# ACCOUNTING HISTORY RESEARCH: TRADITIONAL AND NEW ACCOUNTING HISTORY PERSPECTIVES \*

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## **RESUMEN**

Existe un debate en historia de la contabilidad acerca de las distintas formas cómo los materiales históricos deben ser recopilados, interpretados, analizados y, finalmente, sobre la forma cómo los mismos deben ser redactados. En cierta manera, el centro de este debate descansa en torno a la eternal polémica acerca de la "objetividad/subjetividad" de la investigación histórica. Así, mientras que la corriente más ortodoxa sostiene la idea de una interpretación objetiva de la historia, el enfoque alternativo defiende una interpretación de carácter crítico. En este artículo, nosotros pretendemos hacer una valoración del debate entre los enfoques tradicional y de nueva historia de la contabilidad. En concreto, pretendemos contrastar la aproximación tradicional y de nueva historia de la contabilidad en torno a cuatro dimensiones: qué es lo que cuenta como contabilidad, el debate entre orígenes y genealogías, los distintos papeles y roles que se atribuyen a la contabilidad, y las fuentes de historia de la contabilidad. En este artículo examinamos las diferencias entre la historia tradicional de la contabilidad y la nueva historia en torno a cada una de estas dimensiones, concluyendo que a pesar de las posiciones tan diversas que sostienen, las dos aproximaciones han contribuido sustancialmente a elevar el rigor investigador en historia de la contabilidad, así como a fontalecer el programa de investigación en esta disciplina.

### **ABSTRACT**

There is an ongoing debate in accounting history around the ways in which historical material should be gathered, interpreted, analysed and written. Lying at the heart of this debate is the perennial concern with 'objective/interpretive' modes of investigation. The mainstream orthodoxy of accounting history embraces the 'objective' view of history, whereas the alternative approach promotes interpretive and critical stances. The aim of

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this paper is to provide an overview of the achievements of NAH. This is attempted here by contrasting NAH with TAH along four dimensions: what counts as accounting; origins versus genealogies; roles of accounting; and sources of historical material. Under each of these dimensions, we show the differences between the two approaches and comment on the extent to which NAH may contribute to the study of accounting history. We argue that, although TAH and NAH approaches exhibit fundamental differences, both contribute significantly to the field, and indeed to the sharpening of each other's research agenda.

#### PALABRAS CLAVE:

Nueva Historia de la Contabilidad, Historia Tradicional de la Contabilidad, Investigación Archivística KEY WORDS:

New Accounting History, Traditional Accounting History, Archival Research

... more and more historians are coming to realize that their work does not reproduce 'what actually happened' so much as represent it from a particular point of view. To communicate this awareness to readers of history, traditional forms of narrative are inadequate. Historical narrators need to find a way of making themselves visible in their narrative, not out of self-indulgence but as a warning to the reader that they are not omniscient or impartial and that other interpretations besides theirs are possible (Burke, 1992, p. 239)

... all histories start with the curiosity of a particular individual and take shape under the guidance of her or his personal and cultural attributes. Since all knowledge originates inside human minds and is conveyed through representations of reality, all knowledge is subject-centered and artificial, the very qualities brought into disrespect by an earlier exaltation of that which was objective and natural. (Appleby, Hunt & Jacob, 1995, p. 254)

These two quotes taken from recent history books are illustrative of the debates which are taking place now within the discipline of history. They also have import for, although by no means fully reflect, recent debates in accounting history. For within the discipline of history itself and within the field of accounting history there has been a lively debate centred around the ways in which historical material should be gathered, interpreted, analysed and written (e.g., Miller et al., 1991; Miller and Napier, 1993; Tyson, 1993, 1995; Carnegie and Napier, 1996; Hernández Esteve, 1996b). Lying at the heart of this debate is the perennial concern with 'objective/interpretive' modes of investigation which is captured by the above two quotes. The mainstream orthodoxy of accounting history (Traditional Accounting History, TAH) embraces the 'objective' view of history, whereas the alternative approach (New Accounting History, NAH) promotes interpretive and critical stances.

The aim of this paper is to provide an overview of the achievements of NAH. This is attempted here by contrasting NAH with TAH along four dimensions: what counts as accounting; origins versus genealogies; roles of accounting; and sources of historical material. Under each of these dimensions, we show the differences between the two approaches and comment on the extent to which NAH may contribute to the study of accounting history. We argue that, although TAH and NAH approaches exhibit fundamental differences, both contribute significantly to the field, and indeed to the sharpening of each other's research agenda.

This paper may be of interest for several reasons. First, since the publication of the earliest NAH papers less than two decades ago, a large number of important studies home become available and me believe that the time has come for an assessment of the past achievements and future challenges of this research trend. Second, we have drawn on primary, archival sources to support our arguments. Third, in this paper we aim to contribute to the internationalization of accounting history research by paying particular attention to some of the contributions of non-Anglo-Saxon accounting historians which have a bearing on our arguments.

Unlike TAH, but in common with novel developments within any discipline which challenge received wisdom, NAH comprises several heterogeneous approaches to the study of accounting history. Miller *et al.*, (1991, p. 395) refer to some of the idyosyncratic characteristics of TAH and describe NAH as interrelated shifts reflected in

a proliferation of methodologies, a questioning of received notions such as progress and evolution, a widening of scope, a new attentiveness to the language and rationales that give significance to accounting practices, and a shift of focus away from invariant characters such as the book-keeper and the decision-maker towards concern with broader transformations in accounting knowledge.

Under this description NAH is viewed as a loose assemblage of disparate research questions and issues, and indeed research methodologies.

However, this description of NAH may be regarded as too broad to be helpful, or more critically, too vague to avail itself to sensible scrutiny. While not wishing to draw a more restrictive description of NAH, we believe it would be helpful to identify some main themes that would allow a differentiation to be made between TAH and NAH. Under TAH, accounting is typically defined in terms of one particular method, that of double-entry book-keeping (see later). Even cost accounting, despite the absence of statutory requirements and given the multitude of types of information and methods of reporting used internally within organisations, has been presumed to be a sub-set of double-entry book-keeping (for example, Solomons, 1968). Thus, management and cost accounting are typically cast in conventional, functionalist terms. For example, Edwards and Newell (1991, p. 39) state:

Management accounting is the term developed since the Second World War to describe the provision, for management, of statistical information for the purposes of

planning, decision making and control. The term cost accounting has older origins and is concerned specifically with the identification and accumulation of costs and, as such, provides much of the basic information required by management accountants (original emphasis).

Under this definition, both management and cost accounting practices are purposefully designed and utilised to provide information deemed relevant and useful to the (presumed) rationally thinking and acting managers. Management accounting information, thus, is produced because it is needed for *rational* action. It is presumed to emerge as a *response* to a carefully articulated and rational *demand* (hence the so-called 'demand-response theory' which dominates research in TAH).

In contrast to this view, NAH problematises management accounting practices by appealing to other roles, over and above the purely functional, that accounting plays in organisations and society. Although not an historical paper, the work of Burchell *et al.*, (1980, p. 17) pioneered this alternative view of accounting which has been eagerly taken up by researchers working within NAH:

The consequences that accounting systems have cannot be considered to be simple reflections of the interests which might have given rise to their creation.... For once in operation, accounting systems are organizational phenomena. Indeed, having their own modus operandi they themselves can impose constraints on organizational functioning, often contributing in the process to the effective definition of interests rather than simply expressing those which are pregiven ... (Accounting systems) become mechanisms around which interests are negotiated, counter claims articulated and political processes explicated (original emphasis).

Under such a view, it is imperative to avoid the temptation to equate the intentions of designers of accounting systems with the outcomes of accounting implementation, for the consequences of accounting are not deterministic, nor necessarily the intended outcome of rational action. Compared to the view of accounting held under TAH, this is a fundamentally different view which renders accounting calculations as politically and socially constructed measures rather than being objective, factual and neutral. Accounting information is presumed to be *produced* and *used* not only as a response to (economically) rational demands, but also frequently for social and political reasons.

#### What counts as accounting?

Accounting historians are inevitably faced with a crucial question at the outset of their research inquiries: What counts as accounting? Practices within any profession, such as accounting, change over time. An accounting historian has to decide at the beginning of an

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investigation whether a contemporary notion of accounting practice will be adopted, or whether a concept more suited to the historical context under investigation is to be considered (see Previts and Bricker, 1994). Put differently, the legitimacy of deploying concepts of the present to describe and analyse past accounting practices is debatable. This is a challenging enough problem for researchers concerned with charting accounting history over the last few centuries (for example, Garner, 1954; Solomons, 1968; Johnson, 1981; Hoskin and Macve, 1986; Hopper and Armstrong, 1991; Carmona *et. al.*, 1997; 1998), and the difficulty is compounded several times over for those concerned with accounting history in ancient times (e.g., Ezzamel, 1994; 1997; Mattessich, 1989; 1998).

The influential book *Accounting Evolution to 1900* by A.C. Littleton (1933/1981: f.n., p.23) provides a useful starting point for discussion. Littleton devotes much time to developing views on accounting which, for him, is double-entry book-keeping as "complete, systematic, coordinated account-keeping." Littleton identifies three main attributes and four antecedents of double-entry. The attributes are, firstly, duality (of books, of account form, and especially of entry); secondly, the equilibrium/balance of results (for example, as reflected in the balance-sheet); and thirdly proprietorship (ownership of goods handled and claims upon emerging income). Together, these three attributes are taken to constitute the form and substance of double-entry:

The form of complete book-keeping is the duality and equilibrium which derive from early record-keeping precedents, the substance consists of proprietary calculations of the gains (or losses) from ventured capital. (Ibid., p. 27).

The antecedents, according to Littleton, are capital, money, credit and commerce:

If either property or capital were not present, there would be nothing for records to record. Without money, trade would be barter; without credit, each transaction would be closed at the time; without commerce, the need for financial records would not extend beyond governmental taxes. (Ibid., p. 12).

Littleton's notion of attributes and antecedents of accounting focus on the domain and nature of what counts as accounting. While these attributes/antecedents can be traced in many important accounting practices over past centuries, such conception may also be regarded by some researchers as too restrictive in the present context. For example, the insistence by Littleton on double-entry as the pure (indeed the only) form of accounting acts only to privilege *one* form of accounting not simply over others but, more crucially, to the *exclusion* of others (for similarly restrictive views see Weber, 1978; Sombart, 1979). Moreover, insistence on monetarisation excludes entries using non-monetary units to represent transactions or exchanges.

To provide some concrete examples of our concerns raised above, consider the attitude to alternative forms of accounting taken by Stevelinck, a researcher working within the TAH camp. In examining evidence of accounting transactions from Ancient Egypt and Mesopotamia, Stevelinck (1985) dismisses the relevance of such accounting practices to contemporary accounting historians. Stevelinck raises two concerns; first, that "These accounts appear far too distant from us. They may be admissible but what can we learn from them that will be of use to us professionally? Surely, we should attempt to discourage students from learning techniques that are out of date." (p. 3). The second concern is: "Accounting has been kept since time immemorial, but double-entry bookkeeping goes back less than 1,000 years. In the last analysis, it is this system that really interests us, because it is still in use, and because it would be instructive to examine its origins, to follow its evolution step by step, to identify progress, the path it took, the tentative innovations of our predecessors, the soultions they arrived at." (p. 3). These concerns, we argue, underpin TAH research and demonstrate most clearly its emphasis on origins, evolution, progress, and the privileging of double-entry, over all other admissible forms, as the only interesting form of accounting practice.

In spite of these and other restrictive assumptions, Littleton's prominent view of what is the essence of accounting, continues until today to underpin almost virtually all the research conducted under TAH. This is not only time in the English speaking world; Italy and Spain, for instance, are countries where TAH constitutes the mainstream of accounting history research. Rafael Donoso-Anes (1994), for example, examined the accounting procedures implemented in the Casa de Contratación in Spain in early 16th century to monitor the receipt of silver and gold shipped from America as well as the subsequent minting and selling in public auctions of these precious metals to merchants. He argued that the double-entry bookkeeping method was deployed to account for transactions related to the minting process. Donoso-Anes (1994) concluded that such evidence represented the earliest testimony of the utilization of the doubleentry method in a Spanish public organization. Alberto Donoso-Anes (1997) studied the reasons for the introduction of double-entry bookkeeping in the Cajas Reales de Indias (1784-1787) in present Peru as well as the causes that motivated its demise. He found that a number of political and social reasons underpinned the of the public accounting reform. Such challenge the prevailing notion that attributed the implementation failure of the reform to the lack of double-entry bookkeeping expertise of civil servants. As a more recent example of research focusing on double-entry bookkeping, Bisaschi (2003) investigated the implementation of the system in the Santa Maria de la Salute Hospital, in Parma (Italy). There are, however, some notable exceptions where TAH researchers do not exclusively focus on double-entry bookkeeping and monetarisation (see Fleischman and Tyson, 1998 for a recent example of enquiries not limited to double-entry systems).

Investigation of double-entry bookkeeping by TAH researchers is not restricted to implementation issues; it also extends to topics such as examination of the individuals who played significant roles in setting up the foundations of the system (e.g., Antinori, 1994; Hernández-Esteve, 1994), its dissemination into practice (e.g., Craig and Jenkins, 1996), and its

diffussion in the domain of accounting thought (e.g., Donoso-Anes, 1992; González-Ferrando, 1992; Nikitin, 1996).

By emphasising double-entry bookkeeping and related monetarisation, however, TAH researchers marginalise other equally, if not more, important accounting and control practices. For example, the Royal Tobacco Factory of Seville (RTF), a state-owned monopoly of tobacco that arised significant income for the Spanish Crown, developed a sophisticated system for monitoring tobacco movements within the different production stages of snuff tobacco: drying, milling, sieving, second milling, fermentation and distribution. In contrast to the view of accounting under TAH, this system was based on the charge and discharge method and measured the flow of tobacco in quantitative, non-financial terms. To cope with increasing market demand for tobacco, the RTF moved its factory premises from the Old San Pedro Factory to a new, purpose-built building, known as the New Factories, in 1758. As a result of this change in factory premises, the accounting system in the RTF become considerably more developed upon, as illustrated by innovations implemented in the Distribution stage (see AFTS, Legajo 2.10.1; see also Carmona et al., 1998). The Distribution stage constituted the last part of the production process; tins were received from the Fermentación production stage and stored in the finished goods warehouse before their distribution to the sales units spreaded over Spain. In the Old San Pedro Factory, monitoring focused on the delivery of finished goods to customers, formal control of inventory flow within the factory was enforced at that time. In contrast, both the flow of tobacco and the delivery of finished goods to customers were carefully tracked down in the New Factories. The following example illustrates the improvement of control mechanisms following the move from the Old to the New Factories, through the deployment of more and more sophisticated accounting series. The following series were in operation in the New Factories; three were kept in the Accounting Office (Contaduría) and three others were produced at the Distribution stage:

- 1. Accounting series on the Distribution stage kept at Accounting Office:
- · Tobacco delivered to customers (1739-1840). This series dealt with tobacco delivered to the tobacco sales administrations throughout Spain. Entries were then classified according to date, destination and type of tobacco.
- Charge and discharge of tobacco (1760-1787). This series dealt with the receipt and shipment of tobacco as far as the distribution stage was concerned. The charge was formed by the opening inventory, the inflow of tobacco coming from the previous production stage, Fermentation, as well as by any increase in tobacco when re-weighed. The discharge consisted of the monthly shipment of tobacco, and scrap. The discharge was then classified by destination. A summary was prepared at the end of the document, which was signed by the Distribution Supervisor, the Internal Auditor, and the representative of the Accounting Office.

- Drafts (1760-1834). This new series was kept by the Distribution supervisor. It supported the entries kept in the above-mentioned books. In particular, four different documents were produced:
  - · A monthly list of tobacco inflow/outflow. This consisted of charge/discharge of tobacco, making explicit references to the types of tobacco and tins recorded. A summary showed the final inventory. The document was signed by both the Distribution supervisor and the Operations manager (*Director de Labores*).
  - · A weekly list of the outflow of tobacco. Entries were chronologically ordered and had three columns: the first stated the region to which tobacco had been sent; the second contained the entry itself; and the third specified the type of tobacco to be sent.
  - · Charge. These documents kept daily records of the inflow of tobacco from the Fermentation stage with the type of tobacco specified in each entry.
  - · Working papers. These documents were not kept periodically and were aimed at preparing drafts for the more formal accounting series.
- 2. Three accounting series were introduced in the Distribution Stage at the workshop level:
- · Charge and discharge of tobacco (1760-1841). This series comprised a set of documents aiming at monitoring the inflow/outflow of tobacco. It consisted of the following documents:
  - · A Draft book which kept chronological records of the incoming tobacco, specifying its different types.
  - · Charge and discharge of Distribution. This included the following documents:
  - · General Charge which recorded chronologically the inflow of tobacco. There were annual summaries for the different types of tobacco.
  - · General Discharge which accounted chronologically for the outflow of tobacco. Entries also stated the types of tobacco and their destination. As a result of the charge and discharge entries, a final inventory statement was produced.
  - · Charge which was a preliminary draft of the General Charge, mentioned above.
  - · Discharge which was a preliminary draft of the General Discharge, mentioned above.
  - Notebook which tracked down the different types of tobacco delivered in the Distribution stage. This notebook shows, by type of tobacco, opening inventory, inflows, outflows and final inventory. There was also a detailed account of the weight of the different tobacco tins.
  - · Santisima Trinidad warehouse. This document provided specific records for this particular warehouse. All entries stated the weight of the different tins.
  - · Permanent account for tobacco inventory.
  - · Draft of tobacco outflow.
- Accounting records submitted to the Accounting Office (1760-1841). These documents chronologically accounted for the inflow/outflow of tobacco according to different product type and destination. It contained extensive details of scrap ingredients.
- · Drafts (1762-1842). This series comprised two types of documents:

- · Draft notebooks for the distribution of snuff tobacco. These notebooks showed a chronological classification of the different types of tobacco delivered, specifying the weight of each batch.
- · Daily records of delivered tobacco.

In short, accounting series in the New Factories not only accounted for the delivery of tobacco to customers but, more importantly, tracked down the flow of tobacco from Fermentation to Distribution and then to customers. Of interest to this paper is the existence of an extensive list of documents to support tobacco transactions in case of internal audit objections. Both the documents and the accounting series, however, were based on the charge/discharge method and consisted of information of a non-financial nature, in contrast to TAH's emphasis upon double-entry and monetarisation.

Littleton, additionally, was more concerned about the investigation of "causes" of accounting than in researching its "consequences" (Carnegie and Napier, 1996, p.11). This focus on causes, in turn, neglects some interesting possibilities of accounting history research (e.g., the organisational effects of changes in the charge and discharge accounting method). For example, the RTF witnessed a power struggle between the General Superintendent, Mr. Vicente Carrasco, and the General Inspector, Mr. Francisco de Portocarrero, during the 1770s. The General Superintendent had full authority on RTF activities. However, the steering Agency of the tobacco monopoly observed that the RTF was not as efficient as expected in dealing with the installed production capacity of the New Factories. Accordingly, the post of General Inspector was launched to tackle manufacturing problems and it had some outstanding characteristics. First, the salary of the General Inspector was higher than that corresponding to the General Superintendent. Second, the General Inspector had no accountability duties to the General Superintendent but reported directly to the Steering Agency. Lastly, Mr. Portocarrero, a knowledgeable expert of the tobacco business, was appointed for such post. The conflict between the two senior managers formally concerned technical issues (e.g., procedures to triple the annual production volume of the RTF), but it actually had a strong political component that spreaded the entire organization. The Accounting Office, for example, played on instrumental role in the desing and development of accounting procedures to cast light on operation activities. In particular, the Accounting Office was supportive of the initiatives of Mr. Portocarrero to triple production volume (e.g., Carmona et al., 1997) and, thus, dismissed some of Mr. Carrasco's actions aiming at similar purposes. On 23<sup>rd</sup> December 1776, Mr. Carrasco issued a memorandum to improve the reporting system of the Supplies Warehouse (e.g., AFTS, Legajo 607) to enforce monthly reporting instead of annual reporting as well as to stipulate more stringent procedures for internal control. The Accountant (Contador, as then Known) of the RTF complained about the consequences that such changes would have on the work load of his office (e.g., AFTS, Legajo 515). In short, the Accountant concluded that "physical inventories cannot be undertaken on a monthly basis". In motivating his position, the Accountant contended that "officers and clerks of the Accounting Office (Contaduría) are already busy during their working hours and have no time for any additional

tasks". Interestingly, however, the Accounting Office was responsive to demands of Mr. Portocarrero to account for endless experiments to improve manufacturing costs (e.g., Carmona et al., 1997). This episode reveals an issue that is of considerable interest for NAH researchers, that is, the deployment of accounting innovations is not solely motivated for efficiency or technical reasons, but also play an instrumental roh in the development of organizational activities.

The limitations of Littleton's (and other similar) view(s) of accounting have prompted some NAH researchers (for example Miller and Napier, 1993, p. 632) to assume, albeit implicitly, that the term 'accounting' automatically leads to the emergence of what they call "traditional histories of accounting" which they identify (correctly from our point of view) as restrictive. Consequently, feeling compelled to seek a way out of the problem, these researchers have proposed replacing accounting history with "genealogies of calculation" (Miller and Napier, 1993, p. 632) or "economic calculation" (Miller et. al., 1991, p. 400) as a means of broadening the scope of inquiry into accounting's past. This proposal, they argue, would make it possible to shift the focus of analysis from seeking to trace the origins of the present (see also below) to trying to understand the outcomes of the past. It is also claimed that this would promote an emphasis upon "the historicity of the various techniques and rationales that have constituted accounting at different times, and in different places" (Miller and Napier, 1993, p. 632). The use of the term 'calculation' instead of 'accounting' is an attempt to avoid "an a priori limiting of the field of study of accounting as it currently exists, or to a particular accounting technique such a double-entry book-keeping", and it is held to help "construct and support particular relations of power and influence" (Miller et. al., 1991, p. 400).

Presumably out of concern for the implications of their suggestion to replace 'accounting' with 'calculation', Miller *et al.*, (1991, p. 401) hastened to add that: "This is not to say that there is no such thing as the history of accounting. But it is to suggest that there is no single character, no immutable entity or practice that will provide an enduring reference point with which to fix the identity of accounting history." While in principle we are in agreement with the argument that the "identity of accounting history" should not be fixed by an "enduring reference point", an important question arises: Is it necessary to supplant 'accounting' with 'economic calculation' to achieve this end? We believe that such supplanting of accounting with some other substitute is both unnecessary and undesirable. We think there is much potential to work within accounting in a manner that seeks to open up the terms of reference and debate concerning the nature and focus of accounting practices.

While we endorse the concerns raised by these researchers over the limited scope of accounting promoted by TAH, their suggestion to replace 'accounting' with 'calculation' runs the serious risk of losing sight of the essence of accounting as a set of practices in terms of what may be deemed their unique or ubiquitous attributes as distinct from other forms of calculation. Indeed, Miller and Napier (1993, p. 631) begin by claiming: "There is no "essence" to accounting, and no invariant object to which the name "accounting" can be attached." In reacting to their contention, much depends on what they mean by "essence"; if they mean specific

methods, such as double entry, then we are in agreement, for the "essence" of accounting should not be inextricably linked to some method that is assumed to be fixed or immutable over time. If, on the other hand, they are concerned with portraying accounting as an unspecified set of calculative practices, in terms of what it does or can do, then their interpretation gives us cause for concern. In our view, the "essence" of accounting is about the latter; what accounting does or can do. Accounting is a constructor of economic value, and this "essence" is invariant across time and space. But irrespective of what Miller and Napier mean by the "essence" of accounting, to propose replacing 'accounting' with something else helps little in progressing the discipline of accounting, as there is likely to be a tendency to gloss over issues that may be central to the development of that discipline. An example is evident in Miller and Napier (1993, p. 631) who, because of their emphasis upon 'calculation' do not provide a clarification of what "counts as accounting". Miller and Napier (1993, p. 632) suggest quoting Power (1992, p. 485) "not all forms of calculation are accounting; not all forms of quantification are monetarized"; such broadbrush statements are of little help to researchers concerned with accounting history. Their suggestion that use of the term 'accounting' results in "ruling out or marginalizing practices that do not fall within that domain" (ibid., p. 632) is not convincing, for this concern presumes that the scope of 'accounting' as traditionally defined is immutable, fixed, and not amenable to reinterpretation.

Another example of a concern with the limitations of conventional views of accounting is found in the work of Tinker (1985, p. 86), who prefers to focus directly upon accounting practices as a means of providing a valuation of alternatives, of facilitating exchange through the determination of reciprocity, and of adjudicating economic claims (and social relations more generally):

Accounting practice is a means of resolving social conflict, a device for appraising the terms of exchange between social constituencies, and an institutional mechanism for arbitrating, evaluating, and adjudicating.

Although Tinker does not begin his analysis by identifying what may be termed, under Littleton's framework, basic attributes and antecedents of accounting, he aspires to promote a broad definition of accounting. Tinker (p. 85 and pp. 95-97), lists a number of examples, as taken from Mandel, (1962; 1968), of entries recording equivalence in labour time dating back to the early and late medieval period in Japan and Europe. For Tinker (1985, p. 86), in these entries, even though not monetarised nor in the form of double-entry, "accounting information helps parties to social and economic transactions assess the adequacy of the value of their returns or entitlements." Tinker goes further in articulating his views of accounting by noting that it operates at two levels. First, accounting examines alternatives from the perspective of each individual party to an exchange as buyers, sellers, and producers. Second, at the social level, accounting practices seek to establish a "rationale for appraising exchange possibilities for the collective parties to an exchange" (Tinker, 1985, p. 86). Furthermore, Tinker carefully avoids the

temptation to equate accounting practices with any specific ideology: "there is nothing inherently and irrevocably conservative, reformist, or radical about accounting practice" (Tinker, 1985, p. 82). Tinker's notion of accounting does not insist on monetarisation, commerce, profit making, or double-entry. Rather, his emphasis is upon the ability of accounting practices to construct, in quantitative terms, human activities and economic exchanges, and in so doing establish modes of reciprocity and adjudicate economic and social claims.

Tinker's work enables a broadening in scope of accounting practices by alluding to the myriad of possibilities which may be called upon by social actors, either individually or collectively. However, there are limitations to his analysis. In particular, his apparent insistence that accounting valuation is "only relevant to those social systems in which integration and cooperation have developed enough to enable social members to devote part of their efforts to producing, not for personal consumption, but for a market exchange (i.e. commodity production)" (ibid., p. 84) excludes those accounting practices which exclusively focus upon redistribution within a centrally administered economy, or on documenting lists of personal wealth, as occurred frequently in ancient economies (Janssen, 1975).

We follow Ezzamel and Hoskin (1998) in suggesting that a base-line definition of accounting is possible whereby such a definition could apply equally across time and space. They argue that, first, accounting is the practice of entering in a visible format a written record (an account) of items and activities. Second, any account involves a particular kind of signs which both name and/or count those items and activities recorded. Third, the practice of producing an account is a form of constructing financial values and/or quantifying non-financial activities and managerial actions: (i) extrinsically as a means of capturing and representing values derived from outside for external purposes, defined as valuable by some other agent; and (ii) intrinsically in so far as this practice of naming, counting and recording in visible format constructs the possibility of precise valuing or quantification. Accounting is therefore a primary technology of valuing and quantification; indeed, accounting is a constructor of value and this, we contend, is true both in the presence and *absence* of market exchange, the profit motive, and indeed currency as long as there is some common denominator that operates as a 'money of account' (Ezzamel, 1997). Under this broad notion of accounting, NAH researchers may involve themselves in investigations of experiments such as those reported in the RTF on 21st February 1777 (see AFTS, Legajo 194), whose aim was to determine the ideal size and quality of tobacco tins. RTF administrators considered that consumers' perception of tobacco quality was informed by the size of tins. In particular, they found that small size tins gave a false impression of low quality tobacco, in spite of the "correct milling and sieving of the materials."

#### Origins/genesis of accounting

Another dimension on which TAH and NAH differ is the debate on the origins versus genesis of accounting. The disagreement is not about fixing different dates for the origins of accounting or charting different evolutionary paths; rather, researchers promoting TAH are

primarily concerned with origins and evolution whereas those contributing to NAH argue that such areas of interest are problematical. A most obvious example of TAH's concern with origin is the title of Littleton's book mentioned earlier, where the whole focus is upon tracing the evolution of accounting to 1900. For Littleton (1933, p. 361), accounting evolution signifies progress: "Accounting is relative and progressive. The phenomena which form its subject matter are constantly changing. Older methods become less effective under altered conditions; earlier ideas become irrelevant in the face of new problems. Thus surrounding conditions generate fresh ideas and stimulate the ingenious to advise new methods, and as such ideas and methods prove successful they in turn begin to modify the surrounding conditions. The result we call progress." Littleton therefore contends that accounting progresses as a linear function of time, and such contention in turn constitutes a debatable issue for NAH researchers.

Much of the research under TAH centres around attempting to anchor the origins of accounting at a particular temporal and spatial intersection to follow the path of progress that Littleton so unambiguously and uncritically promoted. For example, Spanish accounting historiography has devoted considerable effort to analysing when and where double-entry bookkeeping was enforced by law in the private sector (e.g., merchants and banks, see the *Reales Pragmáticas de Cigales* enacted in 1549 as well as those promulgated in Madrid, in 1552), and in the public sector, in 1592, through the creation of the job of *Contador del Libro de Caxa de la Real Hacienda* (Royal Treasury Accountant of the Double-Entry Bookkeeping Method). In view of this and other evidence, Hernández-Esteve (1992) contends that Spain was the earliest country in which double-entry bookkeeping was enforced in both the private and public sectors. In a similar vein, the received wisdom under TAH is that industrial costing procedures for the purposes of planning, control and decision making developed on a significant scale only from the mid-1880's (e.g. Solomons, 1952; Johnson and Kaplan, 1987).

For example, Vollmers (1993) traced the origins of Activity-Based Costing (ABC) back to the 1920s. By examining the costing system of the Dennison Manufacturing Company in Framingham, Massachusets, she found considerable similarities between the system in place and present formulations of ABC. Moreover, Dennison Manufacturing deployed significant efforts to account for distribution and marketing costs, which "tend to be ignored today." This first event is then taken as record of the origin (both in terms of time and space), from which the new practice may spread both temporally and spatially. Similarly, Lemarchand (1994) examined the implementation of double-entry bookkeeping and the charge and discharge methods in eighteenth-century France. He found that double-entry booking was used by merchants as well as in the textile industry, that is, sectors whose capital came from trade. In contrast, the charge/discharge method was implemented by mining and metallurgical enterprises, that is, sectors whose ownership was formed by nobility and also financiers. Lemarchand identified a number of weaknesses in the charge and discharge method that made it unsuitable for business needs, questioning its validity and motivating the implementation of double-entry bookkeeping in the nineteenth-century. In this example, we observe how inefficiencies of the charge and discharge system were identified and then construed by Lemarchand to render this method

unsuitable for implementation in capital intensive industries and then to promote the argument that, thus, the financial and social élite that owned such companies enforced its substitution by the more advanced double-entry bookkeeping method.

Rather than attempt to problematise search for origins or identification of evolutionary trajectory, TAH researchers aim to progress the literature by searching for examples of earlier practices with the hope of pushing the origin of specific accounting practices by a few decades. For example, Fleischman and Parker (1991) seek to advance beyond this received wisdom by arguing that sophisticated costing techniques were developed in a number of British companies between 1760 and 1860. Similarly, Edwards and Newell (1991, p. 36) analyse recently found archival evidence and suggest that several firms "operated advanced 'total' cost accounting systems much earlier than he [Pollard] supposed, and ... that greater use was made of *ad hoc* costing and estimates in guiding management decisions before 1850 than he suggests." Such new evidence is then marshalled to demonstrate the progress and evolution of accounting practices over time in a linear fashion while also presuming that modern concepts apply to past practices.

In contrast, researchers working within the NAH tradition would argue that this whole approach is flawed. First, it has the capacity to marginalise the importance of accounting by conceiving it as existing purely in order to serve, economically rational action. The significance of accounting practices but also as a constructor of value, as a form of power/knowledge (see Foucault, 1980), as a body of expertise, and, as a disciplinary practice is typically ignored under TAH. An example of such practices is shown by the ever-increasing concern of the RTF administrators to eliminate the serious problem of tobacco theft (see AFTS, Legajo 194).

In the case of the RTF, tobacco theft and waste were controlled through a systematic procedure of tobacco weighing after the conclusion of each production stage. The charge and discharge accounting method recorded internal transactions of tobacco between the different production departments. Loss in tobacco weight between production departments were standardized (see the 1761 General Regulation), so that the accounting 'eye' operated as a disciplinary force on operators for the purposes of both improving performance and avoiding deviant behavior (e.g., thefts). Another example of disciplinary practices in the same setting (see AFTS, Legajo 194) is revealed by the decree issued on 20 March 1762 by Mr. Joseph Losada, General Superintendent of the RTF. He required checks to be made on "each oil box taken from the Factories to the Stables, Patios, and jail." The role of accounting in underpinning and constructing disciplinary practices was evident in this document, as Mr. Losada stated that "The Accounting Office [Contaduría] shall keep a daily account of such transfers [of oil]. The records of the Accounting Office should be checked against those kept by foremen."

Second, the emphasis of TAH on origins has attracted considerable criticism from the NAH camp. Rather than seeking to identify the origin of certain accounting practices, the aim of researchers adopting the NAH approach is to focus on the outcomes of the past by attempting to

uncover shifts or discontinuities at the micro or macro level in the economy or society in order to study the emergence of these practices. The focus is specifically located on shifts in the forms of expertise or power at a particular point in time and in a specific social/national context (e.g., Hoskin and Macve, 1986; 1988; Ezzamel *et. al.*, 1990; Hopper and Armstrong, 1991; Carmona *et. al.*, 1997), and to attempt to establish a link between local and broader issues. In this way, NAH researchers would argue, contemporary meanings are not privileged or given priority over notions used in the past; nor are past meanings reconstructed in the guise of contemporary meanings. NAH is concerned with "re-directions, transformations and reversals that time instates, rather than seeking to go back in time to detect an unbroken continuity that links us to our past" (Miller and Napier, 1993, p. 632). Researchers promoting NAH would seek to emphasise the existence of specific vocabularies at a particular intersection of time and space that endow certain accounting practices with specific meanings rather than assume that meanings are immutably fixed. We provide some specific examples of NAH-based research below to illustrate these points.

To differentiate their research agenda from that of TAH, Miller and Napier (1993) identify three major arguments they claim for their approach. First, their concern with 'genealogies of calculation' rather than a narrowly defined notion of accounting history; we have commented on this proposition in some detail earlier. Suffice it to say here that they seek to emphasise the historical contingency of contemporary practice, and to challenge the contention of the permanence of present practice. Second, they emphasise the discursive nature of calculation in a manner that seeks to attend to the ways in which meanings endow certain calculations with significance, rather than being pre-occupied with when a particular accounting technique was judged to have been first introduced. Third, they emphasise ensembles of practices and rationales, rather than isolated instances of particular ways of accounting. Genealogies of accounting practices would seek to avoid imposing time (and space) specific categories, for example, costing for pricing decisions, on archival material uncovered from earlier historical periods for such classifications are not taken as self-evident. In sum:

Rather than a search for the origins of managerial accounting, genealogies of calculation are concerned with the ways in which particular calculative technologies, possibly deployed in enterprises over a long period, come to be linked together at a particular moment in time into a functioning network of routinely applicable expertise (Miller and Napier, 1993, pp. 639-640).

Another example is the work of Hoskin and Macve (1986), who drew on Foucault to examine the late medieval developments in accounting practices and the delay of a near universal adoption of accounting discourse until the nineteenth century. They argue that the disciplinary techniques of elite medieval educational institutions (the new universities and their examinations) generated new power/knowledge relations. These techniques, they contend, embodied forms of textual rewriting, which in turn exerted an enduring influence on accounting practice. They see

'double entry' as an aspect of these rewritings, which is also linked to the new writing of money, especially the bill of exchange. By the eighteenth century accounting technologies feed back into educational institutions through the introduction of the written examination and the mathematical grade, thereby rendering whole populations of pupils into individually calculable subjects amenable to evaluation. These accounting-based systems of evaluation are then extended into the U.S. railroads and other commercial organisations to make up the basis of a modern form of comprehensive managerial accountability. They conclude by suggesting that these developments, in accounting and the examination, emerged not in a linear fashion but as the outcome of discontinuities in the practices of elite educational institutions.

Arguing from a labour process theory perspective, Hopper and Armstrong (1991, p. 406) criticise the work of Johnson and Kaplan (1987) thus: "their theory is flawed, their history partial and some of their prescription neglectful of the socio-economic conditions on which the achievements of the 1920s depend." They also suggest that developments in cost accounting were not consequences of economic or technological imperatives, but rather should be understood as rooted in conflicts centred on control of the labour process. Examples of the conflicts they considered to be related to cost accounting developments included the destruction of internal subcontracting and craft control of production in the early factories, the advent of 'scientific' management and homogenised labour. Post-1930, finally, an accord between primary sectors of labour and corporations promoted an increased emphasis on monopoly pricing, smoothing production (and hence employment patterns), and shifting economic pressures to secondary labour and producer markets.

Drawing on the original archives of the Royal Tobacco Factory in Seville, we can also shed further light on this debate on the genesis of accounting (see AFTS, Cost Instruction, 1773). In 1773, Manuel Vallarin, a fairly junior accountant (segundo oficial de la Contaduría) in the RTF at that time, designed a detailed costing system that made it possible for the first time in that factory for the cost of a pound of snuff and cigars to be calculated. There is no trace of evidence in the Archives to suggest that Vallarin had to develop such costing system in response to a demand from senior managers. However, we draw on indirect evidence (e.g., the front page of the Cost Instruction quoted below) to argue that the main motivation for the design of the system was Vallarin's own curiosity to find out if such a system could be ever developed. Once the system became known to the Tobacco Agency, a state organ charged with the responsibility of overseeing tobacco production in Spain, it quickly identified the potential of the new system for improving discipline on the shopfloor and enhancing tobacco revenue for the Crown and as consequence the 1773 Instruction on cost was issued to enforce the introduction of this costing system in the RTF. The front page of the Instruction stated:

It [the Instruction] is a copy of the original and novel work of Mr. Manuel Vallarin who designed a system of cost calculation, the cost of a pound of snuff and cigars produced in the factories (AFTS, Cost Instruction 1773).

Moreover, based on the new cost data, the above mentioned RTF experiment to increase production efficiency in the New Factories was undertaken and a new regulation to control operations was enacted in 1779. In spite of that, there is compelling evidence to indicate that no improvement in the utilisation of factory capacity occurred, as reported by Carmona et al. (1998) for the 1770s, and by Carmona and Macias (2001) for the period 1821-1887. The point we are making here is not, therefore, that accounting has no use for the purposes of "rational" decision making. Rather, as the case of the RTF illustrates, accounting practices could emerge for a variety of reasons, rather than specifically or even primarily to attend to the rationally imbued needs of managers. But once invented, the potential for exploiting these practices for managerial purposes is fully revealed, thereby possibly *creating* a 'rationally' motivated demand for their services. In this example, the emergence of accounting was not a passive response to rational demand, rather it rendered that demand possible in the first instance.

Although more examples can be provided, the above cases hopefully serve to illustrate the fundamental differences between TAH and NAH. In any study of accounting history a main question has to be addressed: At what point in time and place should the analysis begin? Or put differently, how does the researcher identify the crucial discontinuity from the past that heralds the beginning of a new era? Under TAH, the researcher would typically seek to identify the 'origin' of innovations in accounting practice, and hence history is viewed as a collection of events that can be systematically and chronologically arranged, starting with the 'first' event and moving gradually down the temporal scale.

Under NAH, this whole approach of search for the origins of accounting innovations is deemed to be both fraught with problems and fruitless, as there is no *a priori* reason why a particular event (indeed, any event) should have occurred at any point in time or place (Ezzamel, *et. al.*, 1990, p. 157). For as the research conducted under TAH itself demonstrates, we are forever revising apparent temporal and spatial origins of accounting practices as researchers continue to uncover new evidence (see Edwards and Newell, 1991). Further, under TAH there is a real risk that old practices can appear to be familiar when examining them through the lens of the present (i.e., modern notions are imposed on past practices) rather than seeking to understand the past in its own terms. Under NAH, there is little to be gained from what is viewed as an obsession with origins and the chasing of an ever-moving target (of specific origins). For under NAH, history is viewed as being much more than simply an aggregation of events. Researchers under NAH would seek to focus on 'genesis' whereby, instead of looking backward in time in an attempt to discover origins, the researcher aims to uncover the socio-political setting that issue, or give rise to, specific accounting practices.

#### The roles of accounting

Another important dimension that differentiates TAH from NAH is the roles that accounting practices are presumed to play in organisations (and society more generally). We have already alluded to the reliance of TAH researchers upon the economically motivated thesis of

'demand-response' (e.g., Edwards and Newell, 1991; Fleischman and Parker, 1991). Taken to its natural conclusion, under TAH any accounting development must be explained in terms of a response to an economically motivated demand by some user (see also Carnegie and Napier, 1996, p. 16). Hence, as a new accounting development is uncovered, search begins in earnest to identify what would then be taken to be the precise type of demand that led to the emergence of such a development. At the very least, concern with a 'demand-response' explanation to the exclusion of other possible explanations ushers a research agenda that runs the risk of 'looking hard' for the evidence and in the process probably wrong if only economic justifications are attached to the emergence of new accounting practices. Tyson (1995, p.30), for example, attempts in vain to downplay the role of any motivation different from the economic ones by stating that:"... studies which contend that accounting was a social or political construct as much as an economic response to competitive business pressures are untenable and misleading." This statement is unwittingly condemned by the very standards it sets for judging NAH research, for Tyson fails to demonstrate that his own argument is either tenable a helpful. In contrast, me demonstrate below how unfounded Tyson's argument is.

One important criticism relates to the failure of the 'demand-response' thesis to explain accounting developments even within its own terms of reference. Thus, one of the widely accepted conclusions under TAH is the lack of need for 'sophisticated' accounting practices in situations where competition is absent and profit margins are high (Pollard, 1965). Moreover, Fleischman and Parker (1991; see also Tyson, 1995) have suggested that intensive competition provides the stimulus for the use of cost calculations to improve firm efficiency and to strengthen its competitive position. While this may be a valid argument in some specific instances, under NAH it would not be taken as a blanket statement of general validity. Thus, Carmona et. al., (1997; 1998) provide primary evidence which demonstrates sophisticated development and use of accounting calculations in the monopolic setting of the Royal Tobacco Factory (RTF) of Seville, Spain during the latter half of the eighteenth century for disciplinary and political purposes. Carmona et al., (1997, p. 443) noted that "the use of disciplinary accounting practices in the RTF was linked to the state's recognition of the importance of tobacco revenue to the Treasury and also to the emergence of the RTF as the symbol of the organizational and industrial prestige of eighteenth-century Spain. We have noted that the cost accounting system provided information which contributed to the promotion of a strict work discipline which culminated in the reduction of opportunities for theft and the minimisation of cost of production by subjecting human behaviour to modes of surveillance and calculation." However, Carmona et al., (1997, p. 444) also recognise the possibility that, once invented, accounting practices can be deployed for purposes other than those that gave rise to them in the first instance: "Once available as a microtechnology, accounting opens up possibilities through which work practices and power relations can be renegotiated and redefined. Thus, while the emergence of accounting practices in themselves may be triggered by some historical discontinuity rather than an assumed demand and response mode, once invented, these practices can be made to attend to specific aims." the absence of a number of recurrent economic explanations under TAH, e.g. extremely high

profit margins for tobacco, the lack of disciplining competitive pressures, or the implementatin of innovative accounting systems by observing the activities of competitors, the Carmona *et. al.*, (1997, 1998) findings present a strong challenge to the claims made for the 'demand-response' thesis and the unfounded assertions of Tyson (1995) concerning competitive pressures as the primary reason for the demand for accounting as noted above.

This challenge is further reinforced by other scholars from within the NAH approach (e.g., Hoskin and Macve (1986; 1988); Miller and O'Leary (1987); Ezzamel et. al. (1990); Hopper and Armstrong (1991); and Carmona and Macías (2001)). For example, in commenting on the rise of disciplinarity, both practices and disciplinary knowledge in the Springfield Armory, Hoskin and Macve (1988, p. 68) note: "We therefore see accounting not as the "practical" response of men faced with new entrepreneurial and organisational challenges, who "sensibly" devised ways of collecting and processing the data needed to make rational economic decisions for in that sense no "practical" man would have invented modern accounting practice." In contrast to the view espoused by the adherents of TAH of accounting as an instrumental set of techniques that are developed to guide management decisions, Hoskin and Macve, in their Foucaldian interpretation, emphasise discontinuity and the power/knowledge effects of accounting both as a practice and as a discipline (body of expertise).

These examples demonstrate the strength of convection held by NAH researchers concerning the roles that accounting practices are held to play in organizations and society. Many of the NAH researchers would agree that it is both plausible and possible to link the emergence/functioning of specific accounting practices to economically motivated demands (e.g., Carmona and Macías, 2001; Núñez, 1999). The major point of departure from TAH is that the economically-based 'demand-response' model does not stand the test of time as an all-embracing, or even the main, framework that explains successfully the demand for accounting. Alternative explanations, for example the power/knowledge thesis or labour process analysis yield different, and arguably, very convincing explanations of accounting as a calculative practice. The rejection of the 'demand-response' model by NAH researchers has been motivated by two concerns. First, in contemporary organisations and society the reduction of the roles of accounting practices to the purely rational and economic has been discredited, as evidenced from the Burchell et al., (1980) quote cited earlier. Second, such economic reductionism is even more problematical when imposed on earlier historical periods, for it privileges a modern notion of rationality over other modes of thinking and acting which may have underpinned the emergence and functioning of accounting practices during those earlier periods.

## **Sources of historical material**

Sources or archival material constitute a crucial theme in the debate between traditional and new accounting historians (see Fleischman *et al.*, 1996, p. 64). Researchers embracing the TAH approach pride themselves on basing their historical research upon a meticulous investigation of *original* and *primary*, in contrast to secondary, archival material. At the same

time, these researchers argue that NAH researchers have been guilty of relying on secondary archival sources. When NAH researchers use primary material, they are criticised for providing a superficial examination of such sources (see Luft, 1997). These claims are examined below, but it is worth stating from the outset that even if some NAH researchers have relied upon secondary sources, there is nothing inherent in NAH that promotes secondary sources in preference to primary sources (see also Carnegie and Napier, 1996). A careful investigator, irrespective of the particular approach embraced (i.e. whether TAH or NAH) should always seek to prosecute original and primary sources except when these are not accessible (in which case a clear disclaimer should be made).

The ultimate reason for the debate on primary/secondary sources rests on the contention that it is difficult for "facts to speak by themselves" (Miller *et al*, 1991). For some NAH researchers, primary sources lack objectivity for two reasons. Firstly, archival materials are mostly biased towards depicting the history of the economic and social élites; entrepreneurs, kings, and highly-ranked civil servants. In contrast, very little evidence reports the history from the perspective of those with a low social or economic status; e.g., workers. This bias towards those who control what is to be kept by way of archival material resulted, for example, in the promotion of idealistic images of some professional associations of accountants: "these histories tend to assume both that accountants are essential to society and that much of the professional success depends on how the associations were organized" (Loft, 1986, p. 138). Secondly, accounting historians can be biased in terms of their choice of primary sources, and their interpretation of the material, and this bias is underpinned by their own education and ideology. In short, Tyson (1993, p.13) synthesises his perception of the attitude of NAH researchers to the use of primary sources by stating rather bluntly that "facts can never be objective, so why bother to investigate them carefully".

These arguments, TAH's researchers contend, are used by NAH researchers as an excuse for not drawing on primary sources to support their investigations. Some NAH researchers (e.g., Napier, 1989), while acknowledging the importance of conventional research by emphasising the ensemble of primary and secondary sources, refer to TAH research as "antiquarian". This particular term, on the other hand, is perceived as disdainful by TAH researchers (e.g., Hernández Esteve, 1996a, 1996b), who argue that it neglects the rich tradition of archival search that is conducted under TAH. Indeed, TAH advocates have strongly resented such charge. In one extreme example it is argued that: "Historians committed to conventional accounting methods must confront every attack that is made against the relevance of primary sources" (Tyson, 1995, p.29). Other, more moderate examples, argue that the use of primary materials constitutes an essential part of accounting history research (e.g., Fleischman et al., 1996; Hernández Esteve, 1996b). The debate on the sources of accounting history research, moreover, extends to some other controversial issues, such as the function of accounting history research. Parker (1997) argues that accounting historians are accountable for providing a historical overview that both enhances our understanding of the past and informs the debate, rather than producing interpretations conforming with any given strategy or ideology. TAH researchers distinguish

between "researching within a paradigm", that is the research currently prosecuted under TAH, and "researching to the paradigm", which, in their view, sums up the situation under NAH. They argue that it is academically correct to "research within the paradigm" but not "to the paradigm". Moreover, Fleischman and Tyson (1997, p.101) contend that NAH's arguments would be more compelling if supported by primary sources given that some of its research (e.g., Miller and O'Leary, 1987; Hopper and Armstrong, 1991) simply rely on secondary evidence.

In the debate on sources of accounting history research, we argue, there is more common ground between TAH and NAH compared to the previous three dimensions. First, in spite of the claim by TAH advocates that NAH is inextricably linked to secondary sources, there are many NAH contributions that are underpinned by primary sources: for example, Hoskin and Macve (1986, 1988; see also Ezzamel, et. al., 1990) investigated disciplinary practices in educational organisations drawing on primary sources; Carmona et al. (1997, 1998, 2002), also the present paper examined the design and use of cost accounting and control practices and accounting change, and the relationship between accounting and spatial practices in the Spanish Royal Tobacco Factory drawing on primary sources. Second, as noted above, there is nothing inherent in NAH that compels researchers not to draw on primary sources. Other NAH researchers who draw mainly upon primary sources include Núñez and Gutiérrez (1996), who investigated the deployment of cost accounting practices in the monopoly of silver mines in New Spain, in 18<sup>th</sup> century; Zambon and Zan (1998), who examined cash. flow practices in the Arsenal of Venice, in 16<sup>th</sup> century; Núñez (1999), who studied the gunpowder monopoly in New Mexico and the process of accounting change that occurred as consequence of the appointment of Mr. José de Gálvez as new General Inspector.

To sum up, the debate on the sources of evidence of accounting history research constitutes an area of considerable commonality for scholars of both TAH and NAH. These camps, however, depart in the theories which inform their analysis: sociologically and philosophically-based for NAH and economically-based, as often implicitly applied, for TAH. Research based on primary sources is a fundamental element of accounting history research. Exclusive reliance upon secondary sources requires an explicit disclaimer on the part of the authors and conclusions should be reassessed whenever primary evidence becomes available.

### **Discussion and conclusions**

The differences between TAH and NAH, which, for convenience, have been summarised under what counts as accounting, concern with origins and genesis, the roles of accounting, and sources of historical material, are in the main fairly crucial. For example, under the 'demand-response' thesis espoused by TAH, accounting techniques are assumed to be the products designed and implemented to serve rationally motivated economic needs; their usefulness has to be continuously reassessed over time in light of shifting demands of managers, and when found lacking in relevance calls are made for these techniques to be 'reformed' so that their lost relevance can be regained (Johnson and Kaplan, 1987). The demand-response approach is given

legitimacy by the American Accounting Association (1977, p. 50) which defines accounting history as comprising the study of the evolution of accounting thought and practices as well as the analysis of the institutions that have been set up as a response to both environmental changes and social needs. Accounting is viewed as a product that is shaped and re-shaped to suit the customers (users), and its problems, as there may be, are construed exclusively in terms of failure to attend to the rational needs of users.

In contrast, under NAH accounting's problems are not necessarily linked to lack of relevance to the perceived needs of users since rational demand is not seen to be the exclusive or even the primary driver for accounting change. Rather, "Accounting's problems lurk from within it from the outset and there is unlikely to be any quick and easy remedy." (Ezzamel, et al., 1990, p. 157). Researchers working within the NAH approach would not view accounting practices as having once been relevant only to become perverted at a later point in time and in need of reform, as Johnson and Kaplan (1987) would assert. Rather, the problematisation of accounting is linked explicitly to the power of the calculative practices of accounting as they are deployed to quantify and value activities, measure human performance and define the terms of accountability. Researchers' efforts under NAH would therefore not be directed towards searching for solutions to specific problems. Rather, they would focus on problematising and deconstructing developments in accounting practices, identifying as far as possible their effects on organisational and social functioning, appreciating how apparently mundane accounting practices come to be embedded in organisational action, shaping, and indeed constructing, perceptions of problems, priorities, and solutions, defining possibilities and scope for action, forging patterns of human and organisational interdependencies, and rendering activities calculable and visible (Ezzamel, 1994).

But this is not all. If strictly viewed as the product of the 'demand-response' thesis, accounting practices become formulated as secondary to 'master' disciplines such as economics (Klammer and McCloskey, 1992). Rather than focusing on the development of accounting practices in their own right, under TAH they are understood as manifestations of economic reasoning and rationality. This tendency also carries through to any attempt to theorise accounting whereby it is conceptualised as an economic good. But recent research has cast serious doubt on this privileging of economics over accounting, as new evidence now strongly indicates that the first form of writing ever found was the writing of accounting transactions in ancient civilisations such as Mesopotamia (e.g., Schmandt-Besserat, 1992) and Egypt (e.g. Trigger, 1983). If one accepts this widely accepted and significant finding, that accounting practices emerged before writing, and indeed before the advent of the economically rational being, then any approach that subordinates research of accounting history to rational economic thinking is compromised from the outset.

Although we have attempted to make a case for the new accounting history approach, we do not believe it is either helpful or healthy to polarise the debate. Rather than seek to make a case for the new accounting history to the exclusion of traditional accounting history, we would contend that there is a place for both approaches. Indeed, creating the space for both approaches

should help in sharpening the research agendas of both. We are therefore not inclined to agree with self-congratulatory statements such as:

In the space of less than a decade accounting history has come to occupy a significant position within the discipline of accounting. This is not a matter of volume, the just reward that comes from the accretion of years of patient research. Historians of accounting have long toiled away, carefully documenting the past of the discipline without such a reward. But until recently, this research seemed destined to have a narrowly circumscribed role within the discipline as a whole (Miller et al., 1991, p. 395).

Such statements clearly undermine the pioneering achievements made by leading scholars working within the TAH approach. Similarly, some TAH researchers (e.g., Tyson, 1993), in attempting to advance their own argument, incorrectly accuse NAH researchers of lacking scholarly endeavour. We would argue that, irrespective of one's intellectual persuasion, a scholarly study of accounting history commands both respect and recognition.

As our focus here has been on explicating the main achievements of NAH research so far, we believe that this body of research has already yielded a number of crucial insights. First, NAH has encouraged us to think beyond conventional definitions of accounting so that a much broader view is developed to embrace abroad set of quantifyng, valuing and representational practices there by having the potential to extend to earlier historical junctures which would be excluded under the traditional definition of accounting. This, however, should not push us into the corner of seeking to theorise accounting as a small subset of other practices of calculation as some researchers working within the NAH tradition have suggested. By broadening our definition of accounting, we both avoid privileging contemporary classifications and employing them as straitjackets to interpret past practices. Moreover, and relatedly, such a broadening of defining what counts as accounting opens up new avenues for investigating many rich experiences in specific socio-political contexts that would be drawn from across the whole experience of human history and which are radically different from those of modern times (e.g., Ezzamel, 1997; Ezzamel y Hoskin, 1998). Yet, it is here where one of the major challenges facing NAH researchers lies. Although some promising work on attempting to conceptualise a broader definition of accounting has already begun (e.g., Tinker, 1985), more research in this area is needed.

Second, there is much to be gained from giving more attention to the genealogies of accounting practices rather than simply focusing (as the majority of TAH researchers have done so far) upon tracing what may be deemed the origins of these practices. The few NAH studies which examined explicitly the genealogy of accounting have demonstrated the worthiness of this focus. This emphasis, again, avoids the privileging of contemporary meanings over meanings forged in specific time-space locales in previous periods.

Third, NAH research has demonstrated the value of ascribing roles to accounting practice other than the purely economically rational. Moving beyond, but not necessarily excluding, economic explanations of the emergence and functioning of accounting practices helps to free our thinking so that we no longer need to see accounting as a purely economic good. Alternative views of the roles of accounting in organizations and society would allow us to focus on those roles which underpinned the emergence and functioning of accounting in the past, rather than presume that the 'demand-response' model is capable of providing invariable, temporally and spatially fixed, explanations of the roles of accounting practices. For example, Labour process analysis and the power/knowledge thesis have yielded many interesting insights that have enriched our understanding of new roles and power effects of accounting practices that are not possible under TAH. More future research should capitalise on these findings and extend these approaches to accounting practices in different socio-political contexts.

In spite of these achievements, NAH also faces a number of important challenges. In addressing such challenges, however, we do not intend to outline a blueprint or research agenda for NAH. Rather, our aim is to provide some examples about what we deem as some of the unexplored areas by NAH researchers. First, double-entry bookkeeping constitutes one of the major discontinuities in accounting history. As noted above, investigation of the double-entry method constitutes a prominent research area for scholars of the TAH camp. Surprisingly, however, examination of the social and organisational consequences of the implementation of double-entry bookkeeping in organisations has been almost neglected by NAH researchers (see Lemarchand, 1996 for a notable exception, as he analysed the implementation of the system in the Paris' brothers business a Foucauldian perspective).

Second, NAH places great emphasis upon the role of accounting practices in organisations as an instrument of surveillance (e.g., as stated by the Foucaldians) and exploitation of the labour force (e.g., as argued by the defenders of the labour process approach). By doing this, however, NAH researchers have largely fowsed on cost and management accounting to the neglect of financial reporting practice. Notable exceptions to such neglect, though, are some studies of the structuration of the accounting profession (e.g., Annissete, 1998; Walker, 1993, 1996). Moreover, as Edwards, Boyns and Anderson (1995, pp. 36-37) have pointed out the focus of NAH researchers on issues related to "human accountability" has marginalised examination of other equally important issues, such as price setting, preparation of forecasts, and measurement of the profitability of departments and products.

Third, as noted above, a number of NAH contributions have drawn on secondary sources. Although such theorisation may by understandable in explaining the emergence of a new research trend, there is nothing inherent to NAH towards the utilisation of secondary sources. Future NAH investigations, we contend, should rely whenever possible on primary evidence.

Fourth, interdisciplinarity constitutes one of the most attractive aspects of accounting history research. Accordingly, the discipline has benefitted from contributions using a number of research frameworks, ranging from economics to social theory. As far as research conducted under NAH, however, most of these investigations have dealt with the application of recent social

and sociological theories to specific accounting history issues. In the main, interdisciplinarity under NAH has been an unidirectional flow consisting of the explanation of accounting history problems under the view of some social and sociological theories<sup>1</sup>. Interdisciplinarity, as we view it, however, consists of a double flow; that is, a theory is applied to explain a given problem but results of such explanation should also help in expanding the informing theory, and this is a particularly important challenge as far as accounting is perceived under NAH as a social phenomenon.

Fifth, in contrast to TAH investigations which researchers fron a considerable number of countries have contributed, investigations under NAH have been mostly undertable by scholars affiliated to Anglo-Saxon countries. Understand the problem of publication in top-tier, research outlets for non-Anglo-Saxon scholars, consolidation of NAH as a research trend demands its expansion to countries outside the Anglo-Saxon domain, which in turn will provide evidence on institutional situations different from those characterising the Anglo-Saxon domain. As Scott (2001) contends, little will be known if all, or nearly all, cases address similar institutional settings.

Finally, NAH should expand its local/national domain focus to really address comparative accounting history research. By doing that, our investigations will be capable of address richer evidence and, accordingly, will help contributing the discipline of accounting history.

#### **BIBLIOGRAPHY**

American Accounting Association (1971): Report of the Committee on Accounting History, Sarasota. Florida.

**American Accounting Association** (1977): A Statement on Accounting Theory and Theory Acceptance, Sarasota, Florida.

**Annisette, M.** (1999): "Importing accounting: the case of Trinidad and Tobago", *Accounting, Business & Financial History*, Vol. 9, No.1: 103-133.

Appleby, J.; L. Hunt and M. Jacob (1995): Telling the Truth about History, London: W.W. Norton & Company.

**Bisaschi, A.** (2003): "The Accounting System of the Venerable Society of the Living and the Dead of Parma in Medieval Times", *Accounting History*, Vol. 8, No. 1: 89-111.

Burke, P. (1992): New Perspectives on Historical Writing, Cambridge: Polity Press.

**Burchell, S.; C. Clubb; A.G. Hopwood; J. Hughes and J. Nahapiet** (1980): "The Roles of Accounting in Organizations and Society", *Accounting, Organizations and Society*, Vol. 5, No.1: 5-27.

**Carmona, S.; M. Ezzamel and F. Gutiérrez** (1997): "Control and Cost Accounting in the Spanish Royal Tobacco Factory", *Accounting, Organizations and Society*, Vol. 22, No. 5: 411-446.

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<sup>&</sup>lt;sup>1</sup> A problem that the authors fully admit responsible for in their investigations.

- **Carmona, S.; M. Ezzamel and F. Gutiérrez** (1998): "Towards an Institutional Analysis of Accounting Change in the Royal Tobacco Factory of Seville", *Accounting Historians Journal*, Vol. 25, No. 1 (June): 115-147.
- Carmona, S.; M. Ezzamel and F. Gutiérrez (2002): "Accounting and Factory Space", Accounting, Organizations and Society, Vol. 27, No. 3: 239-274.
- **Carmona, S. and M. Macías** (2001): "Institutional Pressures, Monopolistic Conditions, and the Implementation of Early Cost Management Systems", *Abacus*, Vol. 37, Number 2: 139-165.
- **Carnegie, G.D. and C.J. Napier,** (1996): "Critical and Interpretive Histories: Insights into Accounting's Present and Future Through its Past", *Accounting, Auditing and Accountability Journal*, Vol. 9, No.3: 7-39.
- Craig, R. and S. Jenkins, (1996): "Conjectures on Colonial Accounting History in Australia", *Abacus*, Vol. 32, No. 2: 92-119.
- **Donoso-Anes, R.** (1992): "Bartolomé Salvador de Solórzano, Primer Autor de un Libro de Contabilidad por Partida Doble o Cuatrocientos Años de Reconocimiento Teórico de la Contabilidad por Partida Doble en España", *Cuadernos de Investigación Contable*, Vol. 4, No. 1-2: 1-42.
- **Edwards, J. R.; T. Boyns and M. Anderson** (1995): "British Cost Accounting Development: Continuity and Change", *The Accounting Historians Journal*, Vol.22, No.2: 1-41.
- **Edwards, J. R. and E. Newell** (1991): "The Development of Industrial Cost and Management Accounting Before 1850: A Survey of the Evidence", *Business History*, Vol. 33, No. 1: 35-57.
- **Ezzamel, M.** (1994): "From Problem Solving to Problematization: Relevance Revisited", *Critical Perspectives on Accounting*, 5: 269-280.
- **Ezzamel, M.** (1997): "Accounting, Control and Accountability: Preliminary Evidence from Ancient Egypt", *Critical Perspectives on Accounting*, 8: 563-601.
- **Ezzamel, M. and K. Hoskin** (1998): "On the Logic of the Supplement: Theorizing Accounting, Writing and Money in Mesopotamia and Ancient Egypt", *Working Paper*, University of Manchester.
- **Ezzamel, M., K. Hoskin, and R. Macve** (1990): "Managing it all by Numbers: A Review of Johnson and Kaplan's 'Relevance Lost'", *Accounting and Business Research*, Vol. 20, No. 78: 153-166.
- **Fleischman, R. K.; K.W. Hoskin, and R. H. Macve** (1995): "The Boulton & Watt Case: The Crux of Alternative Approaches to Accounting History?", *Accounting and Business Research*, Vol. 25, No. 99 (Summer): 162-176.
- **Fleischman, R. K., P. Mills and T. N. Tyson** (1996): "A Theoretical Primer for Evaluating and Conducting Historical Research in Accounting", *Accounting History*, Vol 1, No.1: 55-75.
- **Fleischman, R. K. and L. D. Parker** (1991): "British Entrepreneurs and Pre-Industrial Revolution Evidence of Cost Management", *The Accounting Review*, Vol. 66, No. 2 (April): 361-375.
- **Fleischman, R. K. and T. N. Tyson** (1998): "The Evolution of Standard Costing in the U.K. and U.S.: From Decision Making to Control", *Abacus*, Vol. 32, No.2: 214-236.

- Fleischman, R.K. and T.N. Tyson (1997): "Archival Researchers: An Endangered Species?", *The Accounting Historians Journal*, Vol. 24 No 2: 91-109.
- Foucault, M. (1980): Power/Knowledge: Selected Interviews and Other Writings, 1972-1977, New York: Pantheon Books.
- Garner, S.P. (1954): Evolution of Cost Accounting, Tuscaloosa, Alabama: University of Alabama Press.
- **González-Ferrando, J. M.** (1992): "El Sevillano Luis de Luque y Leyva, `reintroductor´ de la partida doble en la bibliografía española", *Cuadernos de Investigación Contable*, Vol. 4 No. 1-2: 43-68.
- **Gourvish, T.** (1995): "Business History: In Defence of the Empirical Approach?", *Accounting, Business and Financial History*, Vol. 5, No. 1: 3-16.
- **Hernández Esteve, E.** (1996): "Problemática general de la historia de la contabilidad en España", *En torno a la elaboración de una historia de la contabilidad en España*, 45-114, Madrid: AECA.
- **Hernández Estew, E.** (1996b): "Prólogo", en Donoso Anes, R. (1996), Una Contribución a la Historia de la Contabilidad: Análisis de las prácticas contables desarrolladas por la tesorería de la Casa de Contratación de las Indias de Sevilla (1503-1717), 15-36, Sevilla: Universidad de Sevilla.
- Hernández-Esteve, E. (1994): Estudio Introductorio sobre la Vida de Luca Pacioli, Madrid: AECA.
- **Hopper, T. and P. Armstrong** (1991): "Cost Accounting, Controlling Labour and the Rise of Conglomerates", *Accounting, Organizations and Society*, Vol. 16, No. 5/6: 405-438.
- **Hoskin, K.W. and R. H. Macve** (1986): "Accounting and the Examination: A Genealogy of Disciplinary Power", *Accounting, Organizations and Society*, Vol. 11, No. 2: 105-136.
- **Hoskin, K.W. and R. H. Macve** (1988): "The Genesis of Accountability: The West Point Connections", *Accounting, Organizations and Society*, Vol. 13, No. 1: 37-73.
- **Hoskin, K. W. and R. H. Macve** (2000): "Knowing More as Knowing Less? Alternative histories of Cost and Management Accounting in the U.S. and the U.K.", *The Accounting Historians Journal*, Vol. 27, No.1: 91-149.
- Janssen, J. J. (1975): Commodity Prices from the Ramessid Period, Leiden: E.J. Brill.
- **Johnson, H. T.** (1981): "Towards a New Understanding of Nineteenth-Century Cost Accounting", *Accounting Review*, Vol. LVI: 510-518.
- **Johnson, H.T. and R. S. Kaplan** (1987): Relevance Lost: the Rise and Fall of Management According, Boston: Harvard Business School Press.
- **Klammer, A. and D. McCloskey** (1992): "Accounting as the Master Metaphor of Economics", *The European Accounting Review*, Vol. 1 No.1: 145-160.

- **Lemarchand, Y.** (1999): "Introducing Double-Entry Bookkeeping in Public Finance: a French Experiment at the Beginning of the Eighteenth Century", *Accounting, Business and Financial History*, Vol. 9, No. 2: 225-254.
- **Lemarchand, Y.** (1994): "Double entry versus charge and discharge accounting in eighteenth-century France", *Accounting, Business & Financial History*, 4(1): 119-145.
- **Littleton, A. C.** (1981; first published in 1933): *Accounting Evolution to 1900*, Alabama: The University of Alabama Press.
- **Loft, A.** (1986): "Towards a Critical Understanding of Cost Accounting in the UK, 1914-1925", *Accounting, Organizations and Society*, Vol. 11, No 2: 137-169.
- **Luft, J. L.** (1997): "Long-Term Change in Management Accounting: Perspectives from Historical Research", *Journal of Management Accounting Research*, 7: 163-197.
- Mandel, E. (1962): Treatise on Marxist Economics, London: Merlin Press.
- Mandel, E. (1968): Marxist Economic Theory, New York: Monthly Review Press.
- Mattessich, R. (1989): "Accounting and the Input-Output Principle in the Prehistoric and Ancient World", *Abacus*, Vol. 25, No. 2: 78-84.
- **Mattessisch, R.** (1998): "Recent Insights into Mesopotamian Accounting of the 3RD Millennium B.C. Successor to Token Accounting", *The Accounting Historians Journal*, Vol. 25, No. 1 (June): 1-27.
- Merino, B.P. and A. G. Mayper (1993): "Accounting History and Empirical Research", *The Accounting Historians Journal*, Vol. 20, No. 2: 237-267.
- Miller, P.; T. Hopper and R. Laughlin (1991): "The New History: An Introduction", *Accounting, Organizations and Society*, Vol. 16, No. 5/6: 395-403.
- Miller, P. and C. Napier (1993): "Genealogies of Calculation", Accounting, Organizations and Society, Vol. 18, No. 7/8: 631-647.
- Miller, P. and T. O'Leary (1987): "Accounting and the Construction of the Governable Person", *Accounting, Organizations and Society*, Vol. 12, No. 3: 235-265.
- **Miller, P. and T. O'Leary** (1989): "Hierarchies and American Ideals, 1900-1940", *Academy of Management Review*, April: 250-265.
- Miller, P. and T. O'Leary (1990): "Making Accountancy Practical", Accounting, Organizations and Society, pp. 479-498.
- Napier, C. J. (1989): "Research Directions in Accounting History", *British Accounting History*, Vol.21, No. 2: 237-254.
- **Nikitin, M.** (1996): "The Birth of Industrial Accounting in France: The Role of Pierre Antoine Godard-Desmarest as Strategist, Industrialist and Accountant at the Baccarat Crystalworks", *Accounting, Business and Financial History*, Vol. 6, No. 1: 93-110.

- Núñez, M. (1999): El papel de los individuos en la institucionalización de prácticas contables, Unpublished Ph.D thesis, Universidad de Sevilla.
- **Núñez, M and Gutiérrez, F.** (1996): "Cost Accounting Practices in the Monopoly of Silver Mining, in New Spain", Working Paper. University of Seville.
- **Parker, L. D.** (1997): "Informing Historical Research in Accounting and Management: Traditions, Philosophies, and Opportunities", *The Accounting Historians Journal*, Vol. 24, No. 2: 111-149.
- Pollard, S. (1965): The Genesis of Modern Management, Cambridge, MA: Harvard University Press.
- **Power, M.** (1992): "After Calculation: Reflections on Critique of Economic Reason by Andre Gorg", *Acceounting, Organizations and Society*, 17: 477-499.
- **Previts, G. J. and R. Bricker** (1994): "Fact and Theory in Accounting History: Presentmindeness and Capital Market Research", *Contemporary Accounting Research*, Vol. 10, No.2: 625-641
- Schmandt-Besserat, D. (1992): Before Writing, Vol. I, From Counting to Cuniform, Austin, TX: University of Texas Press.
- Scott, W.R. (2001): Institutions and Organizations, Thousand Oaks, CA: Sage Publications.
- Solomons, D. (1952): Studies in Costing, London: Sweet & Maxwell, Ltd.
- **Solomons, D.** (1968): "The Historical Deveploment of Costing", *Studies in Cost Analysis*, 3-49, D. Solomons (ed.), London: Sweet & Maxwell.
- **Sombart, W.** (1979): "Sombart on Accounting History", translated by K. S. Most, *Academy of Accounting Historians Working Paper No. 35*.
- Stevelinck, E. (1985): "Accounting in Ancient Times", *The Accounting Historians Journal*, Vol. 12, No. 1 (Spring): 1-16.
- Tinker, T. (1985): Paper Prophets: A Social Critique of Accounting, New York: Praeger.
- **Trigger, B. G.** (1983): "The Rise of Egyptian Civilization", B.G. Trigger; B.J. Kemp, D. O'Conner and A.B. Lloyd (eds.), *Ancient Egypt: A Social History*, 1-70, Cambridge: Cambridge University Press.
- **Tyson, T.** (1993): "Keeping the Record Straight: Foucaldian Revisionism and Nineteenth Century US Cost Accounting History", *Accounting, Auditing and Accountability Journal*, Vol. 6, No.2: 4-16.
- **Tyson, T.** (1995): "An Archivist Responds to Accounting History: The Case of the US Men's Clothing Industry", *Accounting, Business and Financial History*, Vol. 5, No 1: 17-37.
- Walker, S. (1993): Anatomy of a Scottish CA Practice: Lindsay, Lamieson and Holdan, 1818-1918, ABFH, Vol. 3, No. 2: 127-154.
- **Walker, S.** (1996): "The Criminal Upperworld and the Emergence of a Disciplinary Coh in the Early Chartered Accountoncy Profession", *Accounting History*, Vol. 1, No. 2: 7-35.

Walker, S. (1995): "The Genesis of Professional Organization in Scotland: a Contextual Analysis", Accounting, Organizations & Society, Vol. 20, No. 4: 285-310.

Weber, M. (1978): *Economy and Society: an Outline of Interpretive Sociology*, Berkeley: G. Roth and C. Wittich (eds.), University of California Press.

**Zambon, S. and L. Zan** (1998): "Cash Flows and Accounting Practices of a Large XVI Century Organization: The Case of Venice Arsenal", *XXI Annual Congress of the European Accounting Association*, Antwerp.

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