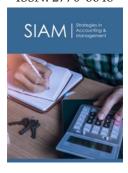


# Revisiting the Role of Accounting from Ancient to Contemporary Times: An Attempt to Evaluate the Role of Corporate Accounting

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#### **Abstract**

The needs for economic systems that humans constructed throughout time have been the driving force for accounting technological inventions starting with bookkeeping, followed by double-entry bookkeeping. Many civilizations and societies have contributed to the development and advancements of accounting. To this effect, Italy was a fortune county in which the number of "antecedents" converged, and thus, is considered the place of origin for modern accounting. Italy as a society cannot be held solely responsible for its birth, nor can its citizens be credited for the invention of accounting. Attributing the creation of accounting to Pacioli and the dating of its origin to 1449 require further consideration, rendering the questions of who invented accounting and when wide open. In the absence of hard evidence, speculating such a defining moment is the optimal contemporary accounting research produces. Accounting has retained its usefulness in societies through its adaptability to new roles when the master of the business is present. The business model needs to be revisited and retheorized when accounting is not serving well. A social paradox results from financing the operations of corporations and becoming their victims. Accounting cannot compensate for owners' absence in the business model selected for conducting business. Accounting research inquiring about the role of accounting and questioning its usability and benefit to society labeled 'critical' or 'historical' or deeming such discourse radical should be one of the mainstream accounting research instead.

**Keywords:** Accounting origins; Pacioli; Civilization; Accounting roles; Corporate accounting; Corporations; Bookkeeping; Double-entry bookkeeping; Single bookkeeping; Triple bookkeeping.

#### Introduction

Advising accounting researchers pursuing investigations on the nature of accounting, Wheeler (1970: 4) stated, "Indeed, one useful piece of research might be a study of the nature of accounting." Over time, several accounting researchers have studied the nature of accounting (Golberge [1], its purpose (e.g., Burchell et al [2]; Mattessich [3]), and its archeology and its use cross civilizations [3,4]. Some have even addressed the role of other disciplines; for example, Buhr [5] refers to the nature and purpose of advertising to enlighten us and broaden our understanding of accounting and its purposes. Accounting emerged from the practice as a response to particular needs [6-20]. No theoretical structure was needed when the accounting user was in charge of the business operation. Not until a divorce between managing and financing operations took place did the need call for abstract grounds upon which corporate accounting founds. To date, such a mission is underdeveloped [6-10,21-30,12,31-35].

Revisiting the role and purpose of accounting throughout time potentially enhances our understanding of what accounting was, is serving, and will best serve. Not all accounting researchers possess archeological evidence in their inquiries for the origins of accounting. Without hard evidence, precise answers for such an inquiry might not be obtainable, though speculation is valuable. Professor Mattessich, who happened to have firsthand archeological

documents, produces unique studies that he compiled in a volume (2012). This study proclaims that the definitive point in time when accounting was created is unknown. Crediting a specific individual for its creation is not only a weak argument but also a mistake. Accounting has emerged in response to its surroundings and tends to adapt to dynamic surroundings but with new objectives. Such surroundings vary by civilization and society [36,37], of which many have contributed to the development and advancements of accounting-adapting to new purposes when necessary has reserved the usefulness of accounting to various societies. The purpose of this article is to present a brief history of the origins of a great profession to those interested in learning about it. The article bravely speculates that accounting was first used in whatever form of bookkeeping was developed when the first transaction took place on the earth. Since the era of such a transaction is unidentified, the birth of accounting remains mysterious. The article also clarifies that the invention of accounting differs from the birth of accounting for dual effects, as we know it in its relation to agency. To fulfill such objectives, the remainder of this paper is organized as follows. First, I detail the lack of knowledge on the first-ever use of accounting. The first moment when bookkeeping was used is speculated in section 3. Then section 4 distinguishes between the creation of accounting and the birth of modern accounting. Section 5 draws the public attention of a social paradox because of financing the operation of corporations and becoming their victims. The corporate model needs to be revisited and re-theorized. Accounting is not causing scandal and fraud. Accounting is suitable for which it is. Accounting cannot make up for the owner's absence in the business model selected for conducting business. I conclude that accounting has retained its usefulness in society through its adaptability to new purposes and roles when the master of the business is present.

# A Great History with an Unknown Departure Point in Time

Unfortunately, answers to the questions of who invented accounting Hendriksen [38] and when remain largely unknown. Hackett [39] documented, "Most points out that the summaries recorded commercial transactions on stone dating back to 3600 B.C. and 400 years later on clay." While the act of recording transactions was founded several years ago, its first use remains unknown. According to Pacioli, conducting businesses without systematically recording entries can be cumbersome; however, people in business who are incapable of keeping books tend to work in the blind and are likely to face significant losses (Gleeson-White, 2011, p. 94, 113). Chatfield [12] stressed that: "The accumulation of private wealth led to some kind of stewardship accounting, both to assure the physical protection of assets and to prove that those who administered them had done their job properly. The need for a check on the honesty and reliability of employees made internal control a central feature of all ancient bookkeeping systems."

The significance of double-entry bookkeeping to humanity rests on its prominence in "mathematics and the quantification of physical phenomena" (Gleeson-White, 2011: 23). Despite confrontation and doubts regarding its accuracy (e.g., Jones,

1796), double-entry bookkeeping has survived to date "as the only complete method of recoding commercial transactions" (Gleeson-White, 2011: 135). Kats [40] noticed that "Unlike the produce accounts, those raised for money values of the same kind could be summarized;" enabling "...all items have to be expressed in the same kind of units; otherwise, summation would be impossible" [40]. In general, accountants worldwide record identical transactions using the same method, despite the dissimilarity of physical locations, settings where the transactions occur, and the cultural variation and language differences of participants involved in such transactions. Double-entry bookkeeping suffices the features of Kuhn's [41] paradigm, enabling accounting to enter a state of normal science after an all-inclusive consensus to keep accounting books using a unified and universal technology [42]. Double-entry bookkeeping is the only paradigm in accounting that fits Kuhn's definition of a typical science paradigm [9,42].

Every transaction has dual financial effects on the financial position of an accounting entity. The dual financial effects of an event on the accounting equation are chronologically recorded using the double-entry accounting system. Portraying operations and activities of entities using their dual effects mirrors the actual exchange that takes place in reality, based on the logic of "give and take" [43]. Such a duality implicates tangible transactions that fit "physical reality" and captures ownership and debt relations that have their place in social reality [44]. Accounting authors have suggested that bookkeeping, for example, Jones' (1796) single entry, lacks efficiency (Gleeson-White, 2011: 135; see Cushing [42]). Sorter's [44] event theory may be comprehensive and informative Johnson [45] but loading accounting records with information may not suffice the need of the intended users of accounting and its systems, causing significant events to be lost in the morass of events [29]. Moreover, efficiency promoted in double-entry bookkeeping may lead systems within accounting entities to lack a certain degree of accuracy. This trade-off between efficiency and accuracy in recording has encouraged accounting researchers to challenge the double-entry bookkeeping system. A major criticism that double-entry bookkeeping has been subjected to is the use of "artifacts associated with journals and ledgers...[that] are not essential aspects of an accounting system" McCarthy [46], whereas the REA model depends on "resources," which double-entry is designed to account for and thus control. McCarthy's [46-48] Resource-Event-Agent (REA)<sup>1</sup> model presents an alternative way to model an accounting system. According to the REA model, capturing the core jobs of accountants and the factors they account for by modeling economic phenomena, as a conceptual representation is possible [46]. It is worth mentioning that "the further addition of a series of fictitious, or nominal, accounts, -a stopgap to be used in all cases where otherwise the equilibrium would be broken" [40]. Nonetheless, the double-entry bookkeeping system has survived several criticisms but recording alternatives as substitutes to the system have also proven to failure and inefficient. Over time, doubleentry became "synonymous with bookkeeping itself" (Gleeson-White, 2011: 136). "When referring to the kind of bookkeeping...the most modern thought, chiefly in Italy, prefers to see the criterion of

bookkeeping by double entry in the raising of two different series of accounts..." [40]. Awkwardly, on the other hand, some writers have credited Pacioli² with the invention of accounting³ [Aleqtisadiah] 2012). In addition, Hannan [49] attributed the origins of accounting to Pacioli⁴. Attributing the invention of accounting to Pacioli (1449)⁵ is an inaccurate assertion. Evidence suggests that double-entry records existed prior to Pacioli's documentation of the Venice method Yamey [50]; see also Mar'ee [51]; Alhomaid [52]. Double-entry preceded Pacioli by some 200 years Belkaoui [29]. Pacioli never claimed to invent double-entry bookkeeping [50,53-56]. His work was a description, not an invention [57]. As Littleton [57] put it, "... Paciolo's description of the 'method of Vinice'- for he invented none of the procedure himself..." Even "...Pacioli himself disclaimed the honour, and there is evidence of double-entry records before 1494..." Yamey [50].

In Italy, merchants began using accounting as a tool of management control by 1400 "(De Rover, 1956, as cited in Belkaoui [29])". The first double-entry books known to exist are those of Massari of Genoa, dating back to the year 1340 [29]. Evidence also points out that this early use of double-entry bookkeeping goes back to 1304 [58]. According to Kats [40], "[i]t has frequently been asserted that Greece and Rome, or at least the Romans, were acquainted with bookkeeping by double entry." Ancient societies kept records. Praising the contribution of professor of archeology Schmandt-Besserat's to accounting, Mattessich [59] stated, "By connecting the loosely dispersed tokens (between about 8,000 to 3,500 BC) with the tokens in clay envelopes (C. 3,500 to 3,000 BC and beyond), she recognized that the tokens were the basis of a widely used accounting system that lasted for some 5,000 years (compared to double entry bookkeeping which seems to have existed for only 600 to 700 years)." Hendriksen [38] added, "Archaeologists believe that the clay tokens that bound in the Mesopotamian region were similarly used for accounting purposes. Sophisticated accounting systems appear to have been in place in China as early as 2000 BC and tantalizing references indicates a familiarity with double entry in Rome. Some even claim that the Romans were familiar with the concept depreciation." Arguably, those who credited Pacioli with inventing accounting have possibly failed to distinguish between the oldest scholarly documented evidence of accounting text and the actual invention of accounting. These claimers, as well as those who attribute the origin of doubleentry bookkeeping to Pacioli, most likely do not debate that commerce had not been practiced prior to Pacioli's documentation double-entry bookkeeping. The relationship between sophisticated economic systems and accounting that Chatfield [12] observed diminishes such claims. Chatfield [12] stressed that, "Whether the progress of ideology governs the development of social institution or vice versa, there are obvious connections between ideas and the conditions under which people live. A study of their revolution suggests that accounting processes are reactive, that they develop mainly in response to business needs at given time, and that their growth is relative to economic progress generally...the higher the level civilization, the more elaborate the bookkeeping methods. And as record keeping needs multiply, the ability of accounting

data to promote or hinder economic development also increases." Ignoring nations that displayed sophisticated economic systems and disregarding the efforts made by men and women throughout human history to develop accounting systems, such as double-entry bookkeeping, even if these individuals are unknown, is unfair. History is a record and ought to show all facts.

## Speculating the First Moment when Bookkeeping was Used

#### Premise 1: What can be accounted for?

Hackett [39] employed the term "transaction" to characterize and refer to activities between people. The speculation arguably is that bookkeeping, more specifically recording, existed with the first ever transaction. Littleton's [57] assertion that "...every transaction has a dual aspect..." builds up such speculation. Moreover, Hackett [39] clarified that "as soon as the first entrepreneurs contrived a method for making a profit, they contrived ways of controlling and protecting that profit." "The recording is limited to a transaction in which a party gives, and another receives. In addition, in ancient "Ur or Babylon," "...where no...common unit was being used, for instance, bookkeeping by double entry was an impossibility, the more so because no money or other common medium was known by which all debts in kind could be commuted" Kats [40]. Recent calls to expand the measurement function of accounting are conditioned on the ability to view aspects intended to be measured in a transaction model. An application would be that events affecting precious and 'perceived scarce resources' may not be accounted for unless viewed as a transaction arrangement between humans and nature. For example, discussing the need to value our planet by assigning "a monetary value to oceans, air, forests, rivers, wildernesses," Gleeson-White (2011: 254) urges that we "account for our transactions with the earth."

#### Premise 2: Bookkeeping originated accounting

Kats [40] argued, "...to trace the origin of accountancy, one always looks for the manifestations of bookkeeping..." Kats further articulated that "in speaking of bookkeeping, the accountant thinks, almost without exception, of the system of double entry and will recognize no other" (1930: 311). Contemporary research has indeed concluded as such. For example, analyzing the development of accounting thought by employing Kuhn's view on science development, Cushing [42] recognized double-entry bookkeeping as the only paradigm in accounting. Yes, "the origin of double-entry bookkeeping remains shrouded in mystery... Like things, attempts to probe the origins of the technique are best intelligent guesses or inferences" Yamey [50]. Yet as Row Fogo, according to Yamey [50], expressed that "bookkeeping is neither a discovery...nor the inspiration of a happy moment, but the outcome of continued efforts to meet the necessities of trade as they gradually developed."

## Premise 3: Delegating authority to others and emerging of conflicts mandate accountability

Over the years, merchants and entrepreneurs have felt the need to hold people accountable. As per Chatfield [12], "Bookkeeping

faced the problem of holding people accountable in societies where vast majority were illiterate." The need for internal control exists when commerce is conducted and practiced. "... Agents had to keep accounts to show their indebtedness to their principals... and, that double-entry is a lineal descendant of that system" Yamey [50]. Burchell et al. [2] argue, "accounting rose to mediate between divergent interests in an organized endeavor, to legitimize and justify particular stances and, above all, to create a symbolic structure within which action could be achieved." DR Scott (1931: 202 as cited in Lee [35] augments that "accounting ...[as] a means of mediating conflicts of interest in business and providing 'justice'." With the spread of agency in the business, two types of bookkeeping exited. That is, as Kats [40] articulated, "Thus, in the main bookkeeping was of two classes, viz: proprietor's accounting and manager's accounting. The former does not necessarily lead to bookkeeping by double entry, while manager's accounting seems to conduce to it almost automatically, as will appear from what follows."

Yamey [50] concluded that "it is likely that merchandise records in agency bookkeeping may have preceded merchandise accounts in proprietorship bookkeeping..." Kats [40] believed that "...double posting as regards Cash, Debts Receivable and Debts Payable on the one hand, and the Owner on the other. In the event of the business being managed by a person not the owner such a summarizing account was highly desirable, if not imperative, so that the owner might see at a glance not only the detailed records of all movements of Cash and outstanding's but also a summary in which all moneys in hand or owing to or by him should be recorded." James Peele (1595 as cited in Kats [40])<sup>6</sup> made a similar claim arguing, "If, on the other hand, the owner managed his own business the need for a Cash account was less urgent, for he was not responsible for his Cash to anybody, and as regards information for himself, he knew that the Cash part was all right, having handled it himself." In a similar vein, Yamey [50] contended, "Every expense or item of revenue, whether in cash or on credit, decreases or increases the debt due to the principal, and also necessitates an entry in the cash account or a personal account. Hence, one of the formal characteristics of double entry may have existed in the earliest systems of agency accounting." In short, since "...double-entry had been adapted for agency bookkeeping..." Yamey [50], "...agency bookkeeping played a significant part in the emergence of double-entry" Yamey [50]

## A distinction between the invention of accounting and the Birth of modern accounting

Hendriksen [38] asserted that Italy was a fortunate county in which the number of events, or "antecedents" as labeled by Littleton [16], converged. These events are the art of writing, development of arithmetic, use of money as a means to sell and buy, emergence of the concept of private property, development of credit, and accumulation of capital facilitated by partnerships and joint ventures (for more, see Hendriksen [38]). Since "the foundations of our society were laid" Hendriksen [38] in Italy, the origins of concepts and ideas were grounded in its civilization. Tracing the origins on double-entry bookkeeping, Martinelli [60]

concluded, "Venetian double entry bookkeeping, greatly improved by the introduction of the journal so closely correlated with the ledger, spread, during the fifteenth and sixteenth centuries, to Lombardy, Tuscany and other Italian regions, although the method did not originate in Venice. But it was this Venetian form that during the first half of the sixteenth century spread to other European countries." From that geographic location, double-entry bookkeeping spread worldwide. "The main influences which spread the knowledge and use of the Italian bookkeeping to Germany..." (Yamey [50], footnote no. 17). Specifically, "Schreiber's Ayn new kunstlich Buech, published in Nurnberg in 1518, is the earliest known book on bookkeeping in German, and the earliest treatise in any language devoted solely to bookkeeping" Yamey [50]. Accounting, as known today, especially with its association with an agency (that is, delegating authority to others in managing one's resources), is not unique in the modern Western world. The origins and roots of modern accounting were already established in Italy Hendriksen [38]. Given the enforcement of accountability, the development of the agency relationship in Italy, a concept that later became important to the development of corporations7, was an important notion. As Yamey [50] articulated, "The relationship of principal and agent was well-known in Western commerce from an early date; and where the relationship exists there is a pressing need for some form of detailed accounting-a much more urgent need for systematic records than in the case of single proprietorships or even partnerships. The earliest known proprietorship accounting records reveal a rudimentary "system," confined to credit transactions. An agent would have required more detailed records; and almost certainly records of all transactions, whether cash or credit, would have been necessary."

While Italy was indeed a fortunate geographic location that experienced the birth of modern accounting, the rest of the world contributed to the advancement of civilized Italy. With their admission to the linkage between modern accounting and Italy, Hendriksen [38] conceded, "accounting is not the creation of white, Anglo-Saxom, Protestant males. Its development depended crucially on events in Africa, in India, in Iraq, in Iran, and elsewhere. Accounting is truly a product of the world." Gleeson-White (2011: 25) documented that many business practices new to unenlightened Europe, including "the cheque had long been used by "Arab merchants, who gave...the English word cheque." In the early ninth century, a Muslim trader was able to "cash a cheque in China drawn on his bank in Baghdad" (Gleeson-White, 2011: 25). It is fair to admit that Italy "was the recipient of the accumulated wisdom of generations of scholars from Mesopotamia, Egypt, India, and the Middle East" Hendriksen [38].

### What is accounting? alternatively, what might accounting he?

Accounting supposedly portrays participants' actions as a means of documentation and measuring their economic consequences. Accounting operates in an environment where the actors are humans. Transactions are an exemplification of social interactions between participants in such an environment.

Measurement the net effect that results from the transaction upon contracting parties characterizes the representation of such an interaction. Transactions are demonstrations of valid interactions that result in agreements between contracted parties to bear economic consequences upon them. Double-entry bookkeeping, a transcribed expression of merchants' relationships with others (Pacioli, 1494 as cited in Gleeson-White, 2011), was an accounting reaction to business necessities Yamey [50]. According to Pacioli (as quoted in Gleeson-White, 2011: 92-93), double-entry bookkeeping is "nothing else than the expression in writing of the arrangement of [a merchant's] affairs." The duality that double-entry bookkeeping portrays captures the two dimensions of representativeness simultaneously. First, the physical reality in the business world and the universe of commerce is represented by economic exchanges, which are resources that are either given up or acquired. Second, the social reality is what a party owns or owes. While reviewing and commenting on the work of Professor Schmandt-Besserat's8 archaeological research on accounting, Mattessich [3] recognized "two different kinds of dualities: a fundamental duality pertaining to physical reality, (e.g., the transfer of commodities) and a derived duality restricted to social reality (e.g., ownership and debt-relations)." Some actions pass economic consequences to a reporting entity without exchanges. A disaster, for example, might yield economic consequences upon a reporting entity that affects its net assets without exchanging economic resources. Although no transaction has been in place, accounting is obligated to depict such an effect on net assets. Accounting is a human invention. "Accounting resembles crafts in so far as it consists of techniques designed to serve certain practical ends" Yamey [50]. In their responses to the needs of societies and businesses, accountants and bookkeepers constantly invented technologies in accounting to meet such needs starting from double-entry bookkeeping, which has been a great innovative technology in human history. Without it, preserving and protecting resources arguably would have been near impossible. Holding agents delegated to administer such resources would have been perhaps unmanageable.

Nowadays, accountants are required to keep up with business demands by acquiring and mastering yet more skills related to big data and data analytics [61]. Triple-entry bookkeeping (Fraser [62], Grigg [63]; Gröblacher Mizdraković [64]; Ibañez et al [65]; Ibañez et al. [66]; Ijiri [67]; Karri [68]; Melse [69] represents an opportunity for accounting to serve business needs at the age of "blockchain" (Cai Cynthia Weiyi [70]; Faccia [71]; Faccia et al [72]), which is a new reality that can be a new landscape of businesses worldwide. As earlier discussed, there are two dimensions of reality that accounting captures Mattessich [3]. Accounting is a legitimating institution Richardson [73], specifically a social institution Hopwood & Miller [74]; Hopwood [75]; Potter [76]; Chapman et al. [77]. Waymire [78] instead view it as an economic institution.

A complete representation of such a reality that underlies an entity is forever impossible [6,20,21,30]. Accounting income number, for example, is unlike so-called "true," "real," and "economic" income [79]. Generally Accepted Accounting Principles (GAAP)' are the accountants' "truth" [6,20,21]. GAAP represents standardized,

but not absolute, truth for corporate reporting. Therefore, corporate reports reflect the truth that GAAP are designed to measure and communicate to stakeholders. Similar to social sciences where "absolute 'truth' is forever impossible" Kerlinger [80], accounting, as social science Mautz [81], but not a science Stamp [82], defines reality in its relevant, suitable, and convenient context. Similar to objectivity in social science, where it has reached its edge Gillispie [83], objectivity and neutrality, if such concepts exist, in accounting, have their limit [84-88]. Even newly proposed accounting research methodology, namely positive accounting methodologies Watts [89,90]; Watts and Zimmerman [91-97], which has been propagated as objective, is not [98,99]. It has been under attack since it was established [9, 20, 23,24, 85, 87, 98,99]; [100-131]. Arguably, the founders of positive accounting methodologies might properly identify the imaginary needs of today's investors in the US capital market but inaccurately proposed an accounting methodology for accounting inquiry [9]. Its apparent accomplishment in the US accounting academy is rhetoric [9,104,119]. Accounting can best be viewed as rhetoric [132,133]. Some important concepts in accounting, for example, auditor independence, is justified rhetorically [134]. For the corporate model to operate, a party needs to appear independent in spite of the impossibility of being imperial in fact Al-Adeem [84,135]. Objectivity, its practice, and definition have advanced in anthropological history to be "a multifarious, mutable thing, capable of new meanings and new symbols: in both a literal and figurative sense" [136]. Supposedly, even if reality is present in nature, its perception that a spectator construct is perchance of the superlative realization [137]. Human investigation aided by numbers might not yield an objective conclusion, as it may appear [138]. Truth in accounting is problematic [139]. Inquiring about truth in accounting and auditing (Briloff [140,141]; Bayou et al. [142]; MacNeal [53]; Conway [143] was indeed critical and may not have been understood by accountants and wellperceived accounting academics. Professor Kenneth MacNeal continued to write critically on accounting and the financial system [54,55,144,145]. Forty years later, Zeff [146] felt concerned about his work and analytically evaluated for learned lessons. Contemporary accounting researchers may want to visit old solutions and cures for contemporary issues contemporary accounting faces. Studying influences from early accounting literature on contemporary research, Bricker [147] concluded that: "The practice of accounting, from which the academic side of our discipline arises, is in a state of continual change. Research issues rise and fall. It is not clear that, like the sciences, we can accumulate all the knowledge of our prior literature and embody it in contemporary research. To avoid "reinventing the wheel", it is therefore important to be alert to our own biases and to not forget literature which today may seem dusty and dated, but which tomorrow may address an issue of great concern."

Conceivably time has proven the possible usability of opinions, perceptions, and conjectures though perceived radical or not applicable. For example, Bergant [148] deemed Al-Adeem "among the first more radical authors" for emphasizing the findings of his research regarding the neglect of accounting theory and the state

in which academic accounting research is in at the current era. Instead of labeling accounting research inquiring about the role of accounting and questioning its usability and benefit to society as 'critical' or 'historical,' it should be one of the mainstream accounting research. Mainstream accounting research virtually occupies contemporary accounting researchers, particularly in the U.S. [137,149-151]. [130,152-160] see also Heck & Jensen; Tinker [98]; Tuttle [161]. After writing extensively on accounting sociology and prevailing of the neoliberalism in American society and U.S. accounting academe, Professor Paul Williams summarized his basic claim "that the current structure of the U.S. academy is one constructed primarily for serving the purpose of generating politically correct academic reputations" (2017: 83). The public needs theses and views enlightening participants in society about a corporation. Potentially, accounting researchers can assist in retheorizing the corporate model accurately for the best of humankind and their societies. More importantly, the public deserves to illuminate whether accounting is or can be a servant of two masters (one inside the corporation running its day-to-day operations; and one outside financing its operations). Brandies (1914: 56, as cited in DeLong [162]) stated, "No man can serve two masters." Accountants asked to "be serving two masters...[who] have adverse interests" are no exception from such impracticality [163]. Uncovering corporate scandals and jailing corporate executives may not add value to the corporate economy that has been a victim of unrealistic optimism by executives, professional managers, or their external auditors' ethical erosion. 'Let us hope nobody would notice' should not be thought of when it is time to release corporate reports to the public. When the public noticed, their wealth and savings invested in corporations had already been drained out of the corporation because of a failing adventure of an executive who hoped that the public pay for their executive's learned lesson. When corporations rule the world Korten [164] with the ideology that is 'profit over people' Chomsky [165], the public needs to take a stand for such a corporate model as opposed to financing its operations by seeking returns on their investments to become the victim of what they created in their societies when corporations fail. The public where corporations are financed is in a social paradox. Accounting cannot be blamed for the failures of corporations as a business model where two masters whose interests are conflicting. The emergence of giant corporations whose ownerships are scattered worldwide, mainly for multinational corporations serving passive or absent so-called owners, has been an accounting challenge for over a century [6,9,17,24-26,166,167].

Accounting theorists have also played a role in putting a theory that guides the preparation of corporate reports. To name some, [53-55]; [168-185]. In addition, a range of hard work by academic organizations, e.g., the American Accounting Association (AAA) [186-189], professional bodies, for example, the American Institute for Certified Public Accountants (AICPA), e.g., Sanders [190]<sup>10</sup>; Moonitz [191]; Sprouse and Moonitz [192]; Staff of the Accounting Research Division [193]; Grady [194] have attempted to theorize corporate reporting. Reporting to externals with interests in the

reporting entity about its internal affairs and its prospect has been an assigned role for corporate accounting. At the same time, internals such as executives who hire individuals in charge of the corporate reporting function has direct access to them. Accounting and its methods and procedures have been defended throughout time Alharbi & Al-Adeem [195]; Hatfield [196]<sup>11</sup>. Some have suggested that putting shareholders first harms the interests of investors, corporations, stakeholders, and the public [197,198]<sup>12</sup>. Serving the interest of shareholders in corporations is a myth [197,199,200]. Holding publicly traded corporations' shares for seconds entitles one to claim ownership Kravitz [199,200] is frivolous. It should not be an accounting issue when the public accepts and finance a corporation that is organized based on a model that assumes the existence of unrealism.

#### **Concluding Reflections and Learned Lessons**

Learning about the point when accounting was first used is not as important as learning that the very nature of accounting is adaptive. Accounting has been the servant of humankind to safeguard resources. Accounting responds naturally to business needs. Accounting is mainly about reacting to such needs throughout time. Chatfield [12] asserts: "...accounting processes are reactive, that they develop mainly in response to business needs at given time, and that their growth is relative to economic progress generally... the higher the level civilization, the more elaborate the bookkeeping methods. And as record keeping needs multiply, the ability of accounting data to promote or hinder economic development also increases." When people manage their wealth, operating resources, and businesses, control was the needed function from accounting to govern business' resources. When partnerships were the prevailing model for conducting business, Hendriksen [38] made it clear that, "As trade expanded and wealth accumulated, individual trading was replaced largely by trading through agencies and partnerships. The use of partnerships permitted the risks of the long sea voyages to be shared and allowed the wealth of the capitalist to be combined with the daring of younger traders."

With the prevalence of partnership, a need called for using multiple measurements for valuing resources. Accountants invented measurement bases. Businesspersons comprehended accounting measurements used by accountants to account for operations and report their economic effects. Partners in England used historical cost and fair value [201]. Chambers [201] further concluded that, "Whatever basis was in fact used, the owners or partners could ascertain the state of affairs from what the account showed and their knowledge of the going market prices of merchandise and other property. Partnership contracts generally secured to the parties the right of access to the partnership books and records."

Even when there was more than one owner, other owners, who might not be involved in businesses, comprehended [6,20,21]. When corporations emerged out of necessity, Previts [167] articulate that, "Corporations arose because of their capacity to support expanding markets and enterprise operations at levels of competitive efficiency called for in a nation where the tasks and

risks were large and the sources of wealth and capital not highly concentrated. There was also the need to use scarce skills, both technical and managerial, wisely. The high costs of scare labor encouraged use of machinery and therefore begat relatively larger investment outlays... [reference omitted]. The appetite of such operations for capital would influence the shape of the money markets and the industrial revolution that overtook the American economy in coming decades."

The shift in business needs with the birth of corporations was recognized early in accounting practice and thought. For example, in 1936, A Statement of Objectives of the American Accounting Association recognized a shift in the purpose of accounting, which corresponds to the changes in the business model: "Accounting, originally designed for the purpose of providing internal control of business affairs by private owners, now finds itself faced with the responsibility of compiling and expressing the results of business operations in a way which will meet the needs of investors, governmental units, and the public at large, as well as those of the immediate management. The mechanism of private accounting must be adapted to serve these broad social and economic purposes." (p. 1)

In sum, this article is a surmise of some of the discourse in accounting about its role across time. It is flavored with archaeologists' conclusions based on archaeological evidence about roles played by accounting in ancient civilizations. Furthermore, some accounting academics who are trained to be positivists may view themselves when reading material on the internal logic of accounting as well as the development of accounting thought as if they are in 'the land of wonder' [22]. This article should serve them properly. By efficiently revisiting the role of accounting, lessons that assist accountants in responding to their role in the corporate model can be deduced [202-232].

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<sup>1</sup>For a brief of the model, see also Belkaoui (2004: 366-367).

<sup>2</sup>Boursy (1943) lists as many as 27 forms of writing Pacioli's name, particularly noted by those who read languages other than English. See Boursy (1943) for more about his name.

<sup>3</sup>The newspaper states: "Accounting was born in the late fifteenth century AD by Bacello, the famous Italian monk. ["Accounting was invented in the late fiftieth century by Loca Pacioli, the famous Italian munch."].

<sup>4</sup>Hannan [Hannan] states: "The origin of accounting is attributed to the work of Luca Pacioli LUCA PACIOLI is the world's most famous Italian mathematician... "The origins of accounting are attributed to the work of Luca Pacioli, a famous Italian mathematician."]

<sup>5</sup>For more information on the book, see Gleeson-White (2001: 77-78 and 91-92). For an illustration of double-entry bookkeeping as explained in the 1449 treatise, see Gleeson-White (2011, chapter 4).

<sup>6</sup>Information of this source as appeared in Kats (1930:313) James Peele: He Pathe-way to perfectness in th'accomptes of Debitor and Creditor, 1569.

<sup>7</sup>Watts (1974, 1977) and Watts & Zimmerman (1978, 1979, 1981, 1982, 1983, 1986, 1990) propose an agency model serving as a meta-theory for contemporary accounting research that dominates other theoretical accounting approaches (see Al-Adeem & Fogarty, 2010). Accounting researchers have severely criticized their methodology since it was proposed. Later in the paper, this discourse is highlighted.

<sup>8</sup>Professor Schmandt-Besserat is a scholar in archeology. Among her exciting contribution, she wrote on the emergence of recording (1982), the origins of writing (1986a), ancient token systems (1986b), the history of counting (1999), and how writing came about (2010). She was a keynote speaker at the 2007 America Accounting Association, Chicago, United States. She, at the stage, testified that accounting assisted and was needed in sophisticated economic systems exited in advanced nations. The selection of her wiring reveals her position toward the role of accounting in societies, e.g.: Accounting In Prehistory (1988a); From Accounting to Writing (1988b); Accounting in the Prehistoric Middle East (1990b); Accounting at the Dawn of History (1992). Mattessich (1994) credited her and recognized her work.

<sup>9</sup>Regretting that Professor Gabriel A. D. Preinreich left us unrecognized, Al-Adeem (2021a: 630, endnote no. 7) dismally documented that: "Professor Gabriel A. D. Preinreich wrote extensively on accounting and accounting theory-related topics, but his fame and contribution have sorrowfully passed unrecognized. Brief (1966, xiii-xxiii) collected some of his contributions and shed light on some of his life. Some of the articles Professor Preinreich authored were collected in a volume edited by Professor Richard Brief and published in the Routledge Revivals series. A debt of gratitude is owed to Professor Richard Brief for noticing his contribution; some of it has been compiled in a single volume and, most importantly, for writing the introduction about him. The introduction... is a significant contribution to the development

of accounting thought literature as no articles written for his memorial are similar to what academics usually do when a colleague passes away. The book was reviewed by Bloom (1997)."

<sup>10</sup>Al-Adeem and Fogarty (2010: 79) provide this statement's history. They state, "It was first published when the Institute used to be named the American Institute of Accountants (AIA). In 1957, the name was changed to the American Institution of Certified Public Accountants (AICPA) (see http://www.aicpa.org). The American Accounting Association reprinted the statement several times (1959, 1963, 1968, 1974, and 1977)."

<sup>11</sup>The original paper was read before the American Association of University Instructors in Accounting on December 29, 1923.

<sup>12</sup>For more on the discourse in this book, an issue of Accounting, economics, and law: A convivium was dedicated to a review of the book in addition to other reviews for example, Schrempf-Stirling, (2013).

#### References

- Golberge L (1964) An inquiry into the nature of accounting. Sarasota, American Accounting Association, FL, USA.
- 2. Burchell S, Clubb C, Hopwood A, Hughes J, Nahapiet J (1980) The roles of accounting in organizations and society. Accounting, Organizations and Society 5 (1): 5-27.
- 3. Mattessich R (1989) Accounting and the input-output principle in the prehistoric and ancient world. Abacus 25(2): 74-84.
- Mattessich R (2012) The beginnings of accounting and accounting thought: Accounting Practice in the Middle East (8000 BC to 2000 BC) and Accounting Thought in India (300 BC and the Middle Ages). Routledge, USA.
- Buhr N (2006) Accounting: It lifts and separates. Working paper, University of Saskatchewan, Canada.
- 6. Al-Adeem, KR (2017a) A need for theorizing corporation: An accounting perspective. Int J of Account Res 5(2): 166.
- Al-Adeem KR (2020a) Deepening the understanding in the conceptual (theoretical) framework for financial accounting. King Saudi University Press, Saudi Arabia.
- Al-Adeem KR (2020b) Cultural challenges for countries implementing international financial reporting standards without contributing to their creation. African Journal of Accounting, Auditing and Finance 7(1): 66-86.
- Al-Adeem KR (2021a) Properly identified imaginary needs, an inaccurately proposed methodology: The case of Rochester school of accountancy's positive accounting methodology. Accounting and Management Information Systems 20: 607-645.
- Belkaoui A (1995) The cultural shaping of accounting. Quorum Books, USA.
- 11. Chambers RJ (1960) The conditions of research and accounting. Journal of Accountancy, pp. 33-38.
- Chatfield M (1977) A history of accounting thought (Revised ed.), R.E. Krieger Pub. Co, Huntington, New York, USA.
- Cowan TK (1968) A pragmatic approach to accounting theory. The Accounting Review 43(1): 94-100.
- 14. Hopwood AG (1987) The archeology of accounting systems. Accounting, Organizations and Society 12(3): 207-234.
- 15. Lehman G (2005) A critical perspective on the harmonization of accounting in a global world. Critical Perspectives on Accounting 16(7): 975-992.
- Littleton AC (1966) Accounting evolution to 1900. Russell and Russell, NY, New York, USA.
- 17. Merino BD (1993) An analysis of the development of accounting knowledge: A pragmatic approach. Accounting, Organizations and Society 18(2-3): 163-185.

- 18. Nelson EG (1949) Science and accounting. The Accounting Review 24(4): 354-359.
- 19. Vatter WJ (1963) Postulates and principles. Journal of Accounting Research. Autumn 1(2): 179-197.
- 20. Al-Adeem KR (2017b) Role of doctoral education in shaping minds and thinking: Reflection on my doctoral education at case western reserve university. International Journal of Critical Accounting 9(5-6): 494-513.
- 21. Al-Adeem KR (2017c) Contributions of gulf cooperation council for accounting and auditing organization's (gccaao) attempts unifying accounting practices and standards in enriching accounting thought: Analysis and evaluation. Accounting Thought Journal 21(2): 533-566.
- 22. Al-Adeem KR (2019a) Book review of: Understanding mattessich and ijiri: A study of accounting thought. European Accounting Association.
- 23. Al-Adeem KR (2021b) Empirically investigating the presence of positive accounting research as the meta-theory for accounting academics: Further evidence from Saudi Arabia. The Journal of Accounting and Management 11(3): 24.
- 24. Al-Adeem KR, Fogarty TJ (2010) Accounting theory: A neglected topic in academic accounting research. (1<sup>st</sup> edn), LAP Lambert Academic Publishing, Germany.
- 25. Al-Hazzani MH, Al-Adeem KR (2020) Do corporations' annual reports address shareholders as proprietors? Evidence from Saudi Arabia. International Journal of Auditing and Accounting Studies 2(2): 175-192.
- 26. Alshiban RF, Al-Adeem KR (2022) Empirically investigating the disclosure of nonfinancial information: A content study on corporations listed in the Saudi capital market. Journal of Risk and Financial Management 15(6): 251.
- 27. Statement on Accounting Theory and Theory Acceptance (SATTA) (1977) Committee on Concepts and Standards for Externals Financial Reports. Sarasota, American Accounting Association, FL, USA.
- Beaver W (2002) Review of the book accounting theory: An information content perspective by Christensen JA, Demski JS, European Accounting Review 11(3): 631-633.
- 29. Belkaoui AR (2004) Accounting Theory (5th edn.), London, UK.
- 30. Brearey CH, Al-Adeem KR (2019) Thinking beyond the black box: Sterling shows accountants the way toward relevance. Journal of Finance and Accountancy 26: 1-20.
- 31. Coetsee D (2010) The role of accounting theory in the development of accounting principles. Meditari Accountancy Research 8(1): 1-16.
- 32. Gaffikin MJR (1987) The methodology of early accounting theorists. Abacus 23(1): 17-29.
- García N (2017) Understanding mattessich and IJIRI: A study of accounting thought. Emerald Publishing.
- 34. King TA (2006) More than a numbers game: A brief history of accounting, John Wiley & Sons, USA.

- 35. Lee TA (2009) Financial accounting theory. In: Edwards JR, Walker SP (eds.), The Routledge Companion to Accounting Theory. Routledge Taylor & Francis Group, New York, USA, pp. 139-161.
- 36. Hellmann A, Perera H, Patel C (2010) Contextual issues of the convergence of international financial reporting standards: the case of Germany. Advances in Accounting, 26(1): 108-116.
- 37. Berry MH (1983) The accounting historians journal 10(1): 137-148.
- Hendriksen ES, Breda M (2001) Accounting Theory. McGraw-Hill, New York, USA.
- 39. Hackett W, Mobley S (1976) An auditing perspective of the historical development of internal control. Auditing Symposium III: Proceedings of the 1976 Touche Ross/University of Kansas Symposium on Auditing Problems, Lawrence, Kansas, University of Kansas, USA.
- 40. Kats P (1930) A surmise regarding the origin of bookkeeping by double entry. The Accounting Review 5(4): 311-316.
- 41. Kuhn TS (1996) The structure of science revolution (3<sup>rd</sup> edn), The University of Chicago Press, Chicago, IL, USA.
- 42. Cushing BE (1989) A Kuhnian interpretation of the historical evolution of accounting. Accounting Historians Journal 16(2): 1-41.
- 43. Grant A (2013) Give and take: A revolutionary approach to success. Penguin, New York, NY, USA.
- 44. Sorter GH (1969) An 'events' approach to basic accounting theory. The Accounting Review 44(1): 12-19.
- 45. Johnson O (1970) Toward 'an events' theory of accounting. The Accounting Review 45(4): 641-653.
- 46. McCarthy WE (1982) The REA accounting model: A generalized framework for accounting systems in a shared data environment. The Accounting Review 57(3): 554-578.
- 47. McCarthy WE (1979) The entity-relationship view of accounting models. The Accounting Review 54(4): 667-686.
- 48. McCarthy WE (2003) The REA modeling approach to teaching accounting information systems. Issues in Accounting Education 18(4): 427-441.
- 49. Han N, Hilweh R (2004) Introduction to accounting theory: The intellectual framework and practical applications. Wael Publishing and Distribution House, Jordan.
- 50. Yamey BS (1947) Notes on the origin of double-entry bookkeeping. The Accounting Review 22(3): 263-272.
- Merhi HA, Sabban MS (1988) Accounting development and contemporary accounting problems. Arab Renaissance House for Printing and Publishing, Lebanon.
- Alhomaid A, Ibrahim AB (2009) Accounting theory. Obeikan Library, Riyadh, Saudi Arabia.
- MacNeal K (1939a) Truth in accounting. University of Pennsylvania Press. USA.
- 54. MacNeal K (1939b) What's wrong with accounting? The Nation, pp. 370-372.
- 55. MacNeal K (1939c) What's wrong with accounting? The Nation, pp. 409-412
- Matar MA (1996) Accounting theory and information economics Hanen library, Jordan.
- 57. Littleton AC (1928) Paciolo and modern accounting. The Accounting Review 3(2): 131-140.
- Baskin JB, Maranti PJ (1997) A history of corporate finance. Cambridge University Press, USA.

- 59. Mattessich R (1994) Archaeology of accounting and Schmandt-Besserat's contribution, Accounting, Business & Financial History 4: 1, 5-28.
- 60. Martinelli A (1977) Notes on the origin of double entry bookkeeping. Abacus 13(1): 3-27.
- 61. Omitogun A, Al-Adeem K (2019) Auditors' perceptions of and competencies in big data and data analytics: An empirical investigation. International Journal of Computer Auditing 1(1): 92-113.
- 62. Fraser IA (1993) Triple-entry bookkeeping: A critique. Accounting and Business Research 23(90): 151-158.
- 63. Grigg I (2005) Triple entry accounting, Work in progress.
- 64. Gröblacher M, Mizdraković V (2019) Triple-entry bookkeeping: History and benefits of the concept. Proceedings: Digitization and Smart Financial Reporting, Singidunum University International Scientific Conference, pp. 58-61.
- 65. Ibañez JI, Bayer CN, Tasca P, Xu J (2020) REA, triple-entry accounting and blockchain: Converging paths to shared ledger systems.
- 66. Ibañez JI, Bayer CN, Tasca P, Xu J (2021) The efficiency of single truth: Triple-entry Accounting.
- 67. Ijiri Y (1986) A framework for triple-entry bookkeeping. The Accounting Review, pp. 745-759.
- 68. Karri H, George L (2021) Providing visibility to recording of related transactions using blockchain technology by shifting from double entry to triple entry. The Management Accountant Journal, pp. 35-41.
- 69. Melse E (2010) Momentum accounting for trends: Relevance, explanatory and predictive power of the framework of triple-entry bookkeeping and momentum accounting of Yuji Ijiri. Nyenrode Business University, Netherlands.
- 70. Cai CW (2021) Triple-entry accounting with blockchain: How far have we come? Accounting & Finance 61: 71-93.
- 71. Faccia A, Mosteanu NR (2019) Accounting and blockchain technology: from double-entry to triple-entry. The Business & Management Review 10(2): 108-116.
- 72. Faccia A, Moșteanu NR, Leonardo LP (2020) Blockchain hash, the missing axis of the accounts to settle the triple entry bookkeeping system. In Proceedings of the 2020, 12th International Conference on Information Management and Engineering, pp. 18-23.
- 73. Richardson AJ (1987) Accounting as a legitimating institution. Accounting, Organizations and Society 12(4): 341-355.
- 74. Hopwood A, Miller (1994) Accounting as social and institutional practice. Australia, Melbourne: Cambridge University Press, UK.
- 75. Hopwood T (2013) Accounting from the outside (RLE Accounting): The Collected Papers of Anthony G. Hopwood. Routledge, UK.
- 76. Potter BN (2005) Accounting as a social and institutional practice: Perspectives to enrich our understanding of accounting change. Abacus 41(3): 265-289.
- Chapman CS, Cooper DJ (2009) Accounting, organizations, and institutions: Essays in honour of anthony hopwood. Oxford: Oxford University Press, USA.
- 78. Waymire GB, Basu S (2008) Accounting is an evolved economic institution. Foundations and Trends in Accounting 2(1–2): 1-174.
- Horngren CT (1978) Security analysts and the price level. The Accounting Review 30(4): 575-581.
- 80. Kerlinger FN (1979) Behavioral research: A conceptual approach. Holt, Rinehart and Winston, New York, USA.

- 81. Mautz RK (1963) Accounting as a social science. The Accounting Review 38(2): 317-325.
- 82. Stamp E (1981) Why can accounting not become a science like physics? Abacus 17(1): 13-27.
- 83. Gillispie CC (1960) The edge of objectivity: An essay in the history of scientific ideas. Princeton, NJ, Princeton University Press, USA.
- 84. Al-Adeem KR (2022) Reconceptualizing the management-auditor relationship by applying the general partnership contract to challenge independence: Ideals versus reality. Journal of Accounting, Business and Management (JABM) 29(1): 155-193.
- 85. Hines RD (1988) Popper's methodology of falsificationism and accounting research. The Accounting Review 63(4): 657-662.
- 86. Morgan G (1988) Accounting as reality construction: Towards a new epistemology for accounting practice. Accounting Organizations and Society 13(5): 477-485.
- 87. Tinker AM, Merino BD, Neimark MD (1982) The normative origins of positive theories: Ideology and accounting thought. Accounting, Organizations and Society 7(2): 167-200.
- 88. Tinker A, Sy A (2017) Politicisation of the professions. International Journal of Economics and Accounting 8(1): 61-66.
- 89. Watts R (1974) Accounting objectives. Working paper series No. 7408. University of Rochester, USA.
- 90. Watts RL (1977) Corporate financial statements, a product of the market and political processes. Australian Journal of Management 2(1): 53-75.
- 91. Watts RL, Zimmerman JL (1978) Towards a positive theory of the determination of accounting standards. The Accounting Review 53(1): 112-134.
- 92. Watts RL, Zimmerman JL (1979) The demand for and supply of accounting theories: The market for excuses. The Accounting Review 54(2): 273-304.
- 93. Watts RL, Zimmerman JL (1981) The markets for independence and independent auditors. Working paper series No. GPB/80-10, University of Rochester. USA.
- 94. Watts RL, Zimmerman JL (1982) Auditors and the determination of accounting standards, Working paper series No. GPB/78-06, University of Rochester, USA.
- 95. Watts RL, Zimmerman JL (1983) Agency problems, auditing and the theory of the firm: Some evidence. The Journal of Law and Economics 26(3): 613-633.
- 96. Watts RL, Zimmaerman JL (1986) Positive accounting theory. Printice-Hall, New Jersey, USA.
- 97. Watts RL, Zimmerman JL (1990) Positive accounting theory: A ten year perspective. The Accounting Review 65(1): 131-156.
- 98. Tinker T, Puxty T (1995) Policing accounting knowledge: The market for excuses affair. Princeton, Markus Weiner Publishers, NY, USA.
- 99. Tinker T (1988) Panglossian accounting theories: The science of apologising in style. Accounting, Organizations and Society, 13 (2): 165-189
- 100. Al-Adeem KR (2019b) Who decides what is publishable? Empirical study on the influence of a journal's editorial board on the observed paradigm shift in us academic accounting research. The North American Accounting Studies 2(1): 1-21.
- 101. Al-Adeem K (2019c) Critique and an extension of nohora garcía's understanding mattessich and ijiri: A study of accounting thought. International Journal of Accounting and Financial Reporting 9(4): 420-438
- 102. Avelé D (2014) Positive accounting theory: Theoretical and critical perspectives, International Journal of Critical Accounting 6 (4): 396-415.

103. Belkaoui AR (1996) Accounting. A Multiparadigm Science, USA.

- 104. Boland LA, Gordon IM (1992) Criticizing positive accounting theory. Contemporary Accounting Research 9(1): 142-170.
- 105. Chabrak N (2005) The politics of transcendence: Hermeneutic phenomenology and accounting policy. Critical Perspectives on Accounting 16(6): 701-716.
- 106. Chabrak N, Burrowes A (2006) The Language of the Rochester School: Positive Accounting Theory Deconstructed. In 8th IPA Conference-The Interdisciplinary Perspectives on Accounting Conference.
- 107. Chambers RJ (1993) Positive accounting theory and the PA cult. Abacus 29(1): 1-26.
- 108. Christenson C (1983) Methodology of positive accounting. The Accounting Review 58(1): 1-22.
- 109. Collin SOY, Tagesson T, Andersson A, Cato J, Hansson K (2009) Explaining the choice of accounting standards in municipal corporations: Positive accounting theory and institutional theory as competitive or concurrent theories. Critical Perspectives on Accounting 20(2): 141-174.
- 110. Demski JS (1988) Positive accounting theory: A review. Accounting, Organizations and Society 13(6): 623-629.
- 111. Kabalski P (2016) Why should accounting science be more normative? Accounting Theoretical Notebooks 88: 61-72.
- 112. Kabir H (2010) Positive accounting theory and science. Journal of Centrum Cathedra 3(2): 136-149.
- $113.\ Kaplan\,SE, Ruland\,RG\,(1991)\,Positive\,theory, rationality\,and\,accounting\\ regulation.\,Critical\,Perspectives\,on\,Accounting\,2(4):\,361-374.$
- 114. Lowe EA, Puxty AG, Laughlin RC (1983) Simple theories for complex processes: Accounting policy and the market for myopia. Journal of Accounting and Public Policy 2(1): 19-42.
- 115. Major MJ (2017) Positivism and alternative accounting research. Revista Contabilidade & Finanças 28(74): 173-178.
- 116. Milne MJ (2002) Positive accounting theory, political costs and social disclosure analyses: A critical look. Critical Perspectives on Accounting 13(3): 369-395.
- 117. Mouck T (1989) Irony of the golden age of accounting methodology. Accounting Historians Journal 16(2): 2.
- 118. Mouck T (1990) Positive accounting theory as a lakatosian research programme. Accounting and Business Research 21(79): 231-239.
- 119. Mouck T (1992) The rhetoric of science and the rhetoric of revolt in the "story" of positive accounting theory. Accounting, Auditing & Accountability Journal 5(4): 35-56.
- 120. Ndjetcheu L (2012) An African critical interpretation of the positive theory of accounting of Watts and Zimmerman (1978, 1980, 1986). African Journal of Accounting, Auditing and Finance 1(1): 25-39.
- 121. Okcabol F, Tinker T (1990) The market for positive theory: Deconstructing the theory for excuses. Advances in Public Interest 3: 71-95.
- 122. Persson ME (2016) Foreword AC Littleton's final thoughts on accounting: A collection of unpublished essays. Emerald Group Publishing Limited, UK.
- 123. Sinha SK (2008) Positive accounting theory: A critique. The IUP Journal of Accounting Research and Audit Practices 7(4): 7-16.
- 124. Srivastava J, Baag PK (2020) Positive accounting theory and agency costs: A critical perspective. AIMS International 14(2): 101-113.
- 125. Sterling RS (1990) Positive accounting theory: An assessment. Abacus 26(2): 97-135.
- 126. Sy A, Tinker T (2011) From Mellmott to Madoff: History in the (re) making. Accounting Historians Journal 38(1): 141-158.

- 127. West BP (2003) Professionalism and accounting rules. Routledge, New York, NY, USA.
- 128. Whittington G (1987) Positive accounting: A review article. Accounting and Business Research 17(68): 327-336.
- 129. Williams PF (1989) The logic of positive accounting research. Accounting, Organizations and Society 14(5/6): 455-468.
- 130. Williams PF (2003) Modern accounting scholarship: The imperative of positive economics science. Accounting Forum 27(3): 251-269.
- 131. Williams PF (2017) Jumping on the wrong bus: Reflections on a long, strange journey. Critical Perspectives on Accounting 49: 76-85.
- 132. Nahapiet J (1988) The rhetoric and reality of an accounting change: A study of resource allocation. Accounting Organizations and Society 13(4): 333-358.
- 133. Thompson G (1991) Is accounting rhetorical? Methodology, Luca Pacioli and printing. Accounting, Organizations and Society 16(5-6): 572-599.
- 134. Reiter SA, Williams PF (2004) The philosophy and rhetoric of auditor independence concepts. Business Ethics Quarterly 14(3): 355-376.
- 135. Al-Adeem KRA (2015) Sustaining mutual and market interests in the auditor and corporate client relationship. American accounting association mid-Atlantic region, 2015 mid-Atlantic region meeting at: Cherry Hill, NJ, USA, p. 28.
- Daston L, Galison P (1992) The image of objectivity. Representations, Autumn 40: 81-128.
- 137. Al-Adeem K (2017e) Role of doctoral education in shaping minds and thinking: Reflection on my doctoral education at case Western Reserve University. International Journal of Critical Accounting 9 (5-6): 494-513.
- 138. Al-Adeem K (2018) Role of quantitative methods in quantifying reality objectively. Journal of Quantitative Methods 2(2): 1-6.
- 139. Riahi-Belkaoui Ahmed (2018) The Problematics of Truth in Business and Accounting, pp. 41.
- 140. Briloff AJ (1966) Old myths and new realities in accountancy. The Accounting Review 41(3): 484-495.
- Briloff AJ (1981) The truth about corporate accounting. Harpercollins, USA.
- 142. Bayou ME, Reinstein A, Williams PF (2011) To tell the truth: A discussion of issues concerning truth and ethics in accounting. Accounting, Organizations and Society 36(2): 109-124.
- 143. Conway RA (2020) The truth about public accounting: Understanding and managing the risks the auditors bring to the audit. Independently published.
- 144. MacNeal K (1941a) Caveat investor. The Nation, pp. 151-153.
- 145. MacNeal K (1941b) Is our system of financial reporting sound? The Accounting Forum, pp. 7-11.
- 146. Zeff SA (1982) Truth in accounting: The ordeal of Kenneth MacNeal. The Accounting Rev.
- Bricker RJ (1988) Influences from early accounting literature on contemporary research. Accounting Historians Journal 15(2): 83-98.
- 148. Bergant Ž (2021) Accountancy, ethics and sustainable development. In: Mario La Torre (Edn), Accountancy and Social Responsibility, Switzerland, pp. 149-168.
- 149. Al-Adeem KR (2019d) Who decides what is publishable? Empirical study on the influence of a journal's editorial board on the observed paradigm shift in US academic accounting research. The North American Accounting Studies 2(1): 1-21.

- 150. Fogarty TJ (2011) The social construction of research advice: The American accounting association plays miss lonelyhearts. Accounting and the Public Interest 11(1): 32-51.
- 151. Fogarty T, Jonas G (2010) The hand that rocks the cradle: Disciplinary socialization at the American accounting association's doctoral consortium. Critical Perspectives on Accounting 21(4): 303-317.
- 152. Fogarty TJ, Liao C (2009) Blessed are the gatekeepers: A longitudinal study of the editorial boards of the accounting review. Issues in Accounting Education 24(3): 299-318.
- 153. Fogarty TJ, Zimmerman A (2019) Few are called, fewer are chosen: Elite reproduction in US academic accounting. Critical Perspectives on Accounting 60: 1-17.
- 154. Lee T (1995) Shaping the US academic accounting research profession: The American accounting association and the social construction of a professional elite. Critical Perspectives on Accounting 6(3): 241-261.
- 155. Lee T (1997) The editorial gatekeepers of the accounting academy. Accounting, Auditing & Accountability Journal 10(1): 11-30.
- 156. Lee T (1999) Anatomy of a professional elite: The executive committee of the American Accounting Association 1916-1996. Critical Perspectives on Accounting 10(2): 247-264.
- 157. Lee TA (2001) Sustaining a habitus. In advances in accountability: Regulation, Research, Gender and Justice 8: 177-194.
- 158. Lee P, Guthrie J, Gray R (1998) Accounting and management research: Passwords from the gatekeepers. Accounting, Auditing & Accountability Journal 11(4): 371-406.
- 159. Lee T, Williams P (1999) Accounting from the inside: Legitimating the accounting academic elite. Critical Perspectives on Accounting 10(6): 867-895.
- 160. Williams PF (2001) Who gets to speak and what must they say? A commentary on the Briloff affair. Critical Perspectives on Accounting 12(2): 213–219.
- 161. Tuttle B, Dillard J (2007) Beyond competition: Institutional isomorphism in the U.S. accounting research. Accounting Horizons 21(4): 387–409.
- 162. DeLong JB (1991) Did JP Morgan's Men Add Value? An economist's perspective on financial capitalism. In: Termin P (Edn), Inside the Business of Enterprise: Historical Perspectives on the Use of Information, National Bureau of Economic Research, University of Chicago Press, USA, pp: 205-249.
- Carey JL (1946) Professional ethics of public accounting. NY American Institute of Accountants, USA.
- 164. Korten DC (2001) When corporations rule the world ( $2^{nd}$  edn), Kumarian Press, USA.
- 165. Chomsky N (1999) Profit over people: Neoliberalism & Global Order. Seven Stories Press, New York, USA.
- 166. Hunt B (2003) The timid corporation: Why business is terrified of taking risk. John Wiley and Sons, USA.
- 167. Previts GJ, Merino BD (1998) A history of accountancy in the United States. Columbus, OH: Ohio State University Press, USA.
- $168. \ \mbox{Cole WM (1908)}$  Accounts: Their construction and interpretation.
- 169. Dickinson A (1914) Accounting practice and procedure.
- 170. Esquerre PJ (1914) Applied theory of accounts.
- 171. Hatfield HR (1909) Modern accounting: Its principles and some of its problems.
- 172. Kester RB (1916) Accounting theory and practice.
- 173. Montgomery RH (1912) Auditing theory and practice.

- 174. Sprague CE (1907) Philosophy of accounts.
- 175. Wildman JR (1913) Principles of accounting.
- 176. Alexander SS (1950) Income measurement in dynamic economy.
- 177. Canning JB (1929) Economics of accounting.
- 178. Chambers RJ (1966) Accounting, Evaluation and Economics Behavior. Sydney University Press, Australia.
- 179. Edwards EO, Bell PW (1969) The theory and measurement of business income.
- 180. Gilman S (1939) Accounting concepts of profit.
- 181. Ijiri Y (1975) Theory of accounting measurement.
- 182. Littleton AC (1953) The structure of accounting theory.
- 183. Paton WA (1922) Accounting theory: An Introduction to Corporate Accounting Standards.
- 184. Preinreich GA (1996) A landmark in accounting theory: The work of Gabriel AD Preinreich (Richard Brief ed.), Routledge, Taylor & Francis, USA
- 185. Sterling R (1970) Theory of the measurement of enterprise income. 1st Edition, Journals Taylor & Francis, USA.
- 186. American Accounting Association (1941) Accounting principles underlining corporate financial statements. Reprinted in accounting and reporting standards for corporate financial statements and preceding statements and supplements. American Accounting Association, USA.
- 187. American Accounting Association (1957) Accounting principles underlining corporate financial statements. Reprinted in accounting and reporting standards for corporate financial statements and preceding statements and supplements. American Accounting Association, USA.
- 188. American Accounting Association (1966) A statement of basic accounting theory (ASOBAT). American Accounting Association, USA.
- 189. American Accounting Association (1971) Report of the committee on accounting theory construction and verification. American Accounting Association 46: 51-79.
- 190. Sanders TH, Hatfield HR, Moore U (1938) A Statement of accounting principles. American Institute of Certified Public Accountants. Accounting Research Division.
- 191. Moonitz M (1961) The basic postulates of accounting (ARS. No.1). American Institute of Certified Public Accountants. Accounting Research Division.
- 192. Sprouse RT, Moonitz M (1962) A tentative set of broad accounting principles for business enterprises (ARS. No. 3). American Institute of Certified Public Accountants. Accounting Research Division.
- 193. Staff of the Accounting Research Division (1963) Reporting the financial effects of price-level changes (ARS.6). American Institute of Certified Public Accountants, USA.
- 194. Grady P (1965) Inventory of generally accepted accounting principles for business enterprises (ARS. 7). American Institute of Certified Public Accountants. Accounting Research Division.
- 195. Alharbi A, Al-Adeem (2022) A defense on accounting discretion: A questionnaire-based inquiry. Working paper.
- 196. Hatfield HR (1924) Historical defense of bookkeeping. Journal of Accountancy 37(4): 241-253.
- 197. Stout LA (2012a) The shareholder value myth: How putting shareholders first harms investors, corporations and the public. Berrett-Koehler Publishers.

- 198. Stout LA (2012b) New thinking on "Shareholder Primacy". Accounting Economics and Law 2(2): 1-24.
- 199. Kravitz RH (2016) Editorial: Serving two masters: A challenge for the profession and planners. The CPA Journal. September. The New York State Society of CPAs, NY, New York, USA.
- 200. Sikka P, Stittle J (2019) Debunking the myth of shareholder ownership of companies: Some implications for corporate governance and financial reporting. Critical Perspectives on Accounting, p. 63.
- 201. Chambers RJ, Wolnizer PW (1991) A true and fair view of position and results: The historical background. Accounting Business and Financial History 1(2): 197-213.
- 202. Al-Adeem KR (2017d) Significance of announcing auditor switch by corroborations in Saudi Arabia: Analysis of professional and legal requirements. Accounting Thought Journal 21(2): 223-262.
- 203. American Accounting Association (1957) Accounting principles underlining corporate financial statements. Accounting and reporting standards for corporate financial statements and preceding statements and supplements. American Accounting Association, USA.
- 204. American Accounting Association (1948) Principles underlining corporate financial statements. Reprinted in accounting and reporting standards for corporate financial statements and preceding statements and supplements. American Accounting Association, USA.
- 205. Anderson JA (1977) The potential impact of knowledge of market efficiency on the legal liability of auditors. The Accounting Review 52(2): 417.
- Berle AA, Means GC (1932) The Modern Corporation and Private Property. New York. USA.
- 207. Boursy AV (1943) The name of Paciolo. The Accounting Review 18(3): 205-209.
- 208. Fogarty TJ, Jonas GA (2013) Author characteristics for major accounting journals: Differences among similarities 1989-2009. Issues in Accounting Education 28(4): 731-757.
- 209. Heck JB, Jensen (2007) An analysis of the evolution of research contributions by the accounting review, 1926-2005. Accounting Historians Journal 34(2): 109-142.
- 210. Hopwood AG (1983) On trying to study accounting in the contexts in which it operates. Accounting, Organizations and Society 8(2-3): 287-
- 211. Jones T (1857) Bookkeeping and accountantship, elementary and practical. John Wiley, New York, NY, USA.
- 212. Lazonik W (1988) Financial commitment and economic performance: Ownership and control in the American industrial corporation. Business and Economic History, Second Series 17: 115-128
- 213. MacNeal M (1970) Truth in accounting. Coastal Carolina college: Scholars Book Co, USA.
- 214. Mattessich R (2012) The beginnings of accounting and accounting thought: Accounting Practice in the Middle East (8000 BC to 2000 BC) and Accounting Thought in India (300 BC and the Middle Ages). Routledge, USA.
- 215. Schmandt-Besserat D (1982) The emergence of recording. American Anthropologist 84(4): 871-878.
- Schmandt-Besserat D (1986) The origins of writing: An archaeologist's perspective. Written Communication 3(1) 31-45.
- 217. Schmandt-Besserat D (1986b) An ancient token system-the precursor to numerals and writing. Archaeology 39(6): 32-39.
- 218. Schmandt-Besserat D (1988a) Accounting in prehistory. Proceedings of the Fifth World Congress of Accounting Historians 301: 1-10.

- 219. Schmandt-Besserat D (1988b) From accounting to writing. In: Rafoth BA, Rubin DL (eds.), The social construction of Writing and communication, Ablex Publishing Co. Norwood, NJ, USA, pp. 119-30.
- 220. Schmandt-Besserat D (1990) Accounting in the prehistoric middle east. Archeomaterials 4(1): 15-23.
- 221. Schmandt-Besserat D (1992) Accounting at the dawn of history. Proceedings of the  $6^{\rm th}$  World Congress of Accounting Historians, Kyoto.
- 222. Schmandt-Besserat D (1999) The history of counting. Harper Collins, Canada.
- Schmandt-Besserat D (2010) How writing came about. University of Texas Press, USA.
- 224. Schrempf-Stirling J (2013) The shareholder value myth: How putting shareholders first harms investors, corporations, and the Public, by Lynn A. Stout (San Francisco: Berrett-Koehler Publishers. Business Ethics Quarterly 23(3): 486-489.
- 225. Sweeney Henry W (1935) The technique of stabilized accounting. The Accounting Review 10(2): 108-205.

- 226. Sy A, Tinker T (2005) Archival research and the lost worlds of accounting. Accounting History 10(1): 48-69.
- 227. Thompson G (1994) Early double-entry bookkeeping and the rhetoric of accounting calculation. Accounting as Social and Institutional Practice 24: 40.
- 228. White GI, Sondhi AA, Fried D (2003) The analysis and the use of financial statements. In: Hoboken (3<sup>rd</sup> edn), NJ, John Wiley & Sons, Inc, IISA
- 229. Whitley R (2000) The intellectual and social organization of the science (2nd edn). Oxford University Press In, New York, USA.
- Williams PF (2017) Jumping on the wrong bus: Reflections on a long, strange journey. Critical Perspe.
- 231. Wyhe GV (1994) The struggle for status. Garland Publishing, Inc, NY, New York, USA.
- 232. Young JJ (2006) Making up users. Accounting, Organizations and Society 31(6): 579-600.