

## THE ROLES OF ACCOUNTING IN ORGANIZATIONS AND SOCIETY\*

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### Abstract

The paper seeks to contrast the roles that have been claimed on behalf of accounting with the ways in which accounting functions in practice. It starts by examining the context in which rationales for practice are articulated and the adequacy of such claims. Thereafter consideration is given to how accounting is implicated in both organizational and social practice. The paper concludes with a discussion of the implications for accounting research.

Accounting has come to occupy an ever more significant position in the functioning of modern industrial societies. Emerging from the management practices of the estate, the trader and the embryonic corporation (Chatfield, 1977), it has developed into an influential component of modern organizational and social management. Within the organization, be it in the private or the public sector, accounting developments now are seen as being increasingly associated not only with the management of financial resources but also with the creation of particular patterns of organizational visibility (Becker & Neuheuser, 1975), the articulation of forms of management structure and organizational segmentation (Chandler & Daems, 1979) and the reinforcement or indeed creation of particular patterns of power

and influence (Bariff & Galbraith, 1978; Heydebrand, 1977). What is accounted for can shape organizational participants' views of what is important, with the categories of dominant economic discourse and organizational functioning that are implicit within the accounting framework helping to create a particular conception of organizational reality. At a broader social level, accounting has become no less influential as it has come to function in a multitude of different and ever changing institutional areas. The emergence of the modern state has been particularly important in this respect. The economic calculations provided by enterprise level accounting systems have come to be used not only as a basis for government taxation but also as a means for enabling the more general economic management

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\*We would like to acknowledge the financial support of the Anglo-German Foundation for the Study of Industrial Society and the Foundation for Management Education.

policies of the state to grow in significance and impact (Hopwood, *et al.*, 1979; Kendrick, 1970; and Studentski, 1958). Accounting data are now used in the derivation and implementation of policies for economic stabilization, price and wage control, the regulation of particular industrial and commercial sectors and the planning of national economic resources in conditions of war and peace and prosperity and depression. Indeed in its continuing search for greater economic and social efficiency (Bowe, 1977; Haber, 1964; Hays, 1959; and Searle, 1971) the state has been an active agent both for the continued development of accounting systems in industrial and commercial enterprises (Hopwood, *et al.*, 1979) and for their introduction into more sectors of society (Gandhi, 1976).

Such extensions of the accounting domain have had major implications for the development of both accounting thought and practice. As the theorists of management control (Anthony, 1965) now recognize, accounting can no longer be regarded as a mere collection of techniques for the assessment of individual economic magnitudes. Whilst procedures for the derivation of various categories of cost and economic surplus are still important, the growth of the modern business enterprise has resulted in their incorporation into more all embracing forms of organizational practice which can enable the co-ordinated and centralized control of the functional (Litterer, 1961 and 1963), divisionalized (Johnson, 1978) and now, the matrix and project oriented organization (Ansari, 1979; Chapman, 1973; Sayles & Chandler, 1971). Similarly the increasing demands for financial information made by the capital markets, agencies of the state and organizations within the accounting profession itself have resulted in more extensive and rigorous approaches to financial reporting and disclosure (Benston, 1976; Hawkins, 1963). Accounting problems have seemingly got ever more detailed, precise and interdependent, resulting not only in the need to articulate new practice but also to formally explicate what previously had been implicit in practice.

As a result of such developments accounting has gained its current organizational and social significance. No longer seen as a mere assembly of calculative routines, it now functions as a cohesive and influential mechanism for economic and social management. But why should this be the case? Why should accounting have grown in complexity

and significance? What have been the underlying pressures for its growth and development? Just what roles has it come to serve in organizations and societies? And why? All too unfortunately such questions very easily take one into uncharted terrain. For although there has been an enormous investment of effort in improving the accounting craft and even in charting its technical development, very few attempts have been made to probe into the rationales for the existence and development of accounting itself. Be that as it may, the present paper will attempt to make a preliminary excursion into the field of the unknown. Whilst recognizing that with so few prior studies to appeal to our conclusions can be tentative at best, we nevertheless believe that it is important at least to start questioning what has not been questioned and thereby possibly to make problematic what may have been taken for granted.

Our argument starts with a discussion of two important tendencies underlying the development of accounting as we now know it: the increasing institutionalization of the accounting craft and the growing abstraction or objectification of accounting knowledge. On this basis we consider how these and other pressures might have stimulated a search for explicitly stated rationales for accounting – for expressions of the roles which it serves in organizations and societies. After discussing at least some of the more commonly articulated roles which accounting is claimed to perform, we attempt to analyse the adequacy of such functional imperatives, using both observations and the research studies that are available to demonstrate how purposes are implicated in action rather than being essential to the craft itself. To reinforce these arguments more particular consideration is given to the variety of roles which are created for accounting both within organizations and the societies of which they are a part. The paper concludes with a discussion of the implications of our arguments for the future study of accounting.

#### INSTITUTIONALIZATION, ABSTRACTION AND THE SEARCH FOR RATIONALES

It is possible to identify many tendencies underlying the development of the accounting craft. One could point to particular aspects of the emerging bodies of knowledge and practice or to

the changing patterns of influence on them. Alternatively one could highlight developments in the organizational and social significance which accounting has had or changes in the organization of accounting itself. For the purpose of the present argument two particular tendencies are identified: the increasing institutionalization of the craft and the growing objectification and abstraction of accounting knowledge.<sup>1</sup> Both of these tendencies are important for gaining an understanding of the present state of accounting, the roles which it serves and those which are claimed for it. Moreover together they have resulted in the creation of new forums both for accounting deliberation and debate and for the introduction of accounting change, forms of occupational specialization within organizations which have provided bases on which accounting practitioners have searched for as well as responded to organizational needs and meanings, and the continued extension of the domains of both accounting practice and thought.

The institutionalization of accounting has occurred at both the organizational and societal levels. Within both business and governmental organizations, bookkeeping came to take on a new significance and influence as accounting became a more all embracing form of organizational practice (Garner, 1954; Pollard, 1965). Implicated in budgeting and standard costing, organizational segmentation and control, and planning and resource allocation, the accountant came to be an increasingly respected member of the management cadre. Accounting departments were created, specialist staff recruited, emergent accounting systems formalized, standardized and codified, and links with other forms of management practice established. Moreover, accounting itself came to be a more fragmented endeavour with the growing separation of the preparation of the financial accounts from the presentation of internal financial information and the management of corporate liquidity and financial structure.

Such organizational developments were themselves intertwined with the professionalization of

the accounting craft. Almost from their birth, the professional institutes provided an interface between the growing agencies of the state and business enterprises. In continental Europe accountants were involved with the administration of the early commercial codes (ten Have, 1976) and in England and Wales the profession derived a large part of its initial rationale from those extensions to the accounting domain which had been created by successive companies and bankruptcy acts and legislation which provided for the regulation of sectors such as railways, building societies and municipal utilities (Brown, 1905; Chatfield, 1977; Edey & Panitpakdi, 1956; Littleton, 1933). And although the U.S. context was not so regulated in the earliest days of the profession, the latter nevertheless came to flourish on the basis of subsequent governmental interventions (Chatfield, 1977). Indeed with the establishment of professional accounting institutes, many of the subsequent institutional innovations in the accounting area in the U.S.A. and the U.K. were to arise at the interface between them and the expanding regulatory agencies of the state. So, initially at least, the Securities and Exchange Commission in the U.S.A. made rather limited use of its regulatory powers in the accounting area, allowing the profession to invest in that chain of institutional mechanisms for the explication, standardization and codification of financial accounting practice which would progress through the Accounting Principles Board to the Financial Accounting Standards Board. Not dissimilar developments occurred later in the U.K. with the Accounting Standards Steering Committee being created in response to governmental pressure and the desire of the professional institutes to preserve their powers of self-regulation. Elsewhere, however, the institutionalization of accounting was a more direct result of the activities of the state. In pre-war Germany, for example, legal and institutional mechanisms for the standardization of enterprise accounting were introduced in the context of the mobilization of the national

<sup>1</sup> The distinction between institutionalization, and objectification and abstraction parallels similar distinctions made by Popper, Kuhn and Foucault. Popper (1972), for instance, characterises objective knowledge ("that massive fabric of statements which exists in journals and books stored in libraries, discussions, computer memories, etc.") as a world – "world 3" – which is largely autonomous of the world of the senses – "world 2" – and the physical world – "world 1". See also Hacking (1975). Similarly Kuhn (1970) distinguishes between paradigms 1 and 2, the former relating to the logical, conceptual and discursive aspects of a science and the latter to the social and institutional conditions under which the science exists. Foucault (1977) likewise operates with a distinction between knowledge and power, with the latter referring to the complex of social relations – the "regime" – in which knowledge is embedded.

economy for war (Singer, 1943) and in France these innovations were adapted after the war to provide the information which was required for microeconomic planning by agencies of the state.

Important though such a pattern of institutionalized development may be in its own right, we are particularly interested in a number of the implications which it has had for the functioning of accounting and for understanding the roles which it has come to serve. First, the emergence of accounting as is recognized and influential occupational specialization in organizations gave some measure of autonomy to accounting practice. With the creation of accounting departments and the recruitment of cosmopolitan (Gouldner, 1957) specialists who were receptive to accounting developments elsewhere, the development of accounting systems could become intertwined with the management and growth of the accounting function in an organization. Accounting could take its place in the organizational "garbage can" (Cohen *et al.*, 1972), with its development stemming, in part at least from the fact that it existed. Rather than merely having to respond to preconceived organizational needs, accounting practitioners could search for organizational opportunities for the expansion of accounting practice. Roles could now be created for accounting, with accountants pointing to the potential of their systems and seeking to establish connections between accounting and other forms of organizational practice, particularly that of production management. Second, the emergence of professional institutes and specialized bodies for the standardization and codification of accounting practice provided new forums in which accounting deliberations and debates could take place and from which changes in accounting practice could emanate. Developments in financial accounting were no longer necessarily an outcome of the direct interplay between business enterprises and the institutions of the capital market or even the state. Pressures for change could stem from the

relationships between the professional institutes, the bodies concerned with the regulation of accounting practice, the dominant partnerships of the accounting profession and the interested agencies of the state, and then be imposed, comfortably or otherwise, on business or other organizations. So yet again the creation of roles for accounting practice became a much more complex endeavour, with the pressures for change being quite capable of stemming from very different institutional arenas than those in which the new practices were to function. Thirdly the changing institutional structure within which accounting operated created new possibilities for the autonomous development of accounting knowledge.<sup>2</sup> Within organizations, accounting procedures came to be codified in charts and manuals. With their interests in training, examining and regulating, the professional institutes provided a further stimulus for an interest in accounting discourse that could be separated from the practice of the craft. And the growing interest of the state in enterprise accounting also resulted in the formalization of the craft as disclosure requirements started to be laid down and concerns with accounting standardization emerge. As Chatfield (1977, p. 121) notes:

In coming to grips with problems of capital, income and asset created by the industrial corporation and absentee ownership, the auditor was forced to reason beyond existing rules of thumb and finally to elaborate his ideas of proper treatment into accounting principles. His scrutiny of financial statements ultimately rationalized bookkeeping itself, not only through the use of internal control procedures but more directly by refining transaction analysis, account classifications, and the rules of financial statement disclosure. English social conditions had created a need for audit services and had produced accountants more highly skilled than any before them. By subjecting customary methods to analysis, these auditors gave accounting theory some of its earliest practical applications. And in attempting to standardize British practice, Parliament through the companies acts codified parts of this theory.

In such ways accounting became an identifiable form of organizational and social practice. It could

<sup>2</sup> The relationship between the institutional setting of accounting and the development of accounting knowledge is very complex, particularly when one considers that institutions are no less discursive in nature than knowledge itself. A profession, for example, can be conceived as a mass of regulations, categories, procedures, norms and laws, etc. The differentiation and relationship between the two levels of analysis therefore needs to be handled with care. As both Popper (1972) and Foucault (1977) point out in their different ways, it is all too easy to seek to explain "abstractions", "paradigm 1" or "knowledge" by reference to "institutions", "paradigm 2" or "power". Rather than arguing that institutionalization gives rise to abstraction, or vice versa, we prefer to observe the conjuncture of the two. So, for example, formalized accounting knowledge can be seen as a condition for the possibility of the professionalization of accounting, and that professionalization in turn changes the conditions underlying the elaboration and development of accounting knowledge.

be described and codified, debated and challenged, and ultimately changed. The discourse of accounting could be influenced by pressures very different from those which impinged on its practical application. Other bodies of thought which had no necessary *a priori* relationship to the accounting craft could influence the development of accounting thought, often in institutions which were far removed from the practices of accounting. So, for example, accounting thought could come to be intertwined with that of economics (Baxter, 1978) and production engineering (Wells, 1978), and with the concerns of the scientific management movement (Epstein, 1973). And such discursive developments could provide a basis for changing the practice of accounting itself, either by direct application or through the influences which they had on the requirements and pronouncements of the state, the professional institutes and the bodies concerned with the standardization of the craft and independent commentators and analysts.

Together the institutionalization and abstraction of accounting also provided bases on which people might seek to formally explicate roles which accounting served. As in other areas of human endeavour (Hacking, 1975; Popper, 1972), the existence of an abstract and objective body of thought stimulates a search for its nature and rationale.<sup>3</sup> Just what is accounting and what functions does it serve were questions that started to be considered. And with the growing significance of the craft and the increasing complexity of the institutional processes through which changes emerged, such questions might have had a particular relevance for many of those concerned with its practice, regulation and development.

Given that the sources of accounting change were increasingly distant from the arenas in which the new practices were to function, there was no reason to expect why those rationales which had been used in the initial justification and development of any change should provide effective rationales for its public implementation. For in a social context, public actions need to have either a political means for their enforcement

(Moonitz, 1974) or a wider social significance and legitimacy (Posner, 1974). In the latter case, they need to be seen as being orientated towards some desirable or acceptable social end or ends. Action needs, in other words, to have an explicit and public rationale (Watts & Zimmerman, 1979) — a formal expression of the aims and intentions that might be regarded as being embodied within it.

Certainly the state came to act on accounting in the name of both accountability and the furtherance of organizational and social efficiency (Searle, 1971). Professional institutes and those agencies concerned with accounting regulation adopted a similar stance, although they also emphasised the role which accounting could serve in improving the flow of information useful for the investment decisions of shareholders. And those practicing accounting within organizations came to point to its relevancy in improving organizational efficiency and the maintenance of organizational control.

Such roles were not necessarily mere interpretations of accounting practice. Roles could emerge at a distance from practice, often shaped by very different institutional contexts and bodies of thought, and thereafter serve as bases for changing practice. Providing the imperatives for accounting, their relationship to the practice of accounting need be only indirect.

### THE IMPERATIVES OF ACCOUNTING

We are all familiar with those stated roles of accounting which grace the introductions to accounting texts, professional pronouncements and the statements of those concerned with the regulation and development of the craft. Latterday equivalents of the preambles of old which appealed more directly to Heavenly virtue and authority (Yamey, 1974), they attempt to provide a more secular basis for the accounting mission. In such contexts, accounting is seen to have an essence, a core of functional claims and pretensions.<sup>4</sup> It is, or so we are led to believe, essentially concerned with the provision of

<sup>3</sup>Equally the explication of roles for accounting can serve as an inducement for the elaboration of accounting knowledge and practice in particular directions.

<sup>4</sup>The search for a rationale in progress is illustrated by Littleton (1953, p. 18): "There *must* be some basic concept which makes accounting different from all other methods of quantitative analysis, there *must* be some central idea which expresses better than others the objectives, effects, results, ends, aims that are characteristic of accounting — a 'centre of gravity' so to speak" (emphasis added).

“relevant information for decision making”, with the achievement of a “rational allocation of resources” and with the maintenance of institutional “accountability” and “stewardship”. Such functional attributes are seen as being fundamental to the accounting endeavour. Justifying the existence of the craft, they provide rationales for continued accounting action.

Another rather different set of imperatives for accounting has originated from those scholars who have seen accounting systems as mirrors of the societies or organizations in which they are implicated. At the societal level, this has involved seeing accounting as essentially reflective of the organization of social relationships. Feudal societies are seen to require feudal accounting systems; capitalist societies, capitalist modes of accounting (Rose, 1977); and the era of the post-industrial society necessitates a new framework for the accounting craft (Gandhi, 1976). The translation of such thinking to the organizational level has been more recent, influenced by the emergence of contingency schools of thought in the study of organizational behaviour (Bruns & Waterhouse, 1975; Hopwood, 1974; Sathe, 1975; Waterhouse & Tiessen, 1978; Watson, 1975). However some would now see accounting systems as being essential products of such characteristics as the complexity, noxity or uncertainty of the organizational environment (Galbraith, 1973; Khandwalla, 1972), the technology of the enterprise (Daft & MacIntosh, 1978) or the strategy of corporate management (Chandler, 1962). Although the evidence in support of such broad normative theories of accounting is either non-existent or equivocal at best (see Hopwood, 1978), this has not prevented their growing popularity and influence. The fact that they are largely silent about the mechanisms that might create such an essential relationship between accounting and its presumed organizational and social determinants has not been seen as problematic by those who wish to point to either the necessity for change or the elegance of design which underlies accounting in action. Nor has the fact that so many of the underlying organizational theories depend for their validity on the presumption that such contingent designs further the achievement of higher order but defined, consistent and agreed organizational goals – goals which are in part made objective by the very accounting systems which they are supposed to explain (Pfeffer, 1978).

However rather than further delineating either the particular or the more general normative claims for accounting, we choose to focus on a number of their characteristics.

The stated roles of accounting have served to provide a normative structure for accounting thought. Addressing themselves to the accounting mission, they have provided a statement of what accounting is and ought to be about. And, on this basis, they have facilitated the appraisal of accounting practice. Accounting has been challenged and changed in the name of the roles which it is seen as serving. People have sought to extend accounting in order to promote “corporate accountability” and to further “rational decision making”. Others have pointed to the challenges which social change necessarily creates for accounting practice (Gilling, 1976). Recognizing, however, the equivocal relationship between the roles and practices of accounting, the former have been used as vehicles for identifying the disparity of the latter and, on this basis, for correcting what have been seen to be errors in practice.

Indeed many of the functional claims that have been made for accounting have emerged at a distance from the practice of accounting. Emanating from professional institutes, bodies concerned with the regulation of the accounting craft, agencies of the state and not least in importance, the academy itself, they very often reflect the pressures on those bodies and their need for a public legitimacy and rationale for action. Formulated in the context of particular institutional needs and actions, the functional claims attempt to provide rather particular interpretations of the accounting mission. In the academy in particular the public roles that have been articulated have often reflected the influence of other bodies of thought and practice with which accounting as an autonomous body of knowledge has become intertwined. The influences of conventional economic discourse and administrative theory have been particularly important in this respect.

In fact it should be borne in mind that there is little in the development of accounting as practised that would lead one to describe its essential rationale in terms of the furtherance of economic efficiency or rationality. Not only are the concepts which it is claimed to further extremely difficult to define (Winston & Hall, 1959) but also it has been the practice of accounting which has itself provided some of the

operational understandings of the pre-given economic ends which it is supposed to serve.<sup>5</sup> What relationships there are between accounting thought and economic discourse have stemmed from those accounting, management and economic theorists who have sought to analyse and guide the accounting task rather than from any pre-given essential attributes of either of the two bodies of knowledge and practice.

Finally it is worth noting that although the publically stated roles of accounting have been used to identify errors in practice, that very divergence of practice has rarely problematized the roles which are stated for it. Emanating from very different social contexts, the roles have remained absolute. Acting like guardians of the secular accounting mission, they have seemingly defied questioning and rarely been brought into confrontation with accounting as it is.

Hence we can tentatively conclude that the roles which have been attributed to accounting may tell us a great deal about how people have come to see accounting, the influences on accounting discourse and the bases from which people have sought publically to influence accounting. The roles of accounting have been used to change the practice of accounting and no doubt they have been influenced by practice. However that is not to say that they are descriptive of practice. As Argyris and Schon (1974) have pointed out in another context, espoused theories are very different from theories in use. At best the roles of accounting and the practice of accounting would appear to have a rather equivocal relationship.

### THE COMPLEXITIES OF ACCOUNTING PRACTICE

More recently, however, we have witnessed what might be the beginning of a reappraisal of the pre-given imperatives of the accounting mission. Pressures stemming from both academic inquiry and the problems of practical action have encouraged some observers to recognize and analyse the complexities of accounting in action and, on this basis, to start questioning what has not been questioned and make problematic what so far has been taken for granted. For different

reasons and on different bases these tendencies have been evident in both the financial and management accounting areas.

The sustained and influential body of research on the impact of accounting data on the capital markets (Dyckman, Downes & Magee, 1975) has provided one basis on which the actual functioning of accounting has come to be reconsidered. The findings that investors do not necessarily take accounting data at their face value and that much of the information content of corporate annual reports and accounts is reflected in share prices prior to their public announcement (Ball & Brown, 1968) have highlighted the existence of a highly competitive market in information on corporate performance, of which accounting reports are only a part. Investors appraise, question and corroborate accounting information. Rather than being mere passive recipients, they inquire into its significance for the decisions they are taking, bringing to bear their own standards of relevancy. Now other research is starting to recognize the multiplicity of interests in accounting information within even the investor community, let alone elsewhere. Based on conceptions drawn from the study of the economics of information search and use, it is pointing to the difficulty, if not the impossibility (Demskei, 1973), of operationalizing general conceptions of decision relevancy and incorporating them into the selection of a body of information prior to its use in an actual decision situation. Like the empirical research on actual investor behaviours, it too suggests that the relevancy of information is determined within the context in which it is used rather than by the foresight of those who determine the form which it should take.

In which case what influences the nature of the accounting information which is provided, if not used? Unfortunately very little is known about this at the level of the individual enterprise. Whilst consideration is being given to the ways in which information disclosure might be implicated in the formation and operation of agency relationships, the empirical adequacy of such views remains to be tested. However one set of observations which is starting to provide us with at least a partial appreciation of the forces at work at the level of the regulatory institution rather than the individual enterprise has stemmed from analyses of

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<sup>5</sup> The latter was particularly the case in the context of the efficiency and scientific management movements at the turn of the present century. See Haber, 1964; Hayes, 1959; and Searle, 1971.

accounting policy formulation. Both Moonitz (1974) and Horngren (1973) have provided insider views which have emphasised the political dimensions of the process. The technical components of accounting regulation and specification were seen as being embodied within a complex pattern of institutional and other influences and the search for technical solutions as being complemented by a search for institutional and political support. Arising from these studies, there is now a growing awareness of the need to understand the bases on which interests in accounting are determined, articulated and deliberated (Watts & Zimmerman, 1978, 1979). For instance, consideration is now being given to how such interests might stem from the ways in which an accounting of the corporate economy of the past can influence the economy of the future (Zeff, 1978). And with the capital markets no longer being seen as the only or indeed the most significant users of accounting data, more emphasis is also being given to the roles played by agencies of the state.

Financial accounting and reporting are coming to be seen as outgrowths of institutional processes of enormous and still uncharted complexity (Burchell *et al.*, forthcoming). More importantly for the present argument, the roles which they serve are starting to be recognized as being shaped by the pressures which give rise to accounting innovation and change rather than any essence of the accounting mission.

A similar problematization of the accounting craft is slowly starting to emerge from organizational and behavioural inquiries into the ways in which management accounting systems function. Some have questioned the extent to which accounting information is actually used in organizations (Mintzberg, 1973, 1975). Others have pointed to their symbolic rather than technical uses (Gambling, 1977; Meyer & Rowan, 1978). And yet others have emphasised the ways in which uses are created for accounting systems within the context of particular organizational environments (Cammann, 1976; Hopwood, 1973; Otley, 1978; Rahman & McCosh, 1976). Rather than the consequences of accounting systems being determined by their mere existence, they are now being seen as stemming from those organizational processes which give them a particular meaning and significance (Pettigrew, 1973, 1977). Already consideration has been given to the roles played by management styles and

philosophies (Argyris, 1977; Hedberg & Mumford, 1975; Hopwood, 1973), organizational normative environments (Otley, 1978), power and influence structures (Argyris, 1971; Pettigrew, 1973, 1977), organizational mechanisms for the diffusion of information (Shortell & Brown, 1976), organizational mechanisms for the diffusion of information (Shortell & Brown, 1976) and external pressures and constraints (Meyer & Rowan, 1978; Olofsson & Svalander, 1975). Other researchers have given more attention to how accounting systems both arise from and function within the context of those micropolitical processes which constitute the organization as we know it (Pfeffer, 1978). Wildavsky (1965, 1978), for instance, has provided us with particularly vivid insights into how political processes influence how sophisticated budgeting systems function in practice. Equally detailed descriptions of the ways in which organizational resource allocations are a product of the intertwining of budgeting and planning systems and political processes have been provided by Pfeffer and Salancik (1974) and Dalton (1959), and similar findings in the context of the capital budgeting process have been reported by Bower (1970).

Organizational research is also starting to question those automatic presumptions of a positive and causal relationship between accounting systems and effective organizational performance which implicitly or explicitly grace accounting texts and the pronouncements of practitioners and consultants. Albeit slowly, we are starting to move beyond those questioning pleas from the heart that were uttered by Ackoff (1967) over a decade ago. Whilst accounting systems are most certainly centrally implicated in the design and functioning of organizations as we know them, even enabling the existence of particular forms of organizational segmentation and management (Braverman, 1974; Johnson, 1978), some all too tentative studies (Child, 1973, 1974, 1975; Rosner, 1968; Turcotte, 1974) would at the very least suggest that the financially successful might well avoid many of the rigors of the more sophisticated accounting, information and control systems. Seemingly they revel and flourish within the context of informal planning and assessment practices (Child, 1974), multiple and overlapping flows of information (Baumler, 1971; Grinyer & Norburn, 1975) and continually renegotiated exchanges between organizational participants (Georgiou, 1973). Indeed it might be



the "newly poor" (Olofsson & Svalander, 1975) or the externally threatened (Khandwalla, 1978; Meyer & Rowan, 1978) that invest heavily in additional mechanisms for internal visibility and control as they attempt both to allocate their ever more scarce resources or to negotiate a new legitimacy with external agents.

Although we still know all too little about how accounting systems function in practice, the studies that are available do enable us to question the descriptive accuracy of many of the functional imperatives that are claimed on behalf of both financial and management accounting systems. Whilst they may be introduced in the name of particular conceptions of social and organizational efficiency, rationality and relevance, in practice accounting systems function in a diversity of ways, intertwined with institutional political processes and the operation of other forms of organizational and calculative practice. Accounting, it would appear, is made to be purposive rather than being inherently purposeful. At the very least research suggests that in laying down the pretensions of the accounting craft we have uncritically adopted a rather particular set of views of human, organizational and social rationality and the relationships between accounting, decision making and organizational action. Whilst such presumptions might have legitimized the accounting mission, provided the means for acting on accounting and simplified the accounting system design and implementation process, their relationship to the realities of organizational and social life is questionable at best.

Unfortunately the tentativeness of our knowledge of accounting in action precludes any comprehensive and analytical discussion of the way in which accounting systems function in practice. In this essay we can do no more than be suggestive of the roles which they serve. We do this by first focusing on how accounting systems are implicated in organizational practice, choosing to pay particular attention to their involvement in organizational decision making processes. Thereafter we made some even more tentative observations on the social as distinct from organizational functioning of accounting.

#### ACCOUNTING SYSTEMS AND ORGANIZATIONAL PRACTICE

The relationship between accounting and

organizational decision making has been an influential basis for the analysis, development and articulation of normative accounting roles and "solutions". So many writers have pointed to the roles which accounting systems can and should play in providing relevant information for decision making, improving the rationality of the decision making process and maintaining the organization in what is seen as a state of control. However one problem with such a perspective is that the relationship between accounting information and decision making rarely has been examined critically. The link has, in other words, been presumed rather than described. It has been assumed, for instance, that the specification, design and use of accounting systems precedes decision making, that the roles played by accounting systems in decision making can be invariate across a multitude of different decision situations and that accounting information is there to facilitate and ease rather than more actively to influence and shape the decision making process. However whilst such assumptions might point to the potential of the accounting mission, they have a much more complex relationship to the ways in which accounting functions in practice.

Recognizing that the present state of knowledge precludes either a comprehensive or an authoritative account of the ways in which accounting information is implicated in the processes of organizational decision making, we base our own analysis on the rather particular understandings of decision making in organizations formulated by Thompson and Tuden (1959). Whilst overly simple, their perspective nevertheless added to the traditional view by characterizing various states of uncertainty and, as a consequence, a range of possible approaches to decision making. By so doing it provides a basis for discussing at least some of the diverse ways in which interests in accounting can arise out of the processes of organizational decision making.

As can be seen in Fig. 1, Thompson and Tuden

		Uncertainty of objectives	
		Low	High
Uncertainty of cause and effect	Low	Decision by computation	Decision by compromise
	High	Decision by judgement	Decision by inspiration

Fig. 1. Decision making and the location of organizational uncertainty.

distinguished between uncertainty (or disagreement, for that has the same effects at the organizational level) over the objectives for organizational action and uncertainty over the patterns of causation which determine the consequences of action. When objectives are clear and undisputed, and the consequences of action are presumed to be known, Thompson and Tuden highlighted the potential for decision making by computation. In such circumstances it is possible to compute whether the consequence of the action or set of actions being considered will or will not satisfy the objectives that have been laid down and agreed beforehand. As cause and effect relationships become more uncertain however, the potential for computation diminishes. Thompson and Tuden then saw decisions being made in a judgemental manner, with organizational participants subjectively appraising the array of possible consequences in the light of the relatively certain objectives. Just as the introduction of uncertainty into the specification of the consequences of action resulted in a different approach to decision making, so did the acknowledgement of debate or uncertainty over the objectives themselves. With cause and effect relationships presumed to be known, Thompson and Tuden thought that disagreement or uncertainty over the objectives of action would result in a political rather than computational rationale for the decision making process. A range of interests in action are articulated in such circumstances and decision making, as a result, tends to be characterized by bargaining and compromise. When even patterns of causation are uncertain, Thompson and Tuden pointed out that decision making tends to be of an inspirational nature. With so little known beforehand rationales for action were seen as emerging in the course of the decision making process itself.

By being based on a richer characterization of

the ways in which uncertainties and indeed conflicts are perceived and located in organizations the array of approaches to decision making articulated by Thompson and Tuden offers some possibility for trying to understand the different roles which accounting and other information systems serve in organizations. Moreover their framework, whilst simple, does relate to the views of those who have seen information processing mechanisms as means for uncertainty reduction (Galbraith, 1973) and information value as the degree to which uncertainty is reduced. However rather than presuming any such link between information and uncertainty, let us consider the roles which accounting systems might play in the different decision situations. How, in other words, does accounting relate to the computational, the judgemental, the political and the inspirational?

Using an all too unsatisfactory "machine" analogy, Fig. 2 outlines a set of organizational roles which might help us to appreciate some of the ways in which accounting systems function in practice (Earl & Hopwood, 1979; Hopwood, forthcoming). Given low uncertainty over both the consequences of action and the objectives for action, we approach the management scientist's definition of certainty, where algorithms, formulae and rules can be derived to solve problems by computation. Alternatively this situation might represent what Simon (1960) has called structured decision making, where the intelligence, design and choice phases are all programmable. In either case, accounting systems can serve as "answer machines", providing the simple investment appraisal methods, stock control systems and credit control routines which grace many management accounting texts.

With clear objectives but uncertain causation, the situation is more complex. One might expect that this is where organizational participants would need to explore problems, ask questions,

		Uncertainty of objectives	
		Low	High
Uncertainty of cause and effect	Low	Answer machines	Ammunition machines
	High	Answer machines	Rationalization machines
		Learning machines	

Fig. 2. Uncertainty, decision making and the roles of accounting practice.

explicate presumptions, analyse the analysable and finally resort to judgement. Rather than providing answers, accounting systems might be expected to provide assistance through what Gorry and Scott-Morton (1971) have called decision support systems and Churchman (1971) calls inquiry systems. In fact we do find such "learning machine" uses of the accounting function: access facilities, *ad hoc* analyses, what-if models and sensitivity analyses are available and used in organizations. However this is also the area of decision making where we have seen enormous extensions of more traditional approaches to computation practice. For the uncertainty, some would claim, has been seen as a threatening but not inevitable state of the world, needing to be masked, if not reduced, by an investment in the advancement of calculative systems. Accordingly the accountant has devised systems which can themselves absorb rather than convey the surrounding uncertainties. Together with the management scientist, optimizing models and modes of probabilistic and risk analysis have been developed and applied. Often trying to inculcate an aura of relative certainty, the "answer machine" extensions to the accounting craft often have presumed or imposed particular forms of economic and scientific rationality which have an equivocal relationship at best to those rationalities which are implicated in the processes of organizational decision making.

Given uncertainty or disagreement over objectives but relative certainty over causation, values, principles, perspectives and interests conflict. Standards for appraisal and criteria for guiding the organizational task are inherently problematic. Here political processes are important in the decision making process and modes of accounting can arise as "ammunition machines" by which and through which interested parties seek to promote their own particular positions. Striving to articulate the desirability of particular conceptions of the organizational mission (Batstone, 1978) and to selectively channel the distribution of information (Pettigrew, 1973), parties implicated in organized action can introduce new mechanisms for organizational control and the management of information flows.

Similarly we suspect that the uncertainties inherent in decision making by inspiration can create the need for accounting systems to serve as organizational "rationalization machines". Seeking to legitimize and justify actions that already have

been decided upon, in such circumstances an accounting for the past can have a rather particular organizational significance and value.

Admittedly simplistic, our framework of accounting roles is nonetheless suggestive. By pointing to the different ways in which the accounting craft might be used to create particular conceptions of organizational clarity, it enables us to articulate a variety of roles which accounting systems might serve. However rather than discussing all of these, we will assume that at least the "answer machine" and "learning machine" roles are adequately covered in the existing literature. Our subsequent discussion therefore focusses on those extensions of computational practice which seemingly have extended the scope of "answer machine" approaches, the emergence and use of organizational "ammunition machines" and the roles which accounting might play in the rationalization of organizational action.

#### *The extension of computational practice*

The reasons behind the extension of computational practice into the realms of the judgemental remain largely uncharted. However we can point to at least two underlying factors. The first stems from the increasing formalization and objectification of management knowledge and the second from the growing extent to which accounting practices have become implicated in the development of new and more complex forms of organizational segmentation and management.

Organizational management has become the focus of a great deal of abstract investigation in the last few decades. Drawing on the perspectives and methods of economics, mathematics and statistics, in particular, formal representations have been made of management problems. Searching for algorithms, formulae and standardized rules, the investigations of an array of practitioners, consultants and scholars increasingly have enabled the reconstitution of significant portions of organizational decision making into programmed, highly specified forms (Galbraith, 1967; Simon, 1960). To varying extents, computational practices have been developed which can complement, if not replace, the exercise of human judgement.

Accounting has been implicated in the design and implementation of many of these changes in management practice. The increasing formalization of investment appraisals and planning processes has increased the sphere and extent of financial

calculation. On occasions the financial risks and uncertainties which were important foci for managerial judgement are now being quantified, with the decisions taking more of a computational form. Developments in accounting practice have enabled the operationalization of particular conceptions of organizational efficiency and performance, allowing the objectives for action to be stated in seemingly less ambiguous terms. Advances in the practice of budgeting and planning have provided means for the co-ordination of organizational activities by computational means. Production and marketing operations, for instance, can be integrated in rather particular ways, inventory policies evaluated and amended in the light of envisaged organizational circumstances, and the consequences of planned actions for particular organizational resources, such as cash, calculated and evaluated. Similarly the introduction of production and inventory control procedures has resulted in demands for far more detailed financial and other information as the domain of computational practice has been extended.

The extension of computational practice has also been implicated in the development of other approaches to organizational management. The emergence of particular forms of organizational segmentation, for instance, has been enabled by extensions of the accounting craft. Certainly the creation of the divisionalized (Chandler, 1962; Johnson, 1978) and the project orientated (Sayles & Chandler, 1971) organization has been facilitated by the ability to create accounting representations of the newly emergent organizational maps, to measure the performance of organizational sub-units in ways which could be seen as relating to the objectives articulated by central management and to cope in informative and reporting terms with the complex array of organizational interdependencies created by such strategies of segmentation. The use of organization designs to isolate the technical core of the organization from environmental fluctuations (Thompson, 1967) also has enabled and often required the development of computational practices to aid both the control of the technical and the management of organizational buffers such as inventory. Similarly the emergence of

accounting procedures for the measurement and assessment of performance has been intertwined with the development of practices for the evaluation and reward of organizational participants, with the emphasis which accounting has allowed to be put on operational concepts of efficiency and productivity being particularly important in this respect. In ways such as these the organizational rationales for accounting have stemmed increasingly from what it can achieve in conjunction with other approaches to the management task. Rather than having an independent and essential role to play, accounting systems have become ever more implicated with the functioning of more all-embracing forms of organizational practice.

Whilst a discussion of the wider organizational, let alone social, conditions which have facilitated the extension of computational practice is beyond the scope of the present discussion,<sup>6</sup> some of the dynamics which are inherent in the development of such practice at least can be noted. The growing extent of the computational domain, for instance, has resulted in the recruitment of specialists who can search for, as well as respond to, organizational roles. More importantly, however, computational developments can themselves provide the conditions for subsequent changes in both accounting and organizational practice which need be related only tenuously to the rationales in the name of which the initial changes were introduced. By creating a new pattern of organizational visibility, for instance, computational practices can often significantly change organizational participants' perceptions of the problematic and the possible. As a result, new systems of computation might emerge to complement the perceived inadequacies of the old (Jones & Lakin, 1978, pp. 89-96). Of possibly greater significance, however, the new patterns of visibility can change the conditions underlying the existence and functioning of other management practices. Measures of efficiency, for instance, can create possibilities for new targets for managerial intervention and new bases for organizational rewards. Similarly, means for the accounting representation of organizational segments can provide the conditions for the reorganization of the enterprise and the changing locus of power and

<sup>6</sup> Clearly the technical possibility for an accounting is not a sufficient condition for its organizational implementation and use. For discussions of some of the organizational and social considerations involved in the process of accounting change see the literature on the efficiency movement (Haber, 1964; Hayes, 1959; and Searle, 1971) and our analysis of the emergence of value added accounting in the U.K. (Burchell *et al.*, forthcoming).

influence. In ways such as these a rather complex dynamic can be introduced into the development of computational practice. New practices can themselves create possibilities for the development of yet further practices, the emergence and functioning of which may be governed by entirely different forces than those which guided the original changes.

### *Organizational "ammunition machines"*

Rather than creating a basis for dialogue and interchange in situations where objectives are uncertain or in dispute, accounting systems are often used to articulate and promote particular interested positions and values. For the organization is almost invariably characterized by conflicts over both basic orientations and the organizational means which are likely to achieve particular ends. Rather than being cohesive mechanisms for rational action, organizations are constituted as coalitions of interests (Cyert & March, 1963). They are arenas in which people and groups participate with a diversity of interests with political processes being an endemic feature of organizational life. The mobilization and control of the organization, in the name of any interest, are problematic endeavours.

Mechanisms for organizational control are now starting to be seen as arising out of the political and conflictive nature of organizational life. As Pfeffer (1978) has stated:

Structure, it would appear, is not just the outcome of a managerial process in which (organizational) designs are selected to ensure higher profit. Structure, rather, is itself the outcome of a process in which conflicting interests are mediated so that decisions emerge as to what criteria the organization will seek to satisfy. Organizational structures can be viewed as the outcome of a contest for control and influence occurring within the organization. Organizational structural arrangements are as likely to be the outcomes of political processes as are organizational resource allocation decisions.

The design of information and accounting systems are also implicated in the management of these political processes.

For out of the mass of organizational actions and their consequences, accounting systems can influence those which become relatively more visible (Becker & Neuheuser, 1975), particularly to senior management groups. And the visibility so established is very often an asymmetric one. The powerful are helped to observe the less powerful, but not vice versa, as a rather particular mode of surveillance is established. The centralized co-

ordination of activities can thereby be established. Equally, however, demands, requirements, pressures and influences can be more readily passed down the organization, particularly in the spheres of the financial and the economic because of the disaggregative arithmetical properties of the accounting art (Hopwood, 1973). Budgeting, planning and reporting practices can together provide a framework within which a measured and observed delegation of authority can take place. A pattern of expectations can be articulated and even motivations influenced, as the visibility which is created provides a basis for organizational rewards and sanctions. Moreover by influencing the accepted language of negotiation and debate, accounting systems can help to shape what is regarded as problematic, what can be deemed a credible solution and, perhaps most important of all, the criteria which are used in their selection. For rather than being solely orientated towards the provision of information for decision making, accounting systems can influence the criteria by which other information is sifted, marshalled and evaluated.

However the consequences which accounting systems have cannot be considered to be simple reflections of the interests which might have given rise to their creation. New systems certainly can arise out of particular interests and concerns. They can be designed to make particular phenomena visible, to inculcate a particular mission or form of organizational consciousness and to help establish a particular chain of command. Indeed accountants themselves use a language which is suggestive of such ends. Nevertheless the rationales underlying their operation and functioning can differ from those which entered into their design and implementation. For once in operation, accounting systems are organizational phenomena. Indeed having their own *modus operandi* they themselves can impose constraints on organizational functioning, often contributing in the process to the effective definition of interests rather than simply expressing those which are pre-given. So although they might be able to be influenced by particular participants, accounting systems can rarely, if ever, be the exclusive domain of a single interest. Rather they become mechanisms around which interests are negotiated, counter claims articulated and political processes explicated. They may influence the language, categories, form and even timing of debate, but they can rarely exclusively influence its outcomes.

### *Accounting and the rationalization of action*

The imperatives of the accounting mission have focused exclusively on roles for accounting which precede decision making. Even accountings for the past have been given a future rationale. However in organizations, decisions, once made, need to be justified, legitimized and rationalized. Often arising out of complex organizational processes of which few, if any, organizational participants have a comprehensive understanding (Weick, 1979) or out of those inspirational situations where both aims and causal relationships are in a state of flux (Thompson & Tuden, 1959), there is often a need for a retrospective understanding of the emergence of action, for an expression of a more synoptic organizational rationale or at least one which is seemingly consistent with formal expressions of organizational aims. And this particularly might be the case where there are dominant external interests in the decision making process (Meyer & Rowan, 1978).

Accounting systems can be and often are implicated in such organizational processes. As Bower (1970) and others have discovered, the widespread use of capital budgeting procedures has resulted in the availability of justification devices for proposals for organizational action which have gained early commitment and support as well as the simple provision of information for and prior to decision making for those proposals which remain problematic to the end. Similarly budgets and plans can be built around what is to be. Arguing more generally Meyer and Rowan (1978) note that:

Much of the irrationality of life in modern organizations arises because the organization itself must maintain a rational corporate persona: We find planners and economists who will waste their time legitimizing plans we have already made, accounts to justify our prices, and human relations professionals to deflect blame from our conflicts. Life in modern organizations is a constant interplay between the activities that we need to carry on and the organizational accounts we need to give.

Indeed our own inquiries and those of others suggest that quite complex accounting developments can arise out of the need to justify and legitimize. For instance Pringle (1978) has described how the pioneering work on cost-benefit analysis by British officials in mid-nineteenth century India was orientated towards justifying rather than deciding what was to be done.

Then, as now, the main *raison d'être* of cost benefit analysis, as practised, has been aimed at justifying projects

rather than as a tool for investment planning . . . The main impetus seems to have come from the need of British civil servants in India to make a case for state investment. Given a relatively interventionist economic role recommended to the state, the development of a methodology for project evaluation was essential. It was necessary to show and to take into account the gains from state investment which did not accrue to the investing authority. Thus cost-benefit analysis served, in the case of nineteenth century India, to convince a sceptical government of the benefits, both to investors and to the society, of infra-structural projects.

In such circumstances an accounting rose to mediate between divergent interests in an organized endeavour, to legitimize and justify particular stances and, above all, to create a symbolic structure within which discourse could take place and through which action could be achieved.

Our discussion of the organizational functioning of accounting has been partial. Utilizing a particular frame of reference and a limited number of rather simple organizational metaphors, we have sought to illustrate some of the ways in which accounting is implicated in organizational action, but ignored others which might be equally vital. We have also focused on the organizational roles which accounting serves in a piecemeal fashion, discussing them sequentially rather than in combination, yet it is conceivable and indeed probable that within an organizational coalition support for accounting developments and change emerges from a variety of rationales (Banbury & Nahapiet, 1979) and that once implemented, the same accounting system can be used to serve even a different variety of ends as it is used by different actors in different ways (Hopwood, 1973). Moreover our discussion also has been restricted by the sheer lack of studies of accounting as it operates in organizations: there is so much that we do not know.

Hopefully, however, we have succeeded in demonstrating the divergence between the functional claims that are made on behalf of the accounting craft and the roles which it serves in practice. Whilst accounting can be and is acted upon in the name of its essential imperatives, it functions within that complex of political processes which constitute the organization. We have at least pointed to how the pressures to account can arise out of organizational functioning, how accounting can strive to shape conceptions of organizational reality and, in turn, how accountings and accounting systems can reflect as

well as shape the pressures of action. Rather than being essential to the accounting mission, the roles which accounting serves in organizations are created, shaped and changed by the pressures of organizational life. They are implicated in action, rather than being prior to it.

### ACCOUNTING AND SOCIAL PRACTICE

Accounting cannot be conceived as purely an organizational phenomenon however. Whilst arising out of organizational and institutional pressures, it is also a prevalent feature of the societies in which we live. Few accounting systems are unique to particular organizations for very long. Indeed many of the more important accounting innovations have occurred within numerous organizations at more or less the same time (Burchell *et al.*, forthcoming). Seemingly they satisfy more general searches for the extension of calculative practice which are embodied within the societies of which organizations are a part. Certainly the development of accounting itself has paralleled the emergence of numerous other specialized mechanisms for information processing and social and economic calculation, including *stat(e)istics*, the compilation of information for social and economic administration, and instruments for social and economic categorization in medicine, psychiatry, education, law and business and economic life (Baritz, 1960; Cullen, 1975; Kamin, 1974; Kendrick, 1970; Sutherland, 1977). Moreover accounting change increasingly emanates from the interplay between a series of institutions which claim a broader social significance. Often operating at a distance from the arenas in which their innovations function, those regulatory bodies, professional institutes, formal representatives of social interests and agencies of the state which increasingly shape the accounting domain are open to a very different array of social, political and economic pressures

than those which directly impact on the business corporation.

Accounting, it would appear, can be intertwined with social as well as organizational practice. Unfortunately, however, very little is known about either the social nature of accounting thought and practice or the interplay between the social and the organizational. Some scholars have made occasional comments which have pointed to the social origins and significance of the accounting craft, although these have either not remained uncontested for very long or else have not been subjected to further inquiry. Yet other insights have been provided in more general historical studies of social and economic development (Kula, 1976), but those of direct relevance to accounting rarely have been explicated at length. So being all too conscious of such uncertainties, we do not intend to venture too far into the field of the unknown. Our comments on the social in accounting are brief, focusing first on the suggestions of those who have tried to appreciate the social significance of the accounting craft and thereafter on some of the implications for the development of accounting of those bodies which have claimed to have a broader social rationale.

#### *The social significance of accounting*

A multitude of different social significances have been attached to accounting. For Marx, accounting served as an ideological phenomenon. Perpetrating a form of false consciousness, it provided a means for mystifying rather than revealing the true nature of the social relationships which constitute productive endeavour.<sup>7</sup> Others, whilst adopting a less dogmatic stance, have nonetheless pointed to the mythical, symbolic and ritualistic roles of accounting (Coppock, 1977; Douglas, 1977; Gambling, 1977; Meyer, 1979; Wildavsky, 1976). In such a context accounting has been seen as implicated in the operationalization of dominant economic and social distinctions,

<sup>7</sup> Marx saw accounting as a perfectly adequate tool for rational decision-making on the part of capitalists. This is the aspect of his thinking taken up by Most (1963) and Bailey (1978), Most even lamenting that Marx did not jettison his ideological baggage and concentrate on management accounting. However, it is important to note that Marx claimed to reveal the *social* rationality of accounting which, as is pointed out in the text, consists of its mystification of the true nature of social relationships. In *Capital*, Vol. III, Part I, p. 45, Marx states:

"The way in which surplus value is transformed into the form of profit by way of the rate of profit is, however, a further development of the inversion of subject and object that takes place already in the process of production. In the latter, we have seen, the subjective productive forces of labour appear as productive forces of capital. On the one hand, the value, or the past labour which dominates living labour, is incarnated in the capitalist. On the other hand, the labourer appears as bare material labour-power, as a commodity. Even in the simple relations of production this inverted relationship necessarily produces certain correspondingly inverted conceptions . . ."

the creation of symbolic boundaries between competing social agents and the provision of a basis on which rationales and missions can be constructed and furthered. Conveying a pattern of economic and social meanings, it has been seen to be at least partially fulfilling demands for the construction of a symbolic order within which social agents can interact.

The contribution which accounting has made to the emergence and maintenance of the particular order inherent in economic rationality was emphasised by Weber (1969) to whom (Vol. 1, p. 86):

From a purely technical point of view, money is the most "perfect" means of economic calculation. That is, it is formally the most rational means of orienting economic activity.

In fact Weber went so far as to see rationality in terms of the calculative means which might bring it about, defining the "formal rationality of economic action" as "the extent of quantitative calculation or accounting which is technically possible and which is actually applied" (1969, Vol. 1, p. 85). Whilst distinguishing between such a formal rationality and the "substantive rationality" which is implicit in action, Weber thought that the former provided an adequate means to achieve the latter. In the words of a recent commentator (Hirst, 1976, pp. 98-99):

Only formal rationality can adjust means to ends in terms of efficiency since it provides a quantitative measure of efficiency; a *qualitative* measure of the *efficiency* of use of resources is logically impossible. *All* economic action therefore requires formal rationality and is modelled on formal rationality; resources cannot be "rationally oriented" to economic ends without quantitative calculation. *The definition of economic action defines it in terms of formal rationality.* Formal and substantive rationality are not alternative and equally "rational" calculations; end-rational action in the economic sphere requires formal calculation (emphasis in original).

The implications of that economic rationality which might be embodied within the perspectives and practices of accounting are more uncertain

however. Whilst for Weber it was most likely an achievement for the good,<sup>8</sup> for Schumpeter (1950) it might contain the germs of the decline of the business civilization as we know it. That rational, calculating frame of mind which had served capitalism well when its rise was opposed by the "irrational" privileges of an aristocratic order could, he thought, undermine it as its critical intellectuality continued to develop, revealing "the pretensions of property to be as empty as those of the nobility" (Heilbroner, 1977). In his own words (1950, pp. 123-124):

Once hammered in, the rational habit spreads under the pedagogic influence of favourable experiences to ... other spheres and there also opens eyes for that amazing thing, the Fact ... capitalist practice turns the unit of money into a tool of rational cost-profit calculations, of which the towering monument is double entry book-keeping ... primarily a product of the evolution of economic rationality, the cost-profit calculus in turn reacts upon that rationality; by crystallizing and defining numerically, it powerfully propels the logic of enterprise. And thus defined and quantified for the economic sector, this type of logic or attitude or method then starts upon its conqueror's career subjugating - rationalizing - man's tools and philosophies, his medical practice, his picture of the cosmos, his outlook on life, everything in fact including his concepts of beauty and justice and his spiritual ambitions.

Other commentators on the social roles and significance of accounting have adopted a less macroscopic stance, often emphasising the enabling functions of the accounting craft. Although some have stressed the roles which it plays in allowing the devolution and decentralization of economic decision making, others have pointed to the rather different internal pressures to account when decision making is centralized, either in the hands of the monolithic enterprise (Chandler, 1962) or the state (Bettleheim, 1976). And consideration has been given to the ways in which accounting has enabled the operationalization and furtherance of particular concepts of efficiency through the introduction of management methods which have reconstituted the enterprise, separating the conception and control

<sup>8</sup>It may be noted that Weber did allow for the possibility of formal calculative rationality actually subverting substantive rationality by reducing the world to an arid, soulless domain of mechanical calculation. In *The Protestant Ethic and the Spirit of Capitalism* (1958, p. 182) he commented:

"In the field of its highest development, in the United States, the pursuit of wealth, stripped of its religious and ethical meaning, tends to become associated with purely mundane passions, which often actually give it the character of sport. No-one knows who will live in this cage in the future, or whether at the end of this tremendous development entirely new prophets will arise, or there will be a great rebirth of old ideas and ideals, or, if neither, mechanized petrification, embellished with a sort of convulsive self-importance. For at the last stage of this cultural development, it might well be truly said: 'Specialists without spirit, sensualists without heart; this nullity imagines that it has attained a level of civilization never before achieved.' "



of the task from its practical execution (Braverman, 1974).

In this arena of inquiry the thoughts of a few undoubtedly have constructed an agenda of enormous complexity and potential significance, the validity of a lot of which remains to be tested. Looking beyond the immediate implications of the accounting craft, they have searched for a more general social significance, often, as non accountants, seeing accounting as an agent for the furtherance of particular concepts of rational action. Accounting has been seen as both reflecting and enabling the construction of society as we now know it, with both institutional forms and modes of social action intertwined with its emergence and development.

*Accounting and the institutions for the regulation of the accounting craft*

Very different aspects of the social functioning of accounting have been highlighted by our growing awareness of the processes inherent in accounting regulation. At one time seen in terms of technical elucidation and standardization, attention has now been devoted to the institutional and political components of the regulatory endeavour. For operating as they do at the nexus between the institutions of a professionalized craft, centralized bodies for the representation of social interests, the dominant partnerships of the accounting profession and the interested agencies of the state, those organizations which have a claim to regulate and standardize accounting are open to very different pressures from those which impinge on the organizations in which accounting is practiced. With the locus and form of regulation being subject to debate and change, the technical components of standardization have become intertwined with the desire to gain institutional legitimacy and support. Attention has had to be given to the origins of a diverse array of interests in the development of accounting and, as this has happened, the roles embodied in accounting change have been seen as being ever more implicated in the political pressures which have given rise to its emergence.

In the United Kingdom, for instance, we have witnessed how the institutional mechanisms for accounting regulation arose at the interface between a critical media, concerned agencies of the state and a profession concerned with preserving its powers of self-regulation and control (Zeff, 1972). And although often formally

advocated in the name of the user's interests, the articulation of accounting standards has continued to reflect the dynamics of the institutional context of which they are an outgrowth.

The case of inflation accounting is a particularly interesting example of such forces at work. Here the fact of an inflationary economy was certainly a stimulus for change (Mumford, 1979). But that fact alone is not enough to provide an understanding of the emergence of the issue, the processes of the debate or its provisional outcomes. For arising out of the questioning of the state of accounting regulation and the emergent relationships between the accounting profession, the agencies of the state and industrial and commercial interests, the development of methods for the adjustment of financial accounting in an inflationary context has been influenced by a varied and changing number of issues and interests which either stimulated action or were called upon to legitimize particular stances and proposals. In this constellation, the changing interests of the state have been particularly important. At first inflation accounting was of interest to those administrative agencies which were concerned with the taxation of corporate income and the formulation of policies for macro-economic management. In those contexts, it was seen as being able to play rather particular roles, which could be favourably or unfavourably evaluated. Thereafter, however, other agencies of the state started to devote more explicit attention to the roles which inflation accounting might play in the implementation and furtherance of micro-economic policies for industrial recovery and growth. During its turbulent career other interested parties also have devoted attention to the roles which inflation accounting might or might not play in coping with both an economic crisis and a concurrent threat of a changing social power structure. Embodied within such a context, the inflation accounting debate has reflected pressures at both the social and the organizational levels. Some of the issues with which it has become implicated had no *a priori* relationship to the accounting craft and others have stemmed from the pressures of accounting regulation rather than its organizational practice. In such ways the potential roles which have at times given momentum to the debate have changed in both scope and level of institutional significance. Indeed only together rather than singly can they offer some basis for

gaining an appreciation of the dynamics of the debate and those technical changes in accounting which are (or are not) likely to emerge.

Other accounting changes have had not dissimilar patterns of development. In some European countries, for instance, the centralization of accounting policy making has both enhanced and been enabled by the growing interest of the organized labour movement in information disclosure. And elsewhere we have noted the pressures which have created roles for accounting and accounting changes in the context of the conduct of war and the management of the national economy (Hopwood *et al.*, 1979).

In a regulatory environment, the conditions for accounting change are complex indeed. Whilst both technical and conceptual developments are required, to be influential they have to root themselves in a dynamic constellation of issues which constitutes the accounting context. In that constellation, both practice and the roles and functions which it serves and is seen as serving are subject to change as new issues emerge, new linkages to accounting established and new needs for the standardization of accounting practice arise. With so many of these pressures emerging from institutions which at least claim a broader social significance, the roles which can be associated with an accounting change can be different from those which subsequently might be implicated with its actual operation and use.

#### CONCLUSION AND IMPLICATIONS FOR THE PURSUIT OF ACCOUNTING RESEARCH

Our discussion of the organizational and social roles of accounting has tried to identify an area of enormous and largely uncharted complexity. Whilst the development of accounting has resulted in the attribution of formal roles for accounting which can be and are used to evaluate and change the accounting craft, our analyses have attempted to show how the actual practice of accounting can be implicated with the furtherance of many and very different sets of human and social ends. At the organizational level, we have emphasised how roles can be created for accounting within the context of the development of other forms of management practice, how accounting systems, as modes of organizational control, can arise out of

the interplay of political processes both within the organization and at its interface with dominant external agents, and how accountings can emerge out of decisions rather than necessarily having to precede them. At the societal level, our discussion has been more tentative. However we have at least considered some of the views of those who have attributed quite a substantive social significance to the functioning of accounting. In a far more provisional manner, consideration also has been given to the roles which accounting change can play in a regulatory context.

In these ways we have chosen to give particular emphasis to the distinction between the imperatives which are articulated on behalf of accounting and those roles which it is made to serve in the context of organizational and social functioning. Whilst the former are inherently purposeful, often being used to give rise to accounting change, we have emphasised how organizational and social actors making accounting purposive. Seeing thereby the roles which accounting serves as being intertwined in the contexts in which it operates, we also have pointed to the diversity of functions which can be associated with even a single accounting. The pressures which give rise to its existence can themselves be both numerous and conflicting, and different from those which are used for its formal justification. Once implemented, an accounting becomes an organizational and social phenomenon, there to be used for a variety of ends by a range of actors in an organization.

Unfortunately our thoughts have had to remain tentative and suggestive for as yet all too little is known about accounting in action. The number of empirical studies of the organizational operation of accounting systems is few indeed, and even less is known about either the operation of regulatory bodies in the accounting area or the broader social context of accounting development and change. Until recently scholars interested in accounting have been seemingly content to accept the ends which have been claimed on its behalf, focusing their efforts on the further refinement of the craft. We do not necessarily criticize such an orientation, but we would claim that a case also can be made for the study of accounting as a social and organizational phenomenon to complement the more prevalent analyses which operate *within* the accounting context.

Not that such studies would be without problems. As we are already becoming aware, a

questioning of what has not been questioned can be challenging to existing interests. Like other modes of inquiry, it too has the potential to change our conceptions of the accounting craft.

However, assuming that there is some willingness to investigate accounting as it functions, what types of inquiries might be required? There is, we think, a real need for more historical studies of the development of accounting. Just how has accounting come to function as we now know it? What social issues and agents have been involved with its emergence and development? How has it become intertwined with other aspects of social life? And what consequences might it be seen as having had? For until recently, we should remember, there have been relatively few social analyses of accounting change and the emergence of the new. Rather than inquiring into the mechanisms of change, scholars apparently have been more interested in studying the sequence and correlates of change. More emphasis has been placed on chronological accounts of technical developments *per se* than on the processes which gave rise to their existence and significance. And similar needs exist at the organizational level. In fact it is quite staggering to reflect on how few studies there are of the organizational functioning of accounting, particularly in light of the fact that most of what do exist have adopted a relatively short time horizon, focusing on the uses which are made and not made of accounting systems rather than the conditions which gave rise to their existence. Just how, we wonder, has accounting become implicated in the functioning of the modern large scale, hierarchical organization? How have particular systems arisen out of organizational processes and actions? What actions have been involved with their design,

implementation and operation? And what have been the mechanisms for innovation, change and diffusion?

Such inquiries call for theoretical as well as methodological innovation. Scholars of the behavioural in accounting, for instance, would have to be prepared to move beyond the social psychological perspectives which have dominated their inquiries to date. In searching for the organizational and social significance rather than the human use of their craft they would have to be willing to confront those uncertainties which still characterize our knowledge of organizational behaviour and social action. Consideration would need to be given to the roles which information and accounting play in the political processes which characterize organizational and social life, to those forces which have constituted the organization as we now know it and to the ways in which the social and the organization in accounting intertwine with each other. Appeals would have to be made to very different frames of reference and bodies of knowledge. And above all it would have to be recognized that for the foreseeable future at least the different perspectives which are conceivable and available would produce very different insights, problems and leads.

Initially such developments cannot help but produce enormous uncertainties for accounting inquiry. And for that reason alone, some may not want to venture along the route. We nevertheless believe that such changes in orientation are required if scholarly inquiry is to explicate theories of accounting which can help us to appreciate the social and organizational significances which it has had and is capable of having.

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