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Volume 37, Number 2
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ACCOUNTING HISTORIANS JOURNAL

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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.

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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.

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ACCOUNTING HISTORIANS JOURNAL

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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.

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RAY CHAMPERS AND ERNEST WEINWURM – SCHOLARS IN UNISON ON MEASUREMENT IN ACCOUNTING

Abstract: Drawing on new evidence (Napier, 2002), we examine how ideas on measurement in accounting developed in the 1950s and 1960s. We show that for the question of measurement to be addressed properly, there is a need to consider the function of accounting. The analysis of private correspondence between Professors Ray Chambers (Sydney University, Australia) and the U.S.’s Ernest Weinwurm (DePaul University, Chicago) reveals that those ideas were nurtured in a way not previously disclosed. We provide unequivocal insights into how the latter, a scholar relatively unknown in accounting, mentored the former through the maturation of Chambers’ accounting measurement ideas following his 1955 a “Blueprint for a Theory of Accounting” and 1957 “Detail for a Blueprint” articles, his theory matters in general, and other matters in particular being considered by the profession’s standard-setters especially in the U.S. The analysis reinforces the differing notions of what accounting researchers perceived as “scientific,” from the so-called “Golden Age” theorists’ [Nelson, 1973] reasoned thinking based on observations of the commercial foundations within which accounting sits, to the narrower notions emerging from theorists within the economic capital-markets paradigm.

AN INCONSPICUOUS BEGINNING

Accounting measurement issues at a high level of generality emerged in the 1950s and 1960s as part of the desire by many to seek sounder principles for accounting practice. They proved problematic and remain unresolved notwithstanding extensive conceptual framework (CF) deliberations over the last 50 years. Consider, for instance, recent concerns expressed as part of the CF deliberations by the International Accounting Standards Board (IASB), specifically over implementation aspects of fair-value measures in International Financial Reporting Standards. Mark-to-market valuations for so-called “toxic assets” became a
critical issue during the 2007-2010 global financial crisis (GFC).\(^1\) Resolving that issue among others, such as whether to allow multiple measures or prescribe a single measurement property for reporting assets and liabilities, is alluded to in the references in footnote 1 and the text below to have been politically sensitive and seemingly intractable issues for standard-setters for over half a century.

Chambers [1955a, b, 1957], along with Mattessich [1957], were early academics who explored at a higher level of generality the issue of measurement in accounting. Chambers perceived the need for practice to be underpinned by more reasoned thinking than mere custom based on special pleading. Accordingly, reference is made throughout this paper to a desire by Chambers and others for a more “scientific” underpinning of the art of accounting. Not long after those 1950s forays, Homburger [1961] and Bierman [1963] discussed accounting-measurement issues, with the latter using the term “revolution” to flag the prospect of a major breakthrough.

Through private, previously unexamined correspondence (1955-1964) between Professors Ray Chambers and Ernest Weinwurm, we re-examine here several recurring measurement issues, in particular that accounting measurement had to conform to the rules of measurement well established in other disciplines [Stevens, 1946].\(^2\) This new evidence (Napier, 2002) provides insights into how a more rigorous, more “scientific” approach to accounting thought arose in the late 1950s and early 1960s. That evidence also highlights the need for the function

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\(^1\) See Laux and Leuz [2009, 2010] who reject the claims that the reporting of fair values caused the GFC. To put things discussed in the current article in perspective, Barth [2010] notes the standard-setting debate about measurement is taking place in two parts – the measurement phase of the IASB's CF project and the fair-value measurement (FVM) project. Specifically she states: “The Measurement phase of the Conceptual Framework (MCF) project addresses issues related to developing concepts to identify measurement bases that are appropriate to use in financial reporting and to select a particular measurement basis in a particular standard-setting circumstance. In contrast, the FVM project addresses issues related to defining the term ‘fair value’ as it is used in accounting standards.” Further, the 2009 Tampere EAA Measurement Symposium [Dean et al., 2010], from which this extract from Barth appeared, covers many aspects currently being canvassed by the international standard-setters.

\(^2\) The correspondence is part of the R.J. Chambers Collection Archive held in the University of Sydney Archives Unit (USA P202). The Chambers Collection Archive, described in Dean et al. [2006] is directly accessible at http://chamberslibrary.econ.usyd.edu.au, and, also indirectly, along with several digitized accounting databases, through the auspices of a joint EAA/AAA project, known as GADAN.
of accounting to be determined before any question of measurement can be addressed properly.

In addition to that private correspondence, we also review an unpublished 1975 paper “Accounting, Measurement and Mathematics” that was to be a part of an *Abacus festschrift* for Ernest Weinwurm.\(^3\) Those materials reveal that what has been published to date about many early theorists’ works on those matters is a partial account. Our analysis augments Chambers’ public recollection of events and those of commentators, such as Gaffikin (1986, 1988, 2000] and Zeff [1971, 1982].

Before addressing measurement issues systematically, Chambers [1955 a, b, 1961] felt it necessary to resolve in his mind what was the *function* of accounting. To do this, he observed accounting, finance, and management practices. This led him to deduce the primary function of accounting as providing financial information about an entity, particularly its capacity for adaptation. That required accounting measures to be contemporary and, most importantly, by implication the exclusion of expectations. But others, like Mattessich, disagreed. At this stage, there was minimal recourse by most accountants to the foundations (or canons) of measurement. It is shown here that later, due primarily to Weinwurm’s promptings, additional constraints of adhering to those foundations resulted in Chambers’ advocacy of a single valuation principle, current cash-equivalent (in most situations, current exit price) measures for reporting assets and liabilities to show an entity’s capacity for adaptation.

Total correspondence between Chambers and Weinwurm, comprising over 120 letters spans the 1955-1983 period, with few “nil-correspondence” years. More than 60 letters were written in the first ten-year period, in which they discussed research and theory generally and, more particularly, the function of accounting and business decision making, the issue of postulates, measurement, and price-level implications, as well as personal matters. Their discussions were persistent and substantial relative to Chambers’ average annual correspondence with all par-

\(^3\)This proposed *festschrift* paper by Chambers was unearthed as we researched the now publicly accessible Chambers Collection Archive held in the University of Sydney Archives Unit (USA P202). The paper is found under the collection reference C#9131. The following catalogue source and date system is used: USA P202 (W#8090-250855) which refers to the Chambers Collection Archive item number #8090, written by Weinwurm on August 25, 1955 (the USA P202 prefix is not cited hereafter). To our knowledge the *festschrift* paper’s existence has not previously been referred to publicly. Letters in the collection show that Weinwurm requested that the *festschrift* be aborted.

Examining the first ten years of their correspondence reveals major common concerns over the lack of accounting fundamentals underpinning practice. We concentrate here on the development of Chambers’ ideas on measurement (and Weinwurm’s influence) as Chambers’ contemporaries acknowledged him to be one of accounting’s “intellectual giants.” While the work by Chambers [1974, 1991], recalling early efforts to promote his ideas is revealing in many respects, it provides only partial insights into many questions, such as why he was able to enter the international stage in the context of accounting measurement and theory development in the late 1950s and early 1960s and why his ideas on measurement would take, in some commentators’ view, a dramatic change from the late 1950s to the mid-1960s. As we show below, Chambers viewed the change as subtle but crucial. When Chambers wrote his 1955a and 1957 articles, concerns about accounting fundamentals were as pressing then as they are now.

Reviewing this correspondence elicits new inferences regarding how Chambers’ ideas eventually gained international academic respectability, though admittedly failing, initially, to influence practice, especially the postulates and principles underpinning it. Arguably, the present moves by the IASB to cement fair-value accounting in its mark-to-market accounting guise, tag Chambers as a man whose measurement ideas were ahead of his time. He corresponded widely with leading aca-

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4 As noted above, the RJ Chambers Archive reveals myriad letters in the review period with academics, practitioners, regulators, and business people both locally and internationally. Though weeks, sometimes months, would pass before correspondences were received and responses prepared, Chambers and Weinwurm maintained the threads of their conversations, argument, and counter-argument. Overcoming the hurdles of living on different continents and related difficulties makes that endurance all the more significant. Our work shows Weinwurm to be a relatively frequent, on-going sounding board and advisor on matters germane to Chambers gaining networks in the U.S. The letters to and from Weinwurm were augmented by related correspondence with officials of The Institute of Management Science (TIMS) as it was increasing its influence at that time.

5 See Dean [2008].


7 See Devine [1960] and Deinzer [1968].
demics and practitioners – in the U.S., for example, Paton, Vatter, Littleton, Mattessich, Staubus, Moonitz, Davidson, Edwards and Bell, Zeff, and such scions of practice as May (Price Waterhouse & Co), Spacek (Arthur Andersen), and MacNeal (a leading businessman and CPA who also originally worked with Price Waterhouse). They discussed issues that over half a century later remain at the heart of contemporary accounting standard-setters’ deliberations regarding the “forging” of an accounting CF and related measurement issues.8

But who was Weinwurm? He is not well known in the accounting literature and little is known of his early, albeit subtle, influence on Chambers’ thinking on measurement. As a leading figure in the newly emerging TIMS, Weinwurm (as the listing of publications in Appendix I shows) was generally concerned with business, decision making, and related accounting issues. His correspondence promptings resulted directly in Chambers’ ultimate ideas on measurement becoming the foundations of his accounting reforms, eventually coalescing into the core of his Continuously Contemporary Accounting9 (which, interestingly, was initially badged as CCA, then CoCoA). That influence commingled with Chambers’ attention in the early 1960s to the work on accounting postulates, particularly Moonitz’s ARS #1,10 as

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8See Zeff [1971, 1982] for a discussion of the “forging” of accounting principles in numerous countries and an anthology of articles occurring around the time the AICPA’s ARS #1 and #3 were published. Relative to our account, less emphasis is placed on individuals and their private debates that underpinned the profession’s ultimate initiatives on research, postulates, and principles, especially as they relate to measurement. Zeff [1982] notes that this 1950s period of “research push” in accounting mirrored the general push for more research and a more scientific approach to things. Our analysis of the private correspondence puts the published works in perspective, revealing accounting’s “research push” to be driven also by a desire of some individuals to eradicate clear deficiencies in the practice of accounting.

9This episode reveals that ideas, rarely developed in isolation, are difficult to unravel ex post without access to primary sources like letters or diaries. Developing the narrative of accounting history by drawing on primary sources mitigates some of Taleb’s [2007] and other populist concerns with any historical interpretation involving “cause and effect” inferences.

10Chambers visited inter alios Moonitz and Mattessich at UCLA, Berkeley on his 1959 (first) overseas sabbatical, not long after Moonitz became familiar with Chambers’ research works (e.g., his 1955a and 1957 articles). Moonitz’s first letter to Chambers (April 29, 1960) sought his “untrameled views” as part of a wider desire to “take all reasonable precautions to make sure that we (AICPA Research Division) do not overlook attitudes that are prevalent elsewhere than in the U.S. (#7687). Mattessich had corresponded a couple of times after his first contact with Chambers on April 23, 1957 (M#245).
well as his own concurrent consideration of price and price-level changes on accounting.

ERNEST HERMANN WEINWURM

Born in Vienna on April 20, 1895, Weinwurm died in California on April 16, 1988. His LL.D from the University of Vienna in 1920 permits speculation that his early university training would have exposed him to the business economics ideas of the early German Betriebswirtschaftslehre theorists, Schmalenbach, Schmidt, and Mahlberg.11 Were that so, it possibly explains why he placed so much emphasis on the needs of the decision maker in his management science and accounting articles (see Appendix I).

New York Public Library records reveal that Weinwurm arrived in America as a World War II displaced person.12 DePaul University records show that he received an MBA from New York University in 1945, was appointed associate professor of accounting at DePaul in 1954, and a full professor in 1959.13 He was influential in the formation of TIMS, being its president in 1954. He was clearly in the thick of business matters.14 He was involved in the emerging Operations Research Society of America (ORSA) being one of six foundation contributing editors of the Engineering Economist in the mid-1950s. He was president of the Chicago chapter of the Budget Executives Institute in 1964.

During the period of this analysis, Weinwurm wrote several articles and books on cost accounting, planning, and management-science issues. He and Chambers nurtured similar reserva-

11 Interestingly, Clarke and Capalbo [2004] detail how Chambers’ views on the theory of the firm were similar to those of the German Betriebswirtschaftslehre and the Italian Economia Aziendale. This similarity may go some way to explaining why Chambers and Weinwurm quickly felt comfortable corresponding.

12 Humanities and Social Sciences Library, Manuscripts and Archives Division “Emergency Committee In Aid Of Displaced Foreign Scholars Records, 1927-1949,” Box #128, Folio 41; 1929-1942.

13 Based on information supplied by DePaul University, John T. Richardson Library Special Collections and Archives Department, email correspondence dated February 4, 2009.

14 In "Reminiscences of the founder and editor of the Engineering Economist," Arthur Lesser, Jr. [2005] notes: “In the Winter 1956 issue, there appeared an announcement to the effect that six named individuals had agreed to become Contributing Editors....Of these, Eugene L. Grant of Stanford University and Ernest H. Weinwurm of DePaul University were actively helpful during my entire editorship.”
tions regarding contemporary accounting practice. Both were concerned that the data from conventional accounting did not provide serviceable information for use in cognate disciplines (economics, statistics, and operations research (OR). Weinwurm perceived that accounting needed injection of a more rigorous, “scientifically” derived base. The correspondence and literature drawn upon suggest that scientific as it pertained to theory development was interpreted by Chambers and Weinwurm in terms of reasoned thinking about accounting being drawn from observations of the commercial foundations of the environment within which it operated. This contrasts with the views on science and theory development of some of the subsequent accounting and finance academics, especially efficient capital-markets paradigm researchers, such as Watts and Zimmerman [1986, p. 7] who suggested that the role of theory is limited to explaining practice.

Like Chambers, Weinwurm was an avid reader of, and a contributor to, a leading 1950s British (and international) accounting academic journal, Accounting Research. Many of its publications addressed the need for accounting data to conform to classificatory and communicative criteria as in OR models and statistical tools. Thus, given this and Weinwurm’s interest among other things in measurement matters, decision making and how these related to accounting, it was not surprising to find in the Chambers collection that his 1957 papers mailed to Chambers included two entitled, “Improving Accounting Measures for Management: The Concept of Homogeneity in Accounting Data” and “The Limitations of Scientific Method in Management Science.”

Weinwurm’s initial August 25, 1955 letter (W#173) to Chambers shows his understanding that for present accounting to be serviceable, it had to be more commercially grounded. This underpinned advocacy for an Institute for Research in Accounting, with the plan that it be funded by the practitioner arm of the accounting profession. Chambers in his unpublished 1975 festschrift paper (for Weinwurm), noted that Weinwurm’s Institute proposal had “pointed out the pragmatic, trial and error origins of [conventional] accounting procedures, the absence of integration and coordination in accounting doctrine, and the general lack amongst accountants of belief in the value of a scientific approach to accounting problems.” But while Chambers supported the thrust of Weinwurm’s Institute proposal, he was skeptical of its practicability. His October 20, 1955 response (C#175) to the Weinwurm letter is pessimistic regard-
ing its likely success in view of the "... difficulty... in getting the [accounting] profession to sponsor it."

PROFESSIONAL RUMBLINGS – GREATER RESEARCH FOCUS AND APB FORMATION

The late 1950s and early 1960s was a turbulent time for business and the accounting profession. Businessmen, academics, and practitioners expressed their concerns about accounting’s inability to accommodate the post-war inflation. Taxation was deemed by many to be excessive by virtue of the accounting inflation of profits. Costing and pricing problems (see letter extracts below) also created angst. Consistent with the above-mentioned general “research push” in the 1950s, there were general concerns regarding the lack of research about principles underpinning practice, and a questioning of the “process” by which accounting rules (including those related to measurement of assets and liabilities) were developed.15

A quick professional response was deemed critical. In 1956, the AAA commissioned a report from the Committee on Responsibility of the AAA in the Development of Accounting Theory, chaired by University of Nebraska Professor R.C. Dein. A plea for more research to underpin practice was contained in proposals in Alvin Jennings’s presidential address to the AICPA’s annual congress. In 1958, the AICPA created a Special Committee on Research Program, with Leonard Spacek as chair, to study Jennings’s proposals. These followed ideas on accounting and research of the predecessor committees of both bodies – the AIA (cited as Sanders, Hatfield, and Moore, 1938), and the AAA [1936, 1941, 1948, 1957]. Given Spacek’s persistent criticism of accounting and his input as chair, there was little surprise in the AICPA Special Committee’s suggestion to create the Accounting Principles Board (beginning in 1959) with a view to producing principles (still being demanded today) to provide a “sounder foundation of accounting” to underpin conventional rule making.

Spacek had proposed an “accounting court” to adjudicate on and to specify appropriate accounting principles. In many addresses,16 he proposed a more detached view of how princi-

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15 The contemporary tone was evidenced by operations of the American Association for the Advancement of Science which had included a five-part symposium on measurement in its 1956 meetings [Churchman and Ratoosh, 1959].

16 Spacek’s main addresses are contained in an Arthur Andersen monograph [1969].
ples or rules should be determined, based on more academically grounded research [see Weinwurm’s December 12, 1958 letter to Spacek, included in Weinwurm’s letter to Chambers, December 15, 1958 (W#388)]. Spacek also proposed “fairness” as a single postulate of accounting. Such single postulate prescriptions were popular (e.g., Solomons’ with “accuracy,” Weinwurm’s “factual information,” and Briloff’s “integrity,” were current during our period of analysis). They competed with the multiple postulate prescriptions of the likes of Chambers, Moonitz, Mattessich, and Ijiri. Irrespective of the number, calls persisted for more research and for more rigor in determining the profession’s accepted accounting postulates and principles that would underpin practice.

Within that cauldron of malcontent, Weinwurm facilitated Chambers’ airing in the U.S. of his reforms for accounting rules to be based on research into the information needs of business. His intervention in the late 1950s was pivotal to Chambers considering measurement issues more systematically. Also assisting Chambers to expose his views internationally was Weinwurm’s engineering of invitations to participate in the August 1959 AAA meeting as a follow-up to his delivering “Measurement and Misrepresentation” to the first TIMS national meeting in June 1959. These events fuelled Weinwurm’s subsequent suggestions that Chambers should provide a more rigorous foundational support for his proposed “current cash equivalents” measures (a form of selling or exit price) and their promotion through the 1960s and 1970s inflation-accounting debates.

The lack of a grounded function of accounting underpinning conventional extant accounting is critical in this story as Chambers (like the leading OR researcher-cum-practitioner, C. West Churchman, in respect of prescribing appropriate measures more generally) viewed defining the function of accounting as a prerequisite to developing a defensible theory of accounting measurement.

To some “golden-age” theorists, the contemporary accounting thought and practice were deficient, the products of dogma and the captive victims of custom. As noted, many perceived a lack of an analytical framework based on scientifically derived foundations [e.g., Chambers, 1948, 1955a, 1960a, 1961; Mattessich, 1957, 1964; Edwards and Bell, 1961; Sterling, 1970]; what others like Moonitz [1961] would soon after label “postulates,” and, more recently, others would label “concepts” forming an
accounting CF.\textsuperscript{17} To that end, consider Chambers’ [1986, p. 64] observation on Sprouse and Moonitz [1963]:

Over an interval of 20 years [1939-1959] … [U.S. professional bodies published edicts] on practical questions referred from time to time to its Committee on Accounting Procedures and Committee on Terminology… [which] exhibited little of the orderly, systematic development or presentation of ideas which might have been expected to be associated with a more or less orderly art.

Mid-way through that interval, Chambers [1948] had observed critically that one key foundation was the need for firms’ “financial indicators to be relatable to one another in terms of a common and (most importantly) a financial dimension. The data in which they were expressed had to be additive – that is technically capable of having mathematical rules applied to them to yield results possessing “technical propriety.”

Only data indicative of contemporary measurements of a common financial dimension could be “relatable to one another,” a notion Chambers [1961] extended. There he argued the need to understand more clearly “measures” and “measurement” as the products of a scientific process. This motivated his bracket of publications on measurement.\textsuperscript{18} Measurement foundations had begun to influence his thinking significantly. In this regard, Weinwurm’s assistance would prove pivotal.

The section on Chambers’ changing views on measurement post-1960 reveals Weinwurm providing the necessary promptings leading to Chambers’ firming-up and modifying (albeit subtly) his measurement ideas. One contestable area was whether to include expectations and predictions. Chambers’ early measurement publications imply his uneasiness about accounting measurement, especially in respect of how to incorporate

\textsuperscript{17}It is worth noting that a theory and a CF differ. The latter provides the basis of the former. One reviewer of an earlier version of our piece noted that standard-setters do not appear to note the distinction as “they propose qualitative characteristics using terminology that is more closely related to the concept of (empirical) theory than (conceptual) framework.” This point is noted in a comment letter (#130) by Vermahnen [2009] to the IASB discussion paper: “Preliminary Views on an Improved Conceptual Framework for Financial Reporting. The Objective of Financial Reporting and Qualitative Characteristics of Decision-useful Financial Reporting.”

\textsuperscript{18}“Measurement and Misrepresentation,” delivered at the 1959 TIMS Conference and published in its journal in 1960 [Chambers, 1960b], followed by two more measurement pieces as Chambers [1965, 1966]
predictions. This is aptly captured by the abstract of Chambers [1967]: “...mathematical treatment of accounting and business problems may contribute to rigour...may lead to unwarranted expectations. ... Interdependencies make difficult the formal or mathematical description of interactions in complex settings; oversimplification may yield trivial or unrealistic conclusions. The assignment of quantified probabilities to unstructured future events is of questionable value. (This abstract did not appear in the original but was published in Chambers, 1977.)

Other contemporaries expressed similar views, including the leading British economist, G.L.S. Shackle. More recently, Nicholas Taleb’s [2007] criticism of much of the current research in economics, finance, and, by association, accounting, is based on similar reasoning.

Prior to the 1960s, Weinwurm kept suggesting to Chambers that his views on measurement lacked scientific rigor of the type being discussed in cognate statistical disciplines, such as in OR. Weinwurm’s specific role at this stage of Chambers’ changing ideas on measurement is explored further in the next three sections.

A ROCKY PATH TO MORE RIGOR IN ACCOUNTING THOUGHT

Chambers discussed accounting and related financial and measurement issues widely during this period of correspondence with Weinwurm. Most of those connections were either initiated by Chambers (as he pursued a better understanding of what others in the world were doing), or from those seeking Chambers’ thoughts especially following publication of either his 1955a or 1957 articles or his 1956 critique of Littleton’s [1953].”

Business and financial problems during the 1950s, noted previously, were especially in Chambers’ focus. Accordingly, through books and personal discussions, he sought the views on science, theory, measurement, and decision making. What was happening in accounting education and practice overseas was

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19 See Dean [2008].
20 But some academics such as Mattessich were not convinced. Dispute over whether expectations are capable of being measured would be the basis of persistent debates between Chambers and Mattessich [1995b, pp. 45-50] over many decades.
21 His extensive library attests to that (available at: http://chamberslibrary.econ.usyd.edu.au).
investigated, often through correspondence. His many contacts led him to conclude that there were few academics who either perceived the need for, or indeed devoted effort to, seeking to understand better and articulate an intellectual framework of accounting practice. To him, accounting educational programs were littered with descriptions of practice with little other than resort to conventions to explain why those practices should be used.22 Writing to Weinwurm on June 2, 1957 Chambers (C#122) observes:

As far as I can gather conditions are far worse in Britain [than in the U.S.], here much of the tuition of accounting is done by correspondence schools, and the American literature is known to a very limited circle. I have just met a man from Belfast who has for the last year been teaching accounting in Melbourne University; he tells me he had never heard of Gilman [1939] until he went to Melbourne.

Chambers deplored accounting instructors’ poor familiarity with the literature of their discipline; in particular, with the likes of Gilman [1939], possibly the most detailed chronicle of then-contemporary accounting practice.

Against this background, Chambers emerged in the 1950s and 1960s as a most forceful accounting iconoclast, alongside U.S. academic contemporaries like Paton, Vatter, Moonitz, Sprouse, Briloff, Mattessich, and Sterling. Interestingly, the most prolific correspondents with Chambers over that period were the little-known Weinwurm (more than 60 letters) and the higher-profiled Moonitz (just under 60). Of the contemporary U.S. practitioners, Spacek, who had a special bead on practice and its underpinnings, corresponded with Chambers 12 times (late 1958-1964).23 Mattessich began corresponding on April 23, 1957 with a request for copies of Chambers’ 1955a and other articles. Zeff and Chambers corresponded 13 times from 1962 and 1964. Staubus [letter of December 29, 1958 (#431)] corresponded, albeit less frequently, but effusively. He observed that Chambers [1958] “is a wonder. I personally rank it as the best accounting paper I have ever read.”

In contrast, rejecting demands for major accounting reforms to the extant system, Gilman, Littleton, and like-minded

22 Consider Morgenstern [1963] and Gilman [1939].
23 Interestingly, Spacek was influential in Arthur Andersen’s sponsoring the publication of Chambers’ major articles up to 1968 in Accounting, Finance and Management.
practitioners took heart from the lead of George O. May, described by Weinwurm in a letter to Chambers of October 5, 1956 (W#236) as “the man to advance the concept of a theory of accounting if he were twenty years younger. I doubt that he ever gave much thought to general problems of scientific principles. But there is no doubt that he has been the most advanced thinker among anglo-saxon accountants.”

In that setting, rather than to describe practice, Chambers [1955a] seminally advanced four fundamental theoretical premises of practice: (i) accounting systems are collaborative systems, (ii) which are rationally managed, (iii) by recourse to current and relevant financial information, and (iv) the derivation of which is a service function. There, he observed: “It is twenty five years since professor J.B. Canning had written in his 1929 magnum opus that ‘accountants have no complete philosophical system of thought about income nor is there any evidence that they have ever felt the need for one. Even today that statement is true. … It is necessary to distinguish between systems of rules relating to practice and a theory of accounting.’” Nearly 25 years later in a retrospective review of Canning’s Economics of Accountancy, Chambers [1979, p. 766] noted that in the 1920s, Canning had nurtured concerns about the lack of measurement rigor, proposing that accounting reforms be constrained by the canons of measurement, including the need to specify a common property, a common unit of measure, and a constant measurement scale. Such concerns persist.24

“Blueprint’s” impact on Ernest Weinwurm [letter of August 25, 1955 (W#173)] was immediate: “Accounting does not stand alone in the world, as you also point out in stating its service function. Therefore in setting up a theory of accounting the correlations with other neighbour sciences should be considered. Accounting theory must be a part of the general theory of science…” Chambers’ 1955 response (C#175) propositioned that only a theory of the subject could assist in evaluating the many conflicting and contradictory generally accepted accounting rules. On an accounting theory being linked to a general theory of science, he was more circumspect:

[It is] difficult to see your point about accounting being a part of the general theory of science, except in the sense that the general methods of scientific inquiry may

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24 This is well illustrated in the EAA Symposium, “Wanted: Foundations of Accounting Measurement,” at the 2009 EAA Congress, published as Dean et al. [2010].
be applied just as easily and as efficaciously to account-
ing as to other subjects. With this view I entirely agree; a note of mine on the matter, ‘A Scientific Pattern of Ac-
counting Theory,’ will shortly appear in Australia’s lead-
ing practitioner journal, The Australian Accountant.

What should be of interest for contemporary standard-setters is Chambers’ further observation: “In my view accounting is both a means of measurement and a system of communications; both should therefore contribute to its concepts” (emphasis added).

Chambers and Weinwurm then began their lengthy dialogue on measurement in particular and theory matters in general. It blossomed into a warm relationship between two scholars mutually concerned about their profession and the practices underpinning it. During these early years, they met twice, in 1959 and again in 1962. On two occasions when arranged meetings fell through, Weinwurm (the elder of the two) was clearly up-
set. But, these apparent breakdowns in communication were insufficient to override the issues-in-common drawing them together in a 28-year relationship. That Weinwurm’s enthusiasm for Chambers’ ideas to be more widely known in the U.S. is evident in his letter of January 2, 1962 (W#9128): “Of course it is wonderful that you come again [to the U.S.]; as you know I have been in favour of your staying here permanently to help to promote a new scientific approach to accounting.”

THEORY, RESEARCH, AND MEASUREMENT – WEINWURM’S INFLUENCE

Little Publicized Connections: Published sources other than this correspondence provide few traces of the extent of Weinwurm’s influence on Chambers’ emerging thoughts on measurement and wider theoretical research issues. Nor is it likely that the resistance they faced in suggesting change is generally known.25

25The authors emailed several surviving contemporaries, including Ricco Mattessich, Hans-Martin Schoenfeld, and briefly discussed the matter with Steve Zeff. Their responses indicated an unawareness of Weinwurm’s role in the measure-
ment deliberations of professional bodies in the 1950s and 1960s. The published literature was searched, including Gaffikin [1986; 1988], failing to locate other references. Mattessich’s [1995] memoirs, for example, do not refer to Wein-
wurm. Zeff [1982] makes one passing reference to Weinwurm: “In a letter to me Maurice Moonitz recalls the 1962 TIMS conference as follows: Professor Ernest Weinwurm, then of DePaul University in Chicago, asked me to take part in a meet-
ing of the College on Measurements in Management of TIMS to be held in Ann Arbor in September 1962.” In an earlier version of this paper, one reviewer sug-
gested that “perhaps this lack of references was because it ‘was common knowl-
Only Chambers has done so, and then only once publicly. “Development of the Theory of Continuously Contemporary Accounting,” an introductory section added to Chambers’ [1974, pp. xii-xiii] provides a guide to the influence Weinwurm had on his thinking:

For about 15 years I had been concerned with clarifying and arranging in an orderly fashion some of the principal accounting ideas....in the late fifties I had been urged by Ernest Weinwurm...to give attention to measurement aspects of accounting; but it seemed wise first to be sure what accounting was about. I turned to the literature of measurement in 1962. Campbell’s Foundations of Science, Churchman’s Prediction and Optimal Decision, Hempel’s Fundamentals of Concept Formation in Empirical Science, Margenau’s The Nature of Physical Reality and Stevens’ paper [in Churchman and Ratoosh, 1959], ‘On the Theory of Scales of Measurement’ were my main guides.

Not long after, in an unpublished, proposed festschrift piece, Chambers [1975] observed:

By 1961 I had examined critically most of the traditional ideas [in accounting] and had proposed modifications of some of them. In that I first attempted to set up a body of coherent ideas – in ‘Towards a General Theory of Accounting’....Was it proper to add an amount of cash to the replacement price of a non-cash asset? Did a replacement price represent, in respect of a particular asset, financial capacity for market action? I would have to turn to measurement theory and practice after all, as Weinwurm has been suggesting.

The change from replacement prices to exit-price measures using a common measuring unit would be a major product.

Later private correspondence provided more substantial acknowledgments of Weinwurm’s subtle contribution [Chambers, February 6, 1982, (C#8175) and January 25, 1983, (C#6651)]:

[C#8175] I still remember the prompting and the opportunities you gave me during the fifties and early sixties. I am not sure that you will be able to judge the shift in my views about the years 1955-62. But it was in
those years that this disciplinary effect of measurement notions (then almost non-existent in the [accounting] literature, but which you had urged me to consider) provided one of the foundations of what I developed into continuously contemporary accounting.

[C#6651] I remember a letter you wrote on some pieces of mine of the mid-fifties; and a number of letters in which you urged me to turn to the measurement aspects of accounting. I put off doing that for some years. It was your negotiations which put me on the 1959 TIMS program in Chicago; and the paper I wrote more or less forced me to give measurement much more attention over the next few years. It became, in fact, a key feature of the system I developed in the mid-sixties. I ...have always been grateful for, your insistence and persuasiveness in that regard. Out of the clarification of my ideas that occurred during our association of the 1960s arose much of my writing through that decade and the next. (emphasis added)

Twenty years earlier, the following extract from Chambers’ letter to Moonitz on May 11, 1962 (C#772) reveals the fundamental accounting issues that Chambers had been grappling with in the 1950s and early 1960s prior to addressing measurement more rigorously:

The question of basic importance seems to be to discover first of all what accounting can or should do in a general way: what can and should be measured will emerge. Having attempted to do the former I have felt freer to proceed to the measurement problem... there can be no such thing as subjective measurement. There are no such things as subjective measurements of length, weight, volume; there are guesses of course, when one does not have a scale handy, but a guess is not a measurement. For accounting and business...the problem is complicated because there is not nor can there be a fixed scale for measuring: the implications of this are extensive and cannot be dealt with in any way short of an extensive study linked to the ultimate use of accounting information. I am certainly giving it serious thought.26

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26 About a year later, Chambers circulated privately a 48-page mimeo, “Measurement in Accounting,” which would be revised and published as Chambers [1965]. In between, he published Chambers [1964].
For Chambers, resolving what was the appropriate function of accounting and what was the preferred measurement property were integrally linked.

Unquestionably, during the 1950s, Weinwurm and Chambers initially were swimming against the tide. These extracts from Weinwurm’s 1955 “Institute of Accounting Research” proposal, inter alia, are apposite:

1. No lasting scientific progress is possible without constant and large-scale research. This is a generally recognized fact.
2. There may be doubts whether or not accounting should be called a science. It has often been described as an art by emphasizing the aspects of individual judgment and ability. But perhaps accounting may be most accurately classified as a technique at its present stage of development. This clearly reflects the viewpoint of its own practitioners.
3. Accounting has grown over the ages like other techniques and arts and has improved not through systematic research but more or less through trial and error. Modern accounting reflects a number of evolutions in that area such as:
   (a) large-scale business enterprises
   (b) increasing importance of production over traditional merchandising
   (c) the influence of scientific management and control.
4-6. of the proposal are not reproduced.
7. Accountants are sceptical about efforts by outsiders to look at accounting with the eyes of the scientists... convinced that accounting should not and cannot be influenced by or subject to the needs existing in other fields... do not believe in a scientific approach to accounting. (This has been clearly apparent in their reactions to discussions regarding the effects of money value changes upon accounting procedures). (emphasis added)
8. ... accounting is a branch of statistics, the general science of measurement... Accounting merely uses one special type of measure namely money. Accountants may question the significance of this relationship though the fact itself is undeniable. And yet, statistics has always been accepted as part of the scientific structure especially in view of its dependence on mathematical methods.
9-12. of the proposal are not reproduced.
Weinwurm [December 1, 1955 (W#177)] expressed his frustration that the more “scientific” approach outlined within his “Institute of Accounting Research” proposal was unlikely to be considered by the accounting profession or practitioners:

I agree...general methods of scientific inquiry may be applied to accounting as to other subjects. But this is exactly what the American (and as I feel also the British) [academic] accountants deny; they take a completely pragmatic position [in adopting calculated, allocation-based figures and a ‘matching’ approach] and pay no attention whatever to the broader significance of accounting data and statements...to arouse some interest and understanding among practitioners. Recent discussions with leaders of the profession lead me to take a very pessimistic attitude.

...where there may be some interest is in industry...the ever increasing use of scientific management techniques...cannot be pursued satisfactorily as long as accounting method does not conform with scientific prerequisites. I shall keep you posted on whatever progress will be made.

Later [August 24, 1956, (W#234)], he repeated those concerns:

...it seems to me that ['Blueprint for a Theory...']...is bound to be considered a classic once we shall have come closer to have accomplished a theory of accounting....it may be worthwhile to insert [in my Institute of Accounting Research proposal] a separate point or in combination with point three to emphasize the general concept of measurement...bring in statistics and accounting as a branch of statistics....in developing a theory of accounting we should rely a great deal on statistics where the ‘scientific method’ has already been quite successful....As another means for pushing the ‘theory of accounting’ I am trying to set up an interested group within The Institute of Management Sciences. Last spring we set up a chapter here in Chicago and I have considerable influence in setting its policies. Recently, a chapter was established in Paris...could [you] not do the same in Australia....The Institute publishes a quarterly ‘Management Science.’...I propose to attend the annual meeting of the Institute at Los Angeles on October 18-19 (I shall present a paper on the ‘Limitations of the Scientific Method in Management Science’ of which I shall send you a copy when it is ready)....[likely] there is no hope at this time to arouse interest
in ‘Theory’ among the professional accounting organizations in the country and...[that] situation is the same in the Commonwealth countries. Thus no frontal attack is feasible but only an infiltration movement from the flanks and that is what I try to accomplish.

At that time, Chambers received a letter on September 12, 1956 from George O. May (#8375) who had just read the Chambers critique of Littleton [1953]. May observed that “the time is not opportune to state or restate a general theory of accounting.” Chambers on September 18, 1956 (C#235) noted to Weinwurm: I...received a letter from G.O. May...question[ing] the possibility of deriving a general theory of accounting; in reply I simply asserted my belief that it could be done, for it would have taken too long a statement to set out the reasons....

Your letter and May’s conditioned me to expect something quite devastating of Littleton. But it turned out to be rather disappointing. He appears to find objections to the constructions he himself places on my propositions, rather than the propositions themselves. There were, it is true, quite a few things one could quibble with but he does not provide any broad front to which I might reply. I don’t think I told you earlier, but I have submitted to the [The Accounting] Review a critical article on Littleton’s Structure [of Accounting Theory]; it is to be published in the October issue....

I am, of course, very grateful for your efforts to interest others in the matters that concern us, and even if your [Institute of Accounting Research] proposal to the AAA should not be accepted I am honoured that you should think the effort worthwhile. Your activities in T.I.M.S. interest me, and we subscribe to its journal; participation in the activities of three professional and examining bodies outside the university make it difficult for me to act as promoter of a local chapter. These things even prevent me from pursuing my own work in accounting with the freedom it seems to deserve.

Weinwurm promptly replied on October 5, 1956 (W#236):

Thanks for your letter...and the interesting information about your contacts with G.O. May...Littleton, of course, is unable to understand what you have in mind. He too cannot conceive of accounting as something related to
a general theory of science...he certainly has aroused a certain amount of interest in what you are doing and, there, I am very glad that you shall have a piece in... The Accounting Review and perhaps another one a few months later...you should, I think, assume [the likely readers have] no familiarity with the ['Blueprint...'] article in Accounting Research and expressly state so, since only a few of those reading the article in The Accounting Review will have read the one in Accounting Research. I am trying to enlist to our [TIMS College of Measurements] project one of the most influential accountants in this country, Mr Leonard Spacek, the managing partner of Arthur Andersen & Co.

Six weeks later, Weinwurm [December 6, 1956; (W#237)] outlined his attempts to promote the need for a “theory of accounting” and his promotion of Chambers’ ideas in this respect.

As indicated in my last letter, I got in touch with Professor Moyer, the President-elect of the American Accounting Association and head of the Accounting Department of the University of Illinois...[suggesting] the topic of a ‘Theory of Accounting’ should be placed on the agenda of the next annual meeting of AAA and that you should be invited to attend that meeting as a speaker and guest of AAA...Finally, I proposed that a standing research committee on accounting theory should be set up... Copies of the letter and memorandum were mailed to all the members of the AAA executive committee.

...Moyer’s answer was completely negative...[noting] the existing research committee on accounting standards which will make a report next year...he did not see why another committee and more theory would be helpful or required. I did not accept this refusal,...Finally, he invited me to come to Urbana for a talk as I had suggested from the very beginning.

Chambers [December 21, 1956 (C#239)] was effusive of Weinwurm’s persistence:

I hope you will not be affronted if I thank you too for the efforts you are putting into promoting the idea of a more rigorous accounting theory and my own connection with it. I am not surprised that my own work is little known over there, as I have until recently considered it my job to cater for local readers. I should be very grateful if you could convey any impressions, adverse or otherwise, which you have gathered about other
people's views either of the Blueprint article or the Observations on Littleton….Professor Vatter…thought the latter well done.

That persistence and frustration are evident in Weinwurm's [March 1, 1957 (W#121)] reply:

…I have not heard from him [Professor Moyer] at all …Naturally this result is not unexpected…[but] I shall bring up the matter again at the annual meeting of the AAA at Madison. ... [notwithstanding] the terrific resistance of the rank-and-file of the profession against those who want to disturb the peace ..., I have been unable to gain any new [TIMS College of Measurements in Management] recruits of late. There is still a mere handful who are willing to look beyond the narrow confines. I don't think there is much difference in this respect among the different parts of the country as you indicated. And are conditions any better in Britain? I don't think so.

Mr Little (Editor of Accounting Research) has accepted my paper on measurements…I am preparing another (and I hope better one) for the meeting of the Operations Research Society in May. There is some interest.... but not among accountants. I had the first part of your [Blueprint] paper mimeographed and we are using it in our graduate classes....In my opinion, the impetus for improving accounting methods must come from the users. It is for that reason that I am trying to get some interest among industrial engineers and management science experts.

Three months later a somewhat apologetic Chambers [June 27, 1957 (C#122)] responded with:

…I am most grateful for your persistent inquiries and for your encouragement in pursuing the elusive ‘theory.’ The only response I have had to the April ‘Accounting Review’ article [on Littleton] was an inquiry from Prof. Mattessich [January 23, 1957 (M#245)] of Mount Allison University, Canada. I have had no local comment.... It all goes to show how little interest exists in fundamental inquiry.

I ...note with interest [one 1957 Annual Convention of the AAA] session is devoted to accounting theory. It appears that your suggestions may have borne fruit.... In the honours school here we are concerned primarily with concepts; no formal bookkeeping or accounting
work is done but we rigorously examine contrasting methods and concepts. So many of the established principles, conventions and doctrines are not what they seem, or do not find expression in practical methods that their discussion occupies many hours. I have long wanted to reduce this to a written critique, but I am afraid it will have to wait quite some time yet. Meanwhile, in Australia at least, there are many who go on peddling ‘theory’ based on Gilman’s Accounting Concepts of Profit [1939]...It makes it very difficult to break into the hard crust of custom.

Weinwurm’s [August 30, 1957 (W#123)] response arguably reflected a belief that any attempt to generate more theory was a forlorn exercise. It also mentioned several pressing AAA matters in particular, noting Leonard Spacek’s advisory court proposal delivered at the 1957 AAA meeting:

...to settle disputes within the accounting profession. As you know he has brought up a number of good points but a special committee of the American Institute of CPA’s recently ruled that those were without merit just as could be expected.

Last year, the AAA set up a ‘Committee on Responsibilities of the AAA in the Development of Accounting Theory.’ The chairman...Professor R. C. Dein of the University of Nebraska was one of the speakers. He mentioned your name once in passing but referred primarily to Paton & Littleton and dealt with such problems as the best method for setting up bad debt allowances. Two other members...were chairman of a round table on ‘What the AAA Should do to Further the Development of Accounting Theory.’ They discussed a report by the committee which has drafted a beautiful organization chart of how its work should develop. One of the gentlemen stated the duty of the committee as to act as a sort of fire prevention agency28 by settling arguments within the profession [not]...as Spacek has done to the dismay of most professional accountants.

...[in] a speech...I attacked the whole traditional con-

27 Chambers took many years to complete this – the first was an address [Chambers, 1962]; the second, “Conventions, Doctrines and Common Sense,” published in New Zealand’s The Accountants’ Journal, 1964, pp. 182-187; and, finally, as part of Chambers [1966].

28 The “fire fighting, putting out bush fires” analogy would appear often in later discussions about standards setting.
cept of accounting theory as meaningless and referred to your writings. I think this makes August 28, 1957 a historical date of accounting that the problem as such was mentioned for the first time at such an official occasion. Of course, my remarks were greeted with stunning silence.

A Propitious Time for an Idea: There was, however, some action at the AICPA. Zeff [1982, Introduction] captures the mood for change in recalling incoming AICPA President Alvin R. Jennings’ 1957 presidential address, addressing the need for a “re-evaluation of the process by which accounting principles were established, including the creation of a research organization to assist the Institute’s Committee on Accounting Procedure ....”29 It was at that time that Weinwurm [November 26, 1957, (W#124)] also proffered some hope regarding the TIMS Measurement College project.

The long contemplated plan to set up an organization for research in accounting theory has finally come to a result. A College (special group) of The Institute of Management Sciences will be organized shortly with this aim in mind. I have been able to drum up some support on both coasts in addition to a number of people in this area. Both the 1958 TIMS president George Kozmetsky and the 1959 president-elect Melvin Salveson are in favour of the project and willing to support it. This means that we have now a framework and our task is to implement it and make it something living and active.

Chambers’ [December 10, 1957 (C#381)] lengthy reply expressed enthusiasm to participate in the TIMS College of Measurements in Management, specifying possible aims of the venture, many (especially those regarding measurement) coinciding with what ultimately would appear as his CoCoA system):

In response to your invitation to set out my ideas on the aims of the proposed College, I submit the following outline. It is not in the form of a statement of objects – to do this, to do that –...The general purpose of the chapter may be considered as the theoretical study of accounting as a system of measurement; as a system for accumulating knowledge; as a system of communications; and consequently as a significant determinant of human action in its economic aspects, i.e., in the making of per-

29 Jennings [1958] contains the presidential address.
sonal and group decisions, in the allocation of resources, and in the development of economic institutions. This embraces a large number of different types of study. (emphasis added)

Firstly, the concepts implicit in financial and cost accounting practices may be examined; empirical studies of many of such practices themselves are desirable. The concepts and systems of concepts explicitly avowed by writers on accounting practices and theory may be studied; their inconsistencies and the overwhelming influence of expedience need exposing in the interest of management science.

Secondly, a considerable amount of empirical work on the financial and other practices of business can be done, which would throw light on the purposes and effects of particular methods of accounting. Financial and quasi-financial policies of many kinds are influenced by, and have influence on, accounting theory and practice – liquidations, mergers, recapitalisations, reorganisations, are some of the mainly financial matters; pricing, output levels and product-mix are some of the quasi-financial matters; all have obvious connections with accounting.

Thirdly, historical studies of the development of accounting methods and their economic contexts may throw light on contemporary practices. Institutional pronouncements and recommendations may be analytically considered with reference to their consistency, their commercial and professional acceptance, and their consequential effects.  

Fourthly, the literature of economics, jurisprudence, politics, and other social sciences may be examined, insofar as concepts or practices in other fields have influenced, or been influenced by, accounting concepts and practices.

Fifthly, and generally, any studies of the decision-making process, or of accounting and statistical aids in decision-making, are relevant. The matters suggested above may be studied without regard for geographical or political boundaries – they may be localised or comparative studies over space or time – for there are

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30 This point was elaborated in a letter Chambers penned a few years later (see Appendix II).
substantial similarities in commercial institutions although there are significant differences. Further, the College should consider itself free to inquire into any of the above matters, where relevant, in public or private undertakings and in non-commercial situations.

Measurement issues were now clearly to the fore. Six months later, Weinwurm [June 25, 1958 (W#382)] announced a TIMS College of Measurements breakthrough:

There has also been progress with our TIMS College. A meeting of interested individuals was held on May 16 [1958]...There will be a special program at the annual TIMS meeting in October. Furthermore, [a] list of topics suitable for research projects shall be prepared and distributed among Deans of Business Schools and chairmen of Industrial Engineering Departments which offer doctoral programs to encourage research in connection with doctoral dissertations, etc.

Chambers’ 1959 International Travels – Further Initiatives on his First Geo-Accountant’s Journey: All of this was to presage Chambers’ international efforts to diffuse his ideas on theory generally and measurement in particular. This would be achieved through: further publications strategically placed in overseas journals; his maiden visits in late 1958 through most of 1959 to several U.S., U.K., and European universities; overseas conference presentations; and continuation of his prolific letter writing.31 In this context, accounting historian Gary Previts observed that Chambers, “arguably is the first geo-accountant.”32

A letter to Weinwurm [July 2, 1958 (C#383)] outlined an intention to attend the TIMS’ 1959 Chicago meeting. Other letters in 1958 discussed his proposed year-long sabbatical, with visits to the U.K., Europe, and the U.S.33 In the interregnum, the AICPA had produced a “Report of the Special Committee on the Research Program” to which Weinwurm [April 24, 1959 letter

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31 The Chambers Collection Archive provides evidence that there are other letters not held in the Collection. But the Collection appears to hold about 95% of all letters Chambers wrote and received. It also reveals that Chambers wrote and received more than 11,000 letters between 1948 and 1999. This is an average of more than 200 per year, of which we estimate Chambers to have written an average of around 140 per year.

32 R.J. Chambers Memorial Research Lecture, The University of Sydney, November 2004

[W#555]), on Spacek’s urging, provided a critical commentary. He stressed the imperative that universities should have an input to research initiatives related to improving accounting practice.

Sponsors were needed for Chambers’ travels, and several people were actively seeking to find a funding source. Having failed to obtain a Carnegie Foundation travel grant, Weinwurm then (unsuccessfully) suggested that Chambers should seek a Fulbright Scholarship and other funding. Ultimately, Chambers received a $5,000 grant from the Relm Foundation, primarily on prompting and support from other University of Michigan colleagues and Professors Dein and Paton [Chambers December 10, 1975 letter to Paton (C#4637) recalls his help]. Clearly, Chambers’ international supporters were growing.

Notwithstanding securing funding on this occasion, geographical and communication hurdles generally meant it was difficult for a non-American to influence U.S. academic thought in those days. This is quite understandable, especially for one arguing against U.S. academic and practitioner icons like Littleton and May. But, with funding and invitations now secured, Chambers agreed to deliver a paper on measurement at the 1959 TIMS meeting [Weinwurm’s letter to AAA president and Duke University academic, Martin Black, November 28, 1958 (W#391), copied by Weinwurm to Chambers], and to participate in an accounting theory session at the 1959 AAA meeting. Other presentation possibilities and proposed consultancies, such as with General Electric in 1959, were being considered. Hindsight shows that attendance at those meetings and subsequent events placed Chambers firmly on the international stage regarding issues of how a better accounting theory and, in particular, a more rigorously derived accounting measurement could benefit practice. It would be the beginning of many other friendships, including lengthy associations with Maurice Moonitz and William Paton. In early 1960, following Chambers visit to Berkeley the year before, Moonitz had asked Chambers’ to comment on the AICPA’s draft ARS #1 “Postulates of Accounting” monograph. Moonitz was keen to ensure feedback from knowledgeable parties all over the world. As noted in fn. 10, he sought Chambers’ “untrammeled views” on ARS #1 [Moonitz, April 24, 1960 (#7687)]. Extracts of a letter to Weinwurm by Chambers dated April 3, 1962 (C#987), reveal a critique of the final version of ARS #1. For more detailed criticisms, see Chambers [1964, reproduced in Zeff, 1982]. Around the time of Chambers’ initial critique (mid-March 1962), Moonitz was still keen to consider Chambers’ ideas, and he invited Chambers formally to join him
and others in late 1962 for two months work at the AICPA Research Division [see Moonitz, 1982].

1950s Price and Price-Level Accounting and the Profession’s Responses: Importantly, all of those post-WW II initiatives on measurement and prior attempts to resolve to the standard-setters’ satisfaction of what was the function of accounting had been forged in the context of prior deliberations on how accounting should be altered to take into account the effects of changing prices and price levels. Specifically, those deliberations were set against a backdrop of what would prove critical in Chambers’ honing his theory of accounting (initially badged CCA, but later CoCoA) on the international stage. There had only been brief discussion of the impact of changing price levels in Chambers’ and Weinwurm’s early correspondence on measurement. However, the 1955 “Institute of Accounting Research” proposal alluded to the price-level problem. Coincidentally, Chambers and others had been addressing price and price-level problems for several years.

Inflationary pressures following the cessation of WW II had coincided with Chambers’ entry into the accounting profession post-war when many governments were pressured to consider the effects of inflation on the taxation base. The argument was that taxation was being levied on inflationary profits, mainly through closing inventories being stated at ever-increasing costs and depreciation charges based on (frequently) pre-war historical costs or being no longer possible on costs that were completely amortized. Concern with the use of out-of-date costs for pricing decisions was also a major concern.

The inflation-accounting debate inevitably turned to discussions of the measuring unit and whether “stable dollars” or “general purchasing power units” were best captured by scaling historical costs with numbers drawn from an index of the general level of prices. Chambers was familiar with the relevant economics and accounting literatures and thus recognized that inflation was inextricably linked to the measurement issue. Sweeney [1936], for example, had discussed these issues in the context of the 1920s German hyperinflation. Later, Alexander et al. [1950], Jones [1955, 1956], Hendriksen [1961], ARS #6 [1963], and Sandilands [1975] did so in a more general inflation-accounting setting, while Edwards and Bell ([1961] and Revsine [1973])34 pursued replacement price valuations in similar con-

34 Clarke [1976, 1982] describes Sweeney’s many publications in this area.
texts. For Chambers, the inflation setting became a side-issue. The prevailing inflation and the need for any measurement system to ensure a constant measurement scale merely served to highlight measurement issues more generally. Subsequent recourse to fundamental metrological ideas, including those relating to price-level and price changes, would be woven into his CoCoA theory. It is here that Weinwurm’s influence looms especially large.

**CHAMBERS’ CHANGING VIEWS ON MEASUREMENT POST-1960**

Chambers’ observations on how his views on measurement had changed are well captured textually in the following extracts from his unpublished *festschrift* paper in which he extends the text algebraically:

During 1962 I read variously in the literature on measurement, scientific method, scientific biography and basic mathematics....The distinction between quantifications which were and those which were not measurements became clearer. If the financial capacity of the firm, for action involving money or money’s worth, were to be represented in a balance sheet, non-cash assets would have to be represented by their money’s worth or cash equivalents. The cash equivalent rule satisfied the ‘uniformity of valuation’ principle. The cash equivalents, were in principle, ascertainable by the same process as other measurements: by taking a reading (the market) in a known scale (number of dollars); and in the case of monetary assets, by straight counting. This kind of quantification, described by some as ‘fundamental measurement,’ provided the pattern for more elaborate and complicated kinds in physics and other fields. It should do the same for accounting, finance and administration.

If it were stipulated that a balance sheet should represent something other than financial capacity for action,

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35 Chambers [1977, p. 9] notes that he first used this algebraic notation in the 1961 address “Towards a General Theory...,” wherein the use of replacement costs was viewed as a legitimate measure for non-monetary assets in some cases. On further reflection to satisfy his “uniformity of valuation” principle and the canons of measurement, this idea would be rejected in his 1963 mimeo paper “Measurement and Misrepresentation.” In his 1978 *Abacus* article, “Use and Abuse of a Notation,” Chambers shows how this notation emerged in the literature and was later abused.
some singular ‘property’ of all assets [and liabilities] at a given date other than cash equivalent would have to be stipulated. No other system stipulated an alternative function and the singular property appropriate to it. Cash equivalents, or any subset of cash equivalents, of assets are appropriate figures to relate to liabilities, short or long term; no other figure is apt for this. And the difference between the total of the cash equivalents of assets and the amount of liabilities outstanding is the aggregate of the owners’ equities; it has a quite definite and understandable significance since the figures from which it is derived have a definite financial significance.

Financial positions at successive points of time are represented by aggregations of ‘point’ or dated measurements. But to calculate the net change in owner’s equity (i.e. to obtain a measure [albeit derived] of net income) during any period, account must be taken of changes in the significance of the monetary unit. These changes are commonly described as changes in the general purchasing power of money....We may speak of the coefficient of variation with respect to money, of the general level of prices, or for short, the price level variation coefficient. We may then define the price level variation coefficient as the proportionate change in an index of the general level of prices. Let it be denoted by p. If the period is denoted by two periods t₀ and t₁, then every dollar t₀ would be equal to \((1 + p)\) dollars at t₁. (To go back to the ‘purchasing power’ analogy it would take \((1 + p)\) dollars at t₁ to buy the same general basket of goods as one dollar would have bought at t₀)....there is no temporally invariant standard in financial affairs akin to the meter, the gram or a coefficient of linear expansion. Current cash equivalents express the current capacity to command goods in general.

Chambers’ unpublished *festschrift* contribution summarizes Weinwurm’s promptings and influence on Chambers’ measurement ideas at this point. His change from preferring replacement prices to exit-price measures for reporting fixed assets using a common measuring unit would be a major product of that influence. Chambers observed that: “This sketch of what I have called ‘continuously contemporary accounting’ is indicative of the way in which metrological ideas pervaded the development process and gave shape to the result.”

Further, Chambers’ [1974], especially the introductory note, provides insights into the critical metrological issues underpinning his accounting theory:
This literature [I had examined in the late 1950s and early 1960s] related principally to the physical sciences. But the parallels with financial matters were plentiful. The foot (or the meter), the pound (or the gram), the hour, the degree (of the angle or temperature) – were neither more nor less ‘conventional’ than the dollar or the pound. Measurements made with reference to these units were combined to yield derived measurements, such as density and velocity; there are analogous measurements, in financial matters, such as rate of return and gearing. All measurements of change entailed observations of initial and terminal states; and if the conditions differed under which the two measurements were taken, adjustments were made of one or both measurements to measurements under a set of ‘standardized’ conditions. On these last two points the practice of accounting differed from physical measurement; terminal states were obtained by calculation, not by observation; and no adjustment was made for the change in the conditions of measuring, changes in the significance of the unit and changes in the relativities of the measures (prices) of particular goods. Failure at these two points seemed to be the reason for the variety of ‘accounting results’ possible for the same set of events, and for the irrelevance of the figures to action at the terminal date.

Eventually Chambers settled on an accounting system complying with the main canons of measurement in the physical fields – a common property, scale, and a specified unit within the scale. He argued that the product of recourse to those canons would produce useful (serviceable) data for the many uses identified in his 1961 article and meeting the principles he had enunciated in his 1955a article.36

By the 1970s, Chambers’ position on measurement had thus crystallized, as if predicting the debate during the GFC regarding mark-to-market valuations in illiquid or inactive markets, effectively where there is not a market [Plantin et al., 2008; Laux and Leuz, 2009, 2010; FASB, 2009; FCAG, 2009; Hertz, 2009]:

[convention] led me to suggest some ‘practicable alternatives’ as approximations where no market [exit]

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36 This is confirmed, for example, in his March 1998 Abacus article, "Wanted: Foundations of Accounting Measurement." With a new introduction written in 1997, this was a verbatim reproduction of an unpublished review written in 1972 of the 1971 report by the AAA Committee on the Foundations of Accounting Measurement.
price was available. But...they appeared to compromise the principle of uniformity of valuation. Critics were quick to point this out. By that time, however, I was so convinced of the value of mathematical and metrological rectitude that I was able to countenance even zero values for assets [and liabilities] which had no market price in their then state and condition [see “Second Thoughts on Continuously Contemporary Accounting, Abacus 1970].

Here, the significance of Weinwurm’s influence is evident. Metrological rigor now underpinned Chambers’ views on a serviceable system of accounting. It presaged his controversial advocacy in the mid-1970s of reporting a zero value for assets and liabilities in their then state and condition where no market price exists. Chambers [1976, p. 145] further suggested this be supported by a double-account approach to allow the showing of other attributes of those assets and liabilities reported at zero values.37

THE FRUITS OF COLLABORATION

Chronicling a little of the personal drama underlying their attempts to influence such matters has exposed the shared frustration of Chambers and Weinwurm. Resistance to change by a profession under siege during the 1955-1964 period was evidenced. A bead on such things came by virtue of analyzing previously unavailable correspondence in the Chambers Collection. These archives provide a unique source of a previously hidden story of Chambers honing his ideas through collaboration with Weinwurm. They also reveal the assistance provided by Weinwurm to Chambers as he attempted to expose his measurement and related ideas internationally, especially to U.S. academics.

Weinwurm and Chambers certainly enjoyed their differences. But this episode demonstrates intellectual progress coming from developing their commonalities. Both desired that practice be injected with more rigor, especially in respect of measurement, and their published writings over the period examined reveal a more rigorous, scientific (as it pertained to theory development) approach to things. Chambers employed reasoned thinking about accounting drawn from observations of the commercial foundations within which accounting operated. This contrasted with the views on science and theory develop-

37The use of the double-account system within a market selling-price system was recently demonstrated in Bloom [2008].

https://egrove.olemiss.edu/aah_journal/vol37/iss2/10
ment, especially much of that supporting the efficient (capital) markets paradigm. Chambers’ unpublished festschrift article explains the motivation for this: “To press the case for something better has been the preoccupation of Weinwurm over these twenty years [1955-1975], a preoccupation which expresses a not very common [in accounting] respect for intellectual discipline and a constant commitment to the advancement of his profession.”

A contemporary understanding of what melded their alliance is evidenced by the intertwined issues of measurement, the function of accounting, accounting theory, concepts (postulates/principles), and decision making. These issues remain foremost on the professional accounting standard-setters’ agenda. Yet, critically, agreeing on a particular measurement approach remains unresolved to the profession’s and users’ satisfaction. It is not surprising that it emerged as one of the most contentious accounting issues in analyses undertaken during and in the aftermath of the GFC.

Our narrative suggests that a possible fruitful path for the profession entails examining more closely prior, relevant debates and the issues underpinning them, in this case those in the 1950s and 1960s on measurement. The Chambers and Weinwurm collaboration reveals the need for a verified system of accounting with the contiguous functions of communication and measurement. This account of that collaboration contains lessons for a profession that has failed to identify adequately the conceptual framework from the commercial environment within which accounting operates.

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**APPENDIX I**

**Ernest Weinwurm’s Major Publications Including Several Books and Major Journal Articles.**


APPENDIX II

Letter by R.J. Chambers to G.R. Gargiulo, Secretary

College on Measurements, C/- Arthur Andersen,
November 16, 1960

Mr. G. R Gargiulo'
Secretary, College on Measurements in Management
C/- Arthur Andersen & Co.,
80 Pine Street,
NEW YORK 5, N.Y. U.S.A.

Dear Mr Gargiulo,

......

In reply to your letter of November 9 may I offer a few suggestions which might be considered in designing the program for 1961.

On point 2, would it be possible to initiate some comparative studies of measurement in different facets of institutional operations for the purpose of throwing light on measurement methods. My own interest [is] in the measurement of financial features and the debate which has surrounded certain of these suggests such questions as:

Are there any general notions, such as physical product, productivity, quality, etc., in the measurement of which there is a widely accepted or acceptable uniform technique?. The answer may indicate new approaches to the measurement of, say income or cost.

In any such field, is it accepted that a given notion may have a variety of magnitudes according to the purposes which its quantification will serve? In accounting something like this proposition has long been tolerated.

Following the last question, and in particular, is it accepted in any non-accounting field that a concept may be represented by different magnitudes, obtained by qualitatively different operations, according to the status of the persons using such magnitudes for appraisal or evaluation purposes (e.g. for management and for external interested parties)?

On point 3, I made some suggestion which may have some use in a letter to Professor Weinwurm dated December 10, 1957. I shall write to him immediately asking whether he now thinks they are relevant, and if so, whether he will bring them to the notice of the Committee.

Sincerely,
R. J. Chambers
Professor of Accounting.
ACCOUNTING HISTORY

Call for Research Proposals

The second Accounting History International Emerging Scholars’ Colloquium

Vallendar/Koblenz
Germany

13-15 July 2011

Organized in cooperation with
WHU – Otto Beisheim School of Management

This international forum is designed for emerging scholars of all ages and career stages, including doctoral degree students, new faculty and other emerging accounting researchers who have an interest in accounting’s past and present and who seek directions and guidance in embarking upon and undertaking specific historical accounting research projects.

The second forum will be hosted by the WHU – Otto Beisheim School of Management which is located in Vallendar near Koblenz, in the heart of the Rhine valley and just one hour from both Frankfurt and Cologne airports. The forum will be led by Garry Carnegie of RMIT University and Brian West of the University of Ballarat, Australia who are the editors of Accounting History, the journal of the Accounting History Special Interest Group of the Accounting and Finance Association of Australia and New Zealand.

Other senior faculty members participating in the colloquium will comprise Marcia Annisette, York University, Canada, Elena Giovannoni, University of Siena, Italy, Christopher Napier, Royal Holloway, University of London and Utz Schäffer and Thorsten Sellhorn of WHU - Otto Beisheim School of Management, Germany.

Research proposals and brief bibliographical details should be forwarded to Garry Carnegie by 31 March 2011: garry.carnegie@rmit.edu.au

Further information is available at the 2AHIESC website: http://www.whu.edu/accountinghistory

Inquiries may be directed to the Colloquium Convenor, Mrs. Evelyn Busch, WHU – Otto Beisheim School of Management: evelyn.busch@whu.edu

Information about the WHU is found at: http://www.whu.edu

Information about visiting Koblenz is obtainable at: http://www.koblenz.de/
Accounting and Financial Reporting by a Late 18th Century American Charity

Abstract: Empirical research to date has neglected accounting and external financial reporting among 18th century American charitable institutions. Contemporary understanding of 18th century American practices is supported by evidence relating to commercial transactions primarily among colonial merchants. Our study examines the accounting and financial reporting of the Charleston Orphan House, the first municipal orphanage in America, from its inception in 1790 through its first five years of operations. The institution was established by city ordinance in 1790 which required the institution “to keep a book of fair and regular accounts of all receipts and expenditures which will be subject at all times to the inspection of the Commissioners.” The ordinance charged the orphanage’s Committee on Accounts to “audit” its accounts. The City Council required the institution’s board chairman to countersign the financial statements in 1792 before subjecting them to a second “audit.” The Orphan House employed a system of account books that recorded and facilitated the reporting of expenditures and sources of funds. Accounting and external reporting may have been legitimizing factors to overcome the “liability of newness” by promoting a sense of propriety and transparency among benefactors.

“I visited the Orphan House at which there were one hundred and seven boys and girls. This appears to be a charitable organization and under good management.”

[President George Washington, diary entry, Saturday, May 7, 1791]

INTRODUCTION

Following the American Revolutionary War, a period of economic hardship descended upon the colonies as retreating

Acknowledgments: The authors wish to thank Dick Fleischman and two anonymous reviewers for their insights and patience in making this a much better manuscript.
British troops took with them much of the commerce that had initially benefited a young America. The effect was especially felt in the southern states where, “South Carolina and Virginia had felt the severity of the ravages of the war in the later years... and...found business stagnant and conditions depressed” [Faulkner, 1960, p. 139].

The limited economic resources had implications for America’s approach to managing its social issues, including the caretaking of orphans. The British model for orphan caring through privately funded sources that had emerged in the colonies was particularly sensitive to unfavorable economic trends. One study concludes: “Orphans were another familiar category of dependency. Their care in England had been provided by binding them out to foster parents and this method was readily employed in America. Novel uncertainties, however, sometimes threw upon the traditional system a weight it could scarcely bear” [Bremner, 1970, p. 29].

The Revolutionary War left orphans throughout America and placed a strain on the traditional foster-parent system which was unsustainable because of the dire economic conditions of the period. This was particularly true in Charleston, South Carolina during the late 1700s as affluent citizens had taken the lead in orphan caretaking, relying on personal funding. These philanthropists found this financial responsibility overwhelming and sought broader assistance from their fellow Charlestonians [Lucas, 1991]. The subsequent institutionalization of orphan caretaking via the establishment of the Charleston Orphan House provides a unique setting in which to observe the early accounting and financial-reporting practices utilized by a charity before the advent of promulgated standards.

This study examines accounting and financial reporting in the formative years (1790-1795) of the Charleston Orphan House, the first municipal orphanage in the U.S. [Jones, 1961, p. 203]. The data came from multiple sources including the minutes of the Charleston Orphan House Board of Commissioners, minutes of the Charleston City Council, and published newspaper reports of the period. The findings contribute to a largely neglected topic in the accounting literature regarding the nature and function of accounting and external reporting by an 18th century American charity. Our findings suggest that financial reporting and accounting were used for financial and operational control and may have served as a legitimizing factor by promoting a sense of financial propriety and transparency during the 1790s.
ESTABLISHMENT OF THE CHARLESTON ORPHAN HOUSE

The Charleston Orphan House was created by an act of the Charleston City Council on October 18, 1790 to care for the orphan population of South Carolina that resulted from the American Revolutionary War. The Act was initiated by John Robertson, a successful merchant and City Council member who had privately supported a number of children orphaned by the war [Lucas, 1991]. The ordinance established the Orphan House “for the purpose of supporting and educating poor orphan children and those of poor and disabled parents who are unable to support them” [City Council minutes, October, 18, 1790]. Charleston’s City Gazette published the ordinance in its entirety the following week.

EXHIBIT ONE

Charleston City Gazette
Ocotber 25, 1790 – Excerpt
Orphan House Ordinance

State of South-Carolina City of Charleston
An ORDINANCE for the establishment of an Orphan-House in the city of Charleston, for the purpose of supporting and educating poor orphan children, and those of poor distressed and disabled parents who are unable to support and maintain them.

WHEREAS the present mode of supporting and educating poor children at different schools, has been found by experience to be attended with heavy expense and many inconvenience, and the establishment of an orphan-house, properly organized and conducted, will be attended with less expense, more convenience and benefit, and may tend to give general satisfaction to the citizen, and induce the benevolent and all in the support of so charitable and laudable an institution.

Source: Charleston Library Society Archives, City Gazette Collection

Lucas [1991] suggests that Robertson and other prominent citizens were driven by economic motive in establishing the Orphan House as the American Revolution had created economic hardship for those left caring for the children. Throughout the former British colonies, a disproportionate number of the wealthy bore the economic burden of caring for homeless children before 1790. As the problems became increasingly costly, the Orphan House emerged as an institution to allocate the burden more evenly. As was the case across most of post-war America, “novel uncertainties...created homeless orphans in large numbers. The only response was to consider some form
of institutional care” [Bremner, 1970, p. 29]. The motive to mitigate the expense of the orphan problem to society is clear in the ordinance. From its inception, the Orphan House was overseen by a Board of Commissioners who reported to the City Council. The Board consisted of 12 prominent men appointed by the City Council. Its members included prominent planters, physicians, attorneys, merchants, and clergy. Daily operations were carried out by two agents of the board, the steward and the head matron.

From 1790-1794, the orphans were housed in a building rented from the city that was once used by British troops and abandoned following the end of the Revolution. In 1791, property was acquired for the construction of an Orphan House by the city. Construction was completed in three years at a cost of nearly $10,000. The imposing five-story Greek revival and federalist building, which spanned nearly a city block and is illustrated in Exhibit Two, may have served as a legitimizing factor among Charlestonians. The ubiquitous Orphan House was as a landmark in the city for over two centuries until it was demolished in the 1950’s.

**EXHIBIT TWO**

Charleston Orphan House

**Completed in 1794**

Source: Roger B. Daniels’ Collection
The city's decision to build an elaborate and ornate structure appears to have been based upon the belief that such visibility would enhance the standing of the institution among potential donors. As Mallgrave [2005, p.39] notes, “buildings not only have the capacity to speak,…in such a way that a rapport is established with the spectator.” Lucas [1991, p. 3] explains:

To care for the children as a group would be less expensive than paying boarding fees to individuals and to schools. Moreover, a visible orphan house would attract charitable contributions, and the process began at once. Until an orphan house could be built a large house on Market Street was rented.... It was during the time that the children were housed in this way that George Washington visited them and congratulated the City on what it was doing for its children. It was reported that he “very pathetically” blessed the children before leaving.

The Board of Commissioners functioned as a sub-entity of the City Council. Its members established policies for the institution, hired and monitored staff, oversaw accounting and reporting, conducted routine inspections, admitted children, and managed the process of bonding them out for apprenticeships. As early as age 12, children were apprenticed for the purpose of learning a trade or skill that would allow them to be self-sufficient as adults. The board was active in each placement, including trades in agriculture, milling, tailoring, culinary arts, brick masonry, and carpentry. Those accepting the children into apprenticeships would provide a “bond” to the city through a legal process in which the court would grant custodianship to those providing the apprenticeship. The city would transfer the bonds to the Orphan House which would receive the funds when paid. These financial instruments accrued interest and were expected to be paid in full by the end of the apprenticeship when the apprentice reached age 21. These bonds were accounted for as receivables and were disclosed in the accounts of the institution, identified by the individual issuing the bond.

The head matron was primarily responsible for the welfare, care, and education of the children. The board required that she be a “woman of good moral capacity and character.” She was primarily responsible for maintaining a physical and moral environment for the children that closely correlated to existing social norms of the community. Matrons were elected by the City Council and reported to the Board of Commissioners. The institution also employed matron’s assistants, nurses, laundresses, groundskeepers, cooks, and a physician.
Contemporary institutional theory may aid in the understanding the formation of the Charleston Orphan House and its subsequent accounting and financial-reporting endeavors. The institutional formation that occurred as part of the effort to transfer the responsibility of orphan caretaking from the wealthier citizens of Charleston to the municipality lends itself to several underlying premises of institutional economic theories. For example, Demsetz [1967, pp. 348, 354-359] describes the evolution of institutions as an effort to realign social responsibilities in order to “internalize” (or resolve) externalities (i.e., problems that are imposed upon society). The organizational or institutional form that results will minimize the transaction costs associated with internalizing the externality [Coase, 1937, pp. 393-395, 404; 1960, pp.16-17]. Demsetz [2002, p. 664] also argues that the institutional form that arises will be relatively “specialized” to minimize transaction costs most effectively and align responsibilities.

This theoretical construct can be easily observed as Charleston’s traditional foster system became institutionalized. The externality facing the post-war American society was, among others, the abnormal level of orphans that were directed toward the foster system as a result of war casualties. Such was the case in Charleston where the cost of this responsibility became so burdensome that the traditional foster care system (i.e., wealthy caretakers) sought to internalize these costs by turning to an institutional form that most effectively reduced the transaction costs (i.e., cost of caring for an orphan). As theory would predict, the institutional form that resulted was the public orphanage. An orphanage, by definition, specializes in caretaking and thus provided the most effective means of reducing transaction costs as the local community sought to deal with this burden placed upon it by the Revolutionary War.

Institutionalization of Orphan House Financial-Reporting Practices: Covaleski and Dirsmith [1988] were among the first to apply institutional theory to accounting and financial reporting. Institutional theory allows for a more robust understanding of the broader organizational and societal implications of accounting and financial reporting. Institutional theorists posit that an organization’s viability and survival are dependent upon its constituents’ perceptions of its conformity to a variety of social norms including the use of acceptable accounting and reporting
rules [Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Covaleski and Dirsmith, 1988; Covaleski et al., 1993; Irvine, 2002].

North [1990, pp. 36-45] describes the adoption of socially accepted practices as a response to society’s “informal constraints.” Institutions will conform to informal constraints as they seek to reduce transaction costs as they internalize externalities and find it cost-beneficial by conforming to established practices. The adoption of established accounting and auditing practices reduces the information search costs incurred by outside parties who seek to contract with the institution [North, 1990]. The institution’s compliance with social norms more efficiently facilitates the relief of externalities. By complying with constituencies’ expectations and conforming to social norms, institutions may be exhibiting strategic motives that reflect an effort to preserve long-term solvency [Suchman, 1995; Deegan, 2002].

Dent [1991] provides support for the idea that entities will adopt rational accounting techniques so as to instill confidence among resource providers. Irvine [2002, p. 3] contends that this notion is particularly important in understanding the behavior of not-for-profit entities. She notes:

Any organization that does not conform to societal expectations about how accounting ought to be performed, and about the accountability and transparency required in financial reporting, risks showing to disadvantage against its competitors, losing legitimacy and ultimately funding. Financial reporting, therefore, and the accountability it purports to exhibit, is an institution whose legitimizing power organizations must recognize if they are to survive.

Institutions tend to conform to the “societal expectation of appropriate organizational behavior” and will exhibit “rule-like status in social thought and action” [Covaleski and Dirsmith, 1988, p. 562]. Adoption of socially acceptable practices assists in establishing social prestige and ensures the inflow of funds from constituencies [Meyer and Rowan, 1977; Oliver, 1991; Carruthers, 1995].

Conformity to societal norms generally results in institutional isomorphism and organizational homogeneity [Covaleski et al., 1993; DiMaggio and Powell, 1993]. Institutions with a specific mission will tend to be organized according to what society expects. Research on this subject is particularly important to not-for-profit entities, including charities, in that it has been
demonstrated that organizations tend to strive for “social fitness rather than economic efficiency” [Powell, 1985, p. 565].

Organizational Legitimacy: The concept of organizational legitimacy is fundamental to legitimacy theory [O’Donovan, 2000]. Dowling and Pfefer [1975, p. 122] define organizational legitimacy as “a condition or status which exists when an entity’s value system is congruent with the value system of a larger social system of which the entity is a part. When a disparity, actual or potential, exists between the two value systems, there is a threat to the entity’s legitimacy.”

For emerging institutions, the incentive to engage in legitimizing behavior often stems from the desire to minimize what Suchman [1995, p. 586] calls the “liability of newness.” To win acceptance by the community and establish itself as viable, organizations must proactively engage in legitimizing behavior. Institutional theorists posit that an organization’s viability and survival are dependent upon its constituents’ perceptions of its conformity to a variety of social norms including the use of acceptable accounting and reporting rules [Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Covaleski and Dirsmith, 1988; Covaleski et al., 1993; Irvin, 2002]. Societal expectations force organizations into this legitimizing behavior to remain solvent [Deegan, 2002].

Suchman [1995] describes legitimacy as a process that solicits unique responses at various stages of the organization’s existence. The first task is to engage in activities that are designed to obtain legitimacy, which includes conforming to current practices deemed acceptable to potential stakeholders, seek out stakeholders that accept the organization’s existing practices, or influence potential stakeholders by establishing unique legitimizing behavior. The second stage of the process involves maintaining legitimacy that has been created, including the monitoring of the organization’s operations in order to avoid problems and establishing defensible operational accounts. By accounting for its activity, the organization positions itself to repair legitimacy in the event that events compromise its solvency.

Attention is focused on maintaining legitimacy as it is more efficient to engage in behavior that preserves past and current legitimizing efforts than re-establishing it once stakeholders’ perceptions of the organization’s legitimacy wanes [Suchman, 1995; O’Donovan, 2000]. A key approach to maintaining legitimacy is to inform stakeholders of the organization’s legitimizing efforts [Lindblom, 1994].
Legitimacy theory focuses on strategies that management chooses to remain legitimate. Such strategies may involve making charitable donations, acts of altruism, voluntary disclosure, etc. [Patten, 1992; Roberts, 1992; Suchman, 1995; Gray et al., 1995; Deegan et al., 2000]. For these strategies to be effective, organizations must engage in targeted disclosures that improve constituents’ perceptions of legitimacy that have been previously established [Deegan, 2002].

EIGHTEENTH CENTURY AMERICAN ACCOUNTING PRACTICES

Although no major empirical studies have examined accounting and financial reporting for charities per se in 18th century America, several studies have examined such practices in the commercial sector. Voke [1926] and Baxter [1946, 1956] were among the first to observe accounting practices in an era characterized by the scarcity of money, barter transactions, and use of a system of books including the wastebook, journals, and ledgers. Baxter [1956] concludes that accounting methods emerged in colonial America to support the mercantile trade and the bi-lateral barter transactions of the period. Coleman et al. [1974] observed the use of financial statements with an inherent audit component among 18th century Virginia merchants, although the study admits that the account books have been lost to history. Thomas Jefferson’s accounts were found to support managerial decision making in a study by Shenkir et al. [1972].

In commercial ventures, early 18th century accounting techniques have been described as “elaboration” of those from earlier periods [Levy and Sampson, 1962, p. 64]. Previts and Merino [1998, p. 15] citing an unpublished letter from [1976] Yamey characterized these early methods:

Yamey (1976) advises that these accounts were not in double-entry form but advises, ‘whether one calls it “incomplete double entry” or single entry is a matter of taste. I would not use a description including the words “double entry.” But it is not “single entry” either, if one implies by that a system. Incidentally, there is no capital account in the ledger, and no indication that there was a secret ledger with such account.’

As the complexities of commerce and culture progressed, so did the need for specialized accounting. The creation of joint ventures and the need to account for invested capital led to the limited use of double-entry in colonial America, although its use
was relatively rare in comparison to its use in Britain [Yamey, 1981]. Edwards [1960, p. 5] observes that American practices were directly linked with those of England and Scotland: “Just as customs, common law, and commercial practices came to the United States from England and Scotland, so did the practice of accountancy, either through books or through accountants themselves. Direct links with countries other than England and Scotland are not very clear.”

Baxter [1956] found that single-entry accounting methods were primarily used to track debts among 18th century New England merchants. Account books mostly contained accounts of persons (both debtors and creditors) and permitted differentiation among customers and suppliers. Double-entry was not widely used as there was no informational need to calculate profit. More recently, Baxter [2004, p. 132] concluded that 18th century American accounting techniques were largely “a slipshod system of single entry.” Accounts for the typical colonial trader were generally limited to “debts due to and by him.” The barter system and the scarcity of money defined the American colonial economy where there was little need for profit-and-loss information or a balance sheet.

Schultz and Hollister [2004, p. 171] found single-entry accounting to be a facilitator of asynchronous trade in 18th century New York. The lack of trained bookkeepers, the scarcity of money, and barter transactions were identified as having shaped the nature of accounting among colonial merchants. Although double-entry was widely written about in 18th century British texts that made their way into America, colonists generally disregarded its complexity and chose simpler single-entry methods as they generally had no need to measure profit and loss of the “triangular” transactions of barter.

Systematic accounting methods were employed as a consequence of trade. The use of the wastebook permitted the proprietor to capture transactions as they occurred. Yamey [1981, p. 130] refers to a “wastebook-journal” described in an early 18th century literature. A leading accounting text of the period, John Mair's *Bookkeeping Moderniz'd* [1793, p. 2] describes the purpose of the wastebook in systems of accounting.

The wastebook allowed proprietors to capture daily transactions as they occurred and permitted a later, more thoughtful, and deliberate transfer to the journal or ledger [Mair, 1793; Voke, 1926; Previts and Merino, 1998]. After the transfer of the information, the wastebook had no purpose, thus providing its name. Notations in the wastebook were entered into the journal,
or in certain systems, directly to the ledger. In some cases, the daybook was used in place of the wastebook and journal, and generally served a similar function as the wastebook. In his text, Mair [1793, p. 7] explains the origins of the name wastebook: “After the journal is filled up and corrected, the wastebook is of little further use and probably on this account it has got the name it bears.” When the complexities of commerce dictated, cash books, sales books, and expense books were employed [Voke, 1926].

Baxter [1946, 1956] demonstrated that the scarcity of money and the barter system in America influenced the nature of accounting in the 18th century. These factors were unique to America and led to distinctively different accounting practices from those of the British. The scarcity of coinage and paper money gave rise to the practice of keeping single-entry accounts that focused on individual debtors and creditors, often with no distinction between the two groups. Double-entry was not found to be common among 18th century American merchants as the determination of profit and loss was seldom required. The stockholders’ equity account was not relevant to many business owners whose accounts were kept according to expenses of doing business and receipts of cash and goods from transactions.

Accounts often remained open for many years as barter transactions were commonly bilateral. Barter transactions were often complex and required sufficient detail in the account books. Baxter [1956, pp. 273-274] explained:

Barter became plain sailing when traders could appraise goods in common terms, and still more when they could stretch the exchange over a long time.
Money—even though it was too scarce to be always available as a unit of exchange—provided the common unit of value, and book-keeping gave the means for remembering and providing the details of a lengthy exchange. Thus, the farmer of Colonial New England was able to sell his pig in Boston for a money-credit in the storekeeper’s books; he could then take supplies as and when he wanted them, while the storekeeper charged up his account. If the farmer could also on occasion assign his credit to the third person—so that the storekeeper acted in effect as his bank—the barter became a tolerably flexible and efficient means of trading.

Ledger accounts of the 18th century were books containing consecutively numbered pages or “folios” [Mair, 1793; Voke, 1926; Baxter, 1946]. Folio references permitted tracking of accounts over time. When pages in the ledger where filled, the accounts were tallied and the balances transferred to a new folio. Accounts on the left page (Dr.) of the open ledger were characterized as “To” and represented the expenses. The right page (Cr.) represented inflows of cash, bonds, bills of exchange, or goods and designed “By.” When all the ledger folios were completely filled, the ledger was closed as indicated by a line and the balances were transferred to a new ledger.

ACCOUNTING SYSTEM OF THE ORPHAN HOUSE

The 1790 ordinance establishing the Orphan House mandated that the institution keep a system of account books to include a cash book, expense book, and wages book [Exhibit Three]. The steward was charged with keeping “a book of fair and regular accounts of all receipts and expenditures.” Notations concerning these transactions were kept in a wastebook. From the wastebook, entries were transferred to the cash book, expense book, or wages book which were also maintained by the steward. The wastebook included daily descriptions and notes on donations (both monetary and non-monetary) and use of funds for operations, including food, clothing, supplies, and wages. The steward controlled the cash used for daily operations, while the treasurer controlled the funds held by the board for capital expenditures, including construction of the building, furniture, and fixtures.

The treasurer, a member of the Board of Commissioners, oversaw the accounting performed by the steward and maintained the ledgers. The treasurer signed the ledgers as they were completed and provided them for inspection by the Committee
EXHIBIT THREE

Charleston City Gazette
October 25, 1790 – Excerpt
Orphan House Ordinance

The Steward - Shall exercise the general superintendence, direction, and control over all and every department...; He shall... keep a book of fair and regular account of all receipts and expenditure, which shall be subject at all times to the examination of the Commissioner. And he shall keep the following books according to the form prescribed therefore, and lay the same upon the table of the Board at each meeting, for the inspection and information of the Commissioner:
Cahal Book of Receipts and Disbursements, Expense Book of Officers' Table, Wages Book of Servants and Assistant.

The Matron—Shall watch over the moral and conduct of the children, direct the assistant and nurser, and see that they discharge their duties faithfully. Take care that the food and clothing provided for the children are wholesome and suitable; preserve order and decorum at table and elsewhere; attend the children at worship on the Sabbath, and obey all the directions of the Commissioner.

Source: Charleston Library Archives, City Gazette Collection

on Accounts on the Board of Commissioners annually. In addition, the treasurer controlled the funds held by the commissioners and accounted for their balance periodically. The 1790 ordinance charged the Committee “to examine annually the books of the Treasurer, and personally inspect the securities in which the capital of the private fund is invested, and the vouchers for the disbursement of the income of said fund” (Exhibit Nine).

Periodically, transactions from the three account books were transferred to the ledgers maintained by the treasurer. The wastebooks were not retained after the transactions were transferred to the ledgers. The wastebook is referenced in several ledger entries although none have survived. Their absence is consistent with Mair’s [1793] observation that there was no need to keep the wastebooks once the entries to the ledger had been accomplished.

Transactions were entered in a single-entry type method that allowed for balancing of expenses of the institution with its resources provided through various individuals, religious congregations, the City Council, and any other sources. Alternatively and consistent with Yamey’s [1976] observations, the method may be described as “incomplete double-entry” as it is neither purely double-entry nor single-entry as the duality of accounts inherent in double-entry accounting is absent.

The entries contained in the cash, expense, and wages books
were periodically summarized and the totals transferred to the ledger which was organized into folios that contained specific accounts. The ledger accounts were summarized either annually to comply with the treasurer’s report or when the ledger was completely filled so that the balances could be transferred to a new book.

The folios were consecutively numbered pages (or leaves). The open ledger consisted of a left folio and a right folio. The left folio was numbered and marked as Debit (Dr.) and contained the expenses of the Orphan House, labeled as “To.” The right folio contained the accounts detailing the support of the institution and identified each funding source individually. The right was characterized “By.” Outflows of funds related “To” a specific ledger account (bread, clothing, blankets, individual salaries, etc.). Funds on the credit side were identified as “By” the specific source.

As the folios in the ledger filled, their balances were transferred to a new folio. When the last set of folios in a ledger was completed, the expenses (left folio) were brought into balance with the institution’s funding for a particular period. A new ledger, consecutively numbered, was opened with the final balances of the previous ledger “brought over” as illustrated in Exhibits Four and Five.

These two exhibits contain account balances for expenses incurred by the orphanage and monetary donations from bond proceeds and donations from individuals and religious organizations. Although debit and credit balances are indicated, the absence of pure double-entry bookkeeping is consistent with 18th century American practices [Mair, 1793; Voke, 1926; Baxter, 1946; Previts and Merino, 1998]. Balancing of the expenditures and sources of funds took place whenever the accounts were summarized.

The 1790-1793 account activity reflects the orphanage’s routine operations, documenting expenditures relating to food (bread and beef), wood, clothing, employee salaries, and rent on its temporary facility. The increase in operating costs reflected in the accounts is consistent with the growing orphan burden assumed by the institution during these years. The number of orphans taken in by the institution rose from 107 at its opening in 1791 to approximately 160 by the end of 1795.

During 1793 folios 164 and 165 were completed, and the debit and credit balances were totaled. At that point, funding of £3,798.12.2 had been recorded with corresponding expenditures of £1,278.1.8. This “surplus” of funding over expenditures was
EXHIBIT FOUR

Charleston Orphan House – 1793 Ledger (Folios 164 and 165)

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 1 1793</td>
<td>Ta Sundries charged to the Orphan House by the Corporation from October 1790 to September 1791, vis.</td>
</tr>
<tr>
<td></td>
<td>Bread</td>
</tr>
<tr>
<td></td>
<td>Wood</td>
</tr>
<tr>
<td></td>
<td>Blanket, Sweeping Chimney</td>
</tr>
<tr>
<td></td>
<td>Rent of Orphan House, half year due</td>
</tr>
<tr>
<td></td>
<td>Alex. Blackford, payed 1s.</td>
</tr>
<tr>
<td></td>
<td>Clothing</td>
</tr>
<tr>
<td></td>
<td>John Waldorf payed 3rd quarter salay to 18 August 1791</td>
</tr>
<tr>
<td></td>
<td>Sarah Bristow, Mistreess 3/4 due to 1 Aug 60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 1 1793</td>
<td>By Cash supplied by the City Council from October 1790 to September 1791</td>
</tr>
<tr>
<td></td>
<td>1793</td>
</tr>
<tr>
<td></td>
<td>Bread</td>
</tr>
<tr>
<td></td>
<td>Wood</td>
</tr>
<tr>
<td></td>
<td>Blanket, Sweeping Chimney</td>
</tr>
<tr>
<td></td>
<td>Rent of Orphan House, half year due</td>
</tr>
<tr>
<td></td>
<td>Peter B. Markow, payed 1/2</td>
</tr>
<tr>
<td></td>
<td>Harry Grant, payed 1/2</td>
</tr>
<tr>
<td></td>
<td>Christopher Williams, payed 1/2</td>
</tr>
<tr>
<td></td>
<td>Robert Howard, payed 1/2</td>
</tr>
<tr>
<td></td>
<td>Source: Charleston City Archives</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transferred to Folio 166 and 167</td>
</tr>
<tr>
<td></td>
<td>Bread</td>
</tr>
<tr>
<td></td>
<td>Half year rent due 1st Nov 1792</td>
</tr>
<tr>
<td></td>
<td>Wood</td>
</tr>
<tr>
<td></td>
<td>John Waldorf payed 1/4 of salary due 1 Aug 1792</td>
</tr>
<tr>
<td></td>
<td>Sarah Hefffield payed 1/4 of salary due 1 Aug 1792</td>
</tr>
<tr>
<td></td>
<td>Sarah Wolff payed 1/4 of salary due 1 Aug 1792</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Source: Charleston City Archives</td>
</tr>
</tbody>
</table>

Daniels et al., An 18th Century Charity
The Orphan House, as a charitable institution, had no need to determine profit as no distribution of earnings was to take place. Furthermore, there was no informational need to capitalize expenditures in the form of buildings or fixtures. The focus of the accounting system was on expenses and funding sources. The summarized ledger accounts essentially served as financial statements.

The account books were kept at the Orphan House for “inspection of all persons whomsoever.” This availability to the public was noted in many of the institution’s early financial statements, including those published in 1793. [Exhibit Twelve]. Of course it is unknown the degree to which the information
was actually accessed by those visiting the facility. Plausibly, the availability may have fostered a sense of transparency and offered assurance of financial propriety to benefactors.

President Washington’s visit in 1791 was widely publicized. The publication of this visit describing his “perusal” of the Orphan House documents and subsequent laudatory comments, clearly served to boost the prestige of the institution. As an emerging institution, the legitimizing effects of the attention paid to Washington’s visit could have contributed to mitigating the orphanage’s “liability of newness” [Suchman, 1995].

The Charleston City Gazette [1791, p. 1] reported Washington’s visit on May 23:

The President of the United States George Washington…visited the Orphan House where…the Commissioners laid the Ordinance for establishing the Orphan House, Rules of the Orphan House, the Journals of the proceedings of the Board and the Registrar before the President for his perusal, he was pleased to express the highest approbation of the Institution. The children being assembled in the Breakfast Room, to the number of one hundred and seven, with the Mistress, Steward, assistant and nurses, in their proper places, his Honor the Indendant, and the other Commissioners, conducted the president and the gentlemen who attended him, to the room, on taking leave of the children, he very pathetically pronounced his benediction on them.

The Board and City Council made the account books publicly available since the inception of the Orphan House, although it was not approved as official policy until March 1793, when the commissioners resolved that the treasurer purchase three accounts books: “One to keep his own accounts in, and in which to enter in regular order the accounts of all treasurers, heretofore; one as a duplicate or complete copy of the above to always be lodged with the Commissioners; and, the third in which to enter all charitable donations that have been or may be given to the institution with the names of the donors…; That it shall be the duty of the Treasurer to keep the said Book regularly filled up, and that it be lodged in the Orphan House for the inspection of any person whomsoever.”

The Board of Commissioners routinely solicited donations for the Orphan House. Commissioners would collect the donations and present them to the board at its weekly meeting. The funds were entrusted to the treasurer who would hold the cash receipts in his personal accounts until the board authorized
their expenditure or investment. The donations were used either for operating expenses of the orphanage, put towards the building of the facility between 1791 and 1794, or held for future use. Donated funds were reported at each board meeting and reflected in the minutes, as illustrated in Exhibit Six.

EXHIBIT SIX

Donor Funds Entrusted to the Treasurer
October 27, 1791

Col. Mitchell presented donations from the following gentlemen for the benefit of the Orphan House, viz.: 

<table>
<thead>
<tr>
<th>Name</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Watson</td>
<td>£4.10</td>
</tr>
<tr>
<td>Childs Melver &amp; Co</td>
<td>5.6.4</td>
</tr>
<tr>
<td>Edward North</td>
<td>2.2</td>
</tr>
<tr>
<td>Daniel Cohia</td>
<td>2.8</td>
</tr>
<tr>
<td>Jacob Cohen</td>
<td>2</td>
</tr>
<tr>
<td>Ann Timothy</td>
<td>1.17.4</td>
</tr>
<tr>
<td>Abraham Lyon</td>
<td>1.70</td>
</tr>
<tr>
<td>William Lee</td>
<td>1.2.6</td>
</tr>
<tr>
<td>Doctor Robert Wilson, Sr.</td>
<td>9.4</td>
</tr>
</tbody>
</table>

Amounting to £21.5.6. which was put into Thomas Corbet Esq. Hands.

Source: Charleston City Archives

The treasurer controlled the cash account of the commissioners. These funds were used for more significant purchases and were held either in the bank or by the treasurer. The cash used for operations was under the control of the steward who accounted for expenditures and receipts to the treasurer through the cash book. The treasurer provided monthly reports to the commissioners, including his accounts reflecting the funds he held “in his hands” [Exhibit Seven]. Expenses and sources of funds were presented yearly to the commissioners and contained detail of the operations. The annual reports contained the balanced ledger accounts of expenses and sources of funds.

The Orphan House’s Committee on Accounts was presented the account books, where it was charged with the responsibility to “audit the accounts” with supporting vouchers. After approval of the accounts by the committee, the Board of Commissioners submitted the reports to the City Council where their Committee on Accounts would examine and “certify” them. Since there is no evidence in the commissioners’ minutes describing the procedures undertaken by the Committee on Accounts in its audit of the accounts, it is impossible to determine the nature of the
process that they used in its evaluation. Therefore, any comparisons to the modern usage of “audit,” “auditing,” or “attestation” are hypothetical.

**EXHIBIT SEVEN**

Treasurer’s Report

August 15, 1793

The Treasurer reports a state of his accounts, from which it appears that he has in his hands

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Cash</td>
<td>£123. 18. 6</td>
</tr>
<tr>
<td>In Bonds/Notes &amp; C of follow, vis</td>
<td></td>
</tr>
<tr>
<td>John McCullay Note</td>
<td>£50.</td>
</tr>
<tr>
<td>Ditto</td>
<td>80.</td>
</tr>
<tr>
<td>Ditto</td>
<td>100.</td>
</tr>
<tr>
<td>Alexander Crawford</td>
<td>2.</td>
</tr>
<tr>
<td>George Bampfield</td>
<td>10.</td>
</tr>
<tr>
<td>Commissioners East Bay Acceptance</td>
<td>10. 10.</td>
</tr>
<tr>
<td>Thomas Harry order on do- for what may be due</td>
<td></td>
</tr>
<tr>
<td>Francis Levy Note</td>
<td>5.</td>
</tr>
<tr>
<td>Harry Grant/ Bond</td>
<td>75. 15.</td>
</tr>
<tr>
<td>John Roberts/ Account</td>
<td>35. 11.</td>
</tr>
<tr>
<td>Isaac DaCoste/ Note</td>
<td>5.</td>
</tr>
<tr>
<td>John Williams Note</td>
<td>60. 13. 4</td>
</tr>
</tbody>
</table>
<pre><code>                                                             | 755. 19. 3 |
                                                             | £879.17. 9 |
</code></pre>

Signed Thomas Corbett
Treasurer

Source: Charleston City Archives

The August 15, 1793 treasurer’s report was presented to the Board of Commissioners and approved by its Committee on Accounts [Exhibit Seven]. The report was published in the *City Gazette* on August 22, 1793 and contained the details of £879.17.9 held by Thomas Corbett, the board’s treasurer. Both cash and receivables were in the physical custody of Corbett, who was responsible for collecting the interest on the notes and bonds. The bonds represented amounts to be paid by those taking in the orphan apprentices. The obligations were expected to be paid in full to the orphanage by the time that the apprenticeship was finished, usually when the apprentice attained the age 21.

By 1795, the treasurer’s report provided detail of operating expenditures of the Orphan House. While the accounts for operating expenses, including salaries, were maintained by the steward, the treasurer incorporated this information into his reports. This additional reporting was likely in response to several financial crises that arose during the building of the 1794 facility that depleted cash and required the commissioners either to
loan money to the Orphan House from their personal funds or to seek additional funds from benefactors and/or the city. This is illustrated in the treasurer’s report published on November 12, 1795 [Exhibit Eight].

**EXHIBIT EIGHT**

**Treasurer’s Report**

**November 12, 1795**

The Treasurer reported an account of Salaries and Expenditures attending the Orphan House for the months of August, September, and October 1795 certified by John Champney and Thomas Roper, Esq. Committee of Accounts amounting to £252 4 5 for which an order is given in the following words:

Orphan House 12 Nov 1795

Sir

The above account amounting to Two hundred and fifty two pounds four shillings and five pence if examined, approved and recommended to be paid to Thomas Carbutt, Esq. Treasurer.

By Order of the Board

Charles Lining
Chairman

John Edwards, Esq. Intendant

Source: Charleston City Archives

*Committee on Accounts:* The 1790 ordinance that created the Orphan House required the Board of Commissioners to appoint a Committee on Accounts. This committee was charged with the responsibility “to audit and report upon all accounts, bills and claims” of the Orphan House [Exhibit Nine]. Its charge extended to the books kept by the steward as well as those maintained by the treasurer. The committee consisted of three members of the board who would inspect or audit the books and provide approval of the account balances to the other board members. While it is unknown the degree or extent of the audits conducted by the committee, such an oversight mechanism provided an internal control over the accounts and financial reports. Again, no modern inference of “audit” is intended.

The orphanage’s Committee on Accounts was to “superintend” the preparation of the financial reports to be presented to the City Council by the Board of Commissioners. These statements were then examined by a similar committee of the Charleston City Council. The Committee on Accounts of the City Council had a parallel charge to audit the financial reports of the city’s agencies. Thus, the financial reports were subjected to two layers of oversight aimed at determining their propriety.
In August 1792, the City Council passed a resolution that required the “certification” of the Orphan House’s accounts by its Committee on Accounts. The statements were to be counter-signed by the board chairman who was responsible for submitting the statements to the City Council. The Resolution mandating this financial-reporting structure is illustrated in Exhibit Ten.

**EXHIBIT TEN**

**Charleston City Council Minutes**
**August 11, 1792**

> On motion, Resolved that the Commissioners of the Orphan House do hereafter render quarterly statements of their expenditures, that their accounts shall be certified by their Committee on Accounts, allowed by their board and countersigned by their chairman, who shall transmit such audited accounts to the Intendant to be laid before Council, after whose financial examination and approbation: The Intendant will give an order for their immediate discharge.

Source: Charleston City Archives

On September 15, 1793, Charles Lining, the board chairman, submitted to the City Council the ledger accounts of the Orphan House kept by Thomas Corbett and audited by the institution’s Committee on Accounts. Following that, the corresponding City Council’s committee was charged with the responsibility to “examine” the accounts. Upon determination that the accounts were “right,” they were then certified by the city’s committee. Minutes of the September 19, 1793 Board of Commissioners meeting acknowledges the process and includes the “certification” of its accounts by the city. The report of the city’s Committee on Accounts was published in the *City Gazette.*
the following week, along with details of the Orphan House’s building fund [Exhibit Eleven]. The two levels of assurance provided by the Committees on Accounts for the Orphan House and the Charleston City Council plausibly provided assurance to the benefactors of the propriety of the institution’s financial affairs.

EXHIBIT ELEVEN

Committee on Accounts Report
September 17, 1793

By an order from the City Council, we have examined the above account with the City Treasurer’s Books and books kept by the Commissioners of the Orphan House. Also, the Vouchers for the respective charges in said account and find the same right.

Certified by

Thomas Legare
Robert Hasilhurst
James Gregory

Source: Charleston City Archives

Contained in Lining’s September 15, 1793 letter to the City Council is a request by the board that the accounts of the Orphan House be published. His letter explains the commissioners’ opinion that publication of the accounts will better position the institution among benefactors:

The Commissioners beg leave to suggest to your honorable board, that in their opinion, it would afford great satisfaction to those charitable persons, who have by their donations contributed...to the establishment and support of the Orphan house and the inhabitants at large, if the foregoing accounts were published.

External Financial Reporting: At the request of the Board of Commissioners, the accounts of the Orphan House were published on September 20, 1793 (Exhibit Twelve). In absence of a legal requirement to do so, coupled with the stated motive of the commissioners, this voluntary disclosure was an endeavor to gain legitimacy among potential benefactors. The commissioners belief that the publication of the accounts would enhance the standing of the Orphan House within the community seems to establish their motive of seeking legitimacy.

The published financial statements presented in Exhibit Twelve include the expenditures and funding sources for the building fund. The operating accounts, similar to those present-
ed in Exhibit Five, were also published as financial statements on September 20, 1793. The financial statements are essentially reproductions of the balanced ledger folios as the accounts and format for both the building fund (Exhibit Twelve) and the accounts of the operations are identical to those contained in the institution's ledger.

The receipts and expenditures of the building account included the purchase of bricks, lime, timber, stone work, painting, and other expenditures associated with construction of the new facility. The notes and bonds “in the hands of the commissioners” were reported by the individual debtor. Specific individuals and firms were named as suppliers of materials and labor. The statement identified the collections from the city and from “religious congregations, societies and individuals.” Bonds received for apprenticeships for the children were transferred from the city and held by the Orphan House. Through the accounts, the commissioners provide detail of the receipt and expenditure of £2,740. 16. 11 ½ that had been provided for the purpose of building the Orphan House.

Following their initial publication in 1793, the financial statements or accounts of the Orphan House were published yearly, although in various forms. Their publication appears to have coincided with the annual submission of the accounts by the Board of Commissioners to the City Council. Their regular publication in newspapers of the day was at the discretion of the board as there was no legal mandate for it to do so.

CONCLUSION

The study of the Charleston Orphan House provides insights into a late 18th century American charity’s accounting and external financial reporting. Contemporary understanding of the practices of this period is supported by studies relating to commercial transactions, mostly among merchants. The scarcity of money and the barter system did not result in widespread need for double-entry. Predominantly, accounting in colonial America has been described as neither double-entry, nor single-entry. Yamey [1976] referred to the various techniques of the period as “incomplete double entry.”

Transactions of the Orphan House were entered into a system of books maintained by the steward and the treasurer. The steward was responsible for recording the operating transactions in three books of account (cash, expense, and wages). The wastebook provided the basis for transferring the transactions to
EXHIBIT TWELVE
Orphan House Financial Statements
Charleston City Gazette
September 20, 1793

<table>
<thead>
<tr>
<th>Dr.</th>
<th>No. 1</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>To cash paid Daniel Martin for cleaning and cutting 4004 ft.</td>
<td>£ 179.7</td>
<td></td>
</tr>
<tr>
<td>bricks in the brickyard, and cutting lime timber, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To do, paid John Langhaff's account for work done</td>
<td>£ 215.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>192.8</td>
<td></td>
</tr>
<tr>
<td>1793.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To cash paid William Bowers, for labor delivered from</td>
<td>£ 295.5</td>
<td></td>
</tr>
<tr>
<td>26th November, 1793, to 26th May, 1793, per agreement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To do, paid the contributions of the children of the orphan house,</td>
<td>309.15</td>
<td></td>
</tr>
<tr>
<td>for purchase of 1000 bricks, and 2000 bricks of lime.</td>
<td>590.35</td>
<td></td>
</tr>
<tr>
<td>1794.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To cash paid for bricks, cutting, etc.</td>
<td>£ 47.2</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>96.10</td>
<td></td>
</tr>
<tr>
<td>To do, paid for cutting, lime, bricks, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>August</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To do, paid captain Smith for some work for the orphan house,</td>
<td>£ 372.16</td>
<td></td>
</tr>
<tr>
<td>costs of work done, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duties and collection fees, etc.</td>
<td>91.10</td>
<td></td>
</tr>
<tr>
<td>To invoice by the widow of the orphan, for handling of goods,</td>
<td>370.6</td>
<td></td>
</tr>
<tr>
<td>principal, vessels, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To invoice of sundry items per the account books</td>
<td>100 x 8</td>
<td></td>
</tr>
<tr>
<td>To freight, duties, etc.</td>
<td>43.25</td>
<td></td>
</tr>
<tr>
<td>To cash paid for time</td>
<td>988.12</td>
<td></td>
</tr>
<tr>
<td>277.2 x 15.25</td>
<td>£ 1,390.18</td>
<td></td>
</tr>
<tr>
<td>The balance in the hands of commissioners, as follows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alexander Crawford's account,</td>
<td>£ 30</td>
<td></td>
</tr>
<tr>
<td>George Bumpfield's account</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Commissioners' receipts</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Francis Ley's note</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Harry Grant's account</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>John Roberson's account</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Isaac DuCaf's note</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>In cash,</td>
<td>£ 1,390.18</td>
<td></td>
</tr>
</tbody>
</table>

Source: Charleston City Archives
commissioners. In absence of a legal requirement to do so, coupled with the stated intent of the commissioners, voluntary disclosure was an endeavor aimed at improving the esteem of the institution among donors and potential benefactors. Periodic publication of the financial statements may have promoted a sense of propriety and transparency.

Several modern institutional theories may be appropriate to understand the practices of the Orphan House. It emerged as an institution in 1790 to minimize the social cost of the post-Revolutionary War orphan population. As a public institution, the orphanage could operate more efficiently and assist in evenly distributing the orphan burden among the population.

Voluntary disclosure by the Board of Commissioners was plausibly a legitimizing endeavor aimed at fostering a sense of propriety and transparency among donors. Assurance, whether real or perceived, about the propriety of the institution’s accounts through the two Committees on Accounts may have contributed to the Orphan House’s success in securing private funds. Although, the audits by the individual Committees of Accounts of the Board of Commissioners and the City Council were legally mandated and not voluntary, they may have served a legitimizing function for the Orphan House as it sought to establish itself and secure private sources of funding.

In the early years of the institution, accounting and external financial reporting may have served to assist the Orphan House to overcome its “liability of newness.” Legitimacy theory suggests that emerging institutions will engage in legitimizing behavior to establish themselves. Securing future operating resources is, therefore, dependent upon the perceived legitimacy on the part of those who provide the means for the institution to fulfill its purpose. Institutional and legitimacy theories, composed of modern ideas, may be useful in understanding human behavior of earlier periods, such as that reflected by operations at the Charleston Orphan House in the late 18th century.

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Charleston City Gazette (1795), November 18: 4.
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Charleston City Council Minutes (1795), August 11.
Charleston Orphan House Records (1790-1795).
Washington, G. (1791), Diary, entry of May 7 1791 (College Park, MD: United States National Archives and Records Administration).


Mair, J. (1793), *Book-Keeping Moderniz’d or Merchant-Accounts by Double Entry according to the Italian Form* (Edinburgh: Bell and Bradfute).


Abstract: In February 1938, the police arrested Raymond Marien, a small, bookish man, for forging checks at Interstate Hosiery Mills, Inc. During the ensuing investigation, the New York Attorney General’s office found that Marien had “juggled” the books of the corporation and that these accounting irregularities inflated Interstate Hosiery Mills’ assets by $1.9 million or about 40% of the company’s assets. In an irony of history, the company’s external auditors, as it turned out, employed Marien. The extensive investigation conducted by the SEC into Marien’s manipulations found that, save for forged checks amounting to about $2,000, Marien and others were exonerated from any financial gain in the fraud due to the increased value in Interstate’s shares. In the end, the fraud and the SEC rulings would serve as a foundation of many modern accounting and auditing principles related to auditor independence, supervision, and management responsibility.

INTRODUCTION

The American Institute of Certified Public Accountant’s (AICPA) [2009] trial-board proceedings from March 2009 reported that the Institute disciplined a CPA from New York under rule 101 of the Code of Conduct. According to the complaint, “The auditor created journal entries, coded deposits, and disbursements for reporting in the general ledger without obtaining client approval. As a result, the auditor audited his own work.” This was a classic case of a lack of independence on the part of an auditor. The AICPA suspended the member and required him to complete 50 hours of continuing professional education and submit to a peer review. The AICPA’s decision highlights the
importance placed on the concept of independent audits, with the genesis of rules that can be traced to a 1938 Securities and Exchange Commission (SEC) ruling that dealt with Interstate Hosiery Mills, Inc. (IHM) and Raymond Marien, an employee of the firm’s independent auditors.

The following paper details the story of Raymond Marien’s fraud at IHM. As the evidence will show, the exact amount of the fraud or the methods followed to accomplish it were never pinpointed definitively. Thus, the paper will present the balances from various sources to give as complete a picture as possible of the financial events that led up to the SEC’s report and ruling even though the numbers may not directly reconcile. The materials used as evidence in the paper come from SEC case reports; contemporary newspapers, magazine, and journal articles; as well as later Accounting Series Releases (ASRs) that quoted and used the ruling. In addition, the paper includes a brief history of the company; a discussion of the dual investigations by the New York attorney general and the SEC into the alleged accounting irregularities; and the life of Raymond Marien, the primary character. Finally, the resultant 1939 SEC ruling is explored as it relates to the development and application of modern auditing standards related to supervision, independence, and management responsibility.¹

THE ORGANIZATION OF IHM

According to the New York Times (NYT) [1929a, p. 47], IHM was organized as a Delaware corporation. Its purpose was to acquire the stock of several competing hosiery companies and consolidate mill operations. These companies included the Brilliant Silk Hosiery Company of Bloomfield, New Jersey; the Finery Silk Hosiery Company in Clifton, New Jersey; and the Lansdale Silk Hosiery Company in Lansdale, Pennsylvania just north of Philadelphia. The new company named Selig, the former sales manager of the Gotham Silk Hosiery Company, as the chief operating officer of the new concern, with several managers from the consolidated companies named in supporting positions. The NYT [1929c, p. 42] published a stock prospectus for the new company that noted the financials were examined

¹Two 1939 editorials evidenced the importance of the SEC ruling. The first, written by Carey [1939] in the Journal of Accountancy, will be discussed later in the paper. The second in The Texas Accountant [1939, p. 8] commented that the “case is of sufficient importance to justify thorough study of the Commission’s release.”
by “Messers Haskins and Sells.” The article also mentioned that the consolidation of the three mills would “…result in the formation of a company equipped to serve the trade with an unusually wide variety of merchandise distributed through varied channels producing a complete line covering a wide range in price of woman’s plain and fancy full fashioned silk hosiery.”

IHM completed the consolidation through the exchange of 110,000 shares of its stock for the shares of the three predecessor companies. Another article in the NYT [1929b, p. 40] reported pro-forma 1928 income for the combined company at an estimated $386,000 or about $3.51 per share on $4.1 million in sales. The company also reported that there was no funded (long-term bonds) debt or preferred stock, but it did have $159,000 in mortgages outstanding on properties with an appraised value in excess of $1.78 million.

A few days after the merger, the second NYT [1929b] article reported that the investment banking firms of Ernst and Co. and Strupp and Co. took the newly consolidated company “public” and asked for trading privileges on the New York Curb Market. This request came with the issuance of 78,500 shares of newly issued, no-par IHM common stock with a prospectus price of $30.00 per share. The prospectus indicated that the purpose of the $2.5 million offering was for “the immediate expansion… inasmuch as two companies have been operating day and night shifts and one company has been under the necessity of purchasing annually from outside sources several hundred thousand dollars of merchandise…. Substantial savings are expected through the consolidation of dyeing, finishing, and shipping departments.”

To sweeten the deal, the prospectus also announced that the Board of Directors had declared an initial 45¢ per share dividend for June 29, 1929. While the newly formed company settled in their new location on the thirteenth floor of 232 Madison Avenue, the Curb Market admitted IHM for trading on March 7, 1929. IHM was now in operation, but it would soon face Black Tuesday (October 24, 1929) and the Great Depression.

For the next four years, the company would struggle through the depression reporting decreases in prices of hosiery several times as demand waned. There was an eventual reduction of the dividend rate in 1930 from 45¢ to 35¢ per share to conserve cash [NYT, 1930a, p. 47]. In addition, the NYT [1930b, p. 39] listed several of IHM’s judgments against customers that had a problem paying their bills. To stabilize sales, the company, along with other hosiery manufacturers, created an in-
dustry financing company to help its customers stay in business especially around the holidays in 1930 [NYT, 1930c, p. 49]. The company would not show an economic turn-around until mid-1932. In that year, the company posted profits of 82¢ per share after showing moderate losses the previous two years [NYT, 1934a, p. 34]. Prices of finished hosiery began to rise in 1933 at about the same time DuPont introduced rayon, a stronger synthetic thread, to America’s textile manufacturers [NYT, 1933, p. 20]. During 1934, the company complied with the new registration requirements for publicly held companies under the 1933 Securities Act, putting it under federal regulation that included the proper disclosure of its financial condition [NYT, 1934b, p. 33]. The IHM came out of the depression with a strong income report in February 1934 of $462,000 or $4.81 per share [NYT, 1934a, p. 34]. In the end, the company would survive the worst economic downturn in U.S. history only to confront a more daunting set of problems in early 1938.

DISCOVERY OF ACCOUNTING IRREGULARITIES

Troubles at the New York Curb Market: According to the Wall Street Journal (WSJ) [1938a], on February 15, 1938, the officials of the IHM arrived at their offices on Madison Avenue in New York like any other day. The company was in its tenth year. During the day, the New York Curb Market informed the company that it was about to suspend the trading of IHM’s stock after the company itself reported that several accounting irregularities had been found in its yet to be released 1937 annual report. These irregularities included the wanton falsification of the company’s annual reports for the published years 1934 through 1936 and the unreleased year of 1937. The irony of the situation was that none of the company’s officials were accused of this fraud. Rather, the accused was Marien, an employee of the company’s auditors, Homes & Davis (H&D). The story became a minor sensation in the newspapers of New York City until the more salacious and deadly revelations about McKesson-Robbins pushed it to the back pages a few months later. Felker [2003, p. 45] pointed out that the actions of the people in the IHM case “reflect the origins [of the SEC’s] longstanding views on the role

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2 The New York Curb Exchange was the former name of the American Stock Exchange.
3 McKesson & Robbins was a New York drug manufacturer whose management defrauded stockholders through the “manufacture” of false accounting documents that were not properly reviewed by its outside auditor, Price Waterhouse.
of and responsibilities of executives and auditors.” Felker fur-
ther commented that the IHM case thrust the principles of audi-
tor independence, supervision, and management responsibility
to the forefront of the profession and fundamentally changed
the philosophy of auditing in much the same way that the more
famous 1938 McKesson & Robbins case changed the way audits
were conducted.

**Homes & Davis CPAs:** The *NYT* [1939b, p. 37] reported that
Henry Homes and Morton Davis founded the CPA firm H&D
in 1917. The firm’s offices were on Fifth Avenue, not far from
IHM’s corporate offices. IHM originally retained H&D as its
auditors in 1928 to prepare pro-forma financials used in the
upcoming March 1929 prospectus. H&D was probably selected
because of the firm’s previous connection to one of its subsidiar-
ies, Finery Silk Hosiery. In addition, the firm had a reputation
as experts in the field of textile and apparel industry accounting
*[NYT, 1923, p. E10]*. At the time of its association with IHM,
there were about 90 employees, including Marien, working for
the CPA firm.

**Raymond Marien:** McCarten [1962, p. 443] mentioned that
Marien began employment at H&D circa 1928. He was de-
scribed as a “slight, clerkish man in his late thirties [with]
intelligent eyes magnified by rimless glasses.” The *NYT* [1938b,
p. 8] reported that he neither drank nor smoked, giving the im-
pression “of conservatism and utter reliability.” The *SEC Report*
[1939, p. 711], regarding this incident, mentioned that Marien
had interviewed for the job at H&D in May 1928. This was in
response to an advertisement in the *NYT*. Marien informed the
firm that he was a graduate of the University of Montreal and
had eight years of “public accounting experience, including
industrial, mercantile, banking and brokerage assignments.” He
then reportedly told the CPA firm that he had been working for
F.A. Bergeman, a local New York bookkeeping firm, from 1920
to 1928. H&D sent a request to Bergeman and received a letter
of reference from that company indicating that Marien was “a
thoroughly competent senior accountant.” It highly recommend-
ed him for his “keen analytical ability, sound mental training,
his tact, his loyalty and the thoroughness of his work.” H&D ap-

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4 According to McCarten [1962, p. 444], Marien entered the University of
Montreal at age 14 and worked for the Canadian Ordinance Bureau during World
War I.
peared to have completed its “due diligence” and hired Marien “without further investigation.”

As it turned out, the letter from Bergeman must have been a forgery. McCarten [1962, p. 449] reported that Marien had actually been working as an auditor for Price Waterhouse and Company on the D’Orsay (a New York perfume importer) account during the time he reportedly was working for Bergeman. This is the first of many contradictory stories in the press about this case. Earlier in the decade, the NYT [1925, p. 23], reported that the Paris police had arrested one Erasmus Raymond Marien after he had jumped bail on a charge of stealing $16,000 from D’Orsay, Inc. The article implied that Marien had worked for the New York office of D’Orsay and had looted the local checking account before leaving for Paris. In fact, Marien was an auditor for D’Orsay’s CPA firm, Price Waterhouse. After his arrest in Paris and extradition to the U.S., Marien apparently plead guilty to the theft charges. The NYT [1938b, p. 8] reported that the court convicted Marien on the outstanding indictments and that he was sentenced to an “indeterminate period in jail not to exceed three years.” McCarten surmised that Marien’s relatively light sentence in this instance was the result of his explanation to the judge that he had used the money to feed his family and not on “dissipations.” It is very difficult to say without the actual records, but Marien may have stayed in the “Tombs” for about a year and a half, and probably was released from jail several months before he interviewed for the job at H&D. McCarten suggests that the New York City parole officials immediately lost track of Marien as he promptly reinvented himself by working at odd jobs and by making a minor change from his given name of Erasmus Raymond to simply Raymond.

From the available reports, it is difficult to say when H&D sent Marien to IHM’s Lansdale, Pennsylvania mill, but in March 1930, the CPA firm named Marien the senior auditor at that location after a staff resignation. One very confusing question arises with this near-permanent job appointment. Why did H&D send an employee from the New York office to Lansdale, about 120 miles from his home, when the position could have been staffed out of the firm’s Philadelphia office which had opened about four years prior to Marien’s employment [NYT, 1924, p. 40]? Marien’s own penchant for lying could have been the basis

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5 The “Tombs” is the colloquial name for Manhattan’s central holding jail.
6 The SEC Report [1939, p. 712] hinted that Marien was the accountant in charge of the first audit of IHM in June 1929.
for this decision. During the SEC hearings, Marien’s supervisor, Theodore Phillips (the person who had hired him), testified that his employee seemed to have had a better knowledge of the silk and hosiery business than he did. As it turned out, Phillips would endure most of the criticism faced by the CPA firm for his lack of supervision over Marien. Even as Marien’s misdeeds became known, Phillips later testified that “he was the best accountant he ever had…industrious conscientious and glutton for work” [WSJ, 1938e, p. 36], but he also admitted the Marien acted both as the senior accountant on the job and the supervisor “so his falsifications escaped unnoticed” [NYT, 1938h, p. 23].

After Marien’s first year in-charge of the Lansdale audit, IHM’s officials asked H&D if he could supervise the bookkeeping staff there since the company had no controller at that location. This fact, coupled with an unbridled confidence in Marien’s ability and veracity, was the beginning of a long string of problems. McCarten [1962, p. 445] comments that the company eventually entrusted him with “complete control over all its accounting matters” at the plant. By 1934, except for the mill’s cost accountant, Marien was the sole contact between the plant and the corporate offices in New York, going so far as to “certify” the materials that he personally had reviewed as the supervisor of the bookkeeping staff. Nobody at this point seemed to question this apparent conflict of interest or foresee any future difficulties with auditor independence. While Marien diligently went about his duties between 1934 and 1938, IHM’s stock price grew nearly six-fold from $7.00 to $42.00 per share [NYT, 1938b, p. 8]. McCarten [1962, p. 445] wryly noted, “...in back of this bustling prosperity stood the inspired accounting of Marien.”

The end for Marien, aged 45, came rapidly in February 1938 when Harold Greenwald, IHM’s corporate secretary, received a note from its bank in Lansdale informing him that his request to forward certain cancelled checks to Mr. Marien could not be honored because a clerk had already dispatched that month’s bank statements to the company. This mistake by the bank’s clerk turned out to be quite serendipitous. Greenwald quickly realized that he had a problem because he knew that he had never sent such a request to the bank. Upon investigation, he found the two checks, totaling $800, had been forged by Raymond Marien, their trusted accountant. After confessing

7The NYT [1938c, p. 29] reported that New York investment journalist Leo Bercow was “fired by enthusiasm” to recommend IHM’s stock based on the company’s falsified cash position.
his forgery, H&D officials fired Marien, but in a strange turn of events, IHM’s officials asked that he remain in his position to complete the annual report from the Lansdale mill that the company needed for its annual meeting in two weeks. SEC Report [1939, p. 710] noted that Greenwald “thought it improbable that there were any irregularities other than the forgeries.” He could never have envisioned the troubles that were about to beset IHM; troubles that would eventually change the fundamental philosophy behind external audits.

THE NEW YORK STATE INVESTIGATION

The NYT [1938b, p. 8] reported that IHM caught Marien forging four other checks for an additional $1,200 during the time he stayed on at the mill. This forced H&D to remove him from the position on February 8, 1938. The CPA firm dispatched an unnamed replacement from the New York office to the Lansdale mill. In the course of familiarizing himself with the accounts, the new accountant asked to compare the books at the mill with those of the corporate offices in New York. Within a short period, it was clear that $2,000 in check forgeries was not the real problem caused by Marien. By February 10, the new accountant reported to Davis, a founding partner of the CPA firm, that it appeared that there were large discrepancies between the books of IHM’s New York office and the books of the mill. McCarten [1962, p. 446] noted that, “the Homes & Davis operative discovered that the New York books, on which Interstate was paying off,8 bore only the sketchiest relation to reality.” He went on to write, “for almost four years Interstate had been basing salaries, dividends, bonuses, and general financial policy on balance-sheets which Raymond Marien had just made up out of his own head.” This revelation brought the full weight of the law down on both Marien and the company.

On February 16, 1938, the police arrested Marien at his home, an apartment in Sunnyside, Long Island, where he lived with his wife and three adolescent children.9 He was booked into the familiar confines of “The Tombs,” where he was questioned

8 In using the verbiage “paying off,” it should be noted that McCarten was a journalist and not an accountant. One would presume that he meant IHM’s payment of dividends or bonuses and not illegal gambling debts.

9 McCarten [1962, p. 444], reported that Marien married a Toronto socialite whose wealthy father disagreed with the marriage. She stood by Marien through these troubles and, after he went to prison, worked as a waitress to support her family.
by the New York State Attorney General’s Office.\footnote{In the intervening six days between discovery and Marien’s arrest, the company and its auditors informed both the Curb Market and the SEC of the problems leading to the market’s trading suspension on February 15, 1938.} McCarten [1962, p. 446] wrote that Marien soon confessed to his “juggling” the books, stating that he was “overworked and under nervous strain.” The NYT [1938d, p. 2] reported that Assistant New York Attorney General Ambrose V. McCall told his supervisors that Marien “had confessed that he had exaggerated the corporation’s assets in the public balance sheets for several years.” The newspaper went on to write that the accountant said that he “had falsified the accounts on a ‘crazy impulse’ at no profit to himself.”\footnote{According to the NYT [1938g, p. 35], Marien was in the Tombs “on default of $15,000 bail.”}

Even with a confession in hand, the Attorney General’s Office continued its investigation, seeking to learn if the officers of the mills had profited from the falsified statements. Accordingly, McCarten [1962] related that investigators from the Attorney General’s Office questioned Marien almost daily trying to understand what he had done. Marien, for his part, taunted them by “expounding on financial theory and practice,” while admitting to investigators what items he had “fudged,” and explaining that none of the problem could be corrected without his help. As it turned out, his financial manipulations were actually “second-rate” in nature. The SEC report would conclude that had someone at the company actually read the reports from Marien, the problems at the company would have been discovered, a theme parroted by many sources.

During all of the interrogations, Marien never varied his story, and he never implicated any other official at IHM. To rule out an insanity plea, an investigator sent Marien to Bellevue Psychiatric Hospital for an evaluation where he was found to have “superior intelligence” [NYT, 1938i, p. 13]. Marien even went so far as to write letters to the attorney general explaining how ignorant his investigators were. While in jail, Marien also became what modern parlance would call a “jail-house lawyer” by preparing writs of habeas corpus on behalf of other prisoners.

In May 1938, McCall, acting for the then New York Attorney General Bennet, conducted further hearings into the matter. The NYT [1938e, p. 33] reported that the first witness for these hearings was Henry I. Hann from S.D. Leidesdorf and Co., the firm that conducted the re-audit of the IHM. Hann testified that
Marien had just “added $100,000 here and $100,000 there” at the Lansdale mill and reported the following inflated income:

<table>
<thead>
<tr>
<th>Year</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1934</td>
<td>$374,966</td>
</tr>
<tr>
<td>1935</td>
<td>$195,772</td>
</tr>
<tr>
<td>1936</td>
<td>$409,127</td>
</tr>
<tr>
<td>1937</td>
<td>$951,122</td>
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</tbody>
</table>

Hann’s testimony further showed the extent of the problems when he noted that IHM would have actually shown a loss of $56,799 for 1937 without Marien’s manipulations. This forced the officers of the corporation to return all but $90,000 of the $269,000 paid in bonuses since 1934. Hann testified that the discrepancies could easily have been found by Marien’s supervisors at H&D or the officials at IHM had they done something as simple as comparing the central-office books with those of the mill. Hann ended his testimony by demonstrating that the company was still solvent despite the accounting problems.

At this revelation, it appears that the principals from the companies involved tried to distance themselves from the scandal. For example, a WSJ [1938c, p.17] article of February 18, 1938 reported Homes, the managing partner of H&D, testified that “monthly statements made up by [Marien] were sent to officers of Interstate but they had not been checked against the company’s books or the inaccuracies would have been apparent.” Next, Greenwald, IHM’s treasurer, testified that the company had no head bookkeeper (a modern controller) at the New York headquarters. Because of this odd situation, there was apparently no accountant on staff to compare the mill and corporate books. Fundamentally, Marien had kept impeccable books for the mill, but falsified the reports he sent to the New York corporate office where his manipulations would have easily been discovered if proper internal-control procedures were in place. Finally, the WSJ [1938b, p. 12] reported that Selig, the president of the IHM, testified that he had “no knowledge that the assets shown on the books were in excess of actualities.”

The WSJ [1938d, p. 13] from May 25, 1938 further enhanced the information about the fraud by reporting that IHM’s 1937 earned-surplus account was $1,721,000, but should have been $223,000 without Marien’s manipulations. The actual profits of the company between 1934 and 1937 should have been approximately $440,000 compared with the reported $1,118,000. The inflated profits led to overpayment of income taxes and an excess dividend payout of nearly $400,000 in addition to the improper bonuses paid to IHM’s officials. By 1937, the manipulations had inflated the company’s assets by nearly $1.9 million, including inflated inventory of $904,000, accounts receivable of $701,000,
and cash of $234,000. This pattern of inflated assets began in 1934 and grew as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>1934</th>
<th>1935</th>
<th>1936</th>
<th>1937</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>$391,000</td>
<td>$496,600</td>
<td>$756,000</td>
<td>$1,900,000</td>
</tr>
</tbody>
</table>

Earlier articles discussing IHM’s case failed to explain how Marien accomplished this financial manipulation other than to comment that he “wrote-up” the accounts, even though the primary manipulation turned out to be an understatement of “prime cost of sales.” The understatement eventually caused the higher than normal net-income figures. Using the information published by the WSJ [1938a, p. 11], Exhibit A below shows a composite balance sheet for IHM as of 1937 year-end. From the figures given, the assets shown on the manipulated balance sheet must have been in excess of $5 million, meaning that nearly 40% of the firm’s assets were non-existent.

In the end, New York’s investigation left the complicated process of explaining the manipulations and their consequences

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**EXHIBIT A**

**Interstate Hosiery Mills**

**Estimated Balance Sheet**

**December 31, 1937**

*Developed from materials published in the Wall Street Journal [1938a, p. 11]*

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities and Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>Accrued Taxes</td>
</tr>
<tr>
<td>$151,586</td>
<td>$30,613</td>
</tr>
<tr>
<td>Net Receivables</td>
<td>Notes Payable</td>
</tr>
<tr>
<td>575,896</td>
<td>714,500</td>
</tr>
<tr>
<td>Miscellaneous Receivables</td>
<td>Sundry Liabilities/ Accrued Taxes</td>
</tr>
<tr>
<td>942</td>
<td>50,648</td>
</tr>
<tr>
<td>Inventories</td>
<td>Sundry</td>
</tr>
<tr>
<td>1,010,177</td>
<td>37,640</td>
</tr>
<tr>
<td>Sundry</td>
<td>Non—current Serial Notes Payable</td>
</tr>
<tr>
<td>37,640</td>
<td>80,125</td>
</tr>
<tr>
<td>Patents and Goodwill</td>
<td>Capital Stock (par 20)</td>
</tr>
<tr>
<td>1</td>
<td>1,963,820</td>
</tr>
<tr>
<td>Net Plant and Equipment Depreciation and Mortgages</td>
<td>1,279,318</td>
</tr>
<tr>
<td>Deferred Charges</td>
<td>Surplus</td>
</tr>
<tr>
<td>52,699</td>
<td>266,553</td>
</tr>
<tr>
<td>Total Assets</td>
<td>Total Liabilities and Equity</td>
</tr>
</tbody>
</table>

Note: There is a $2,000 error in the reported liabilities and equity items compared to the reported total.
to the coming investigation by the SEC. In addition, New York officials could neither implicate any of IHM's officers in the fraud nor prove that Marien had financially benefited by his actions. All they had were the forged checks written on the First National Bank of Lansdale. When Marien was arraigned before Judge John Freshchi on forgery charges, he pled “not guilty,” even though he had confessed his misdeeds to both officials of IHM and his H&G employers [NYT, 1938f, p. 30].

THE SEC INVESTIGATION AND FINDINGS

As the news of the problems at IHM filtered through the New York financial community, the New York Curb Market informed the company on February 16, 1938, “that they had suspended trading in the company’s stock pending an investigation.” The NYT [1938a, p. 42] reported that the company had to postpone its annual meeting scheduled for that week and would issue a new financial report after a new audit firm (S.D. Leidesdorf and Co.) had an opportunity to complete its work. In response to the problems at IHM reported by the NYT and the WSJ over the previous four months, the regional SEC office in New York announced hearings for June 28, 1938 to determine if IHM’s stock should be permanently withdrawn from registration and trading on the Curb Exchange. Officials from the SEC became involved due to the concern that the rapid growth in IHM’s stock value resulted from the company’s misrepresentation of its financial condition. In addition, the SEC [1939, p. 711] wished to investigate if the statements in annual registration forms fairly represented the condition of the company since the SEC “had reason to believe the financial statements for the years 1934, 1935, and 1936, filed with [the] Commission...were false and misleading.” Finally the SEC’s investigation sought to determine if H&G “knew, or in the exercise of reasonable diligence, should have known,” that there were problems with IHM’s financial condition.

In November 1938, a preliminary report filed by the SEC found that both IHM and H&G were at fault for the accounting irregularities. Both the company and its CPA firm challenged the preliminary report. On December 6, 1938, all the parties involved made “oral arguments” before the SEC. This later investigation would report a cumulative $1.6 million of total accounting irregularities for 1934-1936. The corresponding $1.9 million in overstated assets reported by the WSJ [1938d, p. 13] is a cumulative balance-sheet figure that included amounts from
the unpublished 1937 IHM annual report. The SEC was not interested in these numbers because the company had never released the inflated 1937 annual report that the company corrected before it became part of the fraud. McCarten, however, detailed the differences (Exhibit B) between Lansdale mill’s correct books and the numbers sent to New York in 1937.

**EXHIBIT B**

McCarten’s [1962] Published Balances

<table>
<thead>
<tr>
<th>Account Title</th>
<th>New York Accounts</th>
<th>Lansdale Accounts</th>
<th>Difference provided by authors in italics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$386,073</td>
<td>$151,839</td>
<td>$234,234</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>1,263,543</td>
<td>561,605</td>
<td>701,938</td>
</tr>
<tr>
<td>Inventory</td>
<td>1,840,393</td>
<td>936,034</td>
<td>904,359</td>
</tr>
<tr>
<td>Total account changes</td>
<td>3,490,009</td>
<td>1,649,478</td>
<td>1,840,531</td>
</tr>
<tr>
<td>Profits</td>
<td>582,541</td>
<td>-56,759</td>
<td>525,782</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$4,859,508</td>
<td>$3,382,558</td>
<td>$1,476,950</td>
</tr>
</tbody>
</table>

The overstated cash, accounts receivable, and inventory amounts in the unpublished 1937 statements mirrored those included in the *SEC Report* [1939, p. 718]. However, the inflated profits reported by the *NYT* [1938e, p. 33] do not agree with those reported by McCarten, and the inflated asset totals reported by the *WSJ* [1938d, p. 12] do not agree with those reported by the SEC [1939]. Any attempt to reconcile the balances published by the different publications is impossible without the original documents. To make the process of the fraud even more confusing, the overstated amounts, especially for cash and receivables, were accomplished without manipulating sales.

Brink [1939, p. 21] wrote that the cash management for IHM was handled outside of the reports created by Marien since “the Vice-President received a current report on bank balances in the form of entries made in a book kept by his secretary.” This report, and not Marien’s reports, was used to monitor IHM’s cash position. A comparison of the two would have shown the overstatement problem; however, it was a moot point due to its lack of financial impact. Brink [1939, p. 21] also pointed out that a review of the receivables and sales balances included in the audit report would have indicated “a relationship that could not have been possible under the credit terms and collection record of [the company].” Again, the New York and Lansdale records were never reconciled.
The SEC Report [1939, p. 712] said that Marien’s manipulations did not take place in the actual account books of the Lansdale mill. Rather, he manipulated trial balances (the previously mentioned balance sheets) that were sent to New York to be consolidated with the reports from the other mills. As it turned out, either H&D, IHM, or both should have found these manipulations quite easily if someone had bothered to compare them with source documents. The SEC, though, did not seem too concerned with these overall problems because it concentrated on manipulation of inventories and the understated cost of goods sold, which actually were the culprits in inflating IHM’s profits. In the final analysis, the SEC probably felt that the inflated income, and its corresponding earnings per share number, did more to help boost the stock price of the firm than the inflated assets.

According to McCarten, Marien deflated the cost of goods sold by manipulating what the SEC called the “prime cost of sales.” In this case, he had to falsify raw-silk contracts and prices from the commission knitters and throwsters (producers and exporters of raw silk) with whom IHM dealt. The SEC noted that during the audit season, Marien supervised approximately 20 audit staff from the CPA firm. Each staff member was responsible for different parts of the ledger, with one conducting an audit of cash and another the confirmation of receivables while part of the staff dealt with inventories. Marien, however, conducted the valuation of the raw-materials inventory. This valuation supposedly included reviewed market reports for raw silk which he ultimately changed to have the effect of understating the cost of goods sold or, as IHM titled it, “prime cost of sales.” The SEC Report [1939, p. 714] then mentioned that Phillips, the partner on the engagement, testified that he specifically accepted Marien’s valuation of raw materials because he was not familiar with the silk market.

The overstatement of the principal balance-sheet accounts was reported by the SEC [1939, p. 708] and is shown in Exhibit C, along with author-developed analytics to help determine the process of the fraud and its possible early discovery. Exhibit C shows that the overstatement of assets in “principal balance sheet accounts,” in each year under scrutiny closely follows the gross profit overstatement. The SEC Report [1939, p. 708] indicated that it appeared Marien was increasing the asset accounts like inventory and decreasing the cost of goods sold, resulting in overstated assets and an overstated earned-surplus account.
**EXHIBIT C**

**Interstate Hosiery Mills**

**Analysis of Financial Irregularities by the SEC: 1934 to 1936**

Developed from *SEC Report* [1939, p.708]
Shaded numbers were developed by the authors.

<table>
<thead>
<tr>
<th></th>
<th>1934 Reported</th>
<th>1934 Current Year Overstatement</th>
<th>1935 Reported</th>
<th>1935 Current Year Overstatement</th>
<th>Cumulative</th>
<th>1936 Reported</th>
<th>1936 Current Year Overstatement</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>472,529</td>
<td>22,044</td>
<td>485,136</td>
<td>45,956</td>
<td>68,000</td>
<td>145,682</td>
<td>(843)</td>
<td>67,157</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>923,772</td>
<td>124,858</td>
<td>547,883</td>
<td>77,752</td>
<td>202,610</td>
<td>866,773</td>
<td>53,012</td>
<td>255,622</td>
</tr>
<tr>
<td>Inventories</td>
<td>546,876</td>
<td>195,731</td>
<td>985,603</td>
<td>5,422</td>
<td>201,153</td>
<td>1,473,392</td>
<td>349,059</td>
<td>550,212</td>
</tr>
<tr>
<td>Total</td>
<td>1,943,177</td>
<td>342,633</td>
<td>2,018,622</td>
<td>129,130</td>
<td>471,763</td>
<td>2,485,847</td>
<td>401,228</td>
<td>872,991</td>
</tr>
<tr>
<td>Sales</td>
<td>7,275,936</td>
<td></td>
<td>7,545,401</td>
<td></td>
<td>9,446,001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>6,360,452</td>
<td></td>
<td>6,856,040</td>
<td></td>
<td>8,321,667</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Profit (GP)</td>
<td>915,484</td>
<td></td>
<td>689,361</td>
<td></td>
<td>1,124,334</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GP overstatement</td>
<td></td>
<td>373,781</td>
<td></td>
<td>150,628</td>
<td></td>
<td></td>
<td>415,631</td>
<td></td>
</tr>
<tr>
<td>Total and GP Overstatement Difference</td>
<td>(31,148)</td>
<td></td>
<td>(21,498)</td>
<td></td>
<td></td>
<td></td>
<td>(14,403)</td>
<td></td>
</tr>
</tbody>
</table>

**Trends Developed by the Authors**

<table>
<thead>
<tr>
<th></th>
<th>1934</th>
<th>1935</th>
<th>1936</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales-to-Recievables</td>
<td>7.88</td>
<td>13.77</td>
<td>10.90</td>
</tr>
<tr>
<td>COGS-to-Inventory</td>
<td>11.63</td>
<td>6.96</td>
<td>5.65</td>
</tr>
<tr>
<td>Gross-Profit Ratio</td>
<td>12.58%</td>
<td>9.14%</td>
<td>11.90%</td>
</tr>
<tr>
<td>Correct GP Difference</td>
<td>7.45%</td>
<td>7.14%</td>
<td>7.50%</td>
</tr>
</tbody>
</table>
There were internal measurements besides the financial statements that should have alerted management to problems at Lansdale. First, as reported by the SEC, the sales-to-receivables ratio increased during the three years (1934-1936). Second, inventory turnover should have immediately raised some concerns because the increased inventories compared to cost of goods sold should have alerted officials to possible over-production problems. Finally, the gross-profit ratio should have been suspect as well. The corrected gross-profit ratio is the same for 1934 and 1935, and it can be assumed that the ratio would not have been that much different in 1933. Anybody making this simple calculation would have noticed that the ratio had almost doubled from one year to the next, then dropping sharply from 1934 to 1935, and rebounding in 1936. Based on the SEC report, IHM priced its products conservatively.

In the end, discovery of Marien’s forged checks and subsequent disclosure of accounting irregularities apparently occurred by accident and not through the proactive mechanisms of internal control, supervision, and proper segregation of duties. Scheduled supervisory visits to the mill and reconciling account balances at corporate headquarters with account balances at the mill would have gone a long way to mitigate the troubles caused by Marien. But again, apparently nobody checked. Such a lack of planning and supervision would be at the heart of the SEC’s criticisms of the CPA firm.

THE SEC FINDINGS AND RULING

Supervision: On March 18, 1939, the SEC published a report titled In the Matter of Interstate Hosiery Mills, Inc. The report brought the supervision of Raymond Marien (who had never testified) under close scrutiny. Phillips testified that he had acted as both Marien’s supervisor and work-paper reviewer on the IHM audit until 1931. Thereafter, Marien conducted the work without any supervision and only cursory review by Phillips, who “was more concerned with the completion of all of the items on the audit program.” He testified that he did this by “thumbing through confirmations” and reviewing schedules that would tie to later corporate consolidations.

Phillips also said that he did not review the auditor’s “summary mill cost sheets.” A review of these documents over a period would have shown a history of “prime cost ratios”¹² that

¹²The ratio is calculated by dividing the prime cost of sales (in this case, raw silk) by the mill’s related sales.
could be compared to the reported figures, similar to a modern analytical review of gross-margin percentages. Then, a deviation from the historical data should have given Phillips pause to think and react to a possible problem (see Exhibit C). According to the SEC, its investigation revealed that profits were overstated principally by understating “prime cost of sales” (modern cost of goods sold) in the profit-and-loss statements. Essentially, it appears that Marien purposely overstated the ending raw-materials inventories. This error corresponded to the understatement of cost of goods sold. How and why he did this is still unclear, but the process can be seen in the following example:

<table>
<thead>
<tr>
<th></th>
<th>Beginning Inventory</th>
<th>Add Purchases</th>
<th>Available Inventory</th>
<th>Less Ending Inventory</th>
<th>Cost of Goods sold (Prime Costs)</th>
<th>Sales</th>
<th>Gross Profit</th>
<th>Prime Cost Ratio</th>
<th>Gross Profit %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct</td>
<td>25,000</td>
<td>225,000</td>
<td>250,000</td>
<td>20,000</td>
<td>230,000</td>
<td>700,000</td>
<td>470,000</td>
<td>.3285</td>
<td>67%</td>
</tr>
<tr>
<td>Overstated</td>
<td>25,000</td>
<td>225,000</td>
<td>250,000</td>
<td>30,000</td>
<td>220,000</td>
<td>700,000</td>
<td>480,000</td>
<td>.3143</td>
<td>69%</td>
</tr>
</tbody>
</table>

Assuming all other costs of manufacturing (e.g., direct labor and various overhead accounts) were not manipulated, the overstated ending inventory decreased cost of goods sold and increased gross profit. This in turn created a downward trend in the prime-cost-of-sales-to-sales ratio and increased (or overstated) gross profits. This was the prime reason for the suspension of trading privileges at the New York Curb Market.

Even though Phillips did not review the mill reports, the trial examiners, Adrian Humphrey and Pierce Bradley, dismissed this analytic review process as a means of identifying the inventory problems because Marien’s manipulations of the trial balances hid any problem from prying eyes. Though Philips tacitly seemed to be exonerated in this area, in light of the true inventory balances at the mill as reported by production manager Charles Frankel [SEC, 1939, p. 718], the upward trend in Marien’s reported inventory balances and decreasing inventory

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13The manipulation of inventories was obviously intentional; an unintentional inventory error is self-correcting in the next accounting period providing no other errors occur.

14The SEC seems to say that the original investigation by New York State either ignored the prime-cost-ratio issue or overlooked its importance. The SEC mentioned the ratio data should have been put into evidence even though, in a contradictory comment, “there was nothing in the falsified profit figures themselves which would have aroused suspicion.”

15The fraud could have been identified earlier if the ratios had been significantly different from historical trends, but Marien just seemed to make small changes over time.
turnover accompanied by an increase in accounts-receivable turnover should have necessitated an investigation and reconciliation with actual inventories. This very likely would have uncovered Marien’s deceit sooner rather than later. Marien may have prolonged this deceit by creating some manipulations that gave the opposite effect of actually widening the ratios, making it appear that inventories were actually increasing on an historical basis. How he did this was not explained.

The SEC examiners did not, however, fully exonerate Phillips from negligence because in his lack of extensive work-paper review, he failed to notice that the trial balance, which is included as part of any set of work-papers, had obviously been manipulated with sheets replaced and doctored. Here the fraud should have been apparent to both Phillips and IHM officials because Marien did not bother to renumber the papers. Simply put, the trial-balance pages that were numbered 1 of 7, or 2 of 7, etc. were actually eight pages with Marien’s handwriting on the false page along with an incorrect footing. The expert witnesses brought in by the SEC [1939, p. 715] to review H&D’s practices actually seemed to support Phillips’ work saying it was:

...generally sufficient for a reviewer to question the accountant in charge of an audit as to anything unclear or unusual, accepting without check or verifications answers which appear to be reasonable; he does not necessarily examine the trial balance or other working papers in detail; he ascertained the existence of confirmations, but need not attempt to relate the amounts confirmed to the figures in the report he is reviewing.

The SEC examiners took exception with these practices, which were apparently quite prevalent within the auditing profession, and remonstrated that they were insufficient and “required thorough revision.” The SEC Report [1939, p. 716] then went on to say that this type of partner or supervisory review should first ensure “the integration of the original work papers with the financial statements and second a searching analysis of the ultimate facts developed in the course of the actual audit.” In a rather lengthy discussion of the lack of supervision by H&D, the trial examiner succinctly pointed out that a work-paper review that was more than just perfunctory in nature would have “exposed the irregularities in this case.”

Supervision of the staff would become a hallmark of the work of CPAs with the introduction of Generally Accepted Auditing Standards by the Committee on Accounting Procedure
in 1948. In particular, the standards of field work highlighted that “work is to be adequately planned and any assistants are to be properly supervised” [Holmes, 1951, p. 4]. Arens and Beasley [2003, p. 32] write that, “supervision is essential in auditing because a considerable portion of the field work is done by less experienced staff members.” In the case of H&D, the formal audit program used by the company made it clear that it had planned its audit of IHM well, but that the lack of supervision, due to either complacency or laziness, had caused many of the problems for the firm. Marien’s propensity for lies and deception probably exacerbated those problems.

In the end, the SEC [1939, p. 715] failed to find that the review made by Phillips, customary at H&D, “was less extensive than that ordinarily made by accounting firms.” William Werntz [1939, p. 1], the chief accountant of the SEC, commented on the IHM and McKesson & Robbins cases as “evidence of the inadequacies in the procedures and practices in auditing.” He continued in his speech before the Ohio Society of CPAs on September 7, 1939, commenting that the SEC Report “…indicated it was satisfied that an adequate review would have exposed the irregularities and if the views of the registrant’s expert witnesses were to be accepted as to the usual practice followed by [CPAs], in reviewing the work of those responsible for the opinion that the practice requires thorough revision.” An internal peer review similar to that used in modern audit firms may have found the problem of the lack of supervision on the IHM audit well before the problems came to light.16

*Independence*: Over and above the falsified documents, the trial examiners went on to question whether H&D had actually completed an “independent audit.” The SEC went on to criticize the process of the “mill auditors” completion and “certification” of the “monthly detailed audit.” It felt that these reports were not audited in the “true sense of the word,” and that H&D were false in designating the monthly reports as audited. The SEC Report [1939, p. 717] stated that the “certified reports could not accurately be described as an independent audit for the amazing extent Marien had taken upon himself in the function of bookkeeping as well as auditing for Interstate.” As discussed previously, the officials of both companies never saw any conflict

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16The SEC [1949, pp. 12-13] noted that problems of lack of supervision not only have to be addressed for junior employees, but for audit partners as well.
between Marien’s dual responsibilities as auditor and bookkeeping supervisor. Testimony stressed that the standard journal of the mill (in actuality, the mill’s ledger) was in Marien’s possession, and that he made entries in it even though officials of the CPA firm said this was against company policy. Davis, partner in the firm, testified, “if the accountant is permitted to do original work, the purpose of the audit is lost” [SEC, 1939, p. 717].

The SEC’s comments expanded a ruling from a 1937 ASR that an accountant cannot be deemed independent if he is an officer or director of the registrant or holds a significant financial interest [SEC, 1976, p. 1]. By 1950, Rule 13 of the AICPA’s rules of professional conduct reiterated this concept [Holmes, 1951, p. 35]. Almost 60 years later, Section 210 of the Sarbanes-Oxley Act bolstered independence rules by banning CPAs from auditing books that they helped prepare or accounting systems that they either designed or helped install.

In addition to the standard journal, Marien, at the request of IHM officials, also kept a “private ledger” that included accounts that management wanted kept secret from its employees. The SEC did not seem to think this was an inappropriate course of action, probably because Lansdale was a unionized mill. The problem was that Marien had control over these records with their contents (probably additional income), bypassing the income statement and posted directly to surplus after the closing of the mill’s regular books. Though H&D apparently did not know that Marien was completing original write-up work, it was obvious that IHM officials approved of this arrangement. Such work by Marien, in the opinion of the SEC, made the books of the Lansdale mill unaudited. The SEC [1939, p. 717] rebuked the practice by reporting, “Marien’s unchecked control not only renders the Homes & Davis’ [audit] certificates false as to scope of the audit made, but also imposes upon Interstate considerable responsibility for Marien’s misdeeds.” The independence issues highlighted in the IHM case were used by the SEC [1972] in a monograph to explain the guidelines and examples of situations involving the independence of accountants.

Management Responsibility: The findings against H&D did not let the officials of IHM off the proverbial hook because the SEC took exception with its review and control practices as well. For example, reports coming from Frankel, the Lansdale mill’s cost accountant, showed a different cost-per-dozen hose manufactured than Marien’s reports. These discrepancies were never investigated by the company. The SEC [1939, p. 719] concluded
that the understatement of cost by the H&D accountant resulted in an “overstatement of the average gross profit per dozen on sales amounting to about 44 percent in the annual report for 1936 and 150 percent for the first six months of 1937.” Brink [1939, p. 21] commented that the realization (production) schedules and related orders “furnished to the officers should have proved a basis for detecting the overstatements.”

Greenwald, who actually made the purchases of silk for the company, should have also seen a “red flag” had he compared his record of silk prices with Marien’s reports. These reports would also have been identified as false had there been a comparison of monthly cash and receivables reports generated in New York with those coming from Landsdale. In the SEC’s [1939, p. 719] opinion, “if management had made any effort at all to check the information in the H&D reports against that furnished by their own employees, Marien’s inventions would have been discovered as soon as they began.” In the end, the SEC found that the officers of IHM hardly read Marien’s reports, let alone made any comparisons with internally generated figures; yet, they were responsible for the ultimate content.17

In a lengthy explanation of its judgment, the SEC [1939, p. 721] concluded that:

…the fundamental and primary responsibility for the accuracy of the information filed with the Commission and disseminated among investors rests upon management. Management does not discharge its obligations in this respect by the employment of independent public accountants, however reputable.18 ...In our opinion the conduct of Interstate’s Management in respect of information which was to be the basis of reports submitted to the New York Curb Market, stockholders and the Commission indicated a complete abdication of responsibility....We conclude that the officers of Interstate were at fault in failing to discover the falsification of the financial statements filed with the Commission.19

17 The ruling did not change auditors’ relationships to third-party liability developed in Ultramares Corp v. Touche. According to the NYT [1939a, p. 30], the only reported lawsuit stemming from Marien’s fraud came from Aaron J. Funk, whose suit was over the excess bonuses that the officers eventually paid back.

18 In June 1947, the SEC’s ASR #62 used this verbiage to explain that independent CPAs should be careful in certifying “summary earnings tables” and other condensed financial-reporting devices.

19 Montgomery [1949 p. 7] used the same quote to highlight management’s responsibility for financial reporting. The quote showed the importance of the IHM case after its adjudication. However, by the next edition [Montgomery, 1957,
The responsibility of the accounting reports would be a point of contention for many years. In 1947, the SEC [ASR #62, p. 3] comments that the corollary to the IHM rulings is that, “the accountant’s certificates are required not as a substitute for management’s accounting of its stewardship but as a check of that accounting.” In the mid-1980s, the AICPA, in an effort to limit its members’ liability, included verbiage to this effect in its model audit report presented in SAS #58, Reports on Audited Financial Statements. In a more definitive manner, Title III of Sarbanes-Oxley reiterated the findings of this long-forgotten panel and made certain that corporate officials were formally responsible for the financial reports of the company under the threat of jail and fines.

The SEC Ruling: The general purpose of the SEC hearings originally was to determine if the suspension of IHM from trading on the Curb Exchange should be made permanent, resulting in formal de-listing and rescission of its right to trade shares of stock. In this part of the ruling, the SEC found that the officers of the corporation were negligent in their duties but not the CPA firm. The SEC, however, also found that in the year since the company had revealed its problems to the Curb Market, the company had made a number of changes to mitigate any future problems. For example, IHM’s prompt notification of the Curb Exchange and the SEC allowed for a re-audit of the company’s books with amendments filed on a timely basis. This seemed to convince the SEC that there was no intent of wrongdoing on the part of the officers of the corporation. Second, there was the prompt return of excess bonuses paid to the corporate officers. This showed that they were concerned with the institutional integrity of the company. Next, the company employed a corporate controller with responsibility over all three mills, allaying any SEC fears that this type of manipulation would happen again. Finally, the company made employment contracts more flexible as to bonuses as well as the removal of officers for cause. In the end, the SEC [1939, p. 721] ordered that the “registration of the common stock of Interstate Hosiery Mills on the New York Curb Exchange shall not be suspended or withdrawn.”

An editorial by John L. Carey [1939, pp. 257-258] in the Journal of Accountancy highlighted the importance of the SEC’s...
finding in this matter. Carey emphasized the SEC's supervision position, but warned that the ruling does not “relieve the independent auditor of full responsibility for the exercise of reasonable care and diligence in making his check upon management's accounting.” He goes on to write that the volume of material is too great for one person to scrutinize, and that the acts of subordinates are their responsibility, leading to a duty of “reviewing adequately the work of staff assistance as to satisfy themselves of its sufficiency.” Carey finished by indicating that the IHM case may be a “freak one,” but it is the partner’s duty “to satisfy his own mind as to the representations of his assistants are sound and reasonable, and that they are based on sufficiently extensive inquiry and investigation.” These comments were published before the American Institute of Accountants (AIA) issued standards of fieldwork, supervision, and evidential matter in the late 1940s.

AFTERMATH AND CONCLUSIONS

The issuance of the SEC Report recommending the reinstatement of IHM’s trading privileges on the Curb Exchange effectively ended the Raymond Marrien fiasco. The WSJ [1939, p. 2] reported that the Exchange allowed the trading of IHM’s stock at 1:00 p.m. on March 24, 1939. For their part, IHM’s officials were required to return the remaining $90,000 in bonuses paid to them from 1934-1936 even though this represented earnings from corrected financial statements [NYT, 1939a, p. 30]. Despite all the evidence from the hearings, this article alluded to the continuing suspicion in public circles and that IHM’s managers would be dogged by rumors that they had put Marrien up to the task of “juggling” the books. In fact, the issues surrounding IHM’s difficulties would surface again as the McKesson & Robbins fraud unfolded in late 1938. At that time, the president of the New York Society of CPAs wrote a letter to the McKesson inquiry committee stating that “recent investigations into such [accounting problems] like Interstate Hosiery Company, have revealed certain fundamental weaknesses into the preparation of financial statements of large corporations” [NYT, 1938j, p. 4].

Within a few years, the Marrien affair faded from the public eye, and the future of IHM began to brighten. For example, the 1939 financials showed profits of $2.27 per share compared with $2.15 in 1938 [NYT, 1940, p. 31]. Assets, however, were just $1.9 million after the reduction forced by the revelation that nearly five million dollars in inflated assets were reported in 1937.
IHM, however, would soon face some unusual problems as the relations between Japan and the U.S. deteriorated. In July 1941, President Roosevelt declared a *de facto* embargo on purchases from Japan which produced 85% of the world’s silk at the time. The ban, however, was not on the importation of Japanese products directly, but rather on the transfers of U.S. hard currency to that country. This forced all silk hosiery manufactures to begin using more synthetic fibers like nylon.

Even with this problem, the company successfully survived the transition to the war years, posting $4.723 per share earnings in 1941 that allowed a restructuring and a repurchase of $500,000 of outstanding shares from the market [*NYT*, 1942, p. 29]. By 1943, however, the fortunes had turned as the *NYT* [1943, p. 26] reported the sale of the Bloomfield, New Jersey plant in January of that year. This event, along with a reported 65% drop in earnings per share in 1942 due to a limited production of women’s fine hosiery because of wartime silk shortages, began the slow decline of IHM.

In 1945, the company voluntarily ceased trading on the Curb Exchange [*NYT*, 1945, p. 28], and by the early 1950s, nylon shortages in the industry due to the Korean conflict left the company financially weak. In November 1953, IHM accepted a contract to sell all of its operating assets to Green Cove Hosiery Corporation, a subsidiary of Burlington Mills. According to *Greenwald v. Commissioner*, Green Cove agreed to purchase “all of Interstate’s operating assets, real property, inventories, accounts receivable, leases, name, customer lists, goodwill.” In the end, IHM’s name was changed to I.L.H. Corporation, and the textile company was converted to an investment company.

What happened to Raymond Marien during this period? The *NYT* [1939b, p. 37] reported on October 26, 1938 that Raymond Marien reversed his plea and admitted guilt to the charge of “attempted forgery.” The court sentenced Marien to two and one-half years in prison at the Ossining Correctional Institute (Sing Sing) on November 4, 1938. The *NYT* further reported that he received this rather harsh sentence because it was his second offense for the same crime. This time he could not claim it was to help his family. The article went on to mention that Marien’s sentence for attempted forgery grew “out of his mysterious falsification of accounts and inventories of the hosiery concern.”

Other than a brief mention in the litigation entitled *Interstate Hosiery Mills v The First National Bank of Lansdale*, Marien’s trial stops with the 1939 McCarten article. In this case, IHM sued the bank to recover the losses incurred by the com-
pany from the forged checks passed by “Ray Marien” and paid by the bank. The 1940 case suggested that Marien was still in prison for passing the checks at a New York bank. McCarten [1962, p. 447] wrote that to the end, Marien maintained his defense that he was overworked and that stress made him falsify the records. However, the author mused that “overwork might more reasonably be accepted as the result rather than the cause of Marien’s hocus-pocus,” because “the work involved was just about five times what it would have been had he been keeping honest records.” Did the long “commute” to the job and days away from an apparently normal and loving family life exasperate this situation? The answer is unknown; however, McCarten [1962, p. 447] felt he could easily identify Marien’s motivation for the check forgeries as “a string of bad luck at the horse track.”

Though the name of Raymond Marien is probably unknown to most accountants, and his motivations for the fraud may never be known, its result would have far-reaching effects on the conduct of audits that have lasted into the 21st century. The auditing profession fundamentally changed its philosophy for the planning and control of audits. The related principles of auditor independence, supervision, and management responsibility for the accounting records can be traced to Marien’s actions in much the same way as the more famous 1938 McKesson & Robbins case changed the procedural conduct of audits to confirm inventories and accounts receivable. To reiterate Felker [2003, p. 45], this research pointed out that the actions of the people in the IHM case “reflect the origins [of the SEC’s] long-standing views on the role of and responsibilities of executives and auditors.”

REFERENCES


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20 Attempts to find out more about Marien’s later life through contacting the prison and using websites like Ancestry.com proved fruitless.
*Greenwald v. Commissioner* [44 T.C. 137; 1965 U.S. Tax Ct. LEXIS 93].


*Ultramares Corp v. Touche* [Court of Appeals of New York, 1931, 255 N.Y. 170, 174 N.E. 441].


Abstract: The 1930s in the U.S. were marked by an economic crisis, governmental regulatory response, and a significant audit failure. This paper examines the profession’s struggle for legitimacy during these times through its choice of narratives regarding professional ethics and independence as revealed in the national professional organization’s monthly, the Journal of Accountancy. Initially “ethics is a state-of-mind” or narrative of character was used but transitioned to a more objectively determinable narrative of technique as the decade progressed. To counter governmental regulation, the profession attempted to shift the independence discourse away from regulation of accountants to regulation of client companies.

INTRODUCTION

Occupational groups that apply specialized knowledge and skills to complex tasks and claim to serve both their own and the public’s interest seek to define themselves as professionals. A code of ethics is one of the most important attributes defining a profession [Montagna, 1974] and has been termed a “unique, dynamic record of the movement of an occupational group toward professional status” [Casler, 1964, p. 8]. This paper tempers this functionalist view of the code of ethics with the consideration that the effectiveness of such a code depends upon its reflecting cultural mores. In the process of changing the code of ethics in response to social and political events, professional groups attempt to influence members of the profession, the public, and regulators through discourse on components of its code. This discourse is in the form of narratives that allow society to define the criteria for competence and to evaluate performance. As such, narratives act as legitimating devices [Preston et al., 1995].

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The form or content of these narratives changes over time, as does the code of ethics itself, and at the beginning of the 1930s, the phrase “ethics is a state of mind” [Richardson, 1931, p. 15] encapsulated the profession’s narrative of character. Character is “a core constituent of personal identity” [Preston et al., 1995, p. 521] to be developed through moral education both at home and at school. The state-of-mind of the upright individual so developed provided the moral guidance that could be relied upon to direct his or her actions in an ethical manner. A corollary to this is that unethical behavior resided in the flawed individual instead of in the profession or its self-governance and, consequently, a limited number of rules were needed to constitute an ethics code.

By contrast, the narrative of technique uses legal and technical rhetoric in a specialized and esoteric subject as the means of legitmation. In this narrative, moral guidance is replaced with rules and professional judgment. Preston et al.’s [1995] study of U.S. accountants’ professional ethics found that a 1917 narrative invoking the legitimacy of character had shifted by 1988 to the legitimacy of technique. Their study does not address when this shift occurred; however, the transition is apparent in discourse in the American Institute of Accountants’ (AIA) official magazine, the *Journal of Accountancy* (JA), in the 1930s.

The 1930s opened in the aftermath of economic crisis caused by the stock-market crash in October 1929, followed by the passage of the Securities Act of 1933 and the Securities Exchange Act of 1934. Abbott [1988] argues that the extent of the shift from legitimacy of character to legitimacy of technique varies among professions depending upon the relative use of science and social structures for legitmation. The social structure of greatest significance is regulation, and the 1930s found the accounting profession subject to significantly enhanced regulation by the Securities and Exchange Commission (SEC). The profession was still coping with this increased regulatory attention when the fraud at McKesson & Robbins (M&R) was revealed in December 1938. This fraud was the “first time accounting practices were subject to significant public and governmental disclosure, comment, criticism and judgment” [Barr and Galpeer, 1987, p. 160]. The SEC held hearings with testimony from 12 expert witnesses from accounting firms. The repercussions from this fraud closed the decade and pushed the profession further toward the use of the narrative of technique to attain legitimacy.

Auditor independence was not a component of the code of ethics in the 1930s; however, the JA featured considerable
discourse on the subject. Similar to changing legitimacy narratives, independence was originally viewed as an integral part of character and later was conceived as an economic commodity [Williams, 1992]. Accountants of this era vigorously resisted inclusion of independence in the code not only through legitimacy narrative strategies, but also by reframing the independence discussion in terms of client regulation. Initially, reframing the discussion focused on regulating client-auditor relationships through how auditors were appointed to the engagement. In response to the M&R fraud, accountants continued reframing the discussion through advocating a variety of regulations for client companies and education for financial-statement users. Simultaneously, accountants attempted to regain legitimacy through use of the narrative of technique as articulated through enhanced accounting principles and auditing methods.

This paper does not debate whether accountants were professionals in the 1930s or not, but instead considers accountancy to be a profession. The focus is how the accounting profession constructed its narratives of legitimacy and responded to increased governmental regulation.

The remainder of this paper is organized as follows. The next section describes the primary sources and is followed by a section describing the U.S. audit environment in the 1930s, including the code of professional ethics. Sections on independence as an ethical construct in the 1930s, the engagement of auditors, and the M&R audit failure follow. The last section provides concluding comments.

THE JA AND ITS SPONSORING ORGANIZATION

Articles and editorials in the JA, the official publication of the AIA from October 1929 through 1939, are the main primary sources used. The history of the JA and that of its sponsoring organization are intertwined. While the JA had a single name change, its sponsoring organization went through multiple mergers and name changes. The JA started life as the Auditor, the journal of the Illinois Society of CPAs, in 1904 [Zeff, 1987]. The Federation of Societies of Public Accountants in the United States (the Federation), formed in Illinois in 1902, rivaled the AIA as a national organization. Robert Montgomery, in his then capacity as secretary of the Federation, acquired the journal in 1905 and renamed it the JA. The first issue was published in November 1905 after the Federation’s merger with the American Association of Public Accountants (AAPA) [Zeff, 1987].
The initial issue evinced the practitioner participation featured throughout the magazine’s history with an article by Montgomery on professional standards [Zeff, 1987]. An editorial in the initial issue proclaimed the journal’s objective as “establishment of accountancy in law and opinion as a learned profession” and noted that “much, however, still remains to be done before accountancy can take the stand on the plane of medicine and law.” The editorial closed with three requests of its readers: “(1) Subscribe; (2) praise The Journal publicly and criticize us under the cover of a two-cent postage stamp; (3) tell us how to improve The Journal” [Anon., 1905, pp. 57-59].

The AAPA was organized in 1887 and primarily operated in New York City [Previts and Merino, 1998]. Its name changed in 1916 to Institute of Accountants in the United States of America and then to the AIA in 1917 [Roberts, 1987]. Membership was concentrated in urbanized states, and its leaders were often from large, prosperous firms. Throughout the 1920s, the AIA’s emphasis on the independent audit distanced it from accountants in rural states who considered the AIA elitist [Previts and Merino, 1998]. In December 1921, accountants primarily located in the Midwest founded the American Society of Certified Public Accountants and had a bitter rivalry with the AIA “until threat of external intervention in the thirties forced unification” [Previts and Merino, 1998, p. 243]. The merger in 1936 left the AIA as the national voice for accountants in the U.S. [Montgomery, 1936]. The AIA adopted its contemporary name, the American Institute of Certified Public Accountants, in 1957 [Cook, 1987] and continues to publish the JA monthly.

By the 1930s, the magazine’s masthead included the subheading “Official Organ of the American Institute of Accountants” and the disclaimer: “Opinions expressed in the Journal of Accountancy are not necessarily endorsed by the publishers nor by the American Institute of Accountants. Articles are chosen for their general interest, but beliefs and conclusions are often merely those of individual authors.” This disclaimer appears to have been for legal purposes more than an indicator of divergent views. (Note that divergent views are “merely those of individual authors.” – emphasis added) Authors tended to come from the ranks of business, legal, and government leaders. The list of expert witnesses who testified before the SEC about the M&R audit failure (or “case” as the JA termed it) featured many prior contributors to the journal. A rebuttal article generally accompanied the rare article critical of accountants or some facet of accounting practice. The JA was used to construct narratives for
the profession and in so doing fulfilled its function as the “Official Organ” of the AIA. Far from being objective, disinterested, or independent sources, these articles are reflective of the AIA’s positions and are thus good sources for the narratives this influential segment of the profession desired to communicate in its quest for legitimation.

The initial editors of the JA were business academics [Zeff, 1987], but during the decade of the 1930s, the JA had two non-accountant, professional editors – Alphyon Richardson and John Carey. Richardson was a professional journalist who assumed the editorship in 1912 [Edwards and Miranti, 1987]. He was also the AIA secretary (chief of operations) until he retired from the post in 1930 and assumed only editorial duties [AIA, 1938]. Carey joined the staff of the AIA as assistant secretary after receiving his bachelor’s degree in English from Yale University in 1925 [Zeff, 1987]. He became the AIA secretary in 1930, and in January 1937, he became managing editor of the JA. His tenure in this position lasted until 1949, after which he became editor from 1949-1954 and publisher from 1955-1966 [Zeff, 1987]. Both editors ran unsigned editorial columns in each issue that commented on the accounting issues of the day. Whether the editor wrote each editorial is problematic in Richardson’s case as George O. May, an AIA leader and partner in Price Waterhouse, may have authored many editorials published during Richardson’s tenure as editor [Previts and Merino, 1998].

Each issue of the JA featured editorials that were often lengthy with sub-headings to denote the wide-ranging topics covered. Commissioned works on particular topics, texts of speeches delivered to various professional bodies, and problems from previously administered CPA exams were published. As the decade progressed, discussions of both proposed and enacted governmental regulation were featured. The decade closed with excerpts from expert testimony before the SEC regarding the audit failure at M&R. As the actual words of the past are cited, it should be noted that the language of the 1930s was not gender-neutral. Gender-neutral language will be used when not citing historical works. Those editorials and articles that pertain to professional ethics and the issue of auditor independence were examined for the type of narrative they employed.

THE ACCOUNTING AND AUDIT ENVIRONMENT

In the 1920s, demand for accounting services increased significantly and brought changes “in the position of the pub-
lic accountant in the community” [Olive, 1929, p. 252]. These changes were attributed to the implementation of federal income taxes in 1917, increased recognition of the importance of an independent accountant’s report for credit purposes, the merger and consolidation of small business units into larger corporations, and an increased amount of public ownership of stocks [Olive, 1929]. Montgomery [1937, p. 270], then president of the AIA, attributed these changes to the impact of World War I: “It may be urged that men killing each other has little to do with our profession, but it has much to do. It was the World War which made business cost-conscious; it was war profits which made tax saving attractive.”

In an editorial in November 1928, Richardson [1928, p. 359] noted: “The incorrigible optimism of the investing public continues. Warnings issued by authorities have no effect and the public buys and buys; stocks rise to a market value altogether out of proportion to the companies’ earnings.” The Dow Jones Industrials Index on December 31, 1928 was 300 points, but after the October 1929 crash, the Dow recovered to end the year at 248.5. While the change may seem small by contemporary standards, a drop of seven points in 1928 corresponds to a drop of 350 points when the Dow is at 10,000 [Wright, 2002].

The stock-market crash of October 1929 opened a period of economic crisis that would last through most of the 1930s. Previts and Merino [1998, p. 270] consider the impact of this period on America to be “second in importance only to the years 1776-89 (from the War of Independence to the inauguration of George Washington as president).” Auditors were not blamed for the crash, which was instead attributed to margin buying, stock speculation, and manipulation of stock prices by corporations [Nouri and Lombardi, 2009].

The crash’s economic after effects caused deep decreases in stock prices and offerings. In 1929, new capital public offerings totaled $700 million a month according to the Commercial & Financial Chronicle [cited in Haskell, 1938]. The Dow’s lowest point was 41.2 points in 1932; it peaked at 194.4 in March 1937 [Wright, 2002]. During 1936 and the first ten months of 1937, the public offerings shrunk to $100 million a month. The market contracted further in November and December of 1937 and January of 1938 to $40 million a month [Haskell, 1938]. By December 31, 1939, the Dow was at 150.2 points, a 40% decrease from its December 31, 1929 level [Wright, 2002].

Judge John Knox of the bankruptcy court, addressing the twelfth annual fall conference of the New York State Society
of Certified Public Accountants (NYSSCPA) in October 1934, reminded accountants of the impact of their work [Staub, 1936, p. 209]:

The power of an accountant for the service of good and evil is no whit less than that possessed by the lawyer and physician. The accountant’s nimbleness of mind and his dexterity of hand can reveal truth or they [sic] can conceal it. They may also furnish safeguards for the preservation and increment of the nation’s wealth; or they may be so used as to impoverish the land.

The “service of good and evil” is a rather heroic characterization of the accountant that is indicative of the lack of objective or divergent views represented in the JA. The economically stringent times did call for prudent and well-considered financial advisors, accountants among them.

Companies were “moved by the exigencies of uncertain times” [Barton, 1933, p. 91] following the 1929 market crash to adopt independent audits as a business practice. Prior to the Securities Acts of 1933 and 1934, audits were voluntary for corporations that were not in governmentally regulated industries. The NYSE required all new listings as of July 1, 1933 to have independent audits, citing investor regard of audits as a useful safeguard as the reason. A survey of the 83 largest companies in 1933 found that 87% did have audits, and those with no audits were often under governmental supervision, such as banks, utilities, or railroads. Seventy of the companies had outside auditors for an average of 18 years. To be truly valuable, the NYSE determined that audits had to be adequate in scope and the responsibility of the auditor defined [Barton, 1933].

Although there was regulatory pressure to conduct audits, accountants still had to contend with some adverse client reaction to audits even at the close of the decade [Retzlaff, 1939, p. 85]:

We are only too familiar with the attempts of some businessmen to restrict the scope of our engagements, to cut fees, and generally belittle the accountant’s work. The objectionable practice of asking for bids is an outgrowth of this attitude. To many executives, audits are just a necessary evil – why spend money for reports on last year’s operations which, after all, are ‘water over the dam?’ Were it not for bankers and stockholders, a good many audits would never be authorized.

Passage of the Securities Acts gave CPAs a “legally defined
social obligation: to assist in creating and sustaining investor confidence in the public capital markets” [Previts and Merino, 1998, p. 274]. They deem this social obligation necessary to justify the claim to professional status. Attainment of the “learned profession” status of medicine and law was a stated objective in the initial issue of the JA [Anon., 1905]. Law, medicine, and accounting are professions “in which the articles offered for sale are advice, counsel, and personal abilities” [Richardson, 1936, p. 316], with all of these based on both the technical and the intrinsic, moral components of the practitioner. As law and medicine had codes of professional ethics, accounting likewise had an ethical code as a legitimating device.

**PROFESSIONAL ETHICS AT THE DAWN OF THE DECADE**

By June 1931, the AIA had formulated ethics rules that covered 12 basic areas but did not include independence. These rules comprise the self-regulatory base line at the beginning of the decade and are the context for the narrative surrounding professional ethics that appeared in the JA. At this time, the ethics is a “state of mind” concept was still held and “was also used to limit and then justify the small number of written rules” [Preston et al., 1995, p. 518]. The areas covered by the rules are as follows (the full text appears as Appendix A) [Richardson, 1931, pp. 155-159]:

1. use of the title “Member American Institute of Accountants”
2. certification of statements which contained essential misstatements
3. prohibition of a non-AIA member from practicing in the name of a member
4. commissions
5. incompatible occupations
6. certification of statements not verified under supervision of an AIA member
7. efforts to secure legislation without notification of the Institute
8. solicitation or encroachment on the practice of another member
9. offers of employment to employees of fellow members
10. contingent fees
11. advertisements
12. participation in activities of educational institutions whose promotional activities were discreditable to the profession.
The rules are listed in the order of adoption and reflect the profession’s strong need for self-regulation instead of a systematic analysis of ethical issues. The code’s principles were commandment-like in nature as they were phrased as “thou shalt not” prohibitions. They did not attempt to imbue a higher purpose in accountants since character or the accountant’s state of mind was considered sufficient to provide moral guidance.

The ideals of a gentleman were an underlying linchpin for rationalizing the narrative of character [Haber, 1991]. The professions whose status accountants aspired to attain shared these ideals: “Every lawyer, every physician, every accountant, and every man in every other professional field should be imbued with a spirit of righteousness and the ideals of a gentleman,” Richardson [1936, pp. 313-314] stated in an “Ethics in Retrospect” editorial published in the JA’s twenty-fifth anniversary issue. However, he noted that individuals who did not possess these gentlemanly ideals were entering the profession, but that ethics could be learned:

It has been said repeatedly (and the remark, we believe, was originally made by an eminent member of the accounting profession) that ethics is a state of mind and he who has it not will never acquire it. This is not literally true, because it is well known that some of the accountants who have entered the profession without a conception of its real character have been so impressed by the importance of observing the code of ethics that they have gradually acquired a conception of the profession totally different from that which they possessed at the time of their entering in.

Character as an essential professional quality was still advanced, but the ability to learn aspects of the profession, previously deemed impossible to learn, was acknowledged.

The public interest of the profession is intertwined with the private or self-interest aspect of professional ethics [Parker, 1994]. Public-interest objectives are to protect society by safeguarding the economic interests of clients and third parties, delineate client-profession relations, and orient the profession towards social responsibility. Parker [1994, p. 509] defines private interest as “the latent motivation of ethical codes to protect the interests of the professional accounting body corporate and its individual members.” Elements of the private interest are self-control, development of self-professional authority, definition and maintenance of exclusiveness, and preservation of socioeconomic status and political power.
Only one strong, primarily public-interest rule existed in the 1931 Code – certification of statements which contained essential misstatements (#2). As bad audit work would impair an accountant's reputation, there was also a private-interest element. Just compensation of the accountant was the private-interest aspect served by rules on commissions (#4) and contingent fees (#10). These rules also had a public-interest aspect as the separation of payment from work outcome potentially reduced bias. The contingent-fee rule was passed in 1919 in response to the Treasury Department's threat to regulate the many contingency-fee-basis, self-styled “tax experts” who opened shop after the federal income tax was enacted [Previts and Merino, 1998].

The private interest of self-regulation of the profession was evidenced in the rules on solicitation or encroachment on the practice of another member (#8) and offers of employment to employees of fellow members (#9). Both rules constrained competition for clients and employees within the profession. Rule #7, efforts to secure legislation without notification of the Institute, serves the private interest of maintaining political power. It also established the AIA as the sole custodian of narrative with regulators and legislators. Exclusivity of audit services was the private interest established by the rules on use of the title “Member American Institute of Accountants”(#1), prohibition of a non-AIA member to practice as a member (#3), and certification of statements not verified under supervision of an AIA member (#6).

Maintenance of social status was the private interest served by the rules dealing with incompatible occupations (#5), advertisements (#11), and participation in the activities of educational institutions whose promotional activities were discreditable to the profession (#12). Professional advertising was condemned since law and medicine, the professions to whose social status accountants aspired, did not allow advertising. Richardson [1936, p. 315] averred that “no man who is a gentleman can claim for himself any superiority over his fellow.”

The lack of an independence rule may be explained because independence was considered “intrinsic to the character of the professional and not easily subject to formal definition” [Preston et al., 1995, p. 526]. Alternatively, Parker’s [1994] private-interest model of professional accounting ethics holds that creation of a professional mystique that renders the profession immune to evaluation by outsiders to be a crucial, private-interest goal. If only the accountant could ascertain independence, then the profession had sole claim to evaluation of a central facet of its
operation. Absence of an independence rule served the private interest of insulation from external monitoring.

INDEPENDENCE

Auditor independence was not in the code of professional ethics, but it was the subject of considerable discourse in the JA and of regulatory attention throughout the 1930s. The stock-market crash “may be viewed as a catalyst, mandating some form of action to restore confidence in the securities markets” [Merino et al., 1987]. Frederick Hurdman [1931, p. 303], then president of the AIA, attempted to improve the perception of the profession by introducing in 1931 the following resolution mandating auditor independence from the client:

Whereas the relations between a client in the form of a corporation and the auditor for that corporation should be one of entire independence, and  
Whereas it does not appear to be practicable for the auditor consistently to hold a dual relationship as auditor and executive of the corporation, and  
Whereas the public interest and confidence will best be preserved by complete separation of these two functions, therefore be it  
Resolved that the maintenance of a dual relationship of director or officer of the corporation while acting as auditor of that corporation is against the best interest of the public and the profession and tends to destroy that independence of action considered essential in the relationship between client and auditor.

This resolution, which focused on activities and relationships to remove external indicators of lack of independence, was defeated in 1932. However, it did not address the full range of incompatible relationships since ownership of an audit client was not included. The profession’s failure to pass the proposal was a strong indication of the depth of adherence to independence as character. Although not enacted, the resolution indicated an acknowledgment of stakeholders in financial reporting since public interest and confidence were cited as reasons for the adoption of an independence rule.

It is difficult to reconcile acceptability of stock ownership in a client and incompatible relationships with the independence aspect of the 1930s ethics code’s ban on commissions. The prohibition included giving commissions to secure engagements and receiving commissions from stationery purveyors and other providers of services to clients. Commissions were prohibited
as “a professional man who would give his best services must be absolutely uninfluenced by external matters” [Franke, 1930, p. 360]. Ironically, the profession acknowledged the possibility of influence or loss of independence from recommending a seller of business products but simultaneously felt an ownership interest in a client would not create a similar conflict. The narrative of character was used to explain the inconsistent positions. Hurdman [1931, p. 304] noted that bankers found a dual relationship of auditor and director, or auditor and officer, to be troubling unless “the reputation of the accountant involved was of such a high character that they felt reasonably certain the dual relationship did not work harmfully.”

Use of insider information in reorganizations, underwritings, new issues, and stock dividends was also deemed to reduce independence as it placed the accountant in the position of receiving a favor from management. Hurdman [1931, p.304] concluded that no fixed rule regarding stock ownership could be instituted but did note that the accountant “should keep in mind the necessity at all times of preserving an independent relationship and so arranging his investments that he does not take advantage of the public or permit any hoped-for gain in market values to influence in any degree his impartial review and presentation of the facts.” The amount of ownership interest should be immaterial to the accountant and was to be left to the accountant’s individual discretion. Hurdman [1931] advanced the notion that it was unlikely on a practical basis that an accountant would risk potential future earnings and goodwill by making an inappropriate decision swayed by stock ownership in a client. This view is consistent with the ethics is a state-of-mind argument of the narrative of character in which independence was an intrinsic characteristic of the accountant.

Then, as now, the SEC did not endorse independence as character but instead favored an objectively determinable approach. SEC rule 650(b) was instituted in 1934 and read as follows [Carey, 1937b, p. 244]:

The commission will not recognize any certified accountant or public accountant as independent who is not in fact independent. An accountant will not be considered independent with respect to any person in whom he has any substantial interest, direct or indirect, or with whom he is connected as an officer, employee, promoter, underwriter, trustee, partner, director, or person performing similar functions.

The AIA passed an independence standard in 1934 when
pressure from government and the financial press made its passage almost involuntary [Previts and Merino, 1979]. The AIA’s adopted version of the independence standard read [Carey, 1937b, p. 243]:

Resolved, That no member or associate shall certify the financial statements of any enterprise financed in whole or in part by the public distribution of securities if he is himself the actual or beneficial owner of a substantial financial interest in the enterprise or if he is committed to acquire such an interest.

The SEC rule was more comprehensive than that adopted by the AIA in the same year as it covered both financial and employment relationship aspects. Both substantial ownership of a client and incompatible relationships (e.g., director) were banned. The profession still endorsed independence primarily as character or a personal attribute since the dual relationship of auditor and director was not banned in the AIA standard. Neither did the profession address incompatible services offered by accountants.

The character/intrinsic-moral-attribute approach to independence and ethics was still held by accountants after the Securities Acts. After the passage of the Securities Act of 1933, Frederick Andrews [1934, p. 59] wrote:

Rarely in this country does the public accountant have such a relation to the stockholders as to give him other than a moral duty to them, and it is to his everlasting credit that he recognizes this moral duty so clearly that he is not infrequently required to suffer direct financial loss in the performance of it.

The reference to the accountant’s “moral duty” harkens back to the character narrative. A self-recognized moral duty but not a legal or professional one was acknowledged, thus illustrating the degree to which accountants urged the public to rely on their moral commitment to serve the public interest.

While specialized education enhances further technical development and thus is a necessary component of legitimacy of technique, the narrative of character was not abandoned in the classroom. Warren Nissley [1937, p. 114] lectured at the new School of Public Accountancy at Columbia University. He told his accounting students on December 8, 1936 that the most important of seven essential traits for a successful accounting career was a character with the highest ethical standards. Although a highly ethical accountant is necessary for the pro-
tection of the public interest, ethical behavior was also seen to have a private-interest aspect. It was noted that for “a public accountant to perform his work dishonestly would be to commit vocational suicide.”

The SEC did not accept this argument and held a rather skeptical attitude expressed by James Landis, then SEC chairman, in a speech: “The impact of almost daily tilts with accountants, some of them called leaders in their profession, often leaves little doubt that their loyalties to management are stronger than their sense of responsibility to the investor” [quoted in Nissley, 1937, p. 101]. This reaction had some validity as the profession articulated its disagreements with the SEC in the JA on the topics of dual auditor-director relationships and ownership interests in clients.

The profession considered that there were three acceptable exceptions to the ban on dual auditor and director status. These three exceptions were in the cases of (1) closely held corporations, (2) auditors employed by a bank to make a credit examination, and (3) non-profit organizations [Carey, 1937a]. The profession’s conclusion on the dual relationship issue was that “it can not flatly be said to be wrong in all cases, is clearly a thing to be avoided whenever possible” [Carey, 1937a, p. 245]. The individual accountant’s character was the factor that would make the dual relationships acceptable in some cases, thus involving once again the narrative of character.

Both the SEC and the AIA versions of independence banned a “substantial” financial/ownership stake in a client, but exactly what constituted “substantial” was a subject of debate. In the SEC’s second accounting release issued on May 6, 1937, the Commission stated its position on independence. In addition to reiterating its opposition to auditor dual relationships, the release indicated that stock ownership in excess of 1% of an accountant’s net worth would impair independence [Broad, 1938]. The profession did not consider this a fair rule since accountants were “recruited from those in moderate circumstances whose incomes are relatively large in relation to their fortunes” [Carey, 1937b, p. 410]. The word “independence” did not appear in the code of ethics until issuance of Opinion No. 12: Independence by the AICPA’s Division of Professional Ethics in 1961 [AICPA, 1970]. Adherence to the personal attribute approach spanned the Atlantic. Upon learning of the ownership prohibition, English accountants expressed surprise that the Americans would “permit the inference that their integrity might be impaired by the dual relationship” [Carey, 1975, p. 80].
ENGAGEMENT OF AUDITORS

While the SEC attempted to achieve auditor independence by regulating the profession, the profession’s own independence efforts were aimed at regulation of the client through altering how auditors were appointed. Debate centered on two methods of appointment of auditors, termed the director and the shareholder (or English) methods [Richardson, 1932]. The director method was predominately used in the U.S. The directors, an elected board of management, appointed and compensated the auditors without shareholder oversight. The shareholder method was a legal requirement in England where the auditors were elected at the annual meeting by the shareholders themselves. The shareholders were considered the true owners of the company and were empowered to select their independent investigator “who might almost be called also an arbiter” [Richardson, 1932, p. 321].

Unlike SEC rule 650(b)’s ban on substantial ownership and incompatible relationships, the shareholder method did not create constraints on the accountant but instead improved the auditor’s position vis-à-vis management and the board of directors. The focus of discussion shifted from regulation of the accountant to regulation of the client company without further limitations on accountants themselves. While the discourse concerning independence utilized the narrative of character, discussion regarding engagement of auditors used the narrative of technique. In an editorial in the JA, the AIA endorsed the shareholder plan in 1932. It was noted that when the auditor “is engaged by the people who are under investigation his personal independence may be jeopardized and the affairs of the corporation itself may not always be given the complete, objective analysis which they should have” [Richardson, 1932, p. 326].

Some regulatory sentiment concurred with the AIA position as expressed by Milo Maltbie, chairman of the New York Public Service Commission [Barton, 1933, p. 98]:

Auditors who are selected by officer are much less inclined to be independent than those selected by stockholders, which is the English plan. In other words, the value of an ‘independent audit’ depends more upon the standing of the auditors and the thoroughness of their investigation than upon the fact that the auditors are not upon the regular staff of the utility which they are investigating.

However, by the end of 1933, only Massachusetts and Pennsyl-
vania had enacted corporation laws that required the auditor to be selected by the stockholders. The United States Steel Corporation had voluntarily had its auditors selected by the stockholders, an action that was seen to anticipate “future emergencies by establishing the auditors as independent advisors of the stockholder, co-equal for that purpose with the management itself” [Andrews, 1934, p. 60].

The shareholder method had additional independence advantages. The auditors had the right to attend and address the shareholders meeting and state their case before being dismissed [Hunt, 1935]. Under the director method, there was no forum in which an auditor who resigned an engagement due to disagreements with management could explain the reason for the resignation [Nissley, 1937]. In England, the auditor was also obligated by law to include in his/her certificate whether or not the directors had satisfied the auditor’s needs for information [Hunt, 1935], thereby reducing the possibility of audit-scope limitations. The auditor also had a statutory right to access the books at any time and to require the officers and directors to respond to auditor inquiries [Carey, 1938].

Some of the impetus for discussion of the English method came from the profession’s desire to avoid governmental or bureaucratic control of auditing and auditors. A governmental commission to appoint auditors was viewed as unlikely to be free from political interference with a corresponding negative impact on an auditor’s independence [Hunt, 1935]. The shareholder method was also viewed as a means to improve audit quality as “the English practice of fixing the auditor’s fee at annual meetings, might tend to remove restrictions on the scope of an auditor’s examination, from which he occasionally suffers because of the management’s desire to reduce expenses” [Carey, 1938, pp. 356-357].

The appointment of auditors was revisited in expert-witness testimony before the SEC regarding the M&R case and necessary accounting and auditing reforms [Anon., 1939c]. George Bailey testified that toward the later part of the 1930s, the directors initially selected auditors but managing officers reappointed auditors subsequently [Anon., 1939c]. Witnesses generally agreed that engagement by the board of directors or an audit committee was preferable to engagement by management. This view was shared by a committee established by the NYSSCPA to examine audit procedures in the wake of the M&R audit failure [Stempf, 1939].

Samuel Broad chaired the AIA’s committee that published
Examination of Financial Statements by Independent Public Accountants in 1936 which represented authoritative audit guidance at the time of the M&R audit. He noted that the shareholder method “is not a panacea because presumably under our American practice the stockholders, who support the management, either by giving them their proxies, or by voting for their continuance, would probably confirm the auditor of the management’s choice” [quoted in Anon., 1939c p. 355-356].

THE M&R AUDIT FAILURE AND THE NARRATIVE OF TECHNIQUE

December 31, 1937 was the date of the last financial statements issued prior to the revelation of the audit failure at M&R. This fraud came to light in late 1938 and engendered considerable public outcry that startled accountants [Carey, 1939a, p. 65]:

Like a torrent of cold water the wave of publicity raised by the McKesson & Robbins case has shocked the accountancy profession into breathlessness. Accustomed to relative obscurity in the public prints, accountants have been startled to find their procedures, their principles, and their professional standards the subject of sensational and generally unsympathetic headlines.

While accountants were disconcerted by the public’s reaction, the fraud was far from a dry, technical problem. Initial reports of missing funds in the crude drug division run personally by company president, F. Donald Coster, were followed by the revelation that Coster was the false identity of a career fraudster, Philip Musica. Faced with an increase in his bail, Coster committed suicide [New York Times, 1938b]. Strong physical resemblances led to the discovery that his three brothers used aliases to collude in the fraud and that two of the brothers had significant posts at M&R [New York Times, 1938d]. Allegations of Coster’s arms dealing, bootlegging, and blackmail by several people who knew his real identity followed.

Amid the human-interest aspects was a financial fraud case that involved $19 million in fictitious assets, approximately one-fourth of the total assets shown on the financial statements [Vanasco et al., 2001]. While observation of inventory was not yet required, Price, Waterhouse & Co., M&R’s auditors, checked the “inventory of every other department with extreme diligence, [but] they accepted the inventory of the crude drug department on the statement of the company officers in charge” [New York
The crude drug unit inventories and the Canadian warehouses in which they were supposedly stored were non-existent [New York Times, 1938a]. Receivables were not confirmed as “either Coster said they were not necessary or because his success made them seem unnecessary” [New York Times, 1939a]. Coster’s files contained a copy of “private and confidential” audit instructions issued by Price, Waterhouse & Co. that “laid bare the scope and operations as well as the schedules that must be drawn up to satisfy the auditors” [New York Times, 1939b]. In testimony before the SEC, Ralph Thorn, the in-charge for the M&R audit, stated the audit instructions were given to the M&R controller as requested before each annual audit to show Price Waterhouse was not doing work for the sake of increasing the audit fee.

M&R was the first landmark case in establishing U.S. audit evidence standards [Vanasco et al., 2001] and set the precedent for the SEC’s relationship with the AIA over audit standard-setting policy. This fraud raised concerns about “the adequacy of audit procedures and financial reports at a time when post-depression investor confidence was just beginning to be restored in the stock market” [Previts and Flesher, 1994, p. 222]. While the fraud reduced the value of M&R’s stock, it did not have a depressive impact on stock-market prices as a whole [Wright, 2002].

The accounting profession’s response to negative reaction by the public and regulators was to engage in a narrative that emphasized the scientific, rational, and technical aspects of accountancy rather than the character narrative used by the profession at the start of the decade. The M&R scandal was such that a character narrative was rendered unsupportable and unlikely to be effective. The AIA’s press release stated the “case was an extraordinary one in which there was testimony indicating collusive fraud on the part of high officers and the forging of accounting records.” The press release framed the issue as “the problem of auditing was to find means of affording adequate protection at a cost which would not constitute an undue burden on honestly administered companies” [Carey, 1939b, p. 66].

Upon election as commissioner of the SEC, Jerome Frank issued a statement to the press that, “We want to be sure that the public never has reason to lose faith in the reports of public accountants. To this end the independence of the public accountant must be preserved and strengthened and standards of thoroughness and accuracy protected” [Carey, 1939d, p. 2]. Although the commissioner referred to independence as
a key issue, independence was not a key feature in the expert testimony from hearings before the SEC that the JA published in three succeeding issues starting in April 1939. Instead the profession’s experts focused on (1) implementation of a natural business year; (2) early notification of the auditor’s appointment, (3) increased explication of accounting standards, (4) a change in the form of the audit report, and (5) education of the public about what the audit signifies [Anon., 1939a, b, c]. All of these points focus on techniques rather than moral or ethical aspects of accounting practice. The client company and the public are the focus of the suggested reforms.

The natural business year is “a fiscal year which will close at that month-end which has been shown by experience over the years to be the one at which there is the lowest ebb of activity” [Anon., 1939b, p. 280]. C.O. Wellington testified before the SEC that adoption of the natural business year “would contribute as much, and perhaps more, than any other one change toward improving auditing practice” [Anon., 1939c, p. 357]. Accounts receivable and inventory fraud figured prominently in the M&R case, and it was considered that their balances would be lowest at the natural business year-end. Low balances would reduce the audit work on these accounts and reduce their percentage impact on the balance sheet.

The audit had to be completed after the closing of the books and before the stockholders’ meeting, dates that were set by the company’s charter at the suggestion of the company’s attorneys [Anon., 1939b]. Scheduling the audit at the lowest point in the business cycle, the natural business year-end, would facilitate completion of the audit in a timely manner. The natural business year was deemed to allow accountants to manage better their practices by a more even allocation of work throughout the year. Staffing would be improved as auditors would be able to maintain a more constant staff, attract staff of greater ability, and require fewer temporary staff. The cost of audits would be reduced as well [Anon., 1939c]. Enhanced credit analysis of financial statements by banks was also claimed as all companies within a particular industry would be received at a non-peak time [Anon., 1939c]. The cure-all-ills claims for the natural business year are reminiscent of the profession’s claims for the shareholder method of auditor appointment; however, neither item was likely to be the panacea the profession claimed. Both the shareholder method and the natural business year are evidence of narratives focused on technique that directed the postulated change away from the accountant’s personal and professional conduct as the
means to cope with negative publicity and calls for reforms in the accounting profession.

The need for development and codification of accounting principles was reflected in the state of financial reporting as described by John Haskell [1938, pp. 296, 298], a member of the NYSE, who noted that “the annual reports of some are so brief that they could be printed on a postage stamp.” Further, some companies “have been unable to describe their practice as to depreciation as a policy, for the simple reason that they had none.” Frank Shallenberger’s [1939, p. 267] speech in October 1939 noted “the chief obligation of the profession to the public at the present time is the clarification of accounting principles.” While clear accounting principles were important, intangible personal characteristics of the accountant were deemed important as well. “No statement of principles can replace the good judgment and integrity of the professional accountant any more than floodlights and the radio beacon can be substituted for the experience and skill of the pilot. They can both serve as great aids to him” [Haskell, 1938, p. 300].

In statements that presage the expectation gap of the 1970s, the profession lamented that the public neither understood the meaning of the audit report nor what accountants do. The lack of understanding revealed “the growing tendency of the public to expect more from the certified public accountant than he can deliver” [Stempf, 1939, p. 23]. The public, it was felt, did not understand that the financial statements are the representation of the client rather than the accountant, and “that accountants merely express an opinion – expert to be sure – rather than ascertain inexorable facts” [Seidman, 1939, p. 120]. The problem was mainly framed as an educational or publicity issue that would benefit the profession if accountants would not be asked to perform functions to which they were not prepared to attest. Usefulness in the capital markets of public understanding of the audit certificate was also recognized: “The falling tree in the forest produces no sound if there is no ear to hear it; the painter creates no art if there is no audience to appreciate it; the accountant fails in his function if he does not convey true and sound reports which can be understood and used for the purposes for which they are intended” [Wilcox, 1939, p. 152].

The narrative of technique was invoked strongly to regain the profession’s legitimacy after this large and publicity generating audit failure. While rhetoric regarding accounting principles, audit procedures, and changes to natural fiscal year-ends were featured in the SEC hearings testimony, the JA cautioned that
character was necessary as well: “It must be understood that an audit report is the professional opinion of the accountant who submits it and that its value is in direct proportion to his personal competence and integrity” [Carey, 1939d, p. 194]. Technique trumps character as competence, a component of technical qualifications and accuracy, is listed before integrity, a personal moral component of the individual accountant’s character.

CONCLUSION

Print media was a primary means of communication in the 1930s, and the JA articulated issues that concerned the profession as defined primarily by leaders of its professional organization. The monthly JA was a serious news source about the profession. Printing the text of speeches given at professional meetings increased communication with the AIA’s national membership. Both editors used their editorial platform to engage in dialog with external institutions. Carey’s editorials in particular responded to regulators’ public statements. The AIA was the surviving organization in the consolidation of professional associations that concluded in 1936, and the JA attempted to create a national, unified voice to cope with economic uncertainties and regulatory pressures.

Alteration of narrative types did not drive the editor change at the beginning of 1937, but the type of narrative changed at about the same time. Richardson’s editorship started in 1912 and covered most of the early period in Preston et al.’s [1995] study that found the narrative of character to be the profession’s legitimacy strategy. Richardson advocated the ethics is a state-of-mind tenet in his JA editorials. His JA twenty-fifth anniversary editorial noted “the very substance of professional life depends upon adherence at all times to the moral code” [Richardson, 1936, p. 313]. However, this editorial also included comments indicating a transition to the narrative of legitimacy. Carey assumed the editorship after the economic crisis of 1929 and the regulatory watershed of the Securities Acts. While Carey’s writings acknowledge elements of character, these two events made the narrative of character less viable as his editorials increasingly turned to the narrative of technique.

Transition to the narrative of technique was accelerated when the M&R audit failure occurred with its attendant negative publicity in the mainstream press. The profession reacted with discourse that focused attention away from the accountant as a person toward external professional elements, such as the
scientific and technical expertise of its members. There was no mention of any aspect of character in the portion of the nearly 1,500 pages of expert testimony before the SEC that the JA selected for publication. Expertise used on behalf of the public formed the narrative that validated the legitimacy of the profession. The profession also proposed regulatory changes to deflect regulation of the profession toward regulation of client companies. Reframing regulatory discussion diminished criticism of the profession while attempting to establish a better position for the profession with client companies.

Advocacy of the shareholder or English method of auditor appointment was the profession’s first attempt to regulate the client during the 1930s. This effort predated the SEC’s independence regulation and continued throughout the decade. Shareholders’ appointment of auditors was touted as increasing auditor independence from management. This attempt to deflect regulation of the profession had both an ethical and a technical or practical component. Alternatively stated, it had both a public and a private-interest aspect. The natural business year was the client-directed proposal that arose towards the end of the decade and was emphasized during the M&R audit failure testimony. There was no character or independence aspect in the discourse surrounding the natural business year. The proposal was framed purely as a technique that would improve audit quality. The transition from character to technique that is reflected in the discourse in the JA is also evinced in the nature of the other reforms the profession proposed.

Claims to legitimacy were on the cusp of change from the overtly moral, or principles-based, narrative of character to an objective scientific, or rules-based, narrative of technique. While character and technique are at opposite ends of the spectrum, the profession needed both character and technique to serve the public interest. To fulfill its social responsibilities, “knowledge and courage are the stuff of which accountants must be made” [Shallenberger, 1939, p. 266]. While both character and technique elements are acknowledged, the technique element, knowledge, came first and the character element, courage, was the afterthought. Carey [1939c, p. 195] wrote in an 1939 editorial that “the personal character and integrity of the auditor is the prime factor upon which the profession rests. There must, of course, be common standards of procedure, there must be definition of his legal responsibilities of the scope of his work, but the public should be constantly reminded that these are guides to better performance, not screens to conceal superficial work.”
Character and integrity were still primal, thus identifying a central problem that could not be regulated away. Abbott's [1998] contention that regulation is the most significant factor in the movement to use of the narrative of technique was evidenced in the accounting profession's experience in the 1930s. Both the 1929 market crash and the M&R fraud focused such significant regulatory attention on the profession as to render adherence to the narrative of character untenable and to require adoption of the narrative of technique.

REFERENCES


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APPENDIX A

Rules of Professional Conduct

Adopted by the Council of the American Institute of Accountants with amendments in effect June 1931 [Richardson, 1931, pp. 155-159]

(1) A firm or partnership, all of the individual members of which are members of the Institute (or in part members and in part associates, provided all the members of the firm are either members or associates), may describe itself as “Members of the American Institute of Accountants,” but a firm or partnership, all the individual members of which are not members of the Institute (or in part members and in part associates), or an individual practicing under a style demoting a partnership when in fact there be no partner or partners or a corporation or an individual or individuals practicing under a style demoting a corporate organization shall not use the designation “Members (or Associates) of the American Institute of Accountants.”

(2) The preparation and certification of exhibits, statements, schedules or other forms of accountancy work, containing an essential misstatement of fact or omission therefrom of such a fact as would amount to an essential misstatement of a failure to put prospective investors on notice in respect of an essential or material fact not specifically shown in the balance-sheet itself shall be, ipso facto, cause for expulsion or for such other discipline as the council may impose upon proper presentation of proof that such misstatement was either willful or the result of such gross negligence as to be inexcusable.

(3) No member or associate shall allow any person to practice in his name as a public accountant who is not a member or an associate of the Institute or in partnership with him or in his employ on a salary.

(4) No member or associate shall directly or indirectly allow or agree to allow a commission, brokerage or other participation by the laity in the fees or profits of his professional work; nor shall he accept directly or indirectly from the laity any commission, brokerage or other participation for professional or commercial business turned over to others as an incident of his services to clients.

(5) No member or associate shall engage in any business or occupation conjointly with that of a public accountant, which in the opinion of the executive committee or of the council is incompatible or inconsistent therewith.

(6) No member or associate shall certify to any accounts, exhibits, statements, schedules or other forms of accountancy work which have not been verified entirely under the supervision of himself, a
member of his firm, one of this staff, a member or an associate of this Institute or a member of a similar association of good standing in a foreign country which has been approved by the council.

(7) No member or associate shall take part in any effort to secure the enactment or amendment of any state or federal law or of any regulation of any governmental or civic body, affecting the practice of the profession, without giving immediate notice thereof to the secretary of the Institute, who in turn shall at once advise the executive committee or the council.

(8) No member or associate shall directly or indirectly solicit the clients or encroach upon the business of another member or associate, but it is the right of any member or associate to give proper service and advice to those asking such service or advice.

(9) No member or associate shall directly or indirectly offer employment to an employee of a fellow member or associate without first informing said fellow member or associate of his intent. This rule shall not be construed so as to inhibit negotiations with anyone who of his own initiative or in response to public advertisement shall apply to a member or an associate for employment.

(10) No member or associate shall render or offer to render professional service, the fee for which shall be contingent upon his findings and the results thereof.

(11) No member or associate of the Institute shall advertise his other professional attainments or service through the mails, in the public prints, by circular letters or by any other written word, except that a member or an associate may cause to be published in the public prints what is technically known as a card. A card is hereby defined as an advertisement of the name, title (member of the American Institute of Accountants, C.P.A., or other professional affiliation or designation), class of service and address of the advertiser, without any further qualifying words or letters, or in the case of announcement of change of address or personnel of firm the plain statement of the fact for the publication of which the announcement purports to be made. Cards permitted by this rule when appearing in newspapers shall not exceed two columns in width and three inches in depth; when appearing in magazines, directories and similar publications cards shall not exceed one quarter page in size. This rule shall not be construed to inhibit the proper and professional dissemination of impersonal information among member's own clients or personal associates or the properly restricted circulation of firm bulletins containing staff personnel and professional information.

(12) No member or associate of the Institute shall be an officer, a director, stockholder, representative, an agent, a teacher or lecturer,
nor participate in any other way in the activities or profits of any university, college or school which conducts its operations, solicits prospective students or advertises its course by methods which in the opinion of the committee on professional ethics are discreditable to the profession.
Abstract: This paper addresses and updates the challenge made by Carmona [2004] regarding the need to broaden the accounting history literature into periods, settings, and sectors outside those traditionally published in specialist journals. For this purpose, we review three international journals – the Accounting Historians Journal; Accounting, Business & Financial History; and Accounting History – and two national publications – Rivista di Contabilità e Cultura Aziendali (Italy) and De Computis (Spain) – over the period 2000-2008. The results show changes in the publishing patterns of accounting history research. We also explore whether non-Anglo-Saxon researchers have widened the settings, periods, and sectors studied from those of Anglo-Saxon researchers, thus altering the traditional focus of accounting history research.

INTRODUCTION

Accounting history is currently a dynamic area in accounting research, especially since the early 1990s [Fleischman and Radcliffe, 2005]. In particular, Carmona and Zan [2002, p. 291] considered the 1990s “a golden age” of accounting history research [see also, Fleischman and Radcliffe, 2005]. This improvement came about because of the contributions of accounting history congresses and publications, as well as the efforts of leading accounting history journals, particularly the Accounting Historians Journal (AHJ), Accounting History (AH), and Accounting, Business & Financial History (ABFH) [Carmona and Zan, 2002]. Carnegie and Potter [2000] and Anderson [2002] have also remarked on developments in this area.

In spite of this improvement, most of the literature has been by Anglo-Saxon authors devoted to Anglo-Saxon settings, centered primarily on the 19th and 20th centuries and on private organizations. Scholars from other communities, such as
Italy, France, Portugal, and Spain, have also published in those journals during the 1990s, although only moderately [Carnegie and Potter, 2000; see also, Carmona and Boyns, 2002; Carmona and Zan, 2002; Fleischman and Radcliffe, 2005; Carmona and Ezzamel, 2006]. Nonetheless, these same authors, despite the wealth of archival resources available to them, continued this focus on the 19th and 20th centuries and private organizations.

For this reason, in 2004, Carmona [2004, p. 9] pointed out the need to consider the research of non-Anglo-Saxon authors and to face up to the fact that “such a broadening of the discipline represents the most important challenge for accounting historians in the years to come.” The efforts of non-Anglo-Saxon communities to improve their publishing rates in international journals through special issues or conferences and congresses, particularly at the beginning of the 21st century, should result in a higher level of dissemination of their research. Thus, the aim of this paper is to confirm whether Carmona’s [2004] challenge has been fulfilled in the first years of the 21st century. It does so by exploring whether there has been an improvement in the publication of the work of non-Anglo-Saxon authors, and whether this research has widened the settings, periods, and sectors previously studied, thus changing the traditional focus in leading journals on accounting history.

For this purpose, we have analyzed the papers published in the international specialist journals in accounting history, namely AHJ, ABFH, and AH, over the period 2000-2008. We also reviewed two emergent national accounting history publications from Latin Europe – the Italian Rivista di Contabilita e Cultura Aziendali (RCCA) and the Spanish De Computis (DC) [Hernández-Esteve, 2008] – to compare our findings with the international journals. This enables us to extract some conclusions on the contributions of Anglo-Saxon compared to non-Anglo-Saxon research on accounting history. We have considered for the purpose of this study the U.S., the U.K., Canada, Australia, and New Zealand (NZ) as Anglo-Saxon countries, and Italy, France, Portugal, and Spain as Latin.

Our findings reflect the stability of the statistics on Anglo-Saxon authors, settings, and times centered on the 19th and 20th centuries during the period studied (2000-2008). However, there is, although at a more national level, an emerging community of non-Anglo-Saxon authors supporting new settings, periods, and sectors in international journals. This provides a new perspective on earlier findings by Carnegie and Potter [2000], improving the statistics on the number of settings and periods studied by
non-Anglo-Saxon authors. While there is growing interest by this community in international journals, collaboration appears to be an interesting means to enrich the breadth of accounting research. However, it is not common among scholars, especially those from non-Anglo-Saxon countries [Fleischman and Schuelle, 2009]. Additionally, the indexation of national journals in leading databases could help foster a broader interest in scholarship emanating from non-Anglo-Saxon sources.

The remainder of the paper is structured as follows. The second section elaborates on comments made in the introduction on the two literature streams. The third section explains the methodology by which the data were generated, while in the fourth section the results are provided. The final section contains the analysis, conclusions, and some directions for further research.

PRIOR LITERATURE

Most researchers in accounting history have traditionally been from Anglo-Saxon (English-speaking) countries, mainly the U.S., the U.K., Canada, Australia, and New Zealand (NZ). Carnegie and Potter [2000, p. 194] reviewed the papers published in AH, ABFH, and AHJ during the 1990s and concluded that there was “a relatively insular international accounting history research community,” dominated by a relatively small number of authors from the U.K, the U.S., and Australia [Anderson, 2002; Carmona, 2004; Williams and Wines, 2006]. Furthermore, they found that the settings studied were predominately Anglo-Saxon, centered on the 19th and 20th centuries. Moreover, following the taxonomy in Carnegie and Napier [1996], most of the studies were classified as “business history” or “surviving business records” with public-sector accounting viewed as a potential area for “further research” [Carnegie and Potter, 2000, p. 195]. Finally, they concluded that the authors of these published papers were unlikely to collaborate with those from other countries or regions [see also, Fleischman and Schuelle, 2009]. These are not specific features of the broader accounting discipline as Anglo-Saxon authors are present in many other accounting research areas and also populate the boards of many premier accounting journals [Sikka et al., 1995; Lee, 1997; Carmona et al., 1999].

Carnegie and Potter [2000] likewise remarked on the scarcity of literature from non-Anglo-Saxon countries despite their long accounting history traditions and plentiful, untapped
archives available in European countries (e.g., Italy, France, Portugal, and Spain), and even other continents (e.g., Asia and South America). Italian authors, for instance, have a long tradition of research in accounting history [Carmona, 2005; Giovannoni and Riccaboni, 2009]. The emergence of the Società Italiana di Storia della Ragioneria (Italian Society of Accounting History) is just one example of the productive directions accounting history study in Italy has taken [Cinquini and Marelli, 2007; Cinquini et al., 2008]. The emergence of national journals on accounting history, such as the Rivista de Contabilità e Cultura Aziendale [Carnegie and Rodrigues, 2007], is likewise encouraging. France has also added recently to accounting history research but with “relevant findings that have been published in well regarded journals” [Carmona, 2005, p. 4; see also, Boyns et al., 1997; Boyns and Nikitin, 2001]. Portuguese scholars have just begun to contribute historical output, mainly concerning the 18th and 19th centuries, and have also begun to arrive on the international circuit through organizing workshops (e.g., the 3rd EIASM Workshop on Management and Accounting in a Historical Perspective in 2002) and conferences such as the fourth Accounting History International Conference in 2005, reported by Rodrigues [2006]. Finally, Spain has taken a dynamic role in the study of accounting history, taking into account all the publications on accounting development in that country [Hernández-Esteve, 2005; Carrasco Díaz et al., 2009].

In general terms, this non-Anglo-Saxon research community has focused on periods and scenarios not aligned and mostly unknown by most Anglo-Saxon authors [Carmona and Boyns, 2002; Carmona, 2004]. Thus, scholars from Italy, France, Portugal, and Spain, in a certain sense, have widened the frontiers of accounting history research predating the 19th century and in settings far removed from the Anglo-Saxon experience. Nevertheless, the literature emanating from such communities has commonly appeared in special issues of international journals [Fleischman and Radcliffe, 2005], including the individual special issues of ABFH devoted to France, Italy, and Spain, or special issues devoted to settings unrelated to the industrial revolution as, for example, the single AH issue on religion [Carmona and Ezzamel, 2006]. However, despite these developments, the overall number and diversity of settings, periods, and sectors in publications by authors from non-English-speaking countries remained far below that of the native English-speaking countries during the 1990s. Indeed, Carmona [2004, p. 16] found that “only two of the 276 [from a sample of works authored by
non-Anglo-Saxon authors]...were published in international generalist journals.” Thus, a substantial amount of research on accounting history from these emerging areas has received little attention from the broader accounting history community [Walker, 2005] because of the lower dissemination than works published in international journals [Carmona, 2004].

METHODOLOGY

For this analysis, we selected the three specialist, international, accounting-history journals, AHJ, ABFH, and AH. For the selection of journals, we used the same criteria as did Carnegie and Potter [2000] and chose the period 2000–2008 for a better comparison of our findings with theirs.

To support our evidence for non-Anglo-Saxon scholars, we have resorted to RCCA and DC, specialist journals in accounting history from Italy and Spain respectively, as representative publications of two leading countries in accounting history research in Europe [Hernández-Esteve, 2008]. As the journal’s aims declare, RCCA is devoted to “articles on issues coherent with the scientific objectives of the Italian Society of Accounting History such as: history and development of ‘economia aziendale,’ accounting history, history of the firm, history of the accounting profession.” RCCA is therefore the principal Italian journal devoted to accounting history. In spite of this, RCCA seeks to publish articles which are not necessarily historical [Carnegie and Rodrigues, 2007] and, consequently, have not been considered in this study. In contrast, the Spanish DC “will seek contributions from prestigious accounting history authors willing to submit to the peer-review procedure.” Esteban Hernández-Esteve founded this journal in 2004 wherein most articles are written in Spanish although works written in Italian, French, German, and Portuguese have been welcomed.

As in Carnegie and Potter [2000], we have used individual articles as the unit of analysis. We did not include editorial boards, comments, or book reviews as these are not normally considered research [Carnegie and Potter, 2000; Carmona, 2004]. For each article, we considered the number of authors, the country of the affiliated institution of the authors, the date of publication, the period studied, and coauthorship if any.

Furthermore, to understand whether the frequent calls for the study of settings unrelated to private firms was answered [Carmona and Zan, 2002; Carmona and Boyns, 2002], we added a variable for the “studied sector”; that is, whether the case
under investigation belonged to the public, private, religious, or other sectors. The final category included works not clearly linked or identified with any particular period or setting.

**RESULTS**

After reviewing *AHJ*, *ABFH*, *AH*, *RCCA*, and *DC*, we selected 494 papers written by 783 authors, accumulated from more than a dozen different countries and a mean of 1.6 authors per paper. The sample averaged 55 papers per year during the period of study considered, attesting clearly to the productivity of this branch of accounting research. The tables that follow comprehensively reflect the results in this study.

Table 1 is a summary of articles that appeared in *AHJ*. We can see that this journal published 120 papers by 210 authors, or 1.8 authors per paper with an average of 13.3 articles per volume during the period 2000-2008. Looking at the authors' nationalities, we observe that most are from Anglo-Saxon countries. Specifically, 83% of the published articles were from the U.S., the U.K., or Australia. The greatest number of contributions was from the U.S., followed by the U.K. and Australia in that order. A mere 3% were from either Italy or Spain.

In terms of coauthorship, 64 of the papers had two or more authors. The majority of these are from the U.S. (66%), followed by those originating from the U.K. (20%). Eight of the 64 papers (13%) had both Anglo-Saxon and non-Anglo-Saxon coauthors, and three papers (5%) had only non-Anglo-Saxon coauthors. Most of the articles were concerned with settings in the 19th and 20th century (some 70% of all articles). In practical terms, almost nothing in this journal was set before the 18th century. Most of the articles concerned private firms (58%), while religious organizations received relatively little attention (2%).

Table 2 provides the same information for *ABFH*, with 153 articles authored by 232 authors or 1.5 authors per paper. For the years considered, there is an increase in the number of articles published in this journal each year, with the exceptions of 2003 and 2008. However, it needs to be recalled that some special issues of this journal were devoted to specific countries (Japan in 2001, Spain in 2002, Germany in 2005, and Italy in 2007) or topics (mechanization and computers in banking in 2004), helping to increase the number of articles in some years. In any case, the average number of articles per year was 17.

Regarding the nationalities of the authors, we observed that most (63%) were from Anglo-Saxon countries. The most promi-
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nent among these were authors from the U.K. (36%), followed by Australia (13%). Interestingly, Italian authors accounted for 12% of the total. This exceeded the contribution of U.S. authors (11%), primarily because of the 2007 special issue devoted to Italy. If we exclude this issue, the proportion of Italian authors falls to just 4%. Spanish authors comprised 9% of the sample, again because of the special issue in 2002. After excluding this issue, the contribution of Spanish authors would be only 3%. As shown, 61 papers were by two or more authors, representing 40% of total papers. Specifically, collaboration between U.K. authors was the most common (18 papers), followed by collaborations between Italian authors (nine papers, again the result of the 2007 special issue on Italy).

The papers published in *ABFH* were mainly devoted to 19th and 20th century material, comprising 75% of all works. This preponderance holds despite the special issues devoted to other countries which might have been expected to feature other settings and periods. The *ABFH* papers were distributed across private, public, and other institutional sectors. However, just 3% of the papers concerned religious organizations.

Table 3 provides similar information for *AH* with 112 articles in the new century, authored by 186 contributors. The average was 1.7 authors per article.¹ The number of papers published each year has grown over time, reaching a peak of 18 papers in 2006, including a special issue on religious organizations. Elsewhere, there is an average of 12.4 articles each year. As in the other journals, most authors (77%) were from Anglo-Saxon countries, led by the U.S. (31%), Australia (18%), and the U.K. (17%). Spain was the main non-Anglo-Saxon country represented in this journal (9%), followed by Italy and Portugal (4% each).

Author collaboration was also a common feature of this journal, 56 articles or 50% of the papers published, with the most frequent coauthoring teams from the U.S. (20 papers or 36% of the total), followed by U.K. and Australian authors (12% each). Spanish and NZ academics coauthored four papers (7% each), with two papers (4%) coauthored by academics from Italy and Portugal. The study periods mainly concerned the 19th and 20th centuries (about 69% of all papers). However, the journal also published papers that dealt with settings in a wide variety

¹ During the period 200-2008, *Accounting History* was published with different annual frequencies – 2000-2003, biannually; 2004-2005, tri-annually; 2006 forward, quarterly.
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of different periods. Some 63% of the papers concerned private companies and institutions, while 21% dealt with public organizations or institutions relating to state administration.

RCCA is the first of the national journals considered (Table 4). This journal first appeared in 2001, which may explain why it has published just 64 papers (eight articles per year) by 73 authors (1.1 authors per paper). However, the number of papers published each year has progressively fallen, with 11 in each of the first two years, but only five in 2007 and three in 2008. The nationality of most authors was Italian (93%) with three authors from Russia and two from Spain. In practical terms, there was no evidence of collaboration aside from Italian authors who co-authored eight of the nine papers. Clearly, its national character is reflected in such numbers.

Interestingly, most of the papers (61%) related to the 20th century despite the purported tradition and ability of Italian authors to explore other periods and settings [Carnegie and Potter, 2000; Zan, 2004; Carmona, 2005]. Studies for the period from before the 14th through the 18th centuries represent 21% of the total, with peaks in centuries earlier than the 14th and the 19th century (6% in each case). Many of the papers did not study any specific organization. Therefore, 50% of the works belonged to the “Other” category. As discussed, this category included works not clearly linked or identified with any period or setting. Leaving this aside, most of the works considered private institutions (44%); paradoxically, just one paper was devoted to religious organizations.

DC commenced in 2004 (Table 5) and has published 45 works authored by 72 authors (1.6 authors per article). The number of works per year has been relatively constant, with a peak of 11 published articles in 2005. On average, nearly ten articles were published each year, except in 2004, when there was a single issue. In terms of the nationalities of the contributors, they were overwhelmingly Spanish (accounting for 72% of all works). However, DC also published the work of Italian authors (6%), and 2% of the papers were written by academics from the U.K. Neither Australian nor U.S. authors have published in this journal. The most “international” year was 2004, with papers published from Italy, Spain, France, the U.K., and other countries.2 A clear decrease in international contributions followed

---

2This was the first issue and was comprised of articles by “excellent researchers invited by the Editorial Board” [Editorial Board of DC, 2004, note of the authors]
### TABLE 4

**Rivista di Contabilità e Cultura Aziendale**

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up to 2007 and 2008, with papers only from Spain and elsewhere in the European Union. Collaborations, led by Spanish authors (68%), represented some 42% of all papers. As in the case of RCCA, the DC statistics are clear on its national audience.

The papers in DC covered all periods considered in this study, with peaks in the 19th and 20th centuries, seemingly despite the availability of primary sources from most other centuries [Parker, 1993]. Similarly, the journal published papers from all types of institutions without any clear evidence of bias (29% from public organizations, 24% from religious organizations, 20% from private organizations, and 27% in the “Other”
TABLE 5

De Computis

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Sector studied

| Private | 1 | 1 | 5 | 1 | 9 | 20 |
| Public  | 1 | 1 | 5 | 2 | 4 | 13 | 29 |
| Religious | 2 | 4 | 1 | 2 | 11 | 24 |
| Other   | 2 | 5 | 3 | 2 | 12 | 27 |
| Total   | 6 | 11 | 10 | 9 | 9 | 45 | 100 |

Language

| English | 2 | 1 | 3 | 2 | 2 | 10 | 22 |
| Italian | 2 | 2 |      |      |      | 4 | 9 |
| French  | 1 |      |      |      |      | 1 | 2 |
| German  | 1 |      |      |      |      | 1 | 2 |
| Spanish | 1 | 7 | 7 | 7 | 7 | 29 | 64 |
| Total   | 6 | 11 | 10 | 9 | 9 | 45 | 100 |

Coauthorship

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category). One peculiar feature of this journal was that articles could be written in languages other than Spanish. Up to 2008, they were mainly in Spanish, but also in English (22%), Italian (9%), and just a few in German and French (2% each).
ANALYSIS AND CONCLUSIONS

This work has attempted to respond to the challenge by Carmona [2004] regarding the need to broaden accounting history research to consider any literature that does not fit into what Carnegie and Potter [2000, p. 194] considered a “relative insular accounting history research community.” Thus, most of the literature in the 1990s was by Anglo-Saxon authors and centered on the 19th and 20th centuries and on settings close to them, with a clear trend to the investigation of private firms. Subsequently, there have been emerging communities in Italy, France, Portugal, and Spain that have started to engage in accounting history research. These communities have widened the settings and the periods studied beyond what is considered the conventional accounting history literature.

Following the description of the three specialist, international journals constituting the sample, we have constructed Table 6, which includes absolute values and percentages into brackets to help compare these international journals with the results found in Carnegie and Potter [2000]. Regarding the nationalities of the authors, the most “cosmopolitan” journal was AH, where authors from Australia and NZ authored only 26% of the published works. The remaining authors were distributed among other countries, but mainly from the U.S. and the U.K. In contrast, AHJ was the most “provincial” journal, with 50% of its works by U.S. academics. These findings correlate to those of Fleischman and Schuele [2009] in their analysis of coauthorship in accounting history. However, it is interesting to remark that 184 authors (29%) were not affiliated with an Anglo-Saxon institution, and from this group, 126 authors were Italian, French, Portuguese, or Spanish, 20% of the total amount. In their study of the 1990s, Carnegie and Potter [2000] found that 32 of 149 papers were authored by non Anglo-Saxon authors, with less than 9% affiliated with Italian, French, Portuguese, or Spanish institutions. Therefore, there has been a significant growth in the authorship breadth of papers written on accounting history. The specialist accounting history journals are now welcoming articles from Italian, French, Portuguese, and Spanish scholars.

Most studies were clearly linked to the 20th century, 46% of all papers as per Table 6, with some 25% of articles focusing on 19th century accounting. These patterns are similar to those found in Carnegie and Potter [2000]. In practical terms, there was scant literature on the 15th century (just 1% of all works). ABFH was the leading journal publishing papers on the 20th
TABLE 6
Summary – Absolute Values (Percentages)

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<td>181 (47)</td>
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<th>Italy</th>
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<th>Portugal</th>
<th>France</th>
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<td>TOTAL</td>
<td>181 (100)</td>
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<tr>
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<td>5 (42)</td>
<td>47 (53)</td>
</tr>
<tr>
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<td>24 (26)</td>
<td>5 (42)</td>
<td>13 (15)</td>
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<tr>
<td>TOTAL</td>
<td>193 (100)</td>
<td>92 (100)</td>
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<td>88 (100)</td>
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<th>15th</th>
<th>16th</th>
<th>17th</th>
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<td>2 (2)</td>
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<td>48 (40)</td>
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<tr>
<td>ABFH</td>
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<td>4 (3)</td>
<td>13 (8)</td>
<td>38 (25)</td>
<td>77 (50)</td>
<td>14 (9)</td>
<td>153 (100)</td>
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<td></td>
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<tr>
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<td>1 (1)</td>
<td>2 (2)</td>
<td>4 (3)</td>
<td>14 (13)</td>
<td>23 (21)</td>
<td>54 (48)</td>
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<td>112 (100)</td>
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<tr>
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<td>4 (1)</td>
<td>3 (1)</td>
<td>5 (1)</td>
<td>8 (2)</td>
<td>44 (11)</td>
<td>97 (25)</td>
<td>179 (46)</td>
<td>31 (8)</td>
<td>385 (100)</td>
</tr>
</tbody>
</table>

https://egrove.olemiss.edu/aah_journal/vol37/iss2/10
century (50%). Similarly, the 19th century was mainly explored in AHJ (30%), while AH articles were distributed across all of the centuries studied, although predominately centered on the 20th century (48%). Consequently, we can conclude that, in spite of the availability of sources and the growing numbers of non-Anglo-Saxon authors, the literature expansion during the period 2000–2008 continued to focus mainly on the 19th and 20th centuries.

The settings investigated were mainly private institutions (193 of 385 papers, or 50%), followed by public-sector analyses (92 of 385 papers, or 24%). This pattern differs significantly from the Carnegie and Potter [2000] study in which the public sector accounted for only 2.68% of the total number of papers and was thus identified as an avenue for further research in accounting history. The “Other” category in Table 6 is also high, with 88 of 385 papers (23%) of the total amount. However, the religious sector continues to receive scant attention (just 3%) despite calls for studies and analysis of religious organizations and special issues on the subject [Carmona and Boyns, 2002; Carmona and Zan, 2002; Carmona and Ezzamel, 2006]. AH and AHJ had 70 papers each devoted to private organizations while ABFH championed the public sector with 28 articles. Religious organizations were also explored, mainly in AH and ABFH, with five papers each. Thus, despite the potential contribution of the religious or public sector, only the latter has received substantial attention by researchers. The majority of the studies continue to focus on private firms, with dissimilar results to those of Carnegie and Potter [2000]. As a result, we can conclude that the settings studied have widened as indicated by the growth in public-sector research.

In terms of coauthorship, the total number of joint-authored papers is 181 (or 47% of all articles). Leading the way was AHJ (64 or 35% of all published papers), followed closely by ABFH and AH (61 and 56 papers or 34% and 31%, respectively). Thus, the volume and patterns of coauthorship have changed substantially since Carnegie and Potter [2000], who found that coauthored works accounted for 50 papers out of a total of 149, or 33% of the total, distributed as follows: 43% in AHJ, 26% in ABFH, and 36% in AH.

Consequently, among the international journals, only ABFH increased the number of coauthored papers. As shown in Table 6, U.S. authors (34% of all coauthored papers) were more likely to collaborate with colleagues from their own country, followed by authors from the U.K. (20%) and Spanish and
Italian authors (6% and 7% of all collaborations, respectively). Collaborations with scholars from other countries accounted for 18% of the total, with only 7% involving Anglo-Saxon joint ventures, 4% involving a mix of Anglo-Saxon and Latin authors, and 7% collaborations of Anglo-Saxon academics with others from countries not labeled as Latin. Somewhat surprisingly, there were no collaborations between Latin authors and authors from other Latin countries. Over the period 1996–1999, Carnegie and Potter [2000] found that 50 of 149 papers were coauthored (some 33%), similar to what was found in this case. However, the mix of Anglo-Saxon with non-Anglo-Saxon authors has changed. In their study, Carnegie and Potter [2000, p.187] pointed out that, “only ten contributions (6.6%) featured authors collaborating from different countries or regions.” In this case, the statistics have improved in three instances, thus answering the call of Carnegie and Napier [2002] for greater international collaboration.

Grouping Anglo-Saxon and Latin Journals: As has been pointed out, one of the main challenges of accounting history research for the first years of the 21st century was the widening of the periods, settings, and sectors studied [Carmona, 2004]. For this discussion, we are grouping authors broadly labeled as “Latin,” as distinct from Anglo-Saxon authors to explain whether they have enlarged their contributions to the widening process of accounting history research in the international journals or whether they are resorting to a greater degree to their national journals.

In considering only the international journals, Anglo-Saxon authors have written 71% of the papers (Table 7). In comparison, Carnegie and Potter [2000] found that Anglo-Saxons authored 83% of papers over the period 1996–1999. Thus, there has been a change in the pattern of publication in these journals. Apart from Anglo-Saxon authors, Italian, French, Portuguese, and Spanish authors were the most prolific, with nearly 20% of authors publishing in the English-language journals (Table 7). In Carnegie and Potter [2000], Italian, French, Portuguese, and Spanish authors accounted for fewer than 9% of the papers considered. Thus, the purported aim of Latin authors to publish their research in international publications has been a remarkable achievement [Carmona, 2004; Cinquini et al., 2008].

As shown in Table 7, a clear relationship exists between the ethnicity of authors and the type of journal in which they publish. Accordingly, Anglo-Saxon authors published mainly in
the international journals (71%) and Latin authors, especially Italians and Spaniards, in their national journals (88%). However, it is interesting that more Latin authors have published in international journals (20%) than vice-versa (4%). Authors from Anglo-Saxon countries have chosen not to publish in national, Latin journals. The dissemination of accounting research appears to be one reason for this phenomenon [Carmona, 2006], as discussed below.

**TABLE 7**

**Anglo-Saxon vs. Latin – Percentages (%)**

<table>
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<tr>
<th>Author country/journal</th>
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<th>Latin</th>
<th>Other</th>
<th>TOTAL</th>
</tr>
</thead>
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<td></td>
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<td>Latin</td>
<td>20</td>
<td>88</td>
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</tr>
<tr>
<td>Papers</td>
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<th>Coauthorship</th>
<th>Anglo Saxon</th>
<th>Latin</th>
<th>Other</th>
<th>TOTAL</th>
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</thead>
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<td>7</td>
<td>71</td>
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<tr>
<td>Latin</td>
<td>24</td>
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<td>25</td>
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</tr>
<tr>
<td>Other</td>
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</tr>
<tr>
<td>Total</td>
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<td>26</td>
<td>12</td>
<td>100</td>
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</table>

<table>
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<tr>
<th>Period of study (century)</th>
<th>B/14th</th>
<th>14th</th>
<th>15th</th>
<th>16th</th>
<th>17th</th>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>11</td>
<td>25</td>
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<td>8</td>
<td>100</td>
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<td>1</td>
<td>6</td>
<td>6</td>
<td>8</td>
<td>13</td>
<td>44</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>11</td>
<td>22</td>
<td>46</td>
<td>9</td>
<td>100</td>
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<table>
<thead>
<tr>
<th>Studied sector</th>
<th>Private</th>
<th>Public</th>
<th>Religious</th>
<th>Other</th>
<th>TOTAL</th>
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<tr>
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<td>TOTAL</td>
<td>47</td>
<td>22</td>
<td>5</td>
<td>27</td>
<td>100</td>
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</tbody>
</table>

We can see in Table 7 that Anglo-Saxon authors were more likely to collaborate (71% of the papers) than Latin authors (25%), although the latter did collaborate mainly with colleagues from the same country. Nevertheless, and rather unfortunately, there has been scant interest in coauthorship between Anglo-Saxon and Latin authors (five papers or 2%). This represents a decrease when compared with the results in Carnegie and Potter [2000] where it was found that 10% of collaborations were between Anglo-Saxon and non-Anglo-Saxon authors. Thus, the call made by Carnegie and Napier [2002] to expand collaborations...
among authors from different countries has been met, but not by mixing Anglo-Saxon and non-Anglo-Saxon authors.

In terms of the period under study for both journal groups (see Table 7), the 20th century was the most researched period (46% for international and 44% for national journals), followed by the 19th century (25% for international journals and 13% for national journals). Nonetheless, the distribution across periods for the Latin, national journals was relatively uniform; the standard deviation for international journals (15.4) was higher than that for Latin journals (13.1). This is fairly consistent with Carnegie and Potter [2000], who also found that the 20th century was the most studied period (47%), followed by the 19th century (26%). In practical terms, there has been no change in this observation for the international journals, but it differs for the Latin, national journals which seem to have responded to Carmona’s [2004] call to widen the discipline at least temporally.

Finally, a similar observation prevails with respect to the sector studied. Both here and in Carnegie and Potter [2000], the private sector dominated, but this study differed in that public-sector statistics have markedly increased. However, the distribution of publications in Latin journals are more evenly distributed across the public, private, and religious sectors. This may not be a valid comparison since Carnegie and Potter [2000] did not include the Latin journals. Nevertheless, it has implications for the three international journals considered in both studies, given that the call for a wider literature has to some degree been answered.

In conclusion, the productivity of Anglo-Saxon academic publishing in accounting history journals, noted by Carnegie and Potter [2000], has slowly changed at the beginning of the 21st century. Production by non-Anglo-Saxon scholars in Italy, France, Portugal, and Spain has grown to 20% (7%, 3%, 2% and 8%, respectively) of total articles. The predominance of papers devoted to the 19th and 20th centuries remains. It should be remarked, however, that the variety of sector studies has changed with the growth in public-sector research, as well as an increased number and diversity of collaborations among authors from different countries. Thus, the call made by Carmona [2004] to widen the literature for different periods and settings, complemented by the urging of Carnegie and Napier [2002] to expand international collaborations, appears to have been answered.

However, the Latin, national journals offer a different perspective, with little interest in certain periods and settings and with more isolated islands in accounting research caused by
the scant number and lack of ethnic diversity in collaborations. Given that the principal authors of RCCA and DC are mainly Italian and Spanish, respectively, they have widened the settings and periods studied in their national journals. Thus, it seems that these authors find it easier to publish on different periods and settings in their national journals than in international journals, and that most publish alone or only with scholars from their own country.

These other researchers have increased publication in international journals partly because of the efforts by these journals to widen their publishing interests in accounting history research. In addition, congresses and conferences, calls for the study of other settings, countries, and periods, and other ways of promoting non-Anglo-Saxon accounting history research have played a motivating role in the increased publication of non-Anglo-Saxon academics’ research in international journals.

We should also consider the influence of the increasing popularity of publication impact indices as a key factor in this improvement, especially in countries where they may affect academic careers [Carmona, 2006]. At present, the impact and diffusion of international journals are clearly in the same league as national journals, which also have language as a barrier to dissemination. Consequently, Anglo-Saxon authors have not published to date in national, Latin journals. It would be interesting for these journals to attempt greater recognition from international indexed databases by attracting foreign authors. As a consequence, these national journals should achieve greater dissemination.

The dissemination of accounting history research is a key point in accounting research. According to Carmona [2006, p. 256], “generalist journals dominate their specialist counterparts with respect to the dissemination of accounting research.” Thus, in further research, it would be interesting to explore what is being published and who is publishing in generalist journals in accounting history to verify whether the dissemination patterns discussed by Carmona [2006] still exist.

Despite the enrichment of accounting history research with the welcoming of papers from non-Anglo-Saxon communities and the encouragement of collaboration, the gaps identified by Carnegie and Potter [2000] and Carnegie and Napier [2002] still remain. The number of collaborations among authors from the same country and among authors from different countries has grown, but narrowly. Coauthorship could provide a way to overcome these differences between Anglo-Saxon and non-
Anglo-Saxon academics. Similarly, international collaboration should improve the opportunities for cross-country comparisons in that it would contribute to rendering accounting history research genuinely international [Carnegie and Napier, 2002]. The efforts taken to widen the discipline to include different periods, settings, and sectors have just begun in the early years of the 21st century. Time will judge, if this trend continues, whether accounting history research will be seen as more valuable in the future.

REFERENCES


THE MARKET FOR LUCA PACIOLI’S 
SUMMA DE ARITHMETICA: 
SOME COMMENTS

Abstract: This paper explains why Pacioli’s exposition of double-entry bookkeeping, published in his Summa of 1494, was neither an effective reference text for merchants nor a satisfactory text for their sons. In doing so, the paper contradicts some of the points made in the interesting and wide-ranging article by Sangster, Stoner, and McCarthy in the June 2008 issue of this journal.

INTRODUCTION

In a recent paper [Yamey, 2004, p. 144], I noted that there is no evidence as to how many merchants bought copies of Luca Pacioli’s Summa de arithmetica when it was published in Venice in 1494. I suggested, however, that it is unlikely that merchants, even Italian merchants, were major purchasers of the Summa. In a more recent article, A. Sangster, G.N. Stoner, and P. McCarthy (henceforth “Sangster et al.”) conclude that Pacioli’s Summa “was intended primarily as a reference text for merchants and as a school text for their sons, and that the large majority of sales of the book were to the mercantile classes” [Sangster et al., 2008, p. 131].

Sangster et al. make specific claims for the section De computis et scripturis (henceforth De scripturis) included in the Summa. Thus, they state that the “bookkeeping treatise would have been invaluable to many merchants” in various ways [Sangster et al., 2008, pp. 128-129]. These claims rest on the assumption that De scripturis was an effective exposition of the double-entry method and guide to its practice in Venice.

It is not intended here to examine the contention that the Summa was bought predominantly by merchants when it was first published, though I am not persuaded by Sangster et al.’s interesting and wide-ranging article. My commentary on that article is, instead, focused on explaining why the De scripturis, the pioneering printed exposition of double-entry bookkeeping
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(DEB), was seriously inadequate and defective and could not have served in the various ways claimed for it in Sangster et al. A merchant who bought the *Summa* primarily for its pages on bookkeeping and accounts was likely to have been disappointed, frustrated, and perplexed.¹

**DETERMINING ACCOUNTS TO BE DEBITED AND CREDITED**

According to Domenico Manzoni, author of *Quaderno dop-pio*..., the whole difficulty of the art of DEB is to know how to discern in each transaction which account is to be debited and which to be credited (... *tutta la difficoltà de l’arte, in saper discernere in ciascuna facenda, qual sia esso debitore, e creditore...*) [Manzoni, 1540, ch. 11]. Statements to this effect appear in other publications. Thus, Roger North [1714, pp. 13, 46] wrote: “The making true Drs. and Crs. is the greatest Difficulty of Acc-ompting, and perpetually exerciseth the Judgment....Some Cas-es will happen so perplexed, that it shall be the hardest thing in the World to find out, how to enter them, without transgressing Right and Truth....” In Malachy Postelthwayt’s *Universal Dictionary of Trade and Commerce*, first published in 1751, we learn that in making entries in the journal “lies all the difficulty of account-keeping” because it is in the journal that “the debit and credit are rationally fixed and settled, according to the principles of accountanship” [Postelthwayt, 1751, art. “Mercantile Accountanship”]. And Edmund Degranges [1804, p. 7] stated that the only difficulty presented by the keeping of books by double entry is to find the debtor and creditor in each of the entries that must be made in the journal (*La seule difficulté qu’offre la tenue des livres en double partie, consiste donc uniquement à trouver le debiteur et le créancier des articles que l’on doit passer au journal.*)²

Manzoni sought to deal with that difficulty in two ways. One way was to present a rule or set of rules to guide the reader. The other way was to present a model set of account books in which were entered each of a large number of fictitious transactions,

¹My comments are confined to *De scripturis*, which is only a small part of the large *Summa*.

²Jakob Marperger [1718, p. 14], an 18th century Swedish-German polymath, wrote that the whole of bookkeeping was founded on the intelligent or skilful distinguishing of debtor and creditor: He wrote that the journal was the battlefield or theater where a bookkeeper has to display what he has learned and understood. Marperger idiosyncratically used the term *Posten-Formir-Buch* (Entries Formation Book) for “journal.”
including the entries to be made when the ledger was balanced and closed and its successor opened.

In his text, Manzoni gives a rule which, he writes, covers many of the kinds of transactions a merchant would encounter in practice. This rule is to debit the receiver or the thing received and to credit the giver or the thing given. This rule can be found, either plainly or with more elaboration, in many books on bookkeeping and accounts in the period up to 1800 (and also later).

Rules of this kind had their obvious limitations. To take a simple example, it would have been difficult to apply it to even such a simple matter as the granting of a rebate or abatement to a debtor who paid his debt before its due date. We can be sure that merchants, bookkeepers, and schoolboys were much better served by the model set of account books included as an integrated part of Manzoni’s treatise than by Manzoni’s rule and, indeed, by much of his written text.

Manzoni’s model journal and ledger show the appropriate entries for 300 transactions (including the operations necessary for closing the ledger). The transactions, grouped by type, are listed. The 300 items are numbered and keyed to the numbered entries in the journal. Each item in the list also includes the folio numbers of the two ledger accounts to be debited and credited respectively. As Flavio Pilla [1974, p. 26] has observed, the bookkeeper, when in doubt, could reach for his Manzoni and readily enlighten himself as to how to transform a mercantile operation into one or more bookkeeping entries.

Pacioli’s De scripturis does not include any general rule or rules purporting to guide the reader as to which account to debit and which to credit in a particular case. It does, of course, include in the body of the text many examples of how to treat specified transactions. But these are limited in range, and they are not shown as entries in a model set of account books reflecting a series of inter-related transactions. Moreover, there is no illustration of the entries necessary for closing a ledger and opening its successor. The text of the relevant chapter on that subject (chapter 34) is lengthy, but confused and confusing (as has been shown elsewhere). One cannot imagine the merchant or his bookkeeper reaching for his Summa (itself a heavy book) when...

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3 For a detailed discussion, see Yamey [1994, pp. 160-165]. One source of puzzle is Pacioli’s summa summarum, dealt with towards the end of chapter 34. Viganò [1968, p. 45] has shown that the summa summarum, as described by Pacioli, could not serve any practical purpose. For a detailed discussion, see Yamey [1994, pp. 163-164].
uncertain as to how to proceed in dealing with an unfamiliar type of transaction or when embarking on the ledger-closing procedure.

Jan Ympyn, a Flemish merchant who had spent several years in Italy, included some material taken from Pacioli’s *De scripturis* in his own treatise. This appeared in three versions, in Flemish (Dutch), French, and English respectively [Ympyn, 1543a, b, 1547]. He included a model set of account books in the prologue to the English version, Ympyn [1547] wrote as follows (the wording has been modernized): “And to the intent that all persons might the more easily and sooner attain the knowledge of this said science, here shall follow in this treatise many and diverse examples, by the which every man may learn how to write and convey his business due and in like manner as the young maiden learns her works of the needle out of her exemplars.”

Roger North [1714, pp. 10-11] expressed a similar point by telling the reader that he will “subjoin a fictitious Specimen, to render what is discours’d intelligible” – the “discourse” being a quite lengthy “general Scheme or Description of the Art of keeping Accompts by Dr. and Cr.”

Sangster et al. raise the question why Pacioli did not present a model set of account books as part of *De scripturis*. They suggest that Pacioli would have been able to provide one. In their view, he made a deliberate decision not to do so [Sangster et al., 2008, e.g., p. 130]. The reason was that paper and printing were expensive (especially if the material to be printed was complicated from the printer’s point of view), and that brevity and avoidance of complexity were important. Redundant or inessential material should therefore be excluded. (Sangster et al. [2008, p. 126] rather undermine the emphasis they place on space-saving and cost-saving by noting that “large books were considered to be ‘important books’ during the Renaissance, irrespective of their content …Simply having a book of this size [the *Summa*] in a personal library would impress anyone who saw it.”).

It is obviously risky to ascribe a particular motive or line of reasoning to an author on a matter on which that author did not declare himself at all. It is true that Pacioli did explain that in some places he gave only a few examples where he could have given more, and that he did this because the reader needed no

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4 Unlike Manzoni, who also used much of Pacioli’s text, Ympyn acknowledged his debt to Pacioli.
further help and he, Pacioli, did not want his treatise to be too long. But those remarks made by Pacioli refer to the avoidance of unnecessary repetition;\(^5\) they cannot be applied to provide the reason for the omission of an illustrative set of account books of the kind provided by Manzoni in his text of 1540 and by many authors in several languages in the 400 years after his publication. Had Pacioli, or his publisher, been swayed by considerations of length and cost, his decision was a serious error of judgment. The lack of a model set of account books – combined with the seriously confusing and internally inconsistent chapter 34 – rendered *De scripturis* unfit for the purposes claimed for it by Sangster et al.

In the present context, it should be noted that *De scripturis* does include an un-numbered section which appears after the last numbered chapter (chapter 36). The unnumbered section, which is not listed in the table of contents of *De scripturis*, is headed “Casi che apertiene amettere al libro de mercanti” (which is perhaps best translated loosely as “events (or cases) to be entered in the ledger”). This heading in fact gives no indication of what is in the section. None of the numbered chapters of the text refers to the section in question; and, in turn, the section does not refer the reader to any of the numbered chapters.

The section informs the reader which accounts are to be debited and credited in each of a number of categories of transaction. This would undoubtedly have been helpful to a reader who consulted it (as has been explained above). However, what would have been a useful, though limited, guide is rather spoiled by a presentation that is not reader-friendly and is long-winded in places. In all, the apparently free-standing section, the existence of which is not sign-posted in the main text, is a bit of a puzzle – a part of a more significant puzzle (discussed in the penultimate section below).

**IMPORTANT OMISSIONS FROM THE SUMMA**

According to Sangster et al., the *Summa* was intended primarily as a reference text for merchants and as a school text for merchants.

\(^5\) Sangster et al. [2008, p. 114] refer to a passage in *De scripturis* in which Pacioli is said to have written the following: “For if we wanted to give you an example of all the ways in which merchants do business...this would make our treatise very long...”. However, this quotation is misleading. Pacioli’s text makes it clear that he was referring to differences in the weights and measures and the names for commodities customarily used in different trading centers. He was not referring to differences in types of business transaction or to different bookkeeping treatments of particular transactions.
their sons. It is by no means obvious that an exposition directed at experienced merchants would also serve as an introductory basic text for inexperienced young beginners. As already explained, my view is that *De scripturis*, at least, could not have served either purpose effectively.

Additionally, however, *De scripturis* can be criticized as a reference text for merchants because it does not include any mention, let alone discussion, of topics on which even some experienced merchants might have welcomed guidance or reassurance. Excluded topics include collective (or compound) journal entries; closing and reversed opening balance accounts; inter-locking ledgers (such as a general ledger and a secret or private ledger); so-called *nosto* and *vosto* accounts; and the double index to the ledger. Further, only simple transactions involving bills of exchange are considered (in chapter 24). Again, there is no mention of the treatment of doubtful debts, or of the closing balance to be placed on a merchandise account (for the remaining unsold stock), or the account of a fixed asset such as a ship, furniture and fittings, or implements. (The late Raymond de Roover [1944, p. 398] drew attention to various features of accounting to be found in practice in 15th century Italy which are not mentioned in Pacioli’s *De scripturis*. He attributed their absence to the fact, as he believed it to be, that Pacioli’s *Summa* “simply incorporated...a handbook on bookkeeping which was used by beginners in the Venetian schools....Such a work could hardly be expected to attempt complicated problems which beginners would be unable to grasp.”)

6The heading of chapter 13 of *De scripturis* announces that the chapter deals, *inter alia*, with the index (alphabet) to the ledger, “single and double.” In fact, the only mention of the double index consists of four words of an obviously uncompleted sentence: “*E del dopio alfabeto*.” (“And of the double index.”) Ympyn [1543a, b] provided the double index to the ledger in his model set of account books. For further details on the double index, see Yamey [1994, pp. 121-122]. There is another uncompleted sentence in *De scripturis*. Chapter 26 deals, *inter alia*, with the accounts to be kept in the merchant’s ledger when he sends an agent on a voyage to trade with the merchandise he has entrusted to him. The chapter explains what is to be done when the agent returns and settles with the merchant. The chapter – and the page – ends with the words: “*E sei tuo commesso fosse in le bande.*” The reader is left in the dark as to how the merchant should proceed in his accounts when his agent is “in fetters,” presumably that is, when he fails to return because he has been taken captive or imprisoned. The intriguing question of the appropriate accounting treatment of the agent’s misfortune is left in the air – possibly because several lines of type had been mislaid or had not been set. Whatever the reason for the error, the proof reader failed to notice the lacuna in the text.
CONFUSIONS WITH JOURNAL ENTRIES

Pacioli wrote that he would discuss *el modo di Vinegia* in *De scripturis*. He did not indicate which particular features distinguished the practice of bookkeeping and accounts in Venice from that in Florence, Milan, or elsewhere in Italy. In fact, while there were differences, for example, in the form of journal and ledger entries, there do not seem to have been more significant differences; for example, differences in treatment that would affect the balance on a profit-or-loss account of the firm.

In *De scripturis*, Pacioli identifies only one specific feature which he explicitly associated with Venice. It is the form or style of journal entry. However, the discussion and illustrative material in the relevant chapters 11 and 12 (dealing with the journal) would have puzzled and frustrated a reader who was not already familiar with the form of the journal entry in the Venetian style.

The “Venetian” form was as follows. Take the case of the entry for the receipt of cash of 100 ducats from a debtor Antonio Bassano. The entry would be:

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Per Cassa // A Antonio Bassano
     100 duc.
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The term “Per” indicated the ledger account to be debited; the two slanting lines separated the debit and credit elements of the entry; and the “A” indicated the ledger account to be credited. (Manzoni and others explained that there were two slanting lines because in each case two ledger accounts were affected.) This style of entry can be seen in some surviving journals as well as in several treatises, including that of the Venetian Manzoni.

The treatment in *De scripturis* begins promisingly. The role of “Per” and “A” is explained correctly in chapter 11. But then what should be the two oblique lines (the *due virgolette*) are shown as two *vertical* lines. This itself is obviously of little moment. But a reader would have been puzzled to find that the specimen journal entries in the next chapter (chapter 12) have neither the incorrect vertical nor the correct oblique lines. Instead, the two elements of each entry are separated by colons. Translators of *De scripturis* have tended to be puzzled by all this.

The first specimen journal entry in chapter 12 would have

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7 In 15th century Tuscany, *Vinegia* tended to be used instead of *Venezia*.
8 The Venetian-style journal entry, its treatment in *De scripturis*, and the difficulties translators have had with it are discussed in detail in Yamey [1976, pp.156-161].
increased the reader’s confusion or puzzlement. Its appearance is quite different from that of the specimens that immediately follow it. No explanation for this difference is given in chapter 12. Further, no reference is made to chapter 14 in which there is an explanation; namely, that the first specimen entry shown in chapter 12 purports to show how the entry would look after its content had been posted to [i.e., entered in] the two designated accounts in the ledger. But even then, the specimen does not accord with the description in chapter 14. Instead of two oblique cancellation lines being shown drawn across the body of the entry, the words linea del die dare (i.e., line of debit) are printed vertically on the left-hand side. (There is no corresponding line, for the credit, on the right-hand side.)

It is not known whether Pacioli, the proof reader, or the printer was responsible for the muddle and poor presentation. The present somewhat lengthy digression does, however, lead one to question the view expressed by Sangster et al. that De scripturis would have enabled a merchant to instruct his bookkeeper how to switch to the “Venetian method” or, more generally, that it would have standardized the practice of DEB.

THE “TAILPIECE”

Sangster et al. [2008, p. 114] state that the inclusion of a set of model account books in De scripturis would have “considerably increased the complexity, and therefore the cost, of the typesetting and required many costly wood blocks to be carved or metal plates to be cast.” They continue: “It is unlikely to have been an accident that the journal entries shown on the last page [of De scripturis] appear after all the text.”

Sangster et al. are referring here to a short section that appears right at the end of De scripturis (henceforth referred to as the “tailpiece”). It is neither numbered nor listed in the table of contents to De scripturis. It is not referred to in any chapter of De scripturis, and it does not refer to any chapter.9 It seems to be detached from the rest of De scripturis. Moreover, the tailpiece does not show specimen journal entries. It consists of four

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9 In an earlier publication [Yamey, 1994, pp. 128-129], I wrote that Pacioli did refer to the tailpiece, in chapter 15 of the text. Near the beginning of that chapter, he drew the attention of the reader to the example of the ledger entry at the end (e anco in fin di questo harai exemplo). I interpreted fin di questo (“end of this”) to mean end of De scripturis. Exemplo is singular; there are several “examples” in the tailpiece. The correct reading of fin di questo is “end of this chapter.” Penndorf (1933, p. 111) has the correct reading.
ledger accounts in which entries are shown for five inter-related transactions. (The accounts would have stood out more clearly as accounts if the printer had left some space or had inserted a horizontal line after each of the accounts.)

What is relevant here is that the section and its location cannot have the significance Sangster et al. ascribe to them. Chapter 15 and several later chapters include several examples of entries in ledger accounts. Additional examples were unnecessary. Moreover, the examples did not involve complex typesetting or special type, and took up little space. This is also true of the specimen ledger accounts printed in the tailpiece.

What is more, the examples of ledger entries in the tailpiece are likely to have puzzled readers. This is so because the entries are different in style from those in the main text. The form and content of the tailpiece ledger entries are Tuscan, not Venetian. Neither the text nor the tailpiece draws attention to this fact. There is also no explanation why Tuscan-style entries are included in a treatise dealing purportedly with el modo di Vinegia.

Professor Esteban Hernández-Esteve [1994, pp. 77-80] has comprehensively analyzed the differences between the Venetian style of ledger entries (as in chapter 15) and the Tuscan style (as in the tailpiece). As his article is in a readily accessible journal, there is no need to cover the subject here. Hernández-Esteve concludes that the inclusion of the tailpiece supports his view that De scripturis is not a single, unified work but seems to consist of (at least) two distinct, discrete parts. I agree with his analysis and its conclusion.

**CONCLUSION**

The De scripturis is replete with puzzles and has many weaknesses. But this harsh-seeming assessment does not, of course, detract from the prominent place of Pacioli and De scripturis in the history of accounting or from the assured place of Pacioli and the Summa in the history of mathematics.

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