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SEARCHING FOR ACCOUNTING PARADIGMS

Abstract: The paper seeks to explore the origins of the paradigm on which modern accounting rests. It suggests that explanations which look to the relative concentration and dilution of the central political power may be relevant to discussing paradigms which were available in the past and may be available in the future.

The historical experience affords useful insights into current problems in three significant ways. First, it reveals the uniqueness which characterizes man's efforts to solve the difficulties with which he is confronted. This uniqueness is a synthesis of complex behavioral elements uneasily constrained by closely reasoned judgment. Second, it illustrates the ephemeral nature of those human problems which stem from the insecurity attaching to life, from the shortages created by human needs and from the mismanagement often evidenced in human affairs. Third, it identifies the accumulation of knowledge as the significant factor by which successive generations may be differentiated.

The historical experience is significant because it offers paradigms which are not only useful, but which enshrine fundamental convictions held by mankind. In this sense, it has particular importance in enlarging the perception of the current crisis in accounting. This crisis is not simply a prosaic inability to deal with a host of purely technical problems, such as inflation and valuation, but more fundamentally relates to the absence of a stable definition of accounting and a supportive theory of accounting.

The purpose of this paper is to explore the historical experience from which modern accounting has emerged, and to identify the central elements of the paradigm on which it is founded. It will be suggested that this analysis may be helpful in removing some misconceptions in the debate about current accounting developments.

Paradigm and Crisis

An analysis of the historical process by which the extant accounting paradigm has been forged reveals neither constancy of belief nor linearity of development.[1] Such continuity and association of ideas as may be established lie in a wider framework found in the history of ideas in which accounting has its true origin.[2] A historical analysis reveals the manner in which successive generations identified the nature of their problems and solved them with such instruments as they possessed. In this respect, it affords a balanced judgment of their relative ingenuity and a rich store of experience. It is noteworthy that, though handicapped by more imperfect tools of analysis, some earlier generations than our own developed apparently more profound perceptions. Thus, whereas the Romans had an imperfect concept of capital, and had no rigorous means of distinguishing capital and revenue, they were aware already of the need to incorporate some cost of capital in the definition of current expenditure.[3] This insight is not reflected in modern financial accounting theory.

The emphasis which accounting historians have placed on the supposed importance of double-entry bookkeeping, and the pedagogic authority of its methodology which is enshrined in textbooks, have endowed the extant paradigm with rigidity and limited usefulness. However, the organic growth of accounting for social and economic control, which predated the phenomenon of double-entry bookkeeping, had important lessons which have been concealed and remain to be appreciated. Significant components of an accounting paradigm which intuitively would seem appropriate to the economic, social and political problems of this age may be found in the paradigms which predated double-entry bookkeeping. Specifically, one may allude to the incorporation of non-financial measurements in the accounting process. Civilizations existing prior to the invention of money operated accounting control systems. Early Roman estate accounts held both monetary and non-monetary data, thereby meeting the informational needs of a dual economy.[4] More significantly, the earlier paradigms emphasized control rather than profit.

The inflation accounting problem is only symptomatic of the emerging need for a redefinition of the purpose of accounting and a resulting paradigm substitution. Though the accounting debate has not expressed this objective formally, it has evinced for several years an interest in a range of questions which implicitly erode the basis of the existing paradigm. Such questions have ranged from, *inter alia,* added-value accounting to human resource accounting, from accounting for social costs to accounting for social goals, from the extension of accounting responsibility to groups other than investors and non-monetary measurements, to cost-benefit analysis. Significant and ominous to the durability of the existing paradigm and which looms on the immediate horizon is the prospect of quite revolutionary changes in the socio-economic environment reflecting the pressures engendered by the search for a new political paradigm in Western European countries. In the short-term, many instances exist of a political priority being given to employment rather than profit, as unemployment control policies become more stringent and more direct. In the long-run, the consequent enlargement of state ownership manifestly may erode the significance of profitability accounting. Not unexpectedly, Marxist teaching appears to exert an unwelcomed influence in the current turmoil, and adds an uneasy tension to the accounting crisis.

If the current paradigm is indeed in a state of crisis, and if an accounting revolution is presently being structured, an analysis of the historical experience may assist in enriching the imagination during a period of transition. Thus, while historicism itself has no satisfactory predictive ability,[5] it provides numerous illustrations of options which have been available.

Generalized Hypotheses About the Historical Process

It seems appropriate to formulate generalized observations of the historical process in terms of significant changes in the structure of society. Such changes may be revolutionary and catastrophic, or they may be evolutionary and lead to gradual paradigm substitution. In this analysis, the political structure of any given time determines the objectives of accounting, and where several objectives may be deemed to exist, it ranks such objectives in some order of priority. Several hypotheses may be developed from this fundamental assumption.

First, strong forms of centralized power reduce the significance of individual rights, and require accounting control systems which meet the informational needs of the centralized political power.

Second, the dilution of centralized political power results in the extension of individual rights, the most significant being rights over economic resources. Where the dilution is only partial, as under feudal systems, the political authority vested in subordinate lords manifestly results in the appropriation of economic resources to the enjoyment of these individuals. The devolution of political power generally has a tendency to encourage the appropriation of economic resources to the enjoyment of individuals in whom that power is vested, whether or not that appropriation is effected by legal or corrupt means.

The dilution of centralized political power results in the appearance of several accounting systems functioning side by side and designed to achieve different objectives. These may be classified into two general groups.

First, several accounting systems may exist for the benefit of the central political power operating in a weak form. Some examples of such systems are as follows:

(a) taxation accounting under which limited taxing powers enforce the submission of accounting statements in the form of income tax returns for the purpose of assessing the contributions to be made to the central political power;
(b) government accounting systems operating to manage funds vesting in the central political power; and
(c) specific accounting systems functioning for particular purposes. The range of such systems will reflect the extent of the central power's residual authority. It will usually include systems designed for the control of selected commercial and industrial operations undertaken by the central political power. In addition, such systems generally deal with the management of the money supply, foreign trade and foreign exchange.

Second, several accounting systems may exist for the benefit of individuals or groups of individuals. These are typified by extant financial and management accounting systems having a variety of purposes.

The third hypothesis which may be made is that external or internal threats to the stability of societies exhibiting weak forms of centralized political power will have centripetal effects which may be temporary or permanent. The threat of war may lead to a reassertion of the central political power's control over economic resources, expressed in the mobilization of men and resources, rationing systems, requisitions of property and such abrogation of individual rights as may be deemed necessary. The accounting systems implied by these conditions are intended to control directly the resource allocation process, both as regards the manner of use and the location of use. Internal threats engendered by economic or social crises may have both temporary and permanent effects. Typically, they combine either to strengthen the central political power's authority, or to lead to the subversion and replacement of that power by an alternative one, which historically has proceeded to use draconian measures. This third hypothesis implies a corresponding reduction or elimination of individual rights and the redundancy of the accounting systems with which they are identified.

These three hypotheses will be found useful in the analysis of the historical process for a number of reasons. First, they assist in the categorization of different civilizations according to the form of centralized political power which they exhibit. Therefore, they assist in identifying the accounting paradigms with which these civilizations may be associated. Second, they will show that relative states of knowledge do not necessarily imply different paradigms. The objectives of accounting systems may be associated directly with political power structures and the political paradigms on which they are established. Third, they leave open the accounting numbers and methods which are deemed appropriate to these objectives.

Historical Analysis

The historical process lends itself to an analysis based on these three hypotheses, providing that sufficiently broad sweeps of time are allowed to render such an analysis meaningful. It is evident that the tendencies assumed by these hypotheses relate to the very long-term, and that the paradigms with which they are associated are long-lasting and deeply embedded in cultural patterns. Accordingly, long-lasting paradigms and protracted transition stages, during which paradigm substitution occurs, more typically represent the historical experience than the swift and convulsive changes usually desired by radical reformers.

For the purpose of identifying paradigms which are relevant to an understanding of the current accounting crisis, it is suggested that the following four periods of history offer the most interesting speculations:

(a) the world of antiquity which predates the invention of money;
(b) the Roman world which exhibits interesting problems of structure and control, vestigial developments of capitalism and substantial legal and accounting developments;
(c) the Middle Ages, which may be regarded as a period of transition, reflecting the many stresses associated with paradigm substitution, and in particular the con-

flicts between religion and capitalism, church and state and the development of a restrictive accounting paradigm in the form of double-entry bookkeeping; and

(d) the Western European world of the post-war years, and in particular the last two decades, in respect of which the topicality of speculations ensures the greatest interest but possibly the least substance. The effect of restricting the time-span considered of necessity must heighten the difficulty of identifying the trend of change.

The broad generalization which will be attempted in this analysis is that the internal threat posed to the stability of Western European countries, which is appearing under the guise of a search for a new political paradigm, has initiated a permanent shift of authority to the central political power and a different emphasis in accounting. In this sense, it will be argued that there appears to be a return to earlier forms of central political power and that the third hypothesis is relevant to an appreciation of the nature of paradigm change.

The World of Antiquity

The earliest speculations with which Western scholars appear to be familiar relate to the civilizations known to have existed in the area lying between the Tigris and Euphrates, known as Mesopotamia, where accounting records dating back to 5000-4500 B.C. have been found.[6] In this area jostled the several civilizations mentioned in the Bible, namely, the Assyrian, Chaldaean-Babylonian and Sumerian nations of the Old Testament. These civilizations are recorded as exhibiting the strong forms of centralized political power needed in the face of constant external threats. They also had cities and temples and, seemingly, quite well-developed forms of commercial activities involving real property, inventories, loans, leases, etc.

Homeric sources are of special interest, though they relate to the Mycenean civilization which flourished in the Eastern Mediterranean. Again the classification of knowledge has restricted research to classical scholars, archeologists and ancient historians. Yet central aspects of this research rely on accounting records, and shed light on accounting paradigms.

In Crete, and particularly in Knossos, there flourished the earlier Minoan civilization exhibiting a more sophisticated culture. Excavations at Knossos, in the 1960s, produced a fascinating array of accounting objects. The key to understanding the hieroglyphic language in which accounting data was recorded on the objects which have been excavated was provided by Ventris,[7] who deciphered the Linear B script. It is known that the Minoans operated a palace or temple economy, which was centrally controlled and used accounting control systems for its purposes. The centralized control of all supplies, and dispositions of a military and political nature were recorded by scribes. Money did not exist, but the need to develop accounting data for control purposes was evidently a paramount need of the central political authority. According to Renfrew,[8] the appearance of language in this civilization and the use to which it was put would support the hypothesis that accounting may be the mother of literacy. The absence of money did not impede the development of complex and effective accounting control systems, nor did it prevent the evolution of means of making quite intricate forms of mathematical computations.

This analysis suggests that monetary measurement to which the modern accounting paradigm is restricted was of a much later origin and is not necessarily central to the purpose of accounting. On the contrary, it suggests that the notion of control is the fundamental paradigm, and the measurements which are most suitable to its purposes are a function of perceived objectives. Under the conditions of external military threat, which appear to explain significant aspects of Minoan accounting records, measurements of quantities, descriptions and locations of men and supplies were more relevant to the central political power's needs than ever could be monetary measurement. Interestingly, this was also true during World War II, when considerations relevant to the management of the money economy were subordinated to the requirement of a siege economy and its military objectives. It may be hypothesized that manpower management policies in Western Europe in the next decades will imply different accounting paradigms, both at macro- and micro-levels. The abortive development of human resource accounting in the 1960s and 1970s reveals the degree to which the extant accounting paradigm frustrates the ability of the accounting process to deal with problems which cannot be encompassed within an ambit defined by monetary measurement.

The Mycenean and Minoan experiences indicate that the paradigm which is relevant to the purposes of a strong form of central political power is addressed to the notion of control, and in that sense, language, description and analysis fulfill its needs better than purely money measurements.

The Roman World

The Roman world is interesting in terms of the second hypothesis on which this analysis rests, and the accounting paradigms which asserted themselves during this period. The dilution of the central political power, the extension of empire and the degree of autonomy which its several regions enjoyed under proconsular rule, the objectives of war and its financing and financial aspects, the power enjoyed by municipalities and large landowners, the early manifestations of capitalist production both public and private and the administrative network established to arrive at a workable compromise between public and private affairs and its supporting framework, are all significant to this analysis of accounting paradigms in this period.

Contrary to the belief which ascribes the genesis of modern accounting to the invention of double-entry bookkeeping during the Renaissance, the most significant and relevant paradigms are to be found in the manner with which the Romans dealt with their affairs. This thesis has been advanced in an earlier paper[9] and illustrated therein by numerous examples of Roman ingenuity in devising accounting means for control purposes. It is suggested that there is a general similarity between the hypothesized conditions of political control prevalent in Roman times and in contemporary Western European society. Essentially, the Romans were concerned with the problems of administrative control. They laid such emphasis on the production of administrative information that complaints about the "red tape" syndrome are recorded in the writings of Cicero. In particular, great care was given to the management of financial matters and property rights, where notions of control and audit appear much more important than efficiency of asset use. The Romans were both careful and profligate as regards the use of funds, if profligacy is measured by standards of good housekeeping. As a result, they experienced financial problems akin to today's, namely, maladministration of public affairs, inflation, financial scandals, etc. It is also true that they were mortified by maladministration and made it a point of honor that the Roman citizen should be an example of probity in the management of public and family property entrusted to him. In these several respects, the parallel between Rome and today is too close for comfort. Equally, this parallel provides the most relevant experience for an appreciation of today's problems. Hence it would be difficult to identify conditions which may be said to be entirely representative of this period. Such illustrations as may be selected should relate, therefore, to conditions which are replicated to a degree in modern times.

The dilution of central political power gave rise to a significant private sector, the dimensions of which, at any given time, cannot be evaluated. At the same time the public sector, consisting of the activities of Rome itself, the regions of the empire and the municipalities, exerted a cohesive influence on the entire economy. Wealthy Roman families provided the public figures which administered its affairs, and at the same time controlled the wealth vested in the private sector.

It may be assumed that the objectives of the central political power were determined, as they are now, by the political process. The policies which they engendered doubtless were based on political value judgments rather than accurate and objective perceptions of any anticipated economic benefit and obvious wealth-creating purpose. The public sector control problem in Roman times arguably may have been no different than today's, namely, how to impose expenditure criteria and limits on alternative programs in the light of value judgments susceptible to political vagaries. Excessive expenditure on public feasts and entertainment have their parallel in contemporary public expenditure which is equally whimsical and profligate, and only defensible in terms of almost similar value judgments. Since the realities which place strict limits on personal expenditure do not exert the same influence on public expenditure, it is hardly surprising that the accounting paradigm most relevant to public sector expenditure control is one which emphasizes the control of cash and cash balances. Further, since the expenditure does not necessarily lead to future net cash flows which act to reduce the tax burden, nor can be directly associated with any perceptible increase in the taxpayer's well-being, it follows that the significance of capital accounting is diminished. This reasoning may well explain the logic of Roman public sector accounting, and its emphasis on the accountability of the public persons who held political office. The notion of personal rather than party audit and accountability of public figures has been substantially eroded in the current political paradigm.

The transition to a money economy was not completed during the Roman period. Even in the public sector, accounting methods relied on both money and other measurements and descriptions. In the private sector, an extensive pattern of trade across the Mediterranean and into Roman Europe was supported by a system of production which was not wholly market-oriented. Hence, monetary and non-monetary measurements featured in the dual accounting systems which were prevalent, and such accounting records allowed only an imperfect view of profitability and capital.

As regards the private sector, the accounting emphasis was placed on the control of assets and the notion of audit and accountability was reflected in legal concepts and, particularly, in family law and custom. For this purpose, the Romans required monetary and non-monetary data and descriptions. Although the writings of such persons as Cicero, Varro, Cato and Columella indicated an interest in good management and housekeeping and the economic aspect of estate management, the Romans had little understanding of economic realities, and their accounting methods took very little account of the economic facts underlying the data recorded.

The Middle Ages

The Renaissance which took root in Italy and spread its influence throughout Western Europe gave the Middle Ages a particular significance, both in terms of the second hypothesis and the accounting paradigms established in this period.

The Renaissance was also critical to the subsequent development of Western European civilization, by virtue of the intellectual and cultural leap forward which it inspired and which has culminated in the Scientific Revolution of recent decades. The diffusion and ultimate disintegration of the central political power which marked the existence and disappearance of the Roman empire was gradually reversed by a trend towards centralism in which church and princes played a crucial role.

Western Europe emerged into the Middle Ages endowed with a semi-primitive tribalism manifested in the form of feudalism, which may be suitably described as a political system erected against external threat and maintained by an elaborate pyramid of rights and obligations. Chivalry and religious fervor veiled the overriding concern with property rights in all their forms. The feudal pyramid gave the sovereign political power influence over all resources, though that influence was conditional upon the observance of the conventions of the system. Nevertheless it marked the beginning of a gradual shift of political power towards the center, which took different guises.

First, the rights of individuals were gradually subordinated to those of an immediate overlord. In turn, his rights were conditional upon the favor of a series of superior lords and ultimately the sovereign. Second, petty kingdoms were submerged as nations grew and their boundaries were consolidated. Third, the church exerted a centripetal influence in matters of state, law and property by the influence it exercised over men's minds. Fourth, the militarism which favored Rome's rise to empire and riches also supported the concentration of wealth which occurred in the early Middle Ages.

The accounting paradigm which provided the data required by the feudal system reflected the paramount concern with control. Dues and entitlements were recorded in all forms of estate accounts, and the descriptions found therein contained the requisite variety of detail. The freed slave, who had performed the office of scribe in Roman times, was replaced by a powerful functionary who, in the office of steward, enjoyed the power, responsibilities and emoluments of the latter-day bureaucrat. Rolls and estate accounts not only provided the data base for control, but also evidence at law. Hence, the accounting process served both a political and a legal purpose. This duality of purpose which manifested itself only briefly in the heyday of Roman accounting about 200 B.C., reasserted itself, and remains today a central feature of the accounting process.[10] It is noteworthy that it was the breach of recorded and established rights recognized in actions for tort which ultimately gave rise to the law of contract, which is the fundamental base of accounting transactions.

The formal association of accounting with law during this period was not limited to the recognition and record of legal rights. An interesting extension of this association during the Middle Ages was the emergence in England of the Royal Courts of Justice from the offices responsible for the accounting and administrative functions of the central political power. Thus the Exchequer of Pleas had the authority to deal with disputes arising out of the conduct of royal accounting. It subsequently became a separate court of law, and as the Court of Exchequer survived until 1873 when it was merged into the Supreme Court of Judicature.

As the Crown was identified as the ultimate source of justice, other departments of state endowed with administrative functions also acquired judicial functions. The Lord Chancellor, who at this time was always an ecclesiastical person, acted both as the Sovereign's Chief Secretary and as his Confessor. Appeals to the Sovereign as the Fountain of Justice were referred to the Lord Chancellor as "Keeper of the King's Conscience." This means of overcoming inadequacies in the Common Law proved to be one of the most significant developments in English law at that time.

The accounting paradigm which this association reflects is highly relevant to an understanding of current trends in accounting, but hitherto has received no recognition. Namely, it is a matter of consensus that the central political power in the exercise of its responsibilities should behave in accordance with notions of natural justice, however defined, and should treat its subjects in an equitable manner. Accordingly, the influence of the central political power has long been identified with both legal and social justice, as well as control. It is noteworthy that the accounting process is now seen as involved not only in the area of control, but also with social justice in a number of ways. The idea of corporate social responsibility is merely one facet of a complex of ideas. Access to information by interested parties and the equitable distribution of benefits are other facets. The sentiment which associates social justice with the central political power is deeply entrenched in the human mind, and is manifested in its strongest form in the religious instinct. The standards of expectation and conduct are correspondingly higher, and the degree of accountability more wide-ranging than in the private sector.

The expansion of trade, which subsequently occurred under the umbrella of a protective feudal system, continued after that system underwent its transition to the sovereign system in the latter stages of the Middle Ages. This trade was regulated in a number of ways.

First, the markets and fairs, which were at once national and international centers of trade, operated under the rules of the law merchant. This law was enforced by courts which sat for this purpose. Hence, the process of accounting remained closely linked with the operation of legal rules.

Second, with the growth of towns and the expansion of trade and industry, there appeared the vestigial forms of the modern social system. Craft and merchant guilds regulated the manner and conditions of work, the levels of skills and the price of labor. Discrimination against the Jews restricted their social role to that of merchants and financiers.

Third, the shift to a money economy was completed. Nevertheless, its imperfections were already apparent. Interference with the value of the coinage by the central political power, as well as early practitioners of the art of financial fraud, gave that medium of exchange an uncertain value. Inflation occurred on several occasions and required draconian measures. During this time, several currencies circulated simultaneously and international trade was financed by precious metals and coinage. The extension of credit gave rise to early forms of banking, and the needs of the central political power for finance beyond its revenues resulted in a state debt, and to the establishment of the Bank of England in 1694. That bank has since supervised the expansion of this debt to irredeemable proportions, without curing the endemic problems associated with the management of a money economy.

Fourth, it was in the hands of traders or middlemen, rather than manufacturers, that substantial wealth and power accumulated. The initial concentration of this wealth in the hands of Italian merchants gave rise to early forms of multinational companies controlled from their headquarters in Italy, and requiring more rigorous forms of accounting. It is in the development of the Italian method of double-entry bookkeeping that the most significant accounting paradigm is seen. Nevertheless, it was a paradigm very limited to a particular sphere of accounting responsibility and to that section of trade influenced by the Italians. As Yamey has pointed out,[11] the claim that this method of accounting was critical to the expansion of trade, because it afforded a systematic and rational means of profit calculation, is denied by the successful development of the wool trade in England, which did not enjoy the benefit of this method. Indeed, although double-entry bookkeeping did spread into Europe and was used successfully by the Dutch, as The Netherlands grew to financial and military prominence in the 17th century, it did not seriously take hold in England until after the sinews of English commercial wealth and power had already been established.

It is clear, therefore, that much of the total range of accounting for control is contained in earlier paradigms. An extension of the range of research is required if the problems of today are to be more thoroughly and sympathetically understood.

The Modern Age: Western Europe Post-World War II

The relative concentration and dilution of the central political power provides an illuminating hypothesis on which to develop an analysis of accounting history. In particular, it identifies paradigms which relate the development of accounting models to significant and long-term shifts in the political power distribution.

In applying this analysis to successive and significant historical periods, it has been suggested that the concentration of political power may be associated with periods of external or internal threat. It is this concentration which has helped to provide the required solutions and maintained the continuance of established civilizations. It has been suggested also that control is the pre-eminent concern of any exercise of power, and that accounting is best understood as having evolved from this paradigm.

At the risk of an excessive simplification of today's problems, it is suggested that several trends are of critical importance in relating the development of accounting with shifts in the structure of political power. First, the trend towards centralism is continuing during this part of the cycle which began with the Renaissance. Second, it is an article of faith that the central political power should act directly to provide a framework within which problems can be solved. It is implicit in that faith, and in the political dogma in which all politicians justify themselves, that the best prospects lie in applying the authority of the central political power to the problems which are perceived. Third, the Modern Age is characterized by a growth of knowledge accumulating in a geometrical proportion, resulting in control problems of ever-increasing complexity. Fourth, the objectives of the central political power are not completely circumscribed by economic considerations, but are also social and cultural, and reflected in a philosophy which is liberal to the extent that it limits its encroachment on basic human freedoms. Accordingly, the data relevant to the development of policy and control extend beyond purely monetary measurements. At the same time, the money economy is still pre-eminent and its problems remain intractable of solution. Fifth, the external and internal threats to the integrity of Western European civilization appear ominous, and uncertainty exists as to the manner in which responses should be constructed. It has been suggested earlier that the internal threats may be regarded as being most serious to the maintenance of a Western civilization based on liberal democratic traditions.

Current Accounting Paradigm: Hypotheses and Analysis

The substantial argument advanced in this paper is that the crisis of modern accounting is generalized to its central meaning and purpose, and that the underlying cause of this crisis is attributable to the tendency towards centralism in the distribution of political power, and its consequential effects on the current accounting paradigm. In particular, the relevance of this paradigm to the conditions assumed under states of relative dilution of the central political power and the nature of individual interests thereby created, would seem to restrict the applicability of this paradigm to such conditions.

Accordingly, the crisis of modern accounting may be seen as one involving the search for a definition of accounting which permits the formulation of paradigms which are relevant to conditions assumed under states of relative concentration of the central political power. This search offers a number of options, many of which are foreclosed by existing classifications of knowledge. Clearly, the stipulation that the relevant accounting paradigm should be concerned with the problem of control brings its associated definition of accounting into conflict with other branches of knowledge, for example that I.Q. testing could be regarded as a form of accounting. Supporting this view is the assertion that the influence of economics has closed some of the important options open to accounting.[12]

The resolution of the problem of placing limits on that class of knowledge which may be defined as accounting is a precondition of a useful discussion of the problems of identifying accounting paradigms relevant to the control requirements assumed under the third general hypothesis stipulated earlier. The historical experience provides useful insights in this respect simply because the relevant facts relating to the accounting problem at any given time have not implied any preconceptions about what those facts would be at any subsequent time. What does emerge from the historical experience is that since the invention of money, accounting appears to have been more closely associated with the control of facts of a monetary nature and having financial implications, than with other sets of facts. The appearance of money and the role which it acquired have given accounting a historical association with a clearly defined set of problems, and with phenomena arising from concepts and rules associated with the role of money. Although accounting has implications which may be described as political or variously as legal, economic, social and behavioral, it is difficult to imagine that these implications could be understood within an accounting context unless they were expressed in monetary terms. In effect, this amounts to saying that other types of measurements, unless related in some significant manner to monetary facts, manifestly only have meaning when related to facts which are the concern of other fields of knowledge than accounting. Nevertheless, it remains true that the restriction of the relevant field of knowledge to monetary facts is inconvenient because it limits the accounting process to partial descriptions and explanations.

It remains to consider whether the crisis in current accounting lies in the failure to appreciate the significance of the trend towards the centralization of political power.

The political tendency throughout Western Europe is towards centralization of effective powers of planning and control over economic activity. The economic role of the central political power has resulted in a great diminution of the importance of the private sector, which is the focus of accounting interest. Moreover, the activities administered by state corporations are much more affected by political value judgments than traditional economic principles. Accordingly, traditional accounting methods directed at profitability and capital accounting would seem less appropriate to the problems of public sector economic activities.

There has been a great concentration of welfare functions in the hands of the central political power. This has resulted in the creation of many agencies committed to massive expenditure programs with objectives very different from those represented in the literature of accounting. This area of activity results directly from the belief that the central political power has a responsibility for redressing social injustices, as well as the legal injustices mentioned earlier.

The philosophy underlying the management of private wealth and business accounting is directed to profitability. Essentially, profitability may be represented as reflecting the relationship which exists between holders of business assets and the community at large. Accountants believe that profitability is a measurement of business efficiency. There is a widespread view, however, that profitability is a socially misconceived concept of efficiency, and that some other criterion of efficiency is required to manifest the optimal use of resources. The historical experience of the 19th century, in particular, has imprinted in the popular mind a direct connection between profitability and disproportionate personal wealth of the few on the one hand, and the exploitation and abject and widespread poverty of the many on the other.

The view that profitability reflects social injustice has led to a growing regulation of private sector enterprise. For example, in addition to direct taxation, there is now a widespread framework of laws governing employment conditions, pricing agreements, dividend distributions, trade union negotiations and company law reform.

The increasing concentration of the central political power has resulted in bureaucratic control and the employment of large numbers of bureaucrats. There is growing evidence of substantial discretionary managerial behavior in the ranks of bureaucrats, and of a lack of control over their activities. This is due, in part, to the failure to devise appropriate control procedures, but is also attributable to the inability to impose upon the bureaucracy an appropriate level of audit and accountability.

By taking an olympian view of the historical process, and thereby making generous provision for speculation, it has been suggested that an analysis based upon hypotheses relating to different states of concentration and dilution of the central political power explains significant changes in the direction of accounting interest. The historical experience reveals the many options which have been available from time to time, the sympathetic adjustments which accounting has made towards changing conditions and the manner in which knowledge has been assimilated into its thought and methods.

FOOTNOTES

[1]Littleton and Zimmerman.

[2]Glautier, "The Idea of Accounting: A Historical Perspective."

[3]Mickwitz.

[4]Grier.

[5]Kuhn. Popper (1957).

[6]Keister.

[7]Ventris. Chadwick and Ventris.

[8]Professor A. C. Renfrew encouraged the author of this paper to examine the accounting implications of known facts with a view to establishing the accounting schema which had been developed. The hypothesis suggested by Professor Renfrew is now attributed to him at his request made at that time. Professor Renfrew is Disney Professor of Archeology, Cambridge University, England.

[9]Glautier, "Roman Accounting: The Influence of Socio-Economic Factors on the Development of Accounting Concepts."

[10]Glautier, "Roman Accounting."

[11]Yamey.

[12]Bryer and Pettigrew.

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