown a much lower level of interest in accounting theory in the last quarter century than

they did in the previous two quarters. That applies to both their research and their teaching. I have no good explanation of why this has been so. I think we all know that such an explanation would have to explain the reward systems in university faculties. I am willing, however, to confess that my interest has not waned. If that marks me as antiquated, so be it.

What have I learned in the course of my education? These points I find enduring:

- That accounting has the honor of serving as a major provider of information, and information lubricates markets. Those who enjoy the fruits of markets should recognize the value of accounting. Governmental regulatory activities that positively influence the flow of objective information are consistent with belief in the value of free markets in other goods.
- Education makes information accessible. Accounting education empowers information providers and users.
- Accounting is a branch of economics. The measurement of wealth—positive and negative, inflows and outflows—is the heart of accounting, including the use of accounting in controlling the handling of wealth.
- That teachers can add value and interest to their financial accounting courses by emphasizing decision-usefulness theory in addition to generally accepted accounting principles.
- That measurement methods that simulate the market price of the asset or liability item in a regime of complete and perfect markets provide information relevant to the decisions of interested parties who are future cash flow-oriented.
- That the prospective reliability of those measurements must be weighed heavily in choosing among them and in making the cut-off between those items that are measurable with useful reliability and those that are not, especially intangible investments.
- That no accounting system using only one measurement method can serve users well.
- That accounting measurements always will be fraught with imperfections and that the portion of net asset items that is not measurable with acceptable reliability is increasing.
- That cost finding can be taught by starting with ad hoc situations calling for predictions of economic sacrifices

required to perform an identified activity. Then, *common* cost information needs can provide the basis for developing cost accounting *systems*.

- That many academic accountants can improve their teaching and research by using each to help the other in a symbiotic relationship. That requires that the teaching and research focus on the same subject matter.
- That a career in academic accounting can be rewarding.

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NOTICEBOARD

THE ACADEMY OF ACCOUNTING HISTORIANS 2003 VANGERMEERSCH MANUSCRIPT AWARD

In 1988, The Academy of Accounting Historians established an annual manuscript award to encourage academic scholars new to the field to pursue historical research. An historical manuscript on any aspect of the field of accounting, broadly defined, is appropriate for submission.

ELIGIBILITY AND GUIDELINES FOR SUBMISSIONS

Any accounting faculty member, who holds a full-time appointment and who received his/her masters/doctorate within seven years previous to the date of submission, is eligible to be considered for this award. Coauthored manuscripts will be considered (if at least one coauthor received his/her master/doctorate within the last seven years). Manuscripts must conform to the style requirements of the *Accounting Historians Journal*. Previously published manuscripts or manuscripts under review are not eligible for consideration.

Six copies of each manuscript should be submitted by August 1, 2003 to the chair of the Vangermeersch Manuscript Award Committee:

Professor Richard K. Fleischman
Department of Accountancy
Boler School of Business
John Carroll University
University Heights, OH 44118
USA

A cover letter, indicating the author's mailing address, date masters/doctoral degree awarded, and a statement that the manuscript has not been published or is not currently being considered for publication should be included in the submission packet.

REVIEW PROCESS AND AWARD

In addition to the chair, the Vangermeersch Manuscript Award Committee includes the following members:

Salvador Carmona	Universidad Carlos III
David Oldroyd	University of Newcastle
Chris Poullaos	University of New South Wales
Thomas Tyson	St. John Fisher College

The committee will evaluate submitted manuscripts on a blind-review basis and select one recipient each year. The author will receive a \$1,000 (U.S.) stipend and a plaque to recognize his/her outstanding achievement in historical research. In the case of coauthored manuscripts, only the junior faculty member(s) will receive prizes. The winning manuscript will be published in the *Accounting Historians Journal* after an appropriate review. The award will be given annually unless the Manuscript Award Committee determines that no submission warrants recognition as an outstanding manuscript. The award will be presented at the Academy's 2003 annual research conference in Denton, Texas.

CALL FOR PAPERS

Academy of Accounting Historians
2003 Research Conference
November 6-8, 2003
Denton, Texas

Conference Theme: “Accountability — Pre-Post Enron: Alternative Global Views”

The theme of the 2003 Academy of Accounting Historians’ Research Conference, “Accountability — Pre-Post Enron: Alternative Global Views: is intended to stimulate a historical analysis of the concept of accountability. Specifically, we are interested in an evaluation of:

- In search of the moral compass
- Accounting and auditing responsibility
- The role of accounting research in rendering accountability invisible
- Corporate culture and its impact on accountability
- Comparative practices of accountability in international contexts
- Professional ethics
- Impact of standard setting on accountability
- Corporate governance
- Abdication of academia in the advancement of normative research
- History of earnings management
- History of off-the-balance sheet financing
- An educator’s response to Enron
- An historical analysis of how the profession responds to crisis
- History of auditor rotation

Submission of papers: The deadline for submissions is June 15, 2003. Three copies of papers (double spaced) and an abstract of 500 words or less should be submitted to:

Professor Sarah A. Holmes
Department of Accounting
Texas A&M University
4353 TAMU
College Station, Texas 77843-4353

Papers are subject to double blind review. Abstracts (but not papers) will be published in the Proceedings of the conference and on the Academy’s Home page.

Registration: Registration is \$125. This fee includes a Thursday night reception, Friday and Saturday continental breakfasts, Friday and Saturday luncheons, and Friday evening dinner. Registration forms should be returned to Sarah A. Holmes, Department of Accounting, Texas A&M University, 4353 TAMU, College Station, Texas 77843-4353.

Hotel Accommodation: The conference will be held at the Radisson Hotel Denton & Eagle Point Golf Club. The conference rate is \$99 plus tax per night – single or double. Reservations should be made directly with the hotel at 940-384-2254 or by Fax at 940-384-2244. Be sure to reference the Academy of Accounting Historians.

Airport: Denton is served by the Dallas/Ft. Worth Airport. Shuttle services will be provided.



**15th Annual Conference on
Accounting, Business & Financial History
at Cardiff Business School 10-11 September 2003**

Sponsored by:



BDO Stoy Hayward

Theoretical, empirical and review papers are welcomed in all areas of accounting, business and financial history.

The conference provides delegates with the opportunity of presenting and discussing, in an informal setting, papers ranging from early working drafts to fully developed manuscripts. The format of the conference allows approximately 40 minutes for presentation and discussion in order to help achieve worthwhile feedback from those attending.

In the past, many papers presented at Cardiff have subsequently appeared in print in *Accounting, Business and Financial History*, edited by John Richard (Dick) Edwards and Trevor Boyns, or in another of the full range of international, refereed academic accounting, business and economic history journals.

The conference will be held at Aberdare Hall, Cathays Park, Cardiff, CF14 3UX, UK, from lunchtime on Wednesday, 10 September 2003 to mid-afternoon on Thursday, 11 September 2003.

The fully inclusive conference fee (covering all meals, the conference dinner on Wednesday and accommodation) is £100.

Those wishing to offer papers to be considered for presentation at the conference should send an abstract of their paper (not exceeding one page) to:

Debbie Smith
Cardiff Business School, Colum Drive, Cardiff, CF10 3EU
Tel +44 (0)29 2087 5731 Fax +44 (0)29 2087 4419
Email. SmithDL@cardiff.ac.uk

The deadline for submissions is 31 May 2003 with earlier proposals for papers encouraged.

Following the refereeing process, applicants will be advised of the conference organisers' decision on 30 June 2003.

CONFERENCE ANNOUNCEMENT & CALL FOR PAPERS

FOURTH ASIAN PACIFIC INTERDISCIPLINARY RESEARCH IN ACCOUNTING CONFERENCE

Singapore 4-6 July 2004

&

**APIRA 2004 Emerging Scholars' Colloquium
(2-3 July 2004)**

Organised by Singapore Management University
(Supporting Organisation: Nanyang Business School,
Nanyang Technological University)

In association with Accounting, Auditing & Accountability Journal

The triennial APIRA conference now moves to the "Lion City" Singapore, following on from its predecessors in Sydney (1995), Osaka (198) and Adelaide (2001). APIRA is the premier interdisciplinary accounting research conference in the Asia-Pacific region, rotating in a three-year cycle with the European IPA and the New York CPA conferences.

With a reputation for academic rigor, and the participation of accountancy's foremost thinkers, APIRA 2004 promises to attract strong representation from accounting researchers the world over. Some of the most prolific researchers from the United Kingdom, Europe, North America, the Asia-Pacific region, and many other countries are represented in APIRA's International Editorial Committee. A strong interdisciplinary program of research papers and forums addressing the relationships between accounting, auditing and accountability and their social, institutional, economic and political environments will be included in the program.

This interdisciplinary accounting conference is dedicated to the advancement of accounting knowledge and practice. It provides a platform to discuss the interaction between accounting/auditing and their social, economic, institutional and political environments.

Conference sessions and papers will critique contemporary theory and practice, examine historical and interdisciplinary dimensions of accounting, debate policy alternatives, and explore new perspectives for understanding and change in the accounting discipline.

Papers may explore policy alternatives and provide new perspectives for understanding the accounting discipline, covering the following themes:

- Accounting Communication
- Intellectual Capital
- Knowledge Management
- Risk Management
- Corporate Governance
- Social and Environmental Accounting
- Critical Financial Analysis
- Accounting and Gender and/or Feminist Theories
- Accounting and Accountability in the Public Sector
- Non-profit Organizations' Accountability
- Accounting Policy and Standard Setting

CONFERENCE ANNOUNCEMENT & CALL FOR PAPERS

- Corporate Regulation and Accountability
- Accounting Professions
- New Forms of Accounting and Auditing
- Auditing and Accountability: Professional and Business Ethics
- Accounting in the Third World
- Accounting and the Public Interest
- Critical, Explanatory, Oral and Visual Approaches to Accounting History
- Critical and Ethnographic Case Studies of Accounting in Action
- Accounting and Management Planning and Control
- International Accounting and Globalisation
- Accounting and Technology
- Accounting and Culture
- Accounting and the Home
- Methodological and Theoretical Issues

APIRA 2004 will be held at the Grand Hyatt Singapore, and its associated Emerging Scholars' Colloquium (2-3 July) will be held at the beautiful Bukit Timah campus of Singapore Management University. The conference's plenary speakers on the subjects of corporate governance and management control will include Professors Niamh Brennan (University College Dublin), Trevor Hopper (University of Manchester), and Ken Merchant (University of Southern California).

*For full conference and colloquium details,
access the SINGAPORE APIRA website now!*

**<http://www.accountancy.smu.edu.sg/Apira/index.htm>
or
using www.Google.com, type in "APIRA 2004"**

Key Dates:

- | | | |
|--|---|-----------------|
| • Deadline for electronic submission of papers
(only full papers considered for refereeing) | : | 30 January 2004 |
| • Submission of Revised Paper | : | 30 April 2004 |
| • Early Bird Conference Registration | : | 30 April 2004 |

Fees:

Early Bird Registration by 30 April 2004	:	Full Registration (S\$595) Full-time Postgraduate Student (S\$365) Emerging Scholar's Colloquium (S\$50)
Regular Registration after 30 April 2004	:	Full Registration (S\$695) Full-time Postgraduate Student (S\$415) Emerging Scholar's Colloquium (S\$60)

For further enquiries, please contact:

Ms Adelene Ang Singapore Management University Email: aang@smu.edu.sg	or	Professor Lee D Parker The University of Adelaide Email: aaaj@commerce.adelaide.edu.au
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Conference co-chairs:

Professor Lee D Parker The University of Adelaide Email: aaaj@commerce.adelaide.edu.au	Associate Professor Low Aik Meng Singapore Management University Email: amlow@smu.edu.sg
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THE ACADEMY OF ACCOUNTING HISTORIANS

APPLICATION FOR 2003 MEMBERSHIP

Individual Membership: \$45.00

Student Membership: \$10.00

Name: (please print) _____

Mailing Address: _____

City: _____ State: _____

Zip Code: _____ Country: _____

Accounting History Area of Interest: _____

Phone: _____ Fax: _____

E-mail: _____

Method of Payment: check enclosed

Mastercard VISA

Card Number: _____

Expiration Date: _____

Signature: _____

Mail to: Mrs. Kathy H. Rice
The Academy of Accounting Historians
The University of Alabama
Box 870220
Tuscaloosa, AL 35487
USA

