

The Finitist Accountant

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Sociology, suggests Peter Miller (2001), has forgotten accounting.¹ It played a significant role in the classic analyses of the development of capitalism by Weber and Sombart (see Carruthers and Espeland 1991), but in modern sociology departments accounting is a research topic that is encountered only rarely. A sizeable body of accounting scholarship – represented above all in articles such as Burchell et al. (1980) in the journal *Accounting, Organizations and Society* – has sought to build a bridge to sociology, but this enthusiasm has not been reciprocated widely.² Thus Vollmer (2003: 353) notes “not a single entry on accounting” in the index of the first edition of *The Handbook of Economic Sociology* (Smelser and Swedberg 1994). Collaboration between accountants and sociologists in sociology departments remains unusual: the joint work best-known to a wider sociological audience is probably Miller’s with Nikolas Rose (for example, Rose and Miller 1992).

Amongst the theoretical resources from sociology drawn on by scholars in accounting is the work of Foucault, and the resource is certainly appropriate: accounting is indeed a “technology of government,” a way of constructing the

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² For reviews of the sociologically-oriented literature on accounting, see Vollmer (2003), Cooper and Robson (2006), and Napier (2006). Hopwood and Miller (1994) remains the most useful single collection of articles.

“accountable” and “calculable” person (Miller and O’Leary 1994: 99). In this chapter, however, we argue for the relevance of another resource: finitist sociology of knowledge (“finitism” is explained below). We do so by examining a topic central to accounting, both as practice and as scholarship, that is of great interest from the viewpoint of economic sociology: financial reporting, in particular the “ethnoaccountancy” of profit (MacKenzie 1996, pp. 59-61; MacKenzie 2003a), in other words the processes of the construction of corporate earnings figures.

Amongst the antecedents to our argument in the literature of accounting are the delightful parable by Hines (1988) and the Baudrillard-inspired analysis by Macintosh, Shearer, Thornton and Welker (2000).³ Valuable though these studies are, they have not been followed on any large scale by ethnographic research on how financial reporting is conducted in practice (there has been important work on, for example, the setting of accounting standards, but much less on how those standards bear upon practice, as the review by Cooper and Robson 2006 reveals). The work of more “positivist,” quantitative accounting researchers is also useful; we will draw on it below, but we will also argue that it can usefully be supplemented by investigations focused on issues suggested by finitism.

Scandals such as the bankruptcies of Enron and WorldCom help to show why financial reporting is of interest. The scandals can, however, be interpreted

³ See also, though it is less focused on accounting, McGoun (1997).

simply as examples of *How Companies Lie* (Elliott and Schroth 2002), an interpretation that leaves the normal, non-scandalous practice of financial reporting unexamined. Is there a clear-cut truth that corporations could tell if they chose, or if legal penalties were severe enough and enforcement strict enough? We argue that there is not. While “profit” and “loss” are the central categories of a capitalist economy, they are not self-evident facts. “Profits” are, quite literally, constructed by accountants and by others, and discretion in the way they are constructed is ineliminable.

Financial reporting is at the heart of economic governance in “high modernity,” to borrow Giddens’s term (Giddens 1990). Resources flow towards “profitable” activities and away from “loss-making” ones, with profound consequences for the behaviour and lives of those involved. An appealing analysis of the societies of high modernity, expressed most sharply by Porter (1995) but echoed also in the work of Giddens and of others, is that in them quantification has replaced absent relations of interpersonal trust. Being unable to trust people, we place our *Trust in Numbers*, to quote Porter’s title. A finitist perspective, however, suggests that beneath the phenomena rightly pointed to by this analysis is a profound difficulty. Quantification displaces, rather than solves, modernity’s problem with trust.

The chapter proceeds as follows. After this introduction comes a section outlining finitism, its connections to Wittgenstein’s philosophy, and what it posits in regard to classifications, their relations to “reality,” and the nature of

rule-following. The section makes no claim to be comprehensive – difficult sociological and philosophical questions lurk here – but introduces the basic issues. The third section outlines the process of corporate financial reporting, noting that at its root is the classification of transactions, a process that can be analyzed in finitist terms.

The consequences for accounting of finitism's tenets are laid out in the paper's fourth and fifth sections: neither "economic reality" nor accounting rules can be expected fully to determine how transactions are classified. The fourth section, which explores the role of "economic reality," notes the existence of "local traditions" of accounting, in which similar transactions are classified differently, and the potential for dispute that arises when, for example, attempts are made to harmonize diverse traditions. The involvement of economists (apparent "experts" on economic reality) is not sufficient to resolve controversial issues in accounting. The fifth section turns to rules. It examines the US, the jurisdiction in which attempts to make accounting rule-governed have been most thorough. The section draws upon an extensive quantitative literature in accounting on "earnings management" – a literature that despite its relevance to understanding corporate behaviour is almost entirely unexploited by sociologists⁴ – to suggest that efforts to discipline accounting by the use of rules have failed to eliminate contingency from the process of classifying transactions, just as finitism would predict.

⁴ Effectively the only sociological article to draw on the earnings management literature is Zorn (n.d.).

The sixth section is the paper's conclusion. It emphasizes our current scant and largely indirect understanding of the social processes involved in financial reporting, and puts forward a number of suggestions for research on those processes, together with conjectures (informed by finitism) as to what this research will find. Such research would, we argue, help end sociology's amnesia in respect to accounting. The issues involved are central to economic life in high modernity, and phenomena closely analogous to those of corporate earnings management seem to be emerging in the political sphere too.

Finitism

Finitism is an account of meaning, which it views above all through the prism of classification. Finitism has philosophical roots – in particular in the work of Wittgenstein (see below) and of Hesse (especially Hesse 1974) – but the version of finitism drawn on here has been developed most fully by the sociologists of science Barry Barnes (in Barnes 1982 and much subsequent work) and David Bloor (especially in Bloor 1997).

At the root of finitism is an analysis of the way in which people classify activities, entities and states of all kinds: objects, living beings, processes, circumstances, situations, and so on. Finitists argue that the terms used in such classifications do not have inherent meanings: there is no fixed division of the infinite universe of activities, entities and states of affairs into instances of X and

instances of not-X. “Meaning is use,” as the Wittgensteinian slogan reminds us,⁵ and any term has been used only a finite number of times in the past (by an individual, or even by an entire culture). The finite set of past usages does not determine future usages: “we *decide* how to develop the analogy between the finite number of our existing examples of things and the indefinite number of things we shall encounter in the future” (Barnes, Bloor and Henry 1996: 54, emphasis in original).

Finitism goes beyond the assertion that meanings are conventions, because that assertion (a social-science truism) can be interpreted as compatible with the view that once conventions are “chosen” they “then determine our subsequent taxonomic activity” (Barnes, Bloor, and Henry 1996: 55). If this view were correct, financial reporting would, as we shall see, be an unproblematic matter, but the view is not correct and accounting is not simple. In contrast to the view that conventions determine classifications, finitists argue that “[t]he future applications of terms are open-ended.” There is “no specification or template or algorithm fully formed in the present, capable of fixing the future correct use of [a] term, of distinguishing in advance all the things to which it will eventually be correctly applicable” (Barnes, Bloor, and Henry 1996: 55).

All acts of classification are thus in principle defeasible. “[A] classification is applied to the next case by analogy with existing ones” (Barnes, Bloor and Henry 1996: 56), but analogies can always be contested. “All acts of classification

⁵ Wittgenstein (1967: 14e and passim).

are revisable” – we can always decide that past classifications have been wrong – and such acts are interconnected. “In a collective, terms are applied by different individuals at different times in different contexts: the exemplary instances of proper applications of a term are collectively established.” Acts of applying a term affect applications of other terms: “No system of classification is so many separate, independent pieces” (Barnes, Bloor, and Henry 1996: 57-59).

Consider, for example, the term “murder.” No matter how much effort we might devote to seeking to define “murder,” such effort would not on its own unequivocally “cut” the universe of all past and future killing into disjoint sets of “murders” and “non-murders.” The finite number of killings that have so far been classified as “murders” (or as “non-murders”) do not suffice to determine future acts of classification. Classifications of a killing as murder are defeasible and revisable, and such classifications intertwine with the applications of other terms: “dead” (consider the breathing but “brain-dead”); “person” (consider debates over abortion); “responsible” (the “insanity” defence, for example); “self-defence”; “mercy killing”; “manslaughter”; and so on.

“Murder” is an instance in which the finitist case is intuitively plausible, but finitists argue that finitism holds for all terms: from everyday observational terms such as “red” to mathematical terms such as “polyhedron,” “edge,” “vertex,” and “face” (see the classic, implicitly finitist analysis of mathematics by Lakatos 1976). Finitism applies not only to classification in the sense of the sorting of particulars into discrete categories – important though that always is –

but also measurement. As Lakatos shows, what can be at issue is not just whether a given three-dimensional structure is “really” a polyhedron, but also how many edges, vertices, and faces it has. The quantitative as well as the qualitative aspects of science and technology can be analyzed finitistically (see, for example, MacKenzie 1981 & 1990).

Barnes’s and Bloor’s finitism was an outgrowth of earlier work on the sociology of scientific knowledge such as Bloor’s “strong programme” (see Bloor 1973 & 1976). Three issues about the sociology of scientific knowledge therefore need addressed. The first is a misconception that can easily be amplified by the finitist emphasis on classification: that “strong programme” sociology of knowledge involves a view of knowing as a process separate from action, in other words a view that ignores “practice” (see, for example, Pickering 1992 & 1995). The accusation strikes us as false, but here is not the place to debate it at a general level. Let us emphasize simply that when we discuss the classification of economic transactions we do not have in mind transactions first taking place and then, later and separately, being classified. That can happen, but in large corporations accounting classification is normally part of economic action, not separate from it.

A second issue is whether finitist sociology of knowledge focuses too exclusively on human beings, giving insufficient weight to the interweaving of the human and the non-human (see, for example, the debate between Bloor [1999] and Latour [1999]). Certainly, to ignore that interweaving in the case of

accounting would be absurd. The inscriptions of accounting need to be durable and often portable too, which requires recording in materials more lasting and more easily transported than human bodies and brains: clay tablets, papyri, ledgers, and their modern electronic equivalents. Like all economic action, accounting is distributed cognition in the sense of Hutchins (1995 a & b).

Unaided human beings could not possibly do the accounts of a complex modern corporation, and the process would be hopelessly inefficient if conducted only with the pens and ledgers of the nineteenth century. However, that corporate accounting is now a highly automated, computerized process does not eliminate the need for classification. Accounting software can process transactions only if they are coded to indicate what kind of transaction they are. As a factual matter, coding is still a human province (though the use of artificial neural networks or similar systems is conceivable). Furthermore, no corporation simply presents its investors with a pile of print-out from its accounting software: additional, highly consequential, human-initiated processing takes place.

The third issue concerning the sociology of knowledge is by far the most widespread misconception about it. Pervasive in the “science wars” initiated by critiques such as Gross and Levitt (1994), it is that strong-programme and finitist sociology of knowledge views knowledge as a “mere” social construction unaffected by “reality.” In fact, causal input from the material world has always played a part in strong-programme sociology of knowledge (see, for example, Bloor 1976: 31 and *passim*). Knowledge is shaped by the material world and by the biological characteristics of human beings, as well as by psychological and

sociological processes: it is in this sense a co-construction, not reducible to social processes alone. As we shall see, finitism is wholly consistent with the view that there is an “economic reality” to corporations that is affected by accounting classifications but not constituted in its entirety by those classifications.

The most relevant connection between finitism and the philosophy of Wittgenstein is the latter’s famous discussion of following a rule. If we think of a rule as a set of words – consider for example, the sixth commandment, “Thou shalt not kill” – then following a rule seems to involve an act of interpretation of what the words refer to or “mean.” Does “kill” include the killing of enemy soldiers; of non-combatants; of human foetuses; of terminally-ill people who have expressed a wish to be helped to die; of animals (for purposes of experimentation); of animals (for food); and so on? Of course, one can write rules for interpretation, but if finitism is correct these rules themselves need to be interpreted: we are at the start of a potentially endless regress. If rules are simply verbal formulae, then because the flexibility of interpretation can never be eliminated entirely, “no course of action could be determined by a rule, because every course of action can be made out to accord with the rule” (Wittgenstein 1967: 81e).

We all know, however, that invoking interpretative flexibility might not allow us in practice to “get away with murder.” A key point of theoretical contestation arises here, separating Barnes’s and Bloor’s finitism from ethnomethodology, which is also an inheritor of Wittgenstein’s finitism but

interprets its bearing upon sociological inquiry quite differently. Space constraints prohibit anything approaching a full account (for a helpful introduction, see Kusch 2004 and the subsequent articles in the August 2004 issue of *Social Studies of Science*), but at issue is what to make of the way in which, as a finitist in the tradition of Barnes and Bloor would put it, the logical open-endedness of the application of terms to particulars and the logical under-determination of behaviour by rules are foreclosed in practice.

“To obey a rule, to make a report, to give an order, to play a game of chess, are *customs* (uses, institutions) ... there is a way of grasping a rule which is *not an interpretation*, but which is exhibited in what we call ‘obeying the rule’ and ‘going against it’ in actual cases. ... When I obey a rule, I do not choose. I obey the rule *blindly*” (Wittgenstein 1967: 81e and 85e, emphases and parenthesis in original). The central difference between Barnes’s and Bloor’s finitism and ethnomethodology is Barnes’s and Bloor’s preparedness to invoke psychological and sociological processes to explain the foreclosure in practice of interpretive flexibility. Ethnomethodology, in contrast, does not see it as a foreclosure, and does not invoke social processes in an explanatory way (see, for example, Lynch 1992 and Sharrock 2004).⁶ In this respect, the analysis below follows not ethnomethodology but Bloor:

⁶ A key potential advantage of financial reporting as a topic for exploring these issues is the extent (with few parallels even in high modernity) its rules are explicit and can be pointed to – for example by directing one’s browser at www.fasb.org or by purchasing their international

According to meaning finitism, we create meaning as we move from case to case. We *could* take our concepts or rules anywhere, in any direction ... We are not prevented by “logic” or by “meanings” from doing this ... The real sources of constraint [are] our instincts, our biological nature, our sense experience, our interactions with other people, our immediate purposes, our training, our anticipation of and response to sanctions, and so on through the gamut of causes starting with the psychological and ending with the sociological (Bloor 1997: 19-20).

Financial Reporting in Finitist Perspective

Such issues may seem far removed from the apparently mundane practice of accounting, but that is not so, as can be seen by considering financial reporting. Publicly-held companies are obliged periodically to prepare financial statements and to have at least some of those statements certified by auditors: in the US, for example, public companies have to report quarterly and must have their annual reports audited. Such financial statements now typically include (a) an “income statement” (in the UK, a “profit and loss account”), which records, for the time period in question, the corporation’s revenues and the expenses incurred in generating those revenues; (b) a “statement of financial position” (in the UK, a

analogues such as International Accounting Standards Board (2004). There is thus a proximate separation between the “rule” and the “practice” (q.v. Sharrock 2004: 604).

“balance sheet”), which records the corporation’s assets and liabilities at the end of the time period in question; and (c) a “cash flow statement,” which records cash paid and received by the corporation over the time period in question. From the viewpoint of many analysts and investors the key is the first of these, the income statement, because it defines “profit” or “earnings” (in other words the difference between revenues and expenses). The income statement has, however, to be reconciled with the balance sheet and cash flow statement, so these are important too. Furthermore, companies also have to report earnings to tax authorities, and in some jurisdictions (such as the US and UK) earnings as reported for tax purposes can, perfectly legally, differ considerably from earnings as reported to investors.

Producing income statements and other corporate accounts involves, above all, the classification of transactions, and this is the viewpoint from which the relevance of finitism is most clearly seen. Suppose a corporation buys something (an object, a building, a service, an employee’s time, and so on). The resultant payment needs classified. Is it an expense (which must enter into the corporation’s income statement and thus directly reduces its earnings or profits), or is it the purchase of an asset (to be recorded on its balance sheet and to affect income statements only in the form of changes in value or of depreciation: see below)? Buying a building, for example, might seem clearly the purchase of an asset, but what about renovating the building? What about painting it? What about the interest paid on money borrowed to buy it? Paying staff salaries may seem clearly to be an expense, but what if the staff involved are researchers? Is

expenditure on research and development an expense or purchase of an asset, albeit perhaps an intangible one? To take a classificatory issue of another kind, suppose a corporation grants its managers options entitling them to purchase its stock at a set price in a given future time period. It is giving them a right that may be valuable, yet it has spent nothing. There has been fierce controversy in the US over whether the value of the options should be calculated (for example using an option-pricing model) and classed as an expense, thus reducing corporate earnings.

To identify “assets” and “liabilities” involves classifying entities according to whether they are inside or outside an organization’s boundaries. If a corporation’s subsidiaries and “related entities” can be seen as separate from it, their liabilities are not its own (as Enron’s accountants were aware). More generally, as Hines (1988: 258) points out: “Financial accounting controversies are controversies about how to define the organization. For example what should ‘assets’ and ‘liabilities’ include/exclude; at what point does an asset/liability become so intangible/uncertain/unenforceable/unidentifiable/non-severable, etc. that it ceases to be considered to be a ‘part’ of an organization? The answers to questions such as these, define the ‘size,’ ‘health,’ ‘structure’ and ‘performance,’ in other words the reality of an organization.”

Current financial reporting is “accruals-based,” which means that there is no necessary correspondence between a corporation’s cash flow in a given time

period and its revenues and expenses in that period. As one textbook (Perks 2004: 173-4) puts it, a “naïve, non-accountant” would imagine that:

Profit = Receipts of cash less Payments of cash

Instead, in current financial reporting:

Profit = Revenues earned less Costs incurred in earning those revenues

But when is revenue earned? As Hines, points out:

Sometimes we recognize revenue when the goods are completed; sometimes when they are partly completed; sometimes when the customer is invoiced; or even when he telephones and places an order; or sometimes when he is billed; or when he pays. And even these are not clear-cut. When is a building “finished,” for example? What percentage of a building ... is “completed”?

When does a customer “pay”: when his cheque is received; when it is honoured? (Hines 1988: 253).

There may be a risk that goods will be returned after the corresponding revenue has been “recognized,” or that payment for them may not be received; in complex transactions (for example involving financial derivatives)⁷ the stream of payments may be contingent upon the movement of asset prices or interest rates. So questions arise as to the provisions to be made for bad debts and other contingencies, and perhaps also how large a revenue to “book” (to enter into the income statement) in respect to a sale.

⁷ A derivative is a contract or security the value of which depends upon the price of an underlying asset or on the level of an index, exchange rate, interest rate, or other measure.

The need in modern financial reporting to match costs to the corresponding revenues makes the classification of costs by time period also an important matter. Suppose a corporation sells an item from its inventory of similar items. What is the corresponding cost? Is it the cost of the most recently produced such item (“last in, first out”) or of the oldest such item (“first in, first out”), or a weighted average of costs? If prices are changing, the difference between the answers may be consequential. Advertising, to take another example, is often a major expenditure. Modern financial reporting requires the judgement whether advertising is generating sales in the current period (in which case it should be recorded as an expense in that period), or whether it will lead to sales in future time periods (in which case its recognition as an expense should be deferred to those time periods).

A further key issue is the valuation of a company’s assets: should they be included at cost or at current “fair value”?⁸ This can affect not only a company’s balance sheet but also its income statement (and thus its earnings or profits). If “fair value” is chosen, the question obviously arises as to how value is to be determined. If, alternatively, assets are to be included at their cost (the traditional treatment), then that cost needs to be allocated across time periods in the form of a depreciation charge: it would not be regarded as reasonable to

⁸ “Fair value” has been defined as: “The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s length transaction”

(International Accounting Standards Board 2004: 2169).

allocate the entire cost of an asset to the first year of its lifetime if it will remain useful for many years. How should depreciation be calculated if, for example, an airline buys a new aircraft? Will the aircraft have a useful life of 20 years, 30 years or 40 years? Should it be regarded as depreciating by the same amount in each year, or by larger amounts in its early years?⁹

Accounting Economic Reality

Many further contingencies affecting accounting classifications could be listed, but let us move on to what might structure such classifications. The purpose of financial reporting, it would widely be agreed, is to represent the economic situation of a corporation, for example so that its existing investors, its creditors, and other stakeholders can assess matters such as whether their money is being well used or whether they will be paid, and potential investors can decide whether or not to entrust the corporation with their capital. In other words, just as the physicist reports on physical reality, so the accountant reports on economic reality.

As emphasized above, the variety of finitism we advocate accepts both that “material reality” exists and that it affects our beliefs about it. Can the same be said of “economic reality”? Certainly, we must bear in mind the strong feedback from “report” to “reality.” Financial reporting directly affects the

⁹ Similar issues arise in regard to the valuation of liabilities (e.g. should they be included at their original amount, or at current “fair value”?), which for reasons of brevity we ignore.

economic health of corporations (a corporation that appears sound and profitable is attractive to investors and to lenders, but a bank that appears unsound is vulnerable to a bank run),¹⁰ while astrophysicists' models of the nuclear reactions in stars do not seem to affect those reactions. Indeed, the basic category of all financial reporting – money – is the prototypical example of a “social-kind” term (Barnes 1983). A metal disc, piece of paper or electronic record counts as money because we treat it as money and believe that it will continue to be treated as money.

Nevertheless, for all that economic reality is constitutively social it is still reality – for example, a powerful constraint – from the viewpoint of the individual person or individual corporation. All readers will be aware that there are some purchases they cannot make, and some patterns of expenditure they could not sustain without increasing their income; and something similar holds for corporations. A corporation can become unable to meet its financial obligations just as an individual can, and financial reporting – however optimistic – may not prevent this happening. (Accounting scandals often take the form of the sudden bankruptcy of an apparently profitable corporation. The possibility of “apparent” profitability indicates the flexibility of financial

¹⁰ The latter is of course Merton's famous example of self-fulfilling prophecy: see Merton (1948). As Hines (1988: 256) indicates, it makes a huge difference whether a corporation's assets are valued on a “going-concern” basis or on estimates of what they would fetch if the corporation were liquidated. The former is the standard practice; adoption of the latter would make many corporations seem no longer viable.

reporting, but the possibility of bankruptcy suggests that economic reality is not shaped by accountants' reports alone.) It is not our task to attempt to define what "economic reality" means for a corporation – to do that is to do accounting, not to analyse it sociologically – but we entirely accept that there is a reality to the financial situation of corporations that is constituted only partially by accountants' reports on it.

That physicists report on a reality that is constituted only partially by their activities does not render a sociology of physics impossible (see, for example, Collins 2004). One way of developing the sociology of scientific or technological knowledge is to identify local cultures and local traditions of the practice of science and technology (Barnes, Bloor and Henry 1996: 26-31). Participants in each local culture may well believe – sometimes fervently – that it captures "reality" (or, in technology, the best way of doing something), but the sociologist often finds that local cultures differ, sometimes radically, in their practices.

Accounting, too, has its local cultures and local traditions: the shared goal of capturing economic reality is insufficient on its own to determine the practice of accounting. The most obvious such traditions are national. Formal rules and standards are increasingly being harmonized across countries, but the process is still incomplete, and practice can still vary considerably even when rules are similar or identical. Thus the rules governing the depreciation of fixed assets were similar in the UK and France, but the typical implementation of the rules was quite different (Walton, Haller and Raffournier 2003: 23). The adoption in

2005 by the European Union, and increasingly by other countries as well, of common rules and principles – the “International Financial Reporting Standards” laid down by the International Accounting Standards Board (2004) – has not eliminated variation. A KPMG survey found that “a company’s country of domicile, and its previous national accounting standards appear to have the greatest influence on the choices it makes” (KPMG 2006: foreword).

As a result of national differences, when the assets and profits of a corporation are calculated according to the practices of more than one country, the resultant figures can differ considerably. In 1993, for example, Daimler-Benz AG listed on the New York Stock Exchange, and until 1996 (when it started using exclusively US rules) it prepared two sets of accounts, US and German. The value of its shareholders’ equity (the difference between the valuations of Daimler-Benz’s assets and its liabilities) was 40 to 45 percent higher in its US accounts. Its earnings also differed, and the most dramatic difference (in 1993, Daimler-Benz’s German accounts showed profits of 615 million DM, when its US accounts recorded a loss equivalent to 1,839 million DM) seems to have been caused mainly by revaluations designed to reduce discrepancies in asset values (Bay and Bruns 2003: 397-99).

Sometimes national differences in accounting practices arise for relatively clear-cut reasons. In Germany, Austria, and Italy, for example, the earnings figures that determine corporate taxes must closely follow earnings as reported to investors. In the UK and US, in contrast, tax accounting and financial

reporting are, as noted above, largely divorced. This is one reason for financial reporting typically having been more conservative in jurisdictions such as Germany and Austria than in the US and UK: an optimistic presentation would attract higher taxes. Assets may, for example, be assumed to depreciate more rapidly, and provisions for bad debts and other contingencies may be larger (see, for example, Walton, Haller, and Raffournier 2003).

Members of different local cultures of financial reporting may indeed believe strongly that their practices best capture reality. For example, a Continental European corporation's accountants may have felt they were taking proper account of a rapidly changing and uncertain world, when to their British and American counterparts they seemed to be salting away large undeclared profits. That such convictions can be passionate means that the recent harmonization of international accounting standards across the European Union and the ongoing harmonization between Europe and the US have been fraught. Such harmonization is intended to make it easier for global investors to compare corporations that report in different jurisdictions, but the key figure in these efforts forecast "blood all over the streets" as they came to fruition (Sir David Tweedie, quoted by Tricks and Hargreaves 2004).

Particularly controversial was International Accounting Standard 39 (IAS 39), governing the valuation of financial instruments such as derivatives.¹¹ The key issue was the bearing of the standard upon situations in which derivatives

¹¹ IAS 39 can be found in International Accounting Standards Board (2004: 1635-2003).

are used to hedge a risk, for example when a bank offers its customers fixed-rate mortgages or guaranteed interest rates on their deposits, and uses derivatives to offset its consequent exposure to changes in interest rates. Banks typically take the view that in such situations the economically-realistic accounting treatment is what is called “hedge accounting,” in which fluctuations in the market value of hedging instruments are not recognized in their balance sheets and income statements, on the grounds that those gains and losses are offset by fluctuations in the value of the items being hedged.¹² Opponents of IAS 39 argue that its rules governing the permissibility of hedge accounting are too restrictive, for example in failing adequately to take into account the way in which banks hedge risks such as interest-rate exposure in aggregate, not item by item. The danger, they argue, is that what in economic reality are risk-reducing hedging transactions will be made to appear risky by injecting spurious, artificial volatility into their earnings. In 2004, concerted lobbying by banks led the European Commission to endorse the standard only in part, a decision condemned sharply by the UK Accounting Standards Board, which was reported as suggesting that UK companies “should ignore it” (Tricks and Buck 2004).

It might be imagined that disputes over whether accounting rules reflect “economic reality” could be settled by turning to the acknowledged experts on the latter, economists. In fact, the small minority of economists who have taken research in accounting seriously have rarely been able decisively to settle the

¹² A typical objection is thus to an outcome in which the items being hedged (for example, a portfolio of fixed-rate mortgages) are not “marked-to-market,” but the instrument used to hedge them has to be.

issues at stake. Perhaps the single most important question in financial reporting is the definition and measurement of “income” (or “earnings” or “profits”). The great British economist John Hicks provided what has become perhaps the canonical definition of “income,”¹³ but he admitted it was not precise. Making it precise – in particular, separating income unequivocally from capital – might be “chasing a will-o’-the wisp,” said Hicks. Economists, he wrote, “shall be well advised to eschew *income*.” The concept was a “bad tool ... which break[s] in our hands” (Hicks 1946: 176-77, emphasis in original). Accountants, however, were in no position to duck one of their central classificatory responsibilities. As Dennis Robertson put it, “The jails and workhouses of the world are filled with those who gave up as a bad job the admittedly difficult task of distinguishing between capital and income” (quoted by Kay 2004).

Rule-Governed Accounting?

If “economic reality,” important though it is, does not suffice to determine how accountants should classify it, perhaps convention does? In other words, perhaps the rules of accounting can be made tight enough to eliminate local variation and discretion. It might not be possible to prove that those rules

¹³ “[A] man’s income [is] the maximum value which he can consume during a week, and still expect to be as well off at the end of the week as he was at the beginning” (Hicks 1946: 172).

The difficulty of this definition lies in making precise what is meant by “as well off.” As Hicks pointed out, that leads into issues such as future interest rates and prices, and the depreciation of durable goods. On the episode, see Hopwood and Bromwich (1984).

capture economic reality optimally, but consistency might be achieved. For example, investors would know that all corporations in a given country – and perhaps eventually all corporations in the world – were doing their accounting in an identical, comparable way.

The extent of formal, written rules of accounting varies with time and place, and there has sometimes been strong opposition amongst accountants to such rules. In Britain (and perhaps especially in Scotland, the original home of an organized profession of accounting) there has often been a conviction that the requirement to capture economic reality – to give “a true and fair view” of the financial situation of companies, as the UK’s Companies Acts require¹⁴ – necessitates “a custom-built document” requiring “the exercise of an informed judgment” with which others, even accountants’ own organizations, should not “interfere” (Slimmings 1981: 14). Such a perspective emphasizes professional status: one of the hallmarks of a “professional” – as distinct, say, from a “clerk” – has been taken to be the exercise of “judgement” (see, for example, Porter 1995: 91-91).

Nevertheless, until very recently the direction of change, driven above all by accounting scandals, has been towards rules. After the Great Crash of 1929 the economic reality of many US corporations was seen to have been at variance with their financial reporting. In part to ward off government intervention

¹⁴ This phrasing, in force since 1947, replaced the earlier requirement (in the 1879 Companies Act) for “a true and correct view” (Myddelton 1995: 9).

(possibly even compulsory government auditing of corporate accounts), the American Institute of Accountants made at least a symbolic sacrifice of some of the accountant's individual discretion, and began to promulgate formal accounting standards (Zeff 1984). The effort did indeed help to keep accountants in charge of formulating standards – in 1938, the Securities and Exchange Commission delegated its standard-setting powers to the Institute's Committee on Accounting Procedure – but it marked the beginning of a proliferation of formal standards. The episode serves as one of Porter's prime examples of the rise of the "ideal of mechanical objectivity, knowledge based completely on explicit rules" (Porter 1995: 7), and rightly so. The six brief "rules or principles" formulated by the American Institute of Accountants in 1934 have by 2007 become the Financial Accounting Standards Board's 159 standards, some of which exceed a hundred pages.¹⁵

To what extent, though, do these extensive, detailed formal rules govern the practice of financial reporting in the US? It would be pleasing at this point to be able to cite an extensive corpus of ethnographic literature on the processes of financial reporting – in the US or elsewhere – but no such corpus exists. An extensive literature search by the second author revealed only a very limited number of such studies.¹⁶ Fortunately, however, there is a considerable body of

¹⁵ www.fasb.org, accessed 4 April 2007. For example, Standard 133 ("Accounting for Derivative Instruments and Hedging Activities") stretches over 212 pages.

¹⁶ See Leung (2004). Perhaps the most relevant such work from the viewpoint of this chapter is a pioneering study of auditing in the UK that combines survey data with six case studies of

quantitative research that enables the question to be addressed indirectly. This research concerns the practice of “earnings management,” influentially defined by Schipper (1989: 92) as “purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain (as opposed to, say, merely facilitating the neutral operation of the process).” Schipper’s definition does not say so explicitly, but earnings management is normally taken to be permissible, legal forms of this intervention. “[F]abricating invoices to create fictitious sales revenue” (Schipper 1989: 93) is seen as fraud, not as earnings management.

The relevance of earnings management is thus that it is behavior “within the rules”: its prevalence is an indicator of the extent to which discretion can still be exercised even when, as in the US, the financial reporting process is governed by extensive, formal rules. What “private gain” might induce managements to engage in earnings management? Probably most important is what appears to be a widespread belief amongst corporate managers that stock analysts and investors prefer corporations whose earnings rise predictably to corporations whose earnings fluctuate substantially (even if around the same underlying trend). If the rewards enjoyed by corporate senior managers reflect stock prices, as in recent decades they increasingly have, there is an incentive for “income smoothing,” in other words for exploiting permissible discretion to reduce the volatility of earnings. Clearly, too, there is usually, though not always (see below

companies based on “[m]atched interviews” with the company’s finance director and the auditor’s corresponding “engagement partner” (Beattie, Fearnley and Brandt 2001: xvii).

re “big baths”) an incentive to avoid reporting losses, and it is often very important to meet or to surpass stock analysts’ predictions of corporate earnings.

It is not productive to try to detect income smoothing or other forms of earnings management by comparing reported earnings with “true,” unsmoothed, income or unmanaged earnings: even if the necessary detailed data were available, which they are not, the measurement of “true” income by an accounting researcher would be no less contestable than management’s original figures. Instead, research on earnings management employs a variety of less direct methodologies. None are beyond criticism, but their results suggest that, despite attempts to make US financial reporting rule-bound, significant discretion remains.

One approach is to identify situations in which there is a clear but temporary incentive to manage earnings; to scrutinize corporate accounts for patterns consistent with earnings management; and to examine whether those patterns correlate with situations in which the incentive is present. A pioneering study of this kind was Jennifer Jones’s (1991) examination of the financial reporting of firms in industries that were petitioning the US International Trade Commission to recommend tariffs and import restrictions. Such petitions stood a chance of being granted only if there was evidence that domestic industry was being “hurt” by overseas competition. Jones focused on accruals: balance-sheet changes for which there is no immediate cash-flow counterpart such as depreciation, changes in the valuation of property, plant and inventory, and

estimates of accounts payable and receivable. She estimated the discretionary component of such accruals by subtracting from total accruals a regression-based estimate of “normal,” “non-discretionary” accruals. Aggregating results for five industries (automobiles, carbon steel, stainless and alloy tool steel, copper, and footwear) she showed statistically significant negative discretionary accruals in the years of International Trade Commission investigations.

Initial public offerings of stock (IPOs) are another case in which there are temporarily strong incentives to “window-dress” accounts (in this case to portray financial strength). A comparison of the “unexpected” accruals of companies engaged in IPOs with a matched control group of similar companies found that 62 percent of the IPO firms had higher accruals than the corresponding control (Teoh, Wong and Rao 1998: 187, table 3). Since chance processes would suggest a 50 percent figure, “this implies that roughly 12 percent of the issuing firms manage earnings” (Healy and Wahlen 1999: 373).

A different approach to the detection of earnings management is to examine the statistical distribution of earnings, looking for discontinuities or “kinks” at earnings levels that correspond to particularly strong incentives to earnings management: zero earnings (and thus the divide between making a profit and registering a loss); earnings in the previous year or corresponding previous quarter; and corporations’ or analysts’ earnings predictions. Such kinks turn out to be substantial (see, for example, figure 1). For instance, analysis of US corporate earnings for 1976-94 suggests that “30% to 44% of the firms with

slightly negative pre-managed earnings exercise discretion to report positive earnings” (Burgstahler and Dichev 1997: 124).

The detection of earnings management abounds with conceptual and methodological difficulties (see, for example, McNichols 2000). Analyses based on “discretionary” or “unexpected” accruals are extremely sensitive to the model of “normal,” non-discretionary accruals that is employed (if, for example, earnings management is widespread, “normal” levels of accruals may already reflect such management) and they cannot detect techniques of earnings management that do not involve accruals. Nor are distributional analyses unequivocal. A distributional “kink” is not in itself evidence of earnings management. It may be, for example, that anticipated small losses are turned into small profits not by changes in accounting classifications but by “real” interventions (sales drives, cuts in expenditure on maintenance or on research and development, and so on). Burgstahler and Dichev (1997) attempt to overcome the problem by investigating cash flow from operations and levels of accruals around reference points such as zero earnings, but this kind of analysis may not be entirely robust (Dechow, Richardson and Tuna 2003). There are even potential issues of reflexivity. Some sophisticated investors are already employing academic earnings-management detection models (Henry 2004), and it would be surprising if regulators were not doing so too, so there is now an incentive to manage earnings in ways that the models cannot detect.

Nevertheless, the overall thrust of the literature on earnings management is consistent with pervasive anecdotal evidence (most authoritative is Levitt 1998) of widespread earnings management by US corporations, at least in the 1980s and 1990s. (Empirical study of periods prior to the 1980s is too sparse to allow any definitive conclusions. Because there is a lag in the availability of the necessary data – especially the “Compustat” corporate financial reporting databases – and in analysis, one also cannot be sure of the situation in very recent years. Henry [2004] suggests that earnings management is still widespread, but his conclusion has yet to be tested by extensive published quantitative work.) The scandals of the early 2000s appear not to be isolated instances of rule-breaking, but (extreme) manifestations of the widespread exercise of deliberate discretion. As a finitist analysis would predict, the construction of the world’s most rule-intensive system of financial reporting did not eliminate discretion from corporate accounting.

Conclusion

Corporate financial reporting is a major gap in sociological understandings of contemporary economic processes. It is a key aspect of those processes, but is almost *terra incognita* from the viewpoint of research by sociologists in sociology departments. Even the sociologically-oriented literature in accounting, which is rich on topics such as professionalization, management accounting, and the regulation of accounting, is sparser in regard to the practices underpinning financial reporting: “One of the disappointing characteristics of field studies in

organizations is how few have examined how accounting and audit decisions are made" (Cooper and Robson 2006: 435).

How might the gap be filled? As Cooper and Robson imply, the most attractive form of research would be ethnographies of corporate financial reporting. By this we mean observational studies of the material processes (human and technological) of classification and measurement by which economic transactions are constructed and processed into audited corporate accounts, and of the ways these procedures and their outcomes are shaped by the contingencies that finitism points to: "our interactions with other people, our immediate purposes, our training, our anticipation of and response to sanctions," and so on (Bloor, as quoted above).

Almost certainly, the reason such studies are sparse is difficulty of access and the sensitivity of the data that would be collected: the ethnographer could, for instance, easily become privy to information relevant to a corporation's stock price that is not publicly known. Nevertheless, under some circumstances (for example, with a legally-binding agreement governing disclosure) access can be negotiated. Thus the third author has completed a small-scale pilot study (MacKenzie 2007), although it was not fully ethnographic: it was conducted *in situ*, but was interview-based. The second author has been able to conduct a full-scale, fully ethnographic study, involving seven months of participant observation (Leung forthcoming). Of course, it is likely that the findings of any particular ethnographic study will be to a degree specific to the site being

studied, so many more such studies are needed before any more general picture can be painted with confidence.

We conjecture that in at least one respect the findings of such work will have an emphasis that differs from those of the classic formulations of finitism, highlighting a factor that is not explicit in Bloor's list of "sources of constraint," quoted above: technology. The technical systems of accounting – which can be standalone systems, but increasingly, at least for larger firms, are aspects of continuously evolving Enterprise Resource Planning systems such as Oracle or SAP (see, for example, Quattrone and Hopper 2006) – are neither merely neutral media nor simply means of increasing the efficiency of what unaided human beings might do. Multiple people are needed to do the accounts of any large entity, and technical systems link their work in *structured* ways. In part to reduce opportunities for fraud, accounting systems are, for example, normally designed to constrain the ways in which any given person can alter the results of the work of another (or indeed to prevent any other than a limited set of people making such alterations), and to leave an ineliminable trace when an alteration is made.

Such deliberate "technical" barriers then become "social" constraints. The vast bulk of accounting classifications are made not by senior managers or professional accountants, but by staff lower in corporate hierarchies such as bookkeepers. Technical systems then "solidify" those classifications by restricting what more senior staff can then do to alter them. This matters, we hypothesize, because it is normally senior staff (not those lower in the hierarchy)

whose remuneration is most affected by stock prices and whose interests might thus be served by earnings management. Is a senior manager going to attempt to influence in advance thousands or millions of “primary” classifications made by dozens or hundreds of bookkeepers, or subsequently to attempt to alter those classifications (especially if he or she does not have the access permissions to do so and if the alternations leave a visible audit trail)? The record of cases such as Enron or WorldCom suggests that these are not the most attractive paths. Earnings management seems more often to be accomplished by leaving the primary classifications mostly or entirely intact, and performing higher-level reclassifications.

Of course, technical constraint is never absolute. Any system’s controls can be subverted if the technical staff in charge of a system’s access-control matrix can be persuaded to alter it, or if others can be persuaded to disclose their passwords. Furthermore, the creation of an audit trail is a deterrent only if an auditor is likely to scrutinize it and to contest the reclassifications it reveals, which returns us to the sphere of human constraints, of Bloor’s “interactions with other people” and “anticipation of and response to sanctions.”

Nevertheless, such considerations do suggest that ethnographies of financial reporting will need to pay close attention to its technological bases. They also point to the importance of studying the work of bookkeepers as well as of professional accountants. If our conjectures are correct, it is bookkeepers – not accountants – who produce much of accounting’s equivalent of science’s

observational base. Bookkeepers' classifications are just as open to finitist analysis as those of accountants (and there is no "theory-independent observation language" in accounting or in science), but their classificatory work has almost never been examined in observational detail.¹⁷

Another issue worth attention *is* present explicitly on Bloor's list: training. Finitism suggests that classification and concept-application are based on relations of similarity and difference that, ultimately, are learned ostensively – that is, by exposure to authoritative examples of "correct" classification and "appropriate" concept application. For instance, a scientific paradigm is at root a set of concrete, exemplary solutions to scientific problems. Scientific training consists in good part of learning of how to perform these exemplary solutions and how to extend them to similar cases (Kuhn 1970; Barnes 1982). Socialization into the "paradigm" in the broader sense of an overarching disciplinary framework is not achieved solely by the framework being learned explicitly (if finitism is right, it could not be learned in its entirety in this way), but by repeated, authoritative ostension.

¹⁷ The ethnomethodologically-influenced corpus of workplace ethnographies offers the closest approach to the study of bookkeepers' classifications. See especially Suchman (1983) and Button and Harper (1993).

Accounting and bookkeeping, we conjecture, are also learned in good part ostensibly.¹⁸ Accountants do learn many explicit rules, but they also have to learn how to apply these rules to particulars. Some of this training takes place in formal educational settings; much of it takes place “on the job.” If training in accounting is like scientific training, we would expect it to consist largely in repeated experience of solving problems for which there are authoritative “right” and “wrong” answers. If the analogy with science holds, the result of such training will go beyond technical competence in any narrow sense. It will be found to be socialization into a way of viewing the world that is not wholly explicit, but is not for that reason any less powerful.

In particular, prolonged ostensibly-based socialization can “achieve realism.” To neophytes, we conjecture, classifying items (in accounting, science, or elsewhere) will frequently “feel” like classification: here is an item; here are possible classifications ($X_1, X_2, X_3, \dots, X_n$); which shall I choose? The experienced practitioner, in contrast, will often feel “this item *is* an X_3 ,” just as the experienced bird-watcher glances at a bird and thinks “that is an oystercatcher,” not “I am classifying that bird as an oystercatcher.” The classification can still be analyzed as a choice (or so finitism insists), but to those involved it no longer feels like a choice, or indeed even as a classification.

¹⁸ The literature on the education of accountants (such as Power 1991 and Anderson-Gough, Grey, and Robson 1998) unfortunately does not offer a clear-cut answer to the question of the extent of ostensive learning.

The extent to which accounting and bookkeeping are in practice conducted in nominalist “choice amongst classifications” mode or in “realist” mode is an empirical question. Our conjecture is that both modes will normally be present. Routine, familiar items, for example, may evoke “realist” mode; unfamiliar items provoke explicit choices. An accountant engaged in earnings management can be expected to operate in “choice” mode, but will also need to take into account the classificatory impulses of those in “realist” mode. Thus the crisis at WorldCom was triggered by an internal auditor refusing to accept that the costs of the unused proportions of network capacity leased from other firms could properly be classified as purchase of an asset. There is no evidence of strategic intent on her part: she seems simply to have felt strongly that the classification was wrong, and that these costs *were* expenses, not assets (see MacKenzie forthcoming).

Another issue worthy of more research is the audiences for corporate accounts and the way in which their anticipated reactions feed back into the production of accounts. Auditors are of course an audience whose likely response is of crucial, immediate importance, but others include stock analysts, investors, and tax authorities. Do such stakeholders treat reported earnings as “facts,” or do they – as efficient-market theory would suggest in regard to investors – anticipate and discount earnings management? The quantitative evidence on the point is ambiguous. For example, the earnings management literature has produced “compelling evidence” (Healy and Wahlen 1999: 372) that it is common for banks to manage their earnings via adjustments to

provisions for losses on loans, but the record of banks' stock returns is consistent with investors discounting "abnormally low loan loss provisions." On the other hand, earnings management prior to IPOs and other equity offerings appears to be successful in achieving high stock valuations that are reversed only later (Healy and Wahlen 1999: 374).

Again, though, this quantitative research is often not definitive: there are, for example, other explanations of poor post-IPO stock returns. We would conjecture that qualitative work (ethnographic or interview-based) would find a deep tension in the reception of earnings figures by stock analysts and professional investors. On the one hand, such actors seem to orient their activities to a large extent around accounting data. Analysts devote considerable attention to "forecasting" earnings, and the ratio of a corporation's stock price to its earnings is the single most widely-used investment metric. On the other hand, it seems to us inconceivable that analysts and sophisticated investors in the US were not aware of the substantial elements of discretion in the construction of accounting data well before it was highlighted by the collapse of Enron. Earnings management was front-page news in the *Wall Street Journal* as early as 1994 (Smith et al. 1994). A March 1997 *Fortune* article discussed specific earnings management practices it claimed were used by named corporations (Fox 1997). By 1998, "accounting hocus-pocus" and the colloquial terms for its techniques – heavy "Big Bath" losses, attributed to corporate restructuring, which create "Cookie Jar Reserves" to boost future earnings, and so on – were prominent in a

widely-reported speech by the chair of the Securities and Exchange Commission (Levitt 1998).

A productive focus of research would therefore be on how actors conceive of and treat figures that are both enormously consequential and also, we anticipate, known to be subject to substantial discretion. One of the very few relevant existing sociological analyses is a fascinating study by Zorn (n.d.). He shows that while in the 1980s it was typical for around half of US corporations to meet or beat stock analysts' consensus forecasts of their earnings,¹⁹ that figure climbed sharply in the 1990s (see figure 2). Zorn finds a correlation with firms' internal structure: corporations in which the second-in-command was designated "Chief Operating Officer" were less likely to exceed analysts' forecasts than firms in which the second-in-command was a "Chief Financial Officer."

One probable reason for Zorn's findings is that earnings management became more active in the 1990s, particularly amongst firms whose growing "financialization" (see, for example, Fligstein 2001) was indicated by a prominent role for the Chief Financial Officer. Testing that interpretation would require the quantitative techniques of the earnings management literature. Another, compatible, explanation would be that corporations (again, especially those with

¹⁹ The original source of such "consensus estimates," and the database employed by Zorn, was I/B/E/S (Institutional Brokers Estimate System), which has provided such estimates since the early 1970s. By the late 1990s others such as First Call were also providing them (Fox 1997: 49).

strong financial-market orientations) became increasingly successful at managing analysts' forecasts downwards. Perhaps, we conjecture, the price of continuing to receive the "nudges and winks" (Collingwood 2001: 73; Zorn n.d.: 38) from corporate executives that help an analyst to a career-enhancing, more-or-less precise earnings estimate was an implicit undertaking not to make one's estimate more accurate by second-guessing the – at times quite predictable, as Collingwood (2001: 70) suggests – extent to which the corporation would exceed the estimate. With sufficiently strong guarantees of anonymity, stock analysts might conceivably be prepared to talk about processes such as this.

Research of this kind will bear directly on broader questions of economic sociology. We anticipate that it will be found that the processes of financial reporting and of the reception of such reports are interwoven intimately with more general forms of economic life. Conservative reporting procedures in "stakeholder capitalism" in Germany, for example, seem to have reflected the protection of the interests of corporations' creditors (notably banks) and the exigencies of taxation, rather than prioritizing the kind of information that mobile international investors might seek. (It is worth noting that conservative accounting procedures facilitate the management of earnings, because generous provisions for contingencies can be unwound at appropriate moments. Zimmermann and Gontcharov [n.d.: i] suggest "substantial earnings management occurs in the whole sample" of German firms they study, although

it must be admitted that their methodology is less convincing than those of the earnings-management studies discussed above.)²⁰

Another potential example of the interweaving – one that has been noted in the literature of economic sociology – is the possibility that a good part of the “mergers and acquisitions” movement in the US and UK in the 1980s can be explained by the way in which takeovers expand accounting discretion (Espeland and Hirsch 1990). Although there have been energetic regulatory efforts to curtail the advantages of “merger accountancy,” a pessimistic accounting treatment of the situation and prospects of the acquired firm can be a substantial source of subsequent reported earnings by the acquiring corporation. This can be a powerful incentive for acquisitions, and thus an important factor fueling the “market for corporate control” that has helped transform Anglo-American economic life in the direction of “financialization.”

As the “audit society” (Power 1999) and high modernity’s “mathesis” (Townley 1995) spread, we expect questions analogous to those raised by corporate earnings management to become more salient in other spheres. For

²⁰ Zimmermann and Gontcharov construct a “smoothing ratio,” defined, following Pincus and Rajgopal (2002), as “the ratio of the standard deviation of non-discretionary earnings to the standard deviation of earnings” (Zimmermann and Gontcharov n.d.: 7), and they test for values that exceed 1.0 by statistically significant amounts. “Non-discretionary earnings” are “the sum of cash flow from operations and normal (non-discretionary) accruals from the Jones model [Jones 1991]” (Zimmermann and Gontcharov n.d.: 7).

example, national accounts covering matters such as total public debt and fiscal deficits are of increasing salience (see, for example, Suzuki n.d.). In Greece, for instance, the reported year 2000 deficit of 2 percent of gross domestic product was doubled to 4.1 percent in a revision following the election victory of the New Democracy – a level that would have denied Greece participation in European Monetary Union. At stake were issues familiar in corporate accounting: the valuation of pension fund surpluses, and whether to classify spending on defence equipment as capital investment (thus contributing to the deficit only as it depreciates) or as current expenditure (Munchau 2004). To take another example, the UK's Public Finance Initiatives, and their analogues overseas, are the analogue of many of the private sector's numerous "special purpose entities": they shift liabilities off balance sheets.

In short, sociology – not just economic sociology, but other areas as well – cannot continue to forget accounting, and sociologists working in sociology departments need to build far stronger links to their colleagues in accounting departments. We hope that this chapter will contribute to those links by demonstrating the potential contribution of one particular sociological perspective, finitism. "Governing by numbers" (Miller 2001) requires that those who generate the numbers are themselves governable, but if finitism is right there is a sense in which their discretion is in principle ineliminable. This makes the resultant empirical questions – how discretion manifests itself, with what consequences, and the roles in constraining it of interactions with other people, of technological systems, of classificatory impulses, and so on – crucial topics for

sociologists as well as for accountants. The finitist accountant is at the heart of modern economic life, and the material processes (human and technological) that enable and constrain her or his discretion deserve the most intense empirical investigation.

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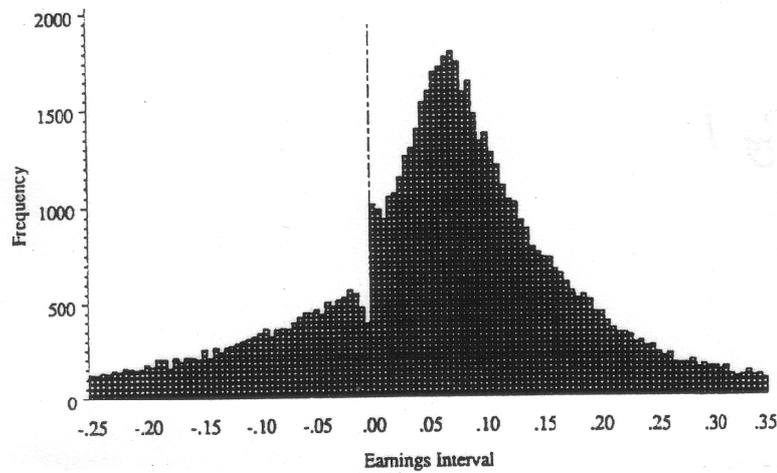


Figure 1. Frequency distribution of reports of net annual income by US corporations, 1976-1994.

Source: Reprinted from *Journal of Accounting and Economics* 24 (David Burgstahler, and Ilia Dichev, "Earnings Management to Avoid Earnings Decreases and Losses," 99-126), copyright 1997, with permission from Elsevier. Burgstahler and Dichev draw their data from Computstat, and the population of corporations excludes the financial sector and regulated industries. Income is scaled by division by the corporation's market value at the start of the year; interval width is 0.005. The dashed line is the zero-earnings point.

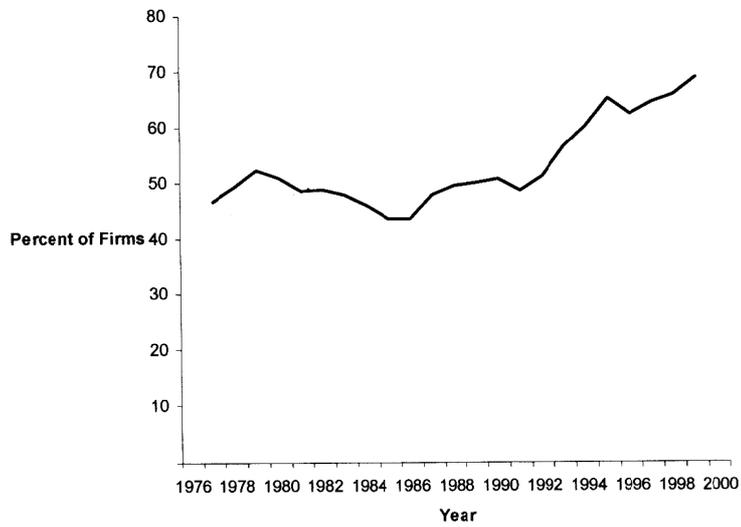


Figure 2. Three-year moving averages of proportions of large publicly-traded U.S. industrial corporations equaling or exceeding stock analysts' "consensus forecasts" of their earnings per share.

Source: Zorn (n.d.). Reprinted courtesy Dirk Zorn.