

THE HISTORY AND EVOLUTION OF ACCOUNTING THOUGHTS

While accounting appears to have been practiced at least since the beginning of recorded history, accounting theory is of comparatively recent origin. This may be due to the difficult, abstract nature of accounting thought, or perhaps to a gradual change in the scope and methods of accounting, which was thereby rendered more amenable to the formalized type of explanation which we call theory. Possibly there is some other cause; it is a matter for conjecture. In this chapter we will attempt to trace the historical development of accounting thought outside the United States.

A SHORT HISTORY OF ACCOUNTING: THE PRE-CHRISTIAN ERA

Excavations conducted by archaeologists invariably discover evidence that accounting was a feature of early civilizations. There are respectable hypotheses that both writing and arithmetic originated in the need to keep accounts, and that this first took place at the time of man's transition from hunter to cultivator. The origins of capital, in the form of a store of food, are also the origins of accounting.

Many of the early records which are recognizable accounts, or the raw materials of accounts, lack those systematic attributes of form and content with which we associate accounting today. They consist mostly of inventories, lists of commodities used as payments, contracts of sale or loan, and, more rarely, simple journal entries. Nevertheless, ancient accounts were both used and useful; a modern archaeologist, studying the records which were kept by the Chaldean merchant Ea-Nasir nearly five thousand years ago, was able to assert that he was trading at a loss.

The force which provided the necessary impetus for the development of modern accounting was the introduction of money as a means of exchange. As with so many other discoveries it appears that the Chinese were the originators of this practice and that they used coined money some two thousand years before it appeared in Europe. Although Western knowledge of Chinese accounting in ancient times is very limited, we do know that sophisticated forms of government accounting, including both historical accounting and budgetary control, existed in China as early as 2000 B.C., accompanied by an audit function performed by a high and independent public official.

The coinage of money having a uniform value, therefore, suitable for use as a medium of exchange, first took place in Europe in the seventh century B.C. Greek civilization, based on the secularization of an economy previously controlled by the priests, possessed a sophisticated

system of public administration with accounting and auditing functions, of which details have survived. Banking and other commercial activities were conducted in ancient Greece, and accounting played an important role in them. Management accounting was used in business, as we know from the Zenon papyri. These rolls represent the records of the Egyptian estates of Apollonius, finance minister to the Greek ruler Ptolemy Philadelphus II, which were managed by one Zenon. It is clear from them that techniques of accounting control, which we associate with the modern corporate form of business enterprise, were known and understood over two thousand years ago.

No accounting records have survived the fall of the Roman civilization, which extended from about 700 B.C. to 400 A.D. This has been attributed to the fact that the Romans kept their accounts on wax tablets, which turned out to be a most perishable material. No doubt the Goths and Visigoths did their part by destroying all remaining physical records. Tantalizing glimpses of Roman accounting occur in the legal codes of Gaius and Justinian, in the orations of Cicero, and in other literary sources. From these it has been surmised that the Romans used the bilateral account form and even that the double-entry system was known fifteen hundred years before Pacioli. We do know that large-scale commercial and industrial operations were a characteristic of the Greek and Roman civilizations, and that they operated complex organizations such as banking, shipping, and insurance. From the Zenon papyri and other records, we know that basic principles of accounting, planning and control such as budgeting, the journal entry, financial reporting, and auditing were used by the Greeks, and therefore probably by the Romans. We are on more certain grounds when we view the modern history of accounting.

THE RISE OF THE DOUBLE-ENTRY SYSTEM

The destruction of the Roman and Byzantine civilizations was followed by a period of European history known as the Dark Ages. The feudal system of political organization rescued Europe from chaos and provided the stability necessary for the creation of economic surpluses. These surpluses represented the capital base on which the economic development of the Middle Ages was built. The conversion of a subsistence economy into a money economy was affected by the Norman adventurer-kings. The medieval period, therefore, saw the existence of conditions favorable for the development of accounting.

This development took place as several levels: government, business and the medieval manor. Apart from banking, the conduct of business was largely a function of small traders and artisans

who kept accounting records of a crude memorandum nature, sufficient for their restricted information needs. Large-scale business operations were carried on by the banks and the church, the latter through the manorial system, and we find the banks using financial accounting based on principles which eventually became double-entry bookkeeping, and the manors using management accounting, based on essentially statistical models.

We have mentioned the use of the bilateral account form long before this period. The integration of this form into a system of double-entry accounts appears to have evolved during the twelfth or thirteenth centuries A.D. It may or may not have been an invention of the Italians who at that time dominated banking, trade, and what little manufacturing there was. Largely as a result of the *Liber Abacci* of Leonardo of Pisa, the Italians adopted Arabic in place of Roman numerals, which was an additional factor favoring the expansion of the concept underlying accounting. Although it is believed that the idea of double-entry was originated by banks, the oldest surviving record which incorporates double-entry principles is the Giovanni Farolfi branch ledger (Salon, France) for the year 1299-1300. More familiar are the double-entry trading accounts of Donald Soranzo and Brothers, merchants of Venice, from the first quarter of the fifteenth century. The *method of Venice* became the model for the celebrated exposition of double-entry bookkeeping published by Pacioli in 1494. The first professional organization of accountants was founded in Venice in 1581. The method of Venice then spread throughout the world, partly through translations and plagiarisms, partly through being transplanted to other countries by Venetian traders and clerks. Giovanni Farolfi and Company were a firm of Florentine merchants, and it is noteworthy that the banking and manufacturing center of Florence experienced a parallel development of double-entry bookkeeping during the same period as Venice. In fact, Florentine accounting appears to have been more sophisticated than the method of Venice and more comparable with modern accounting systems. Datini (1335-1410) conducted a large-scale international business: what would today be called a multi-national corporation using a full double-entry system of accounts for the control of foreign as well as domestic operations. The Medicis not only kept complex accounts for their banking operations, but also integrated cost accounting records for textile manufacturing. In these latter records we find the first examples of accounting for depreciation, interest on capital, and cost of production.

THE SOMBART PROPOSITIONS

Werner Sombart, a political economist of some note, was born in 1863 and died in Germany in 1941. He studied law, economics, history, and philosophy at the Universities of Berlin, Rome, and Pisa, eventually becoming a professor of economics in Berlin. His major work, *Der Modern Kapitalismus*, is a book in praise of capitalism and in it he predicted that capitalism would reach its zenith in the twentieth century. Sombart's theme led him to examine the accounting records of the period during which capitalism developed in Europe, and he identified three casual factors which contributed to the growth of the capitalistic enterprise:

1. The law
2. Business management techniques
3. The market

The law provided a framework for the firm, the capitalistic enterprise as a legal entity, and the market provided a means for it to become a financial entity. Business management techniques relied primarily on accounting, and Sombart put forward four explanations for the role which accounting played in this connection:

- (i) By representing the flow of capital through a business. from the capital account to the transaction accounts through the profit and loss account and back into the capital account, accounting facilitated a concentration on the creation of wealth by means of profits.
- (ii) By restricting the observations of the entrepreneur to that which could be captured in the accounts, accounting fostered the development of economic rationalism: *quod non est in libris, non-est in mundo*. (What's not in the book doesn't exist)
- (iii) Systematic organization of the affairs of the business was achieved through accounting.
- (iv) Double-entry bookkeeping facilitated the separation of management from ownership by rendering the concept of capital objective and by permitting the separation of business accounts from household accounts.

Winjum has examined these propositions in the light of accounting textbooks and records produced in England during the period 1500-1750 and has concluded that, while some evidence exists in support of all four, the primary advantage of double-entry bookkeeping was the creation of order from chaos. The main purpose of accounting revealed by the textbooks and the main use of accounting revealed by the records was the systematic organization of the affairs of the business.

ACCOUNTING IN ITS AGE OF STAGNATION

Largely as a consequence of the influence which Pacioli's work had upon the business world of its time, but also partly because that world changed very little between 1494 and 1775, the period which followed the invention of double-entry bookkeeping has become known as accounting age of stagnation. The principal feature of this period is the extension of the method of Venice to other countries as they came to dominate world trade. Thus, we find double-entry accounting spreading to Germany, the Law Countries (now Belgium and Holland) England, Scotland, Portugal, and Spain during this period.

The emphasis of both literature and practice was on accounting as an aid to the management of a business, rather than as an information source for external users. The owner of a business was expected to keep accounts, and instruction in double-entry bookkeeping was a part of the education of the middle classes. Because the accounts were for one's own use, we do not find the preparation of financial statements and their audit occupying a central place in the expositions of textbook writers. Nor have we inherited any period income statements or balance sheets of the kind with which we are now familiar.

The prevailing practice was to continue the accounts through several years until some event occurred which called for a balance to be drawn up the merchant's death, the filling of an account book, the disposal of the business. We know that the accountant businessman sometimes prepared financial statements for specific periods, and the profit and loss account, precursor of the modern income statement, was, as its name implies, a listing of profits and losses on individual ventures or lines of business. Similarly, the balance sheet was listing of balances left over after profits and losses had been closed out to the profit and loss account. Nevertheless, the concepts of capital as the difference between assets and liabilities, and of net profit as the change in capital between two dates (after adjusting for capital contributions and withdrawals) was well established during the age of stagnation.

THE INDUSTRIAL REVOLUTION AND THE ENGLISH COMPANIES ACTS

We will restrict ourselves here to a description of the way in which accounting and financial reporting developed in England from about 1775 (although a comparable sequence of events can be noted in other European countries) expanding on the reference to this aspect. The industrial revolution, which is conventionally regarded as beginning in the 1760s with the invention of

power machinery, had several consequences of far-reaching importance to the history of accounting. One was the growth of the large-scale enterprise, beyond anything previously known, requiring quantities of capital greater than could be provided by one man or one family. Another was the introduction of the variable time period into production in the two senses of the time period required to amortize machinery and other equipment, and the time period required for production itself.

The demand for capital involved increasing numbers of savers in investment situations, either directly or through financial intermediaries such as banks and insurance companies. The corporation proved to be the most satisfactory form of business organization from this point of view. As more and more individuals and institutions were involved as stockholders, the financing function became separate from the management function, which has been designated the *managerial revolution*. In this situation the owners of the business were no longer able to inform themselves by keeping accounts for its operations, because they took no part in the management of the enterprise. To afford these outside investors a measure of protection, the British government introduced a succession of Companies Act. These laws placed certain obligations on the promoters and managers of corporations as part of the price they had to pay for the privilege of incorporation. The 1844 Act required the directors of a company to supply the stockholders with audited balance sheets annually, and the 1865 Act provided a model form of balance sheet for this purpose. This legislation has been progressively supplemented and refined to the present day. It is aimed at providing investors and other financiers with audited information in the form of accounts on which to base their investment and disinvestment decisions and from which to judge the manner in which the directors of the corporation have managed the business.

The lengthening of the time period of production had two principal effects. These were the development of business credit, as distinct from investment, and the gradual transfer of attention from the balance sheet to the profit and loss account. Business credit, by its nature short-term and revolving, required decisions for which short-term information about financial position and results was necessary. The need to prepare more frequent financial statements which would reveal profitability and liquidity gave considerable impetus to the development of accounting. In the preparation of financial statements, the analysis of changes in capital became necessary for a variety of operating decisions. This led to the establishment of rules for income statement

preparation.in particular, for calculating depreciation, the valuation of inventories, revenue recognition, and provision for future expenditures arising out of past activities.

A by-product of the industrial revolution was the growth and refinement of management accounting. The use of accounting and other quantitative data for purposes of management planning and control has been noted in Ancient Greece, in the medieval manors, and by the traders of the age of stagnation. Some cost accounting was done, varying in sophistication from the *ad hoc* calculations of individuals to the integrated systems of the Medici factories and the French Royal Wallpaper Manufactory. The complex manufacturing processes and large-scale organization which appeared during and after the industrial revolution required more detailed and systematic analyses of costs of production. Thus, the subject of cost accounting, encompassing the accounts necessary to plan, control, and analyze costs, acquired a separate existence during the second half of the nineteenth century. This separation of cost from financial accounting has persisted to the present, in spite of practical and theoretical efforts to integrate them. For this reason, there appear to be two separate theories of accounting and reporting, an unsatisfactory state of affairs in that it should be possible to present one unified theory of accounting.

EARLY ATTEMPTS AT ACCOUNTING THEORY

Historically, there have been three basic approaches to the development of accounting theory. Attention was first directed to the account itself, and attempts were made to 28 Accounting Theory construct rules for the operation of accounts. This led to the celebrated personification theories (discussed later in this section) in which the account was ascribed the qualities of a person who received and gave. But an account is not a person, and recognition of this fact directed attention to the transactions and events which are in great part the subject-matter of accounts. This led to attempts to formulate rules and standards designed to ensure that objective economic facts were recorded and reported. It then became clear that accounts contained values other than those represented by transactions and events, and that the very concept of value was subjective. Attention is now directed to the user of accounting, and contemporary accounting research is heavily influenced by such questions as: is it useful? to whom? is it used ? The transfer of accounting knowledge from one age to another, and from one part of the world to another, was accomplished by writing, teaching, and example. Until the twentieth century, however, very little of this involved theoretical explanation separate and distinct from practical

instruction. In the absence of an accounting theory, early writers had great difficulty in expressing their objectives, models, and systems. They resorted in most cases to precept and admonition, frequently bolstered by appeals to the deity.

A few writers attempted generalizations which would avoid the necessity to memorize many rules and procedures. One of the earliest devices was the *personification theory* of accounts. This device imputed personalities to accounts for things, so that they were treated as living persons. Personification permitted the formulation of general rules, such as debit him that receives; credit him that gives., which appear to have explanatory qualities.

Personification took three forms; the attribution of human qualities to inanimate objects, the fiction that each account was a branch of the owner's personality (e.g. .John Smith his goods.) and the construction that the account represented a clerk, who received and gave up value for the proprietor of the business. Of these, the most useful was the second, for it permitted the accounts of a business to be classified into personal accounts, or accounts of persons outside the business (e.g. debtors, creditors) and impersonal or real accounts, or accounts for objects owned by the owner. The former, of course, would be equal and opposite to the personal accounts kept by others, and must therefore conform to general rules. The latter, being peculiar to the particular business, could be handled in different ways.

The rise of the income statement, or profit and loss account, was accompanied by the development of a third class of nominal accounts for revenues and expenses. At this point personification came under severe strain. How does one personify, for example, discounts received or discounts allowed? This, coupled with a growing realization of the artificial nature of the device, led to its abandonment. By the latter part of the nineteenth century explanations were being phrased in terms of transactions. The second generation of theorists was concerned with images of form and structure, and they attempted to explain accounting by demonstrating the effect of accounting entries on these images.

THE PROBLEM OF CLASSIFICATION

The problem of classification is fundamental to any science, and early writers on accounting attempted to classify ledger accounts in a logical order. An example of the transition from personalization to some other basis can be found in Abraham de Graefs *Instructie van het Italiaans Boekhouden*. (Instruction in Italian Bookkeeping.) published in Amsterdam in 1693. He divided accounts into three groups:

1. Accounts of the merchant as a person: Capital, Profits and Losses, Insurance, Reserves, Housekeeping, Interest.
2. Accounts of other persons: Debtors, Creditors, Participations in Trade Ventures, etc.
3. Accounts for merchandise: Goods in store, Goods in Ships afloat, Cash available for purchases, etc. (the *real* accounts).

Edmond Degrange in his book *La Tenue des Livres Rendue Facile* (Bookkeeping made Easy.), published in Paris in 1795, divided these real accounts into five classes: Cash, Goods, Bills (Notes) Receivable, Bills (Notes) Payable and Profits and Losses. It is noteworthy that what was a personal account to do Graef was a real account to Degrange. Followers of Degrange became known as the Cinquecontistes. or five account school.

In Belgium, H. Godefroid attempted to integrate cost and financial accounts for manufacturing concerns; requiring more classes, he borrowed from literary sources and in a textbook published in 1864 Godefroid suggested the use of titles, chapters, and sections for classifying accounts. In this scheme, one of the titles was used for departmental operating accounting, i.e. for cost accounts. Because of its expanded content, Godefroid's scheme became popular in Europe, and some of his followers decimalized his classification. By the end of the nineteenth century the decimal chart of accounts, based primarily on a classification of balance sheet accounts but including a section for operations, was in widespread use for didactic purposes as well as in actual accounting systems.

The first decimal chart of accounts to give equal weight to the income statement was published by Eugen Schmalenbach in 1926. Schmalenbach was a pioneer European accounting theorist, and his *Dynamische Bilanz* (Dynamic Accounting.), originally published in Germany in 1916, was severely critical of the emphasis on the balance sheet. He argued that the objectives which were generally ascribed to the balance sheet were incapable of realization. The balance sheet could not present the value of the business as a going concern, because that value was different (more or less) from the sum of the individual parts, of which only a selection appeared in the balance sheet.

The balance sheet was not a statement of financial position for the same reason and also because the assets and liabilities were not shown at liquidation amounts. Instead of pursuing unattainable objectives with regard to the balance sheet, Schmalenbach argued, accountants should concentrate on improving the profit and loss account (income statement) with the objective of

accurately measuring the results of operations. This would relegate the balance sheet to the role of a list of balances in suspense, or a step between two income statements. as the contemporary phrase has it. An example of a modern chart of accounts derived from Schmalenbach's classification (referred to Table 2-1 of book). It is noteworthy that more classes are allocated to income statement accounts than to balance sheet accounts.

THE BASIC EQUATION

The basic equation appears in the Italian and American literature during the nineteenth century. According to Fabio Besta, one of the Italian users of this equation, the central 30 Accounting Theory construct of a business is its capital, a pure abstraction without juridical meaning. It is found by deducting liabilities from assets. The American authors go a step further; they view capital as a representation of proprietorship. Thus, we call this early theory a proprietary theory of accounting. The transactions of a business can now be referred to this equation to explain why we account for them as we do. If the transaction increases assets or decreases liabilities, it increases capital; Besta called this a *modifying* transaction. Transactions which alter assets or liabilities without modifying capital, he called *permutational* transactions. This permits the operation of accounts to be expressed in the form given below.

Assets		Liabilities		Capital	
increasing	decreasing	decreasing	increasing	decreasing	increasing
changes	changes	changes	changes	changes	changes

the basic equation, being expressed in balance sheet terms, presented difficulties for the explanation of entries for buying and selling and for expenses and other revenues. It was therefore expanded into the form:

$$\text{Assets} + \text{Expenses} = \text{Liabilities} + \text{Revenues} + \text{Owners. Equity (Capital)}$$

By cancellation of expenses against revenues, this becomes the basic equation again. The income statement represents the substitution of revenues for expenses, the result of which is net income or loss, an increase or decrease of capital. One of the advantages of the basic equation is that it also explains the statement of changes in financial position, or funds statement. Cancellation of expenses against revenues in the expanded equation turns it into the following form:

Assets = Liabilities + Owners. Equity + A Owners. Equity and the funds statement can then be expressed as:

$$A \text{ Assets} = A \text{ Liabilities} + A \text{ Owners. Equity.}$$

However, the basic equation still leaves the terms *asset, liability, owners. equity, revenue, and expense* undefined.

THE INTERNATIONAL CHART OF ACCOUNTS

An international accounting conference which took place in Paris in 1951, *Les Journees Internatinales de la Compatabilite*, resolved to put forward a proposal for a chart of accounts which would be truly international in scope. The chart would have to reflect the basic characteristics of the firm, independent of peculiarities of national legislation, accounting conventions, or professional standards. The conference committee adopted a classification published by Joseph Anthonioz in 1947, which was based on a paper. The Cycle of the Economy. prepared by Maurice Lucas for the International Accountants (referred to Table 2-2 of book).. Congress held at Barcelona in 1929.

The classification is based on a proposition derived outside accounting: that a firm is an entity which takes savings from the economy, invests them in the forms of fixed and circulating capital, and by incurring costs produces goods and services for distribution to the economy. This proposition provides us with a model for the firm. The model has two phases, a planning phase, which starts with the distributed product and proceeds backwards to determine the amount of savings required for investment, and an action phase, in which invested savings are transmuted into distributed products.