Chapter One

HISTORICAL BACKGROUND OF
THE DEVELOPMENT OF ACCOUNTING
Just as the complexity of technology has caused scientific revolution and made scientists highly specialized, likewise the complexity of economic affairs has made accounting a highly advanced discipline.\(^1\) It responded distinctly to the world need. Accounting developed historically in an environment of changing socio-economic situations and acquired distinction in its capacity to serve people. This is possibly the most important of all the services in the world, at least, in terms of respectability.\(^2\) The history of accounting stands on a glorious heritage of service to people from time immemorial. Human civilization, since its early stage, has appreciated the effects and uses of history. Each and every civilization has been found to emphasise on continuity which connects it with a glorious past without which it would have been destroyed. Accounting is one of the few dignified disciplines that holds the thread of this continuity of rendering service to people and acquired a respectable patina through re-interpretation of the past.\(^3\) Littleton and Zimmerman\(^4\) thus, rightly correlated Aristotle's thought, "if you would understand anything,

\(^1\) Muller, G.C. and Smith, C.H; (Eds.) Accounting, New York, Holt, Rinehart and Winstone, Inc., 1970, P.12.
\(^2\) Littleton, A.C; Accounting Evolution to 1900, New York, American Institute Publishing Co., 1933, P.9.
\(^3\) Bread, Mirium; A History of Business from Babylon to Monopolists, University of Michigan Press, 1938, P.1.
\(^4\) Littleton, A.C and Zimmerman, V.K; Accounting Theory; Continuity and Change; New Jersey, Prentice-Hall, Inc., 1962, P.II.
observe its beginning and its development" with accounting history and surmised that the present grew out of the past and grown into future. Thus the history of accounting from its initial stage is worth studying.

**Environmental background:**

The development of accounting has always been found to be conditioned by the dynamism of human civilization. It has undergone constant changes with the changing values and environment of the radically changing world. Unlike other disciplines, accounting has been found to develop through its methods and the theory of accounting has evolved from practice rather than the latter from the former. The methods were devised, revised, modified and finally set for practice. Referring to this stage of accounting evolution, Glaudier and Underdown’s comments "accounting practices have evolved in a mindless kind of way and are applied to business situations in an equally mindless manner. Elsewhere in men's activities it is recognised that there exists a functional relationship between thinking and doing, that the former precedes the other."

The challenge of economic complexities has broadened the scope of accounting needs and ideas did generate to meet...

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those perceived needs. Newer methods have been evolved from newer ideas. Looking back to human civilization, with the development of social life some form of administration could be found to exist, which necessitated a knowledge of holding count for all materials belonging to that social group. Tally marks in the stone, knots in a string, pebbles in a bag, wooden sticks, clay tablets, etc. have been found in use for the said counting purpose before the knowledge of number. There have even been historical references of early caveman who would draw pictures of their wives, children, animals, etc. just to keep track of them. These were possibly all the early ways of summing up representation or surrogate of possessions. In the stream of progress the formation of 'state' or 'sovereignty', need special mention, necessitated written code of laws regarding taxes, debts, purchases, transfer of properties, etc. The first of such regularly organised sovereignities could have been referred to the Chaldean-Babylonian empire as far back as 4,500 B.C. From the

recorded history of civilization it could be traced that
Babylonia at about this time was the Chief commercial
center of the East. Its 'code of laws' had been remarkable
for the organization of trade and good state administration.
Reference could also be made to the Hammurabi's rule in
Babylon during 2500 B.C. to 2000 B.C. where an account of
King's domain has been found to be maintained. The
Assyrian's records of payments to King's army as far back as
3500 B.C. also deserves mentioning. The maintenance of
such accounts necessitated, in addition to the knowledge of
counting, some sort of recording also. The earliest ways of
keeping records of a count was found in Tally system invol-
viting physical objects where Marks had been used as numerals.
Most of the early civilizations have left us fragments of
detailed records relating to, for example, building of the
Pyramid of the Egyptian civilization, repair of Temple in
Jerusalem in the era of Hebrew civilization.

Antecedents of numericals; concept of private property,
exchange and trade:

The records of these early civilizations are, however,

10. Pearce, F.G; An Outline History of Civilization, Oxford
12. Ibid. p.5.
13. Stone, W.E; Antecedents of Accounting Profession, The
    Accounting Review, April,1969, P.286.
erratic in their form. This is only to be expected at that time in the absence of both an adequate number system and money as a common denominator. In fact, the earliest numerals of which there is definite record were found to be simple straight marks for the small numbers, with special symbol for 10. The symbols appeared in Egypt as early as 3400 B.C. and in Mesopotamia as early as 3000 B.C. It could possibly be more interesting to note that the process of numbering in words or symbols did begin much earlier than identifying physical objects by name. Instances of small numbers being denoted by signs or symbols like ears, wings, hands, etc. for representing 'duality' were particularly found in China and Tibet. Joints of fingers had been used in Brazil for three. Fingers and Toes had been in use among the savages to help count up to twenty. As far back as can be reached into the records of man's curiosity and quest of understanding, it can possibly be observed that accounting was cultivated and cherished out of those signs and symbols and was used for transmittal to new generations. But as an organized discipline it certainly owes its origin to the development of social life specially the formation of states. Though Goethe, the universal genius, in appreciation, termed accounting as one of

the fairest invention of human mind yet it seems doubtful whether it was really an invention and, if so, whether any exact date can be assigned to it. The history, no doubt, indicates that book-keeping and accounting appeared neither as a chance phenomenon nor as something that was suddenly inspired by inventions. It apparently grew, bit by bit, out of adaptations and improvements, distinctly in response to social needs. Historically, its birth can be traced around the dawn of intelligence, when people living in the neolithic way of life felt an urge to live as food-producer instead of living as food-hunter. It is in this period that the idea of sub-division of labour (economic endeavour) among the tribal people could have been marked. As a simple corollary to food production, certain equipments were invented and this event made some people specialists in equipment and its organization of production. The rest of the tribal population got involved in the production process with the help of those equipments. The concept of private property made its appearance possibly in those days through upholding such efforts of distinct segregation between agriculture and manual industry. Exchange of equipments and ideas between specialists in equipment making on the one hand and producers of consumers

goods on the other ultimately evolved into commercial exchange of equipments and farm products as the personal properties. It is in this period, we can possibly trace the origin of 'transaction' in the primitive form of 'trade'. Exchange or barter between parties at that stage required some sort of recording by way of a descriptive memorandum for a fair deal between the producer of equipments and farm produce. Whenever personal property was recognized, legal disputes regarding possession or ownership of such properties and their inheritance would have obviously arisen. From the earliest time, when property became an object of dispute, such accounting records often served an important role as legal evidence. However, these records cannot be considered as constituting systematic record keeping i.e. book-keeping. Because recording procedures do not follow any pattern. Recording as well as information need was limited to private information level. Sometimes such information was used in courts as mere evidence of transactions between individuals. Keeping records for such purposes was incidental and secondary rather than constituting an objective itself. Reference could be made to such records of the state of DIODORUS and those of DEMOSTHENES which exemplify the existence of a systematic record keeping as early as 400 and 364 B.C. for the purpose of proper management of resources entrusted to trustees and for the establishment of their...

accountability.  

Forerunner of the concept of medium of exchange: advent of coined currency:

With the passage of time, primitive exchanges became formalized primarily in the concept of propitiation of gifts among the savages. The gifts, in most cases, were in reciprocal manner and would have evidently been of equal worth. Exchange, in the subsequent period, became a necessity as the community grew in size and division of labour among its members had been necessarily much operative. Exchange at that time, therefore, would have been conducted through barter which frequently led to quarrel in fixing equivalence to commodities. This obviously led to the evolution of a conceivable medium of exchange—a new device to serve as an intermediary in all acts of commerce. In the history of civilization the Phoenicians were particularly found to be the greatest commercial people of antiquity and during their period certain objects assumed the character of medium of exchange. The said medium of exchange naturally turned to be a standard by which the value of other things would have been estimated. The


concept of 'Unit of Value' had its origin in the idea of a conceivable standard for exchange and in the history of mankind various physical substances have been used as such a medium of exchange. The more important of the substances that were used as, what may be called, 'currency' through ages were Furs, Skins and Leathers in the pre-Roman and Roman period and Cattle and Sheep in the Pastoral age. A good number of references could be found in the Vedic literature of India, Homeric literature of Greek, Anglo-Saxon literature and the ancient Tutonic code of laws about the use of Corn in Europe, Maize in central America, Grain in ancient China as the conceivable 'medium' of exchange. These consumer products were subsequently replaced by metallic ornaments made of gold and silver which firmly occupied the position of currency i.e., unit of value for several centuries. The metallic contents of those ornaments, with the passage of time, had come to be considered so valuable that every man of that age would strive for them. In this way hunger for metals multiplied and became deep rooted. Subsequently different weights and scales had been found to be attached to those metals for their more and more

25. Ibid., p. (409)
extensive use in business transactions. Egyptian 'Tabnu' rings made of gold and silver could be cited as evidence of metal piece, presumably of different weights, used as medium of exchange during Theban empire of the 18th and 19th dynasties (1635 B.C. to 1235 B.C.). In the history of Babylonian culture it is, however, found that use of metals was prominent not exactly in the shape of Egyptian Tabnu but in the shape of bullions melted into small unstamped ingots of equal weights tested in scale. As the metals had been widely accepted as the medium of exchange, there arose the need for some authoritative control over the quality and weight of metals. The Egyptian commercial community took the lead in this regard and produced metals of definite shape and impressed with a recognized mark as a protection at least against temper. With further advancement of civilization, the metals of individual initiative grew into coin under state initiative and the first of such initiative has so far been detected in Lydian (Asia Minor) at about 630 B.C. The introduction of coined money by Ladian Greeks has certainly been considered a significant event in the

27. Ibid. p.749.
history of civilization as well as commercial advancement. Coined currency extended the choice of consumption which till then had been limited by nature and the ability of production. The development of coin has made exchange much simple and broadened its scope between economic units. It also helped to create a money economy in terms of prices for fair exchange of goods and services in resonance with the demand and supply between economic units. The fundamental accounting requirement of quantification has possibly been the outcome of men's growing knowledge of what money really stands for in the exchange system. It appears that one very important benchmark in the evolution of money economy system has perhaps been the recognition of a basic distinction between 'money as a store of value i.e. money metal' and 'money as an unit of account'. In the medieval period the idea of money as a store of value was dominant which with the passage of time lost its significance and made ways for such idea of money as an unit of account. As the volume of transaction between economic units went on increasing the necessity for proper records became more and more acute. Thus record keeping which is otherwise called book-keeping*

* Book-keeping is the process of recording and classifying business transactions according to systematic method. 30

30. Anderson, Moyer and Wyatt; Accounting, New York, John Willey and Sons, Inc., 1965, P.5.
today, appeared. Though book-keeping had a very humble beginning, it developed and grew into modern accounting* system because of the fact that, men under the dictates of their self-interest were able to adapt themselves to the new need of their time, after modifying the known ideas. Accounting, in this regard, owes to a great extent to the development of coined currency which accelerated the rate of commercial activities and prepared a ground for the evolution of accounting. Most concluded that the exact calculations in terms of money, the vital aspect of economic operation, became possible only when technical progress was able to provide a reliable currency. But accounting in its remotest or crudest sense could not have evolved until some monetary standard was associated with a sound number system and adopted for recording all items composing an account, as we understand it today.

* Accounting is the process by which monetary or financial aspects of transactions are recorded and presented in a systematic manner. Early accounting was limited to book-keeping sort.

† The record of each data classification is called an account.

The idea of measurement:

Accounting from its beginning, has been considered the most definitive expression of all rational attitudes about the use of resources limited in supply. Historically it has been observed that accounting can express any measurable variable and project its changes. The knowledge of counting and recording has been developing through a constant self-examination with an ever increasing degree of consciousness about its own structure. The structure, however, changes continually, and sometimes radically and fundamentally as well in the process of social advancement and has grown into accounting day by day. It has been able to reach its present stage of sophistication both as art and science, to keep

* Science is a systematized knowledge of having certain principles based on cause and effect, while art consists of principles and not necessarily techniques based on sound reasoning. Anything professed in an art appeals more to heart and is, to a large extent, a matter of feeling. Accounting is science so far as its fundamentals are concerned and it is art so far as its practice is concerned. The accounting principles are based on logic and applicable almost universally and in all circumstances, producing almost similar results. But so far its effects are concerned, the actions of man, however logical, are influenced by his emotions.

pace with the ever-changing requirements of the changing socio-economic institutions constituting the legal, social and economic environment. Changes occurred gradually in accounting techniques and concepts and, with these changes, accounting developed historically. Throughout the history of human civilization there could be found the practice of some kind of accounting being undertaken. Each of such records clearly indicates that there was a gradual and consistent development of the system of keeping accounts with changing objectives.

The philosophy of accounting in retrospect:

Though accounting had its beginning in the earliest days of recorded civilization, its progress has been found to be very slow as compared to other disciplines of later origin but of much quicker flight to sophistication. Keeping accounting only to take pride in its past, natural sciences like Alchemy had changed into Chemistry, Astrology into Astronomy and the art of medicineman transformed into that of Bacteriologist. The accountant has, as if, lacked in general a

personality of a sort to capture popular imagination. Remarkable individuals may not be an exception, but, as a class, accountants have in a sense the victim of their virtues. Accountants, from earliest time, served the businessman who has steered a veering course in the history and favoured peace and war, unity and chaos, mystery and science only according to the immediate prospect of profit.  
Accounting in the hands of those accountants, as acting in that given environment, easily lacked philosophical foundation. Thus from the very beginning, accounting relentlessly served the people and all efforts have been made to rank it to be utilitarian with all attributes required to be hold for the purpose. The subject has always been thought of in terms of practice and much of the improvements have been found to surround the techniques of keeping accounts only. The discipline with such a long history behind it, actually failed to provide a coherent set of logical principles that could form the general frame of reference for deep rooted theory. Accounting, as evaluated by Littleton and Zimmerman, is not

* "Theory" refers to the coherent set of hypothetical, conceptual and pragmatic principles forming the general frame of reference for a field of enquiry.  

as strongly oriented towards logical arguments as towards utilitarian service. It is less concerned with deductive generalization than with practical accomplishments. Its methods are technological, its ideology has not been deeply philosophical. Any discipline to be well grounded and utilitarian in practice must be founded on well defined body of logical reasoning i.e., theory. But theory did not possibly precede accounting practice until recently. It is, however, true for almost all disciplines, including accounting, that theories and concepts have been developed in historical continuity. Much of the developments in accounting have been drawn from the ideas accumulated through the experience of many people over a period of about 6500 years.* Over such a long period, it should be pointed out that, accounting as an organized and well defined discipline has not been found to take initiative in forming new ideas instead of serving obediently to the changing social needs. People in this profession have always been found reluctant to propagate any change of their own efforts. There could be found little evidence in the history that people in the accounting practice, until late eighteenth century, devoted any amount of time for the development of the profession or building up an all comprehensive academic foundation for the subject. Public

* It covers a period from the formation of Chaldean-Babylonian empire during 4500 B.C. to the present century.
accounting as it is practised today, however, really came into being during the later part of the eighteenth century. It was in this period that the King of Italy legally recognized a limited group called the 'Chartered Liquidators' as being the only agency competent to discharge the duties of public accountant. During this long period, the scholars from other disciplines had, however, been found to take interest in this applied branch of knowledge. This could well be evidenced from the fact that most of the earlier treatise and books on book keeping and accounting, including the first treatise: "Summa" published by Paciolo in 1494, were written by the scholars of other disciplines. Paciolo, a monk, a mathematician and a university professor at Perugia was followed by German Mathematician Henricus Grammateus who in 1518 completed a book on mathematics namely Ayn Now Kunstlich Buch in which he also introduced a chapter on book keeping. Then followed by Jerom Cardon - astrologer, physician, scientist and mathematician during the reign of Edward VI. Among other earlier writers on book keeping,

those who were prominent were Simon Steven (1602) - a Dutch mathematician, discoverer of Hydro-Static Paradox, explainer of the Codes of Moon and a Statesman; Charles Hulton - a mathematician and professor and Robert Hamilton a banker, professor of natural philosophy, a mathematician and an eminent economist. The practicing man, until recently, did neither make any effort to help accounting reach its deserved position nor come forward to view it as a dignified branch of knowledge. This is possibly the reason why the first book on book keeping, written five hundred years back, still outlives, more or less, in its original form with regard to the use of the methods concerned. Most of the earlier books would consist of varying methods of keeping accounts. In other words much of the efforts and discussions made in the medieval period centered around accounting methods and techniques and not the logic behind them. That is to say that much stress was given on - how to do it rather than why to do it.

From the history of civilization it could be revealed that the developments in socio-economic environment have, to

a large extent, been owing to their indebtedness to the growth and expansion of trade and commerce. And accounting evolution is the outcome of continued efforts made by mankind to meet the necessities of trade as they gradually developed.

While reading the history of commerce and industry, it becomes evident that higher the stage of culture and commercial development in a community, the more advanced are its methods of accounting. Childe in this respect remarks that "writing had been invented not to record the war like deeds of kings nor yet to express theological dogmas, but for strictly practical purposes connected with the administration of Temple's temporal estates; apart from school texts the earlier tablets contain exclusively accounts".

Eric Hoffer, in his book The Temper of our Times, described that since very early times men have attempted to measure and record the result of their economic activities resulting in the increase or decrease of herds, stores of grain or wine, stocks of metals and textiles and surmised that this kind of simple accounting was the seed bed of written language. "We are often told", Hoffer goes on saying, "that the invention of writing in the middle east at about 3000 B.C. marked

an epoch in man's career because it revolutionized the scope of transmission of knowledge and ideas. Actually, for many centuries after its invention, writing was used solely to keep track of the intakes and outgoings of the treasuries and warehouses. Writing was invented, it may accordingly be observed, not to write books but to keep books. Durant, the great historian of the running generation, also referred to the legal and formal recording of transactions of trade in the dim past. Though at first pictures would have been used for keeping track of transactions, but by 5000 B.C symbols, mutually intelligible to tribe of diverse languages, replaced the use of pictures. References of graphic symbols on shards, vases and stones in the prehistoric tombs of Egypt had been found. Durant commented that "these were not pictures but mercantilo symbols for various types of goods, quantities and business memoranda. They constitute our first written language." Salvary observed that writing began in Sumer as a symbolic accountancy.


variously used to keep records of goods brought into or
dispatched from temple store houses. Simple pictographs
and a system of mutually understandable numerals served
reasonably well the purposes of that time. He pointedly
mentioned that "writing was used for temple accounts,
secondarily to record economic contract between individuals
and scarcely at all for other causes".

Accounting and ancient State administration:

The history of accounting could be found very rich
with ancestries. Throughout the ages, record keeping could
be instanced in each and every civilization. Accounting,
more precisely record keeping, has been found closely associ­
ated with Babylonian administration during Chaldean-
Babylonian empire. The Governors (Satrap) of the provinces
were administered to, their offices with the principal duty
of receiving tributes and taxes in money or in kind and to
prepare a register which would serve as state record of the
title of the state over the resources and also as a basis
for the imposition of tax.52 Use of accounting in religious
mattor was, in fact, a regular practice in those days.
Tablets discovered in the temple archives of the Sun God

52. Lenormant: Ancient History of the East, p.424 referred
could be found to contain records that were designed in the fashion of commercial bookkeeping. It shows temple revenues in money and other commodities, the expenses in salaries, wages, etc. and the investment and employment of the temple property in loan, real estates, etc. The records of the "House of Silver of the Treasury" or the pharaoh's central finance department of the ancient Egypt revealed that the details of receipts and disbursements were distinctly recorded, even the smallest quantity of corns or dates. The system of accountability was such that nothing could be withdrawn from the treasury without written order and there was the system of checking one official's record by others. Among the people of antiquity, there were found the Persians during 521 B.C. to 486 B.C. among whom, accounting was in practice. The provincial administrators and the royal secretaries were required to maintain proper records of tax revenues and other properties for submission and verification by 'scribes'. They would have been called the "Kings Eyes and Ears" and were given the most important function of controlling wealth.

records of Creton and Hebrew civilization, there also found the scribe to hold very important position in state administration specially in the maintenance of state property.  

Accounting and temples temporal estate; household accounts:

The history of ancient Greece documents the existence of extensive accounting practice in more formalised way for both state purposes and temple purposes. State accounts as well as temple accounts were considered equally significant in Greek accounting which reached in its peak of importance in the golden age of Pericles (461 B.C. to 429 B.C.) when governmental revenues in Athens grew significantly in amount. There could be found the record of Tabular accounts in stone in ancient Greece relating to the receipts and expenditure of the 4th Board of Overseers in the erection of Temple Athena during 430 B.C. In this period, all accounts of receipts and expenses concerning public revenue were subject to public inspection. The accounts for that purpose were carefully prepared and chiselled in stone on the wall. The custom of the land would require that no official could terminate his office or leave the country without having his accounts checked and posted for public inspection. Along the line of development

of state and temple accounts, household accounts also gradually gained importance in the historic days. The Roman period of history could be found to contain numerous evidences of practical accounting evolution. The 'lucenstors' came into being at about 200 B.C. with all responsibility of financial administration in the Roman empire who made use of a complete accounting system. From the Roman history it is revealed that accounts of Roman family heads bear the testimony of a complete household accounting system commensurate with the time. The Roman family heads would keep records of their wealth and entered in a sort of waste book all the daily receipts and payments and posted these monthly to a carefully kept register of receipts and payments. It is interesting to note that state accounting system grew based on the system practiced in the private life. The Romans have been found concerned about the protection of wealth and all the system of accounting throughout the Roman period were merely preventive measures from fraud under multiple-tire supervisory style. Necessary provision for check and counter check has always been there in the accounts procedure during that time. This possibly, was the forerunner of the modern accounting branch of auditing.

of the treasury, during Roman period, there could be found
the evidence of records of transactions that were kept in mo­
dern journal form in which receipts and payments were entered
separately and regularly in order of their chronological
occurrence. The records also contained the names of the
persons receiving or paying, the nature of the transaction
and the balance of each account at the end of each month.62
Earliest comprehensive accounts on Papyrus* of the private
estate of the chief finance minister of Ptolemy II, Appolonius
in Egypt dates back to 250 B.C. which was prepared by his
agent Zenon. Such an account would distinctly reflect the
purpose of accounting as to be the prevention of loss due to
carelessness, theft or embezzlement.63 Accounts of industries
and agriculture could also be observed to grow in good old
days in Greece and Egypt. Egyptian accounts during the early
part of the first century before Christ possibly bear an
evidence of well demonstrated accounts of industries and
household prepared in narrative type but maintained with

* Papyrus was a writing material used in Egypt which was made
from the Pith stem of Papyrus plant.

continuity. This could be evidenced from the "Mummies of
the Crocodiles" where "the receipts of the day were written
in a book first and then follow the payments, which were
subtracted from the receipts, the balance being carried to
the next day."65

Growth of the concept of capital, credit and,
accounting for venture:

From all these records of ancient civilization,
it is clear that record keeping had its origin in the
protection of wealth and accounting was in use in some form
or other, from time immemorial. It is the advancement of
civilization that brought about changes in the environment
and created newer and newer avenues for the government,
trade, commerce and industry. The owner of the property
got interested about the scope of the application of his
wealth and its proper maintenance. Abundance of wealth
without any sense of reproduction cannot create a condition
to convert it into capital. Similarly, an unlimited supply
of property could not produce book keeping by mere appearance
together historically.66 Along with the concept of private
property there evolved the concept of credit and the accumulation

of capital.\endnote{67} It is often stressed that the introduction of credit played a significant role in the development of accounting. This can't be said to be exaggerated. Credit transactions very often required a reference to the past activities so that payments and repayments of accumulated debts could be discharged to the satisfaction of parties concerned\endnote{68} and possibly the earliest formal record of credit could be found in a florentine account book maintained by a banker around 1211 A.D.\endnote{69} With the storage of accumulated experience, in the long course of time, these concepts have turned into organized institutions that contributed significantly to the development of accounting as an organized discipline. These institutions grew in size day by day in the records of relationship between people generally concerned with wealth. Records of such relationship in arithmetic or narrative could be evidenced throughout the ancient history.

All the elements which stood indispensable antecedents of double entry book keeping system were present throughout the ancient and medieval period in recognizable forms. Yet they had

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    \item Fesmire, W; Op.Cit., PP.52-62.
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failed to produce at that time, what they actually developed later on known as book-keeping. The answer to the queries as to 'why later on' lies in the historical characteristics of the period that emerged gradually with the changes in the outlook and surroundings, in man's varying aspirations and interests and in the differences in the quality of wants and the quality of the ideas which were current and in conformity with the demands of the society. It could also be evidenced from all these that the condition surrounding commerce and its aids capital, credit, etc. in the middle ages were very different from those which accompanied the same in the period of ancient history. And it becomes increasingly apparent that these attendant circumstances so changed the quality, size and extent of commerce and the purposes for which capital and credit were employed that the latter elements could now become the vitalized antecedents of book keeping.  

In the middle ages, the institutions of private property, credit organizations and commercial trade suffered a decline because of the general disorganized condition of the state and the economy throughout Europe. Accounting during that period, was, what Roover described it in the

present century as in its age of stagnation. Gradually, however, accounting was able to re-establish itself later on in the society. The complicated operations of the bankers, the papacy and the monarchies required, at that time an effective system of book keeping. 'Pipe Roll' in the exchequers of England and Wales was compiled for the first time in 1130 to show the taxes collected and amounts due to the crown. The basis of accounting had its start with the royal revenue along with the statements of royal firms payable by sheriffs in every country. 'Tally' was extensively used as a receipt between the royal treasurer and the sheriff which was possibly first introduced in England in 1100. Each sheriff was required to attend the exchequer to account for the revenue twice a year. On the first occasion, he would get a Tally for the amount he paid to the exchequer and on the second and final occasion he had to settle on the famous exchequer table the accounts of the whole year. The accounts of the sheriff contained the receipts from the crown land, casualty fees and fines, etc., all authorized expenses and the amount paid. That elaborate

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system of accounts for the royal finances developed at the exchequers of Great Britain exerted a great and far reaching influence on the advancement of accounting. The organization of accounting in the twelfth century introduced not only a reform in the management of royal finance but also highlighted the necessity of keeping proper accounts with greater rigidity by enterprises and individuals for their private affairs. 76

Growth of partnership and accounting
for continuing venture:

Partnership, in the history of accounting, has also been considered a distinctive factor which contributed most to the progress of the subject. The idea of partnership originated from the idea of creating wealth through joint collaboration in capital of the profit making ventures. It follows the beneficial separation of the 'wealth producing sum' i.e., the amount invested for the purpose of obtaining profits from all want-satisfaction objectives of the persons involved. This type of collaboration not only facilitated to overcome the constraint of large capital investment but also necessitated exact calculations of monetary returns and infused a desire to save and to acquire more wealth. Earliest known partnership records of a Genoese Notary Geovanni

Scribes dates back to 1157. Partnership at that time was formed for the duration of single venture and the accounts were made up of few figures jotted down in loose leaves. Accounts were no longer intended solely for private information. They were required for submission to other venture participants. The profit motive had increased in importance and the complexity of record keeping grew with increases in size of the ventures and the volume of transactions. It made the medieval book keeper conscious to recognize the business firm as an independent unit in itself and the capital and accumulated profits represents the claim of the owners. The resultant contribution of the partnership type of enterprise as an assemblage of property, during the middle ages, could be seen to lie in the separation of business from its owners. Although the modern concept of 'separate business entity' of was the outcome of double entry system of book keeping, yet the twelfth century book keeping system could be found to recognize the contribution of this separation in the business horizon. It operated this separation by liberating the accounts and the management of the business from the person of the businessman. The business as could be found represented by its capital appears as an entity through its

77. Roover, Raymond De; Selected Articles, in Kirshner, Julius, (Ed.) Business, Banking and Economic Thought, Chicago, University of Chicago Press, 1974, P.120.
incorporation in the organized accounting system, and in that the person of the entrepreneur stands clearly to be separate from the entity - the business.  

The immediate result was that it became necessary for keeping track of the changes in the owner's equity rather than other affairs of maintaining accounts, such as protection of resources, etc.  

**Indo-Arabic numerals and columnar form of accounts:**

The thirteenth century from its beginning witnessed a remarkable change in the commercial world. In 1202 Leonardo Pisano (Fibonacci), a Greek Mathematician, in his treatise "Liber Abbaci" skilfully demonstrated the superiority of Indo-Arabic* numerals over Roman numerals in the arrangement of accounts in regular columns. The Arab traders during this period made extensive use of this Indo-Arabic numerals in their accounts of ventures. The adoption of this numerals made it possible to add lists of figures in a way which earlier

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* "While the numerals were the invention of Indians and since Arabs appear to have been inventors of arithmetic, these Indian numerals came to be known as 'Indo-Arabic.'"

79. Rover, Raymond De, Op.Cit., p.120.
civilization found impossible. Once figures began to be arrayed, one below another, in a single column instead of being scattered all over the pages, mostly as part of a continuous narrative, the advantages of addition were realized. In this way two clearly separate columns for facilitating computation were introduced.

Bangalese Zumindaree Accounts:

Though Kutilya's Arthasastra indicates the mere existence of the indigenous accounting system in India from a very remote past, there are evidences of skilful system of accounting in practice even during the early thirteenth century in India. One of such accounts relates to the Zumindaree accounts in vogue as early as of 1223 in Bengal. In appreciation of this particular system and the general Indian system of accounting, Warren Hastings, one of the Governor Generals of the British India said that, "the accounts of revenue in Bengal are kept with a regularity and precision unknown in Europe". The accounts of revenues and expenditures in the Bangalese Zumindaree book (1223) bear:

82. Smyth, D.C; Original Bangalese Zumindaree Accounts, Calcutta, Baptist Mission Press, 1823, pp.1-125
83. Bengal Revenue Consultation Report, November 12, 1776, quoted in Smyth, D.C; Ibid. in cover page.
a deep rooted sense of double entry system in the first quarter of the thirteenth century. The zamindaree accounts were kept in historical continuity with necessary provision for yearly balancing and transfer to the next period which are known in today’s text as yearly closing and carry forward. The principal account was composed of various ledgers. Most of the accounts were prepared in modem ledger form showing the amount of rent payable by each individual Ryot (Tenant). The daily cash register (Seeah) as well as a separate cash account for each ryot were maintained. The daily cash register was balanced on monthly basis. Each of the ledger had been so carefully designed that enough provision for cross references and cross checkings were made. Moreover, the receipts from the ryot used to be recorded twice, first in the individual ryot's personal account and then in the daily cash register. The daily cash register which comprised of separate receipt and disbursement columns actually contained the seed of the practice of double entry in its primitive form. Every transaction in the daily cash register was neatly recorded with necessary narration. At the end of the year an abstract of the yearly receipts and disbursements was prepared showing the net results in a concise form. The abstract would ensure final check on the accuracy of the accounts. This abstract used to be prepared in modern schedule form which is usually found to be annexed to a present
day income statement and balance sheet. All receipts were shown with all possible break-up as to different divisions of lands and different individuals of ryots. Thus it facilitated easy cross checking, and accuracy. In case of disbursement also all the heads of expenditure were first shown in a summary form followed by details in schedule form. The Indian system of keeping commercial accounts was also highly appreciated by one late eighteenth century noted orientalist, Alexander Hamilton. He wrote in 1798 that, "the Banians (Bania) of India have been from time immemorial in possession of the method of bookkeeping by double entry and that Venice was the emporium of Indian commerce at the time at which Luca Paciolo's treatise appeared." 84

By the close of the thirteenth century, bookkeeping was found to have earned an impetus for a good amount of development. One by one the successive steps in the evolution of account books had been achieved till finally it was realised that the transactions of a business in their entirety form a homogeneous whole which are capable of being marshalled in the framework of a system.

The appearance of the double entry system of book-keeping.

From the collection of Professor Arigo Castellani it could be traced that the earliest known evidence of double entry bookkeeping dates back to 1297 in the accounts of Florentine Merchant, Renieri Fini, in the Bank of Philip the Fair - King of Florence (1285-1314). The accounts were prepared in a systematic manner having each entry a cross reference to a corresponding debit or credit for all impersonal as well as personal accounts. Accounts for property, goods, wares, merchandise, etc. were opened at that time in regular fashion. Though not of the twentieth century standard, the principal books were prepared in a ledger form on the basis of debtor and creditor relationship. Contrary to the popular opinion about the origin of double entry system in Genoa around 1340, it could be traced to the Florentine system of keeping accounts much earlier, though not in a form as complete as the up-to-date standard. The Florentine system could well serve the purpose of that time. As the medieval merchant had extended their area of operations, the techniques of record keeping did also undergo changes.

The increasing amount of trade required at that time the inclusion of assets, liabilities, income and expense in the existing account books. 88

The fourteenth century, from its beginning, experienced sharp improvements in the system of bookkeeping throughout northern Italy (Tuscan, Milan, Genoa). The books of Alberti Company in Milan during 1302-1323 were found to be kept in compliance with all the canons of double entry. There was the provision of determination of profit that used to be determined by the rise in the difference of the total liabilities and invested capital from total assets including receivables, goods in stock and cash in hand. The profits were distributed among the partners after making a provision for unpaid expenses, if any. 89 Among the major improvements in the fourteenth century with respect to account books, the practice of using tabular form of accounts is noteworthy. The first example of resorting to such a method could be found in Genoa in the accounts of the Steward or Massari of the Genoese Commune for the year 1340.90 In the books of the public officials of the Genoa's commune, debits and credits were not only placed side by side but each

89. Roover, Raymond De; Selected Articles, Loc. Cit., p.133.
90. Roover, Raymond De; Ibid., p.136.
transaction was also recorded twice, once on each side of the ledger. Without exception, each entry would give the cross reference to the corresponding debit or credit as the case may be. The accounts of the commune of Genoa in 1340 were drawn on the exercise of stewardship over the commune wealth, to which all expense and income accounts were transferred and closed at the end of the fiscal year. Periodic closing of books of accounts at that time had also been an important and definite step forward in the development of accounting. Therefore, with regard to the history of the origin of accounting, it can be concluded that double entry system had been the most remarkable and celebrated development in the economic history. It originated in Italy in between 1250 to 1350 in different cities. The first unquestionable example of the system could, however, be found in the Genoese Steward's records for the year 1340. It is quite interesting in note that though the system of complete double entry book keeping originated in Italy and the Germans may have originated something like the term "double entry" (Vig. Double book keeping), yet, the French, as has been noted by Gambler from the preponderance of evidence, were found to be the pioneer in such effort to give currency to the designation "double entry" or "parties doubles".

92. Ibid., p.144.
The development of double entry system of bookkeeping and its adoption in the first half of the fourteenth century really proved a landmark in the history of human civilization. The system was established on such a logical footing that it soon find wide acceptance among the merchants of different medieval trading centres of Italy. Moreover, along with the extension of trade and commerce, it began to spread throughout the rest of the world. A decided progress can be traced in the books of a French firm, the Freros Bonis of Montauban which were kept during the period 1345 to 1359. The firm, at that time, used to obtain from this book a review of its position and made up a list of its debtors and creditors. But the book could not furnish the particulars of the results of trading. Still, a beginning was thus made. As soon as a set of books was no longer regarded as a mere repository for detached notes, to be produced as a settlement between debtors and creditors, the evolution of systematic bookkeeping commenced. The most important circumstance that brought about this development has been pointed out by Professor Seiveking, as mentioned by Brown, to be the mode of information needs. He characterized the transition from chaos to order by remarking that private information need of the trader could not

lead to any advancement. As soon as, however, accounts had to be prepared for submission to others, there appeared signs of positive and far reaching improvements. Banks, as have already been seen, had the most perfect method of account keeping of that time and it was naturally owing to their keeping records of how they stood with each customer. But the requirements of the banker and its customers were satisfied by the keeping of personal accounts which failed to cope with the requirements of a partner in a partnership business, specially in the apportionment of business profit (loss). This led, as a prime motive, to the creation of a system of book keeping that could provide a legal basis in solving the problems of the business world. Newer techniques had, therefore, been gradually evolved in book keeping to fit into the changed requirements of time. Thus significant improvements in book keeping could be traced during the period of extension in the scale of commercial enterprise and the growth of various types of ownerships. Even the mere growth in the volume of transactions itself must also have led men to ponder on some orderly method of recording their dealings. Throughout the fourteenth century, the search for some device of classifying the accounts and ensuring their accuracy had been a pressing necessity. The outcome was, however, very gradual and as such the initial stages in the development of accounting, though very slow moving, did not lose its continuity.\(^96^\) In less than

50 years from the date when Rinerio and Valdo Fini had operated their nominal accounts, a complete set of double entry made its appearance.

Besides the books of the local authority of Genoa, there were also found the records of a bank in that town going back to 1408 which were kept in double entry form.97 Next in antiquity to those of Genoa were the books of the traders of Venice. The 'methods of Venice' which afterwards became so celebrated, were already evidently on the way to be built up. Reference could be made to the ledgers of the firm of Donado Soranjo and Brothers-Merchants in Venice which were prepared in the nature of commercial book keeping during the period 1406 to 1434.98 One of such ledgers have been found drawn on a very accurate system of double entry, though only upto a certain point. Every debit had its corresponding credit and the goods account was closed with a balance of profit or loss. In another ledger of a later date, the idea of relating and then transferring the items of profit and loss to the capital account was incorporated. The account was made complete with a profit and loss account and a capital account.99

In the history of accounting, the first formal balanced account was found to be that of one Andrea Barbarigo in the year 1434 which contained a capital account at the end. In Barbarigo's book not only were the goods accounts regularly closed to the profit and loss account but the profit and loss account was also formally closed to capital account. The accounts of 1430 and 1432 feed the account of 1434. These few specially well kept books prove that the art of book keeping was largely developed by the commencement of the fifteenth century, and a complete system, though not of a high standard, was in very general use all around from Venice to Florence. Methods of balancing, i.e., providing equality between debits and credits, the most important aspect of double entry today, was yet been absent in account books. It would be too much to say that balancing was unknown at that time, but it was very limited. At that time there was found the widespread practice of balancing the books when it was full. The system of cross entries, as suggested under double entry, have been taken by the merchants of that time as a guarantee for the formal completion of their records and postings and these being fairly serviceable. It has been found that during the early fifteenth century, merchant firms at Florence, Venice and other Greek cities have reached a

high degree of technical proficiency at least with respect
to account keeping. If not annually, at least at regular
intervals, determination of profits and losses had been
practised by the Florentine companies.

Publication of 'Summa':

It was in this century, that the year 1494 was most
celebrated in the history of accounting with the glorious
publication of the Summa.* In this summa, Paciolo first
described the 'accounting method of Venice' with precision.
History reveals further that there has been found another
reference of an unpublished treatise on accounting in the
name 'Della Mercatura et del Mercante Perfelo', written by
Benedetto Cotrugli, a judge, in the year 1458.** Since
unpublished, it has been lost from behind the screen to
civilization. Thus Summa necessarily came out to be the
first written complete book on accounting, in historical
records. Paciolo, in this book, just described the popularly
practised method of accounting in Venice for over few decades.

* Summa de Arithmatica, Geometrica, Proportione et
proportionlita.

101. Kartz, Peter: The Accountant, August 27, 1927, referred
But his contribution through this book to this subject was the introduction of a new thought as regards the objectives of formal accounting. Though the merchants of Florence and Venice used accounting primarily for record keeping and for determining profits and losses secondarily, Paciolo exerted that "the objective of book keeping is to give the trader without delay information about his assets and liabilities."  

The methods described by Paciolo some five hundred years back were basically the same as those in use today, excepting modern incorporations. Paciolo was a product of Renaissance in Italy and his method of description gradually evolved in response to the environmental conditions and needs of the businessmen of Renaissance bound Italy. Its further growth and development were conditioned and impelled by the ever-changing needs of the entrepreneurship and the society.  

It was in this period that the whole of Europe witnessed the beginning of enlightened enquiry — political, social and economical. It gave birth to a new environment that encouraged growth of numerous institutions — trade, commerce, industry and banking. In this period, economic emancipation had been heightened and capitalism was given its foot for culmination. It would be too romantic for accounting historians.

to claim that double entry bookkeeping method was readily adopted by all the important business houses in the world soon after the book Summa had made its appearance. Accounting practice and its development have always been dependent on environmental needs. The use of double entry system of bookkeeping has not been widespread until the middle of the nineteenth century, when the Industrial Revolution occurred in Europe and United States. The transformation, from its initial stage, of small scale factory into large scale industry, the incorporation of public corporations and companies, the separation between owners and management, all created a new and changed environment for the practice and development of accounting. Max Weber, Werner Conrart, Joseph Schumpeter, all observed that bookkeeping has grown throughout Europe as commerce grew.¹⁰⁴ Most economic historians have even been found to accord rational accounting quite a high place among the important variables that explain the rise of capitalism and the final economic development. For instance, B.S. Yamow,¹⁰⁵ in his discussion on Sombert Choud' stated that double entry bookkeeping has played an important part in "releasing, activating, stimulating or accentuating 'rationalistic pursuit of unlimited profits', an essential element in the capitalistic spirit".

¹⁰⁵. Winjum; James; Loc. Cit., P.733.
Professor H.R. Hatfield in his essay "Historical Defense of Book Keeping" stressed that accounting lasted for several centuries after its origin at the Italian cities. The twentieth century, possibly, has witnessed the most important strides in economic as well as accounting development. In the wave of transformation, the role of accounting has been widely diversified and it has accordingly provided sophisticated tools in the hands of those who use it specially, for management. It is now being used as an effective aid in the creation of policies and taking decisions in respect both of long term and day to day operations of the organization.

Modern strides:

Double entry system of book keeping stood the test of time for the last five hundred years and the present phase of accounting is simply the result of adaptations of the old system to the emerging needs. Accounting has come across many important developments in the environment and accordingly adapted itself to the changing environmental requirements. Accounting in the late twentieth century enlarged its scope and function to meet the wider social responsibility leaving behind a long array of functions that it served throughout the history. Accounting appears to have actually originated

in discharging the stewardship function which dealt with
the custodianship of resources from the earliest time in the
history of civilization. Accounting at that time was used
to provide the owners of wealth with a means of safeguarding
it from theft or embezzlement. The methods that seem to
have been applied for the purpose was the traditional
'verification of stock' as practised both in respect of real
things as well as debtors and creditors. Stewardship accounting
largely involved in the orderly recording of incomings and
outgoings in connection with the running of the estates of
Feudal Lords in the medieval period. It naturally ended with
the submission of stewardship report for the satisfaction of
the overlord and owner of resources as regards the honesty
and integrity of the stewards concerned on the one hand and
the viability of their estates on the other. Another most
important feature of stewardship accounting, which also continues
till now, was 'accountability'.

With the rise of commercial capitalism and change of
economic conditions owing to commercial expansion, stewardship
accounting was required to be applied by businessmen to keep
records of their transactions in terms of money. The objectives
of book keeping, however, did not remain confined only to those
of stewardship accounting. They multiplied in the midst of
changes in the economic environment. In addition to recording
the movements of resources accounting also sought to find out
the individual effect of each transaction and also the combined effect of all of these transactions on the financial position of the business. More and more complicated forms of business organizations such as partnership, Joint Stock Company, etc. were added to the existing forms about this time, which required more and more complicated forms of accounting, to be resorted for achieving the same objectives. Roy\textsuperscript{107} called this stage of accounting as 'Financial Accounting' and surmised that it is important to record the financial transactions for knowing their effect on financial position. Book keeping thus has been defined as "the systematic recording of ...... ...... transactions in a manner which enables the financial relationship of a business with others to be clearly disclosed, and the cumulative effect of the transactions on the financial position of the business itself to be ascertained."\textsuperscript{108} The growth of financial accounting thus added to the objectives and caused a change in the framework of stewardship reports that were consequently transformed into formal financial reports. Financial accounting thus extended its function to the preparation and submission of financial statements of a business or any economic entity involved in exchange of values in terms of prices or historical costs. Traditional financial statement came to consist of balance sheet and profit and loss

\textsuperscript{107} Roy, G.D; Financial Accounting, in Mukerji and Roy(Eds.) Op.Cit., P.46.

account. Unlike stewardship reporting, this reporting was meant for a number of parties - investors, creditors, competitors, statutory agencies and many others. The stewardship report was, however, meant for the feudal lord almost alone. In fact it was no reporting at all. Far from capital being withdrawn from one concern to another, the idea of capital was, rather, blunt in case of feudal estates and there was no scope of carrying 'profit' as the idea of 'growth of resources' was also ineffective in case of these estates. Reporting function thus became vital when stewardship accounting was accordingly replaced by 'financial accounting' and in the accounting practice it developed as an addition to the long list of accounting functions. Accounting function thus broadened in scope and leaving behind the days of custodianship of individual's wealth, served the purposes of those external to the operational jurisdiction of the business enterprise. Though the judgement of the owners of wealth or their managers was dependant on accounting facts yet, from the earliest days accounting function was primarily concerned with external reporting. From the time of separation of ownership from management, the owners left the scene of managing the operations and made ways for the growth of independent management group. Management group thus has been entrusted with responsibility of maximum possible utilization of resources given under their trust. Such a development in
the environment presented a challenge to the development of accounting as a tool of management. Accounting reports became essential for internal consumption as a tool for judgement and control. Management can visualize its capabilities and judge the operations of others in the organization through the accounting reports, while at the same time interest sectors judge the management performance through these reports. Accounting from its beginning, has been found interwoven with the management processes. Accounting function thus has been widened to encompass analysis, investigation and interpretation of accounting data to be used in various stages of decision making and control over and above the usual portrayal of financial status and progress. This new role of accounting has been recognized mostly at the middle of the present century though there could be found scattered records of its practice in earlier days as well. Reference could be made to the development of costing techniques and its application as a guide to management decisions by Josiah Wedgewood or the development of standard costs by Harrington Emerson or charter Harrison. The emphasis on accounting information for decision making and control provided a tremendous impetus

to the development of accounting for management or management accounting. It could thus be seen that "management accounting shifted the focus of accounting from traditional recording, reporting and analyzing financial transactions to using information for control of operations and for decisions affecting the future." What has to be specifically noted at this stage is that as a major objective of accounting 'reporting' was replaced by 'supplying information'.

The most recent additions in the phases of accounting development has so far been identified to be the social responsibility accounting, precisely, social accounting. The salient features of social accounting lies in the adaptations of accounting methods in considering the social effects of decisions concerning business enterprise as well as their economic effects. Social accounting owes its birth to the social revolution which tended the social problems to move to the center of all welfare debate in all national and international forum. During the last two decades, a search for the solutions to the social problems has been accorded an urgent importance and there has been observed unanimous consensus about the involvement of accounting in such issues of social problems. "The interest in social accounting", as has been remarked by Glaatier and Underdown, "evolved as a response to this development".