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BRIAN A. RUTHERFORD

A Pragmatist Defence of Classical Financial Accounting Research

One reason for the disdain in which classical financial accounting research has come to held by many in the scholarly community is its allegedly insufficiently scientific nature. While many have defended classical research or provided critiques of post-classical paradigms, the motivation for this paper is different. It offers an epistemologically robust underpinning for the approaches and methods of classical financial accounting research that restores its claim to legitimacy as a rigorous, systematic and empirically grounded means of acquiring knowledge. This underpinning is derived from classical philosophical pragmatism and, principally, from the writings of John Dewey. The objective is to show that classical approaches are capable of yielding serviceable, theoretically based solutions to problems in accounting practice.

Key words: Accounting practice; Classical accounting research; Epistemology; John Dewey; Pragmatism.

In the wake of Nelson's famous assault on so-called a priori research (1973), scholarly financial accounting moved away from 'classical methods' (Zeff, 1989, p. 171), characterized by close engagement with accounting procedures, normativity, natural language argumentation, empirical methods of limited technical sophistication and sensitivity to historical context (Zeff, 1989; Beattie, 2002, 2005).¹ Instead, it adopted paradigms borrowed from mainstream social science (Zeff, 1989; Milburn, 1994; Rutherford, 2010) of which two, statistically sophisticated 'neo-empiricism' (Gaffikin, 2007) and critical accounting theory, dominate (Beattie, 2002).

But potential users of financial accounting research have not found the postclassical paradigms particularly fruitful; in particular, the standard-setters responsible for reforming practice have repeatedly complained about the irrelevance of contemporary research (Leisenring and Johnson, 1994, pp. 113–14; Van Riper, 1994, pp. 52–3; Whittington, 1995; A. Carey, cited in Rutherford, 2007a, pp. 113–14;

BRIAN A. RUTHERFORD (b.a.rutherford@kent.ac.uk) is Emeritus Professor of Accounting, Kent Business School, University of Kent.

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¹ The classical programme described by Zeff (1989) corresponds to the normative-deductive, inductive and decision-modelling schools within the classification developed by the American Accounting Association (1977) and that definition is followed here.

Stevenson, 2011). Even its proponents accept that it has, so far, been able to offer only modest insights in support of reform.² The irrelevance of contemporary research is one aspect of the widely acknowledged gulf—perhaps even schism— between the concerns of accounting practitioners and those of academia (Zeff, 1989; Bricker and Previts, 1990; Granof and Zeff, 2008; Tilt, 2010; Carlin, 2011).

Practitioners continue to deploy traditional procedures, providing financial reports which, despite occasional crises, are generally well received by their target audience. Taking some recent evidence: (a) KPMG's (2007) survey of institutions responsible for managing U.S.\$2.7 trillion found over 60% of respondents regarded published financial statements as 'very valuable', with all the remainder considering them 'reasonably valuable'; (b) the International Federation of Accountants (2008) found 83% of respondents considered financial reporting information to be 'useful' or 'very useful' and only 1.5% considered it 'not useful'; and (c) the U.K. Financial Reporting Council (2010) found that 82% of investors had overall confidence in corporate reporting. The Financial Crisis Advisory Group, established by the International Accounting Standards Board and the U.S. Financial Accounting Standards Board, and composed largely of users and regulators, concluded that 'accounting standards were not a root cause of the financial crisis' of 2008–9 (2009, p. 3).³

In its time, the classical programme made significant contributions to financial reporting. It had considerable influence on the development of the conceptual framework on which, ironically, standard-setters have come to lean heavily only after the programme's demise (Solomons, 1986; Zeff, 1989; Gore, 1992; Storey and Storey, 1998). When runaway inflation threatened the historical cost convention, academics employing classical approaches made major contributions to the development of methods to overcome the problem (Tweedie and Whittington, 1984; Baxter, 1988). Further, scholars working within the classical programme have made important contributions in areas such as accounting for leases (Zeff, 1972, pp. 184–5) and accounting for public sector infrastructure (see Byatt, 1986).

A revival in interest in classical methods may yet be triggered by dissatisfaction with the limited practical contribution of post-classical programmes, frustration with the gulf between practice and academia, renewed calls for assistance by regulators (see, e.g., Singleton-Green and Hodgkinson, 2009, pp. 90–1) and pressure within higher education towards greater relevance of research (Corbyn, 2009). One reason for the disdain in which classical research has come to be held by many in the scholarly community is its allegedly insufficiently scientific nature (Nelson, 1973; Watts and Zimmerman, 1978; S. Davidson, cited in Dyckman and Zeff, 1984,

² See, for example, Barth's (2000) survey of 'four current major financial reporting issues and the state of academic valuation research addressing them' (p. 18). Only one of the four is an agenda item for standard-setters and, on this, she concludes: 'what is left to learn about fair value accounting? Much' (p. 21).

³ There have, of course, been many practitioner-led initiatives to improve financial reporting but, in the main, these advocate marginal changes, extensions in disclosure and additional forms of reporting rather than the replacement of traditional procedures by radically different alternatives.

pp. 281–5; Beattie, 2005, p. 88). The motivation for this paper is to remove this barrier by offering an epistemologically robust underpinning that restores the programme's claim to legitimacy as a rigorous, systematic and empirically grounded means of acquiring knowledge. This underpinning is drawn from classical philosophical pragmatism and, principally, from the writings of John Dewey.

It is worth emphasizing one point here, particularly in connection with the discussion, later in the paper, of the work of the classical theorists. The validity of an epistemological position does not depend on those pursuing knowledge consciously adopting it; equally, the validity of the findings of those pursuing knowledge does not necessarily depend on their epistemological position (Popper, 1959, p. 13). The purpose of the discussion is not to show that those involved explicitly described, or understood, their undertaking in pragmatist terms. Rather, it is to explore the extent to which pragmatist themes, and thus an epistemologically sound underpinning, are evident in the work of some classical theorists, and to demonstrate the sophistication of those theorists' thinking.

PHILOSOPHICAL PRAGMATISM

Philosophical pragmatism is a diverse movement, perhaps 'best conceived less as a well-defined, tightly knit school of thought than as a loose, contentious family of thinkers' (Westbrook, 2008, p. 185). It originated in discussions among a number of thinkers based in Cambridge, Massachusetts, during the 1870s and, in particular, in two papers by Charles Saunders Peirce (Smith, 1999, pp. 2–3). Peirce's central concept was taken over, and substantially modified, first by William James and then by Dewey. Since then, many other philosophers, working predominantly in the U.S.A., have extended pragmatist thinking in a number of directions.⁴ Despite the variety in pragmatist approaches, it is possible to identify a shared outlook (Smith, 1999, pp. 3–6), which James famously likened to a corridor in a hotel: individual thinkers working on different theories in separate rooms all need to pass through the corridor to get into or out of their accommodation (James, 1907, pp. 21–2).

The core of pragmatist thought can be traced to its embrace of Darwinian evolution, itself relatively newly discovered at the time the founders were formulating their ideas (Smith, 1999; Westbrook, 2008). A fundamental tenet is that 'philosophical questions must arise out of the perplexities that confront us in the course of experience' (Smith, 1999, p. 5). Pragmatism focuses on change, development, context and history, rather than endeavouring to find fixed patterns. It follows a piecemeal and pluralistic approach—for example, concentrating on particular ideas and specific subjects rather than seeking a summary relationship between thought at large and things at large. Principles of analysis are applicable to the cultural as well as the physical world. In conducting their analysis in a Darwinian context, pragmatists stress the innovative and creative elements of the process. Knowledge is seen as

⁴ For introductions to pragmatist thought, see Kuklick (2001), Rosenthal *et al.* (1999) or Shook and Margolis (2006).

probabilistic and fallible, fallibilism here entailing that any given piece of knowledge may turn out to be in error, rather than sceptical despair that anything can be known with confidence (Festenstein, 2008).

Characteristic maxims of pragmatism are that what works most effectively in practice provides a standard for determining truth in statements, rightness in actions, and valuation in appraisals; that the meaning of a concept is to be sought in the experiential or practical consequences of its application; and that we should be prepared to regard the best that can be done as good enough (Haack, 1992; Rescher, 2005). It is worth emphasizing that philosophical pragmatism is to be distinguished from the colloquial use of the term, namely answering only to immediate needs, if necessary in a rough-and-ready way. Philosophical pragmatism entails that 'what works' must work in the large, consistently, systematically, durably and across society (see, e.g., James, 1907, p. 86). Thus, 'what is important is what fits with all the experience that would be available, what the community of inquirers would converge upon' (Misak, 2000, p. 95). In this sense, the outcomes of inquiry are socially constructed.

Classical pragmatists saw themselves as realists, in that they accepted that what will turn out to be most efficacious must be located within a non-negotiable world of existence. Sleeper (1986) calls Dewey's position *transactional realism*: 'This is not transcendental realism, but transactional realism, for knowing is here regarded as a transaction that takes place between an organism and its environment' (p. 92). Classical pragmatism typically argues that nature is undifferentiated, varying continuously in subtle and complex ways, and that human thought imposes discontinuities, concepts and distinctions as differences in kind, with the purpose at hand determining the conceptualizations involved. For Dewey, an 'object of knowledge' is 'the outcome of directed experimental operations' and not 'something in sufficient existence before the act of knowing' (Dewey, 1929, p. 171; see also Thayer, 1990, pp. 444–6).

Classical pragmatism was eclipsed in the second quarter of the twentieth century by the analytic philosophy movement but revived by a ground-breaking paper from Willard van Orman Quine (1953). Thereafter the work of 'reformist' pragmatism (Haack, 1992) resumed, carried on by writers such as Quine, Wilfrid Sellars and Hilary Putnam. A revolutionary movement, neo-pragmatism, emerged, the most extreme advocate of which, until his death in 2007, was Richard Rorty. For Rorty, 'there is no truth or objectivity to be had, only solidarity, or agreement within a community, or what our peers will let us get away with saying' (Misak, 2007, p. 1).

In recent years there has been a resurgence in interest in classical pragmatism (see, e.g., Burke *et al.*, 2002a; Lachs, 2007, p. 40; Bernstein, 2010). One distinguished pragmatist has gone as far as to suggest that 'the second phase of pragmatism [i.e., neo-pragmatism] hardly adds any new conceptual strategies to classic pragmatism' (Margolis, 2006, p. 4). On this view, the works of Putnam and Rorty, the two best-known post-classical pragmatists, amount to little more than mutual critique, so that they 'tend to cancel each other out' (Gavin, 2003b, p. 5), their contribution actually being to revive interest in classical pragmatism and, specifically, the work of Dewey (Margolis, 2002), a revival recognized by, for example, Gouinlock (1999), Hickman (1999, 2004), Gavin (2003a) and Cochran (2010).

Dewey developed his epistemological ideas over many years; they were published in final form in 1938 (Sleeper, 1986; Putnam, 2010).⁵ His system rejects many orthodox metaphysical dualisms, including body and mind, matter and form, theory and practice, the analytic and the synthetic, fact and value, and knowing subject and independent object. He saw his project as the reconstruction of metaphysics to overcome the problems introduced by these false dogmas and, in keeping with this view, he called his system a 'theory of inquiry' (e.g., in the title of his 1938 work) and largely eschewed the term epistemology.

Dewey viewed commonsense and science as strongly related: scientific methods developed out of the methods of craft workers, and science has no privileged access to the real denied to other forms of inquiry. Many forms of inquiry, though unable to employ scientific methods in their full rigour, nonetheless benefit from adopting a 'scientific attitude' (Boisvert, 1999, p. 49), characterized by openness to experience; creative thinking; controlled, structured experimentation; communal working; self-correction by trial and error; and the treatment of conclusions as tentative.

It is sometimes suggested that, because of its focus on 'what works', and on Darwinian evolution, pragmatism is essentially conservative. This was not Dewey's view of his philosophy, which he regarded as having an important contribution to make to social and political analysis, criticism and reform (Sleeper, 1986, chapter 8; Haack, 2006, pp. 38–9). As Wells, a noted legal pragmatist, puts it: 'the hallmark of a pragmatic method is its continual re-evaluation of practices in the light of the norms that govern them and of the norms in the light of the practices they generate' (1992, p. 331). Dewey specifically regarded the process of inquiry, as he characterized it, as having the potential to be 'ameliorative' (Cochran, 2010, p. 5).

Dewey considered that 'it lies in the nature of pragmatism that it should be applied as widely as possible' (1916, p. 307). Many features of classical, and specifically Deweyan, pragmatism make it particularly suitable for the purpose of analysing financial reporting's epistemological status, and, with it, the epistemological status of classical financial accounting research. Among these are its view of knowledge as emerging as agents grapple with the practical world of experience; its concern with knowing specific things in particular ways; its commitment to reform; its contention that 'the methods of science are continuous with methods of inquiry in everyday life' (Putnam, 2010, p. 34); and its capacity to bridge inquiry in the natural and social worlds (Cochran, 2010, pp. 4–5).

DEWEY'S THEORY OF INQUIRY

According to Dewey (1938), the acquisition of knowledge begins when a human being, acting as a biological organism, and functioning within existential circumstances perceived in qualitative (hence indeterminate) terms, encounters a problem.

⁵ For more extensive summaries of Dewey's ideas in this area, see Boisvert (1999), Burke (1994, chapters 4–5), Burke *et al.* (2002a) and Sleeper (1986, chapter 3).

Knowledge is the outcome of inquiry, which is 'the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole' (pp. 104–5, emphasis omitted). In response to the problem, two kinds of operation are undertaken: (a) existential operations, guided by habit and familiarity and proceeding by observation, establish the terms of the problem; and (b) conceptual operations, which represent 'anticipated consequences (forecasts) of what will happen when certain operations are executed under and with respect to observed conditions' (p. 109).

Although functionally different, observations and ideas 'develop in correspondence with each other' (Dewey, 1938, p. 109) because they are both operational. Conceptual operations direct further observations and 'organize all the selected facts into a coherent whole' (p. 113). Observations are not self-sufficient but designed to structure the problem in a meaningful way and test potential solutions. Knowledge acquisition is thus cyclical rather than an arc—another traditional dualism, stimulus and response, is replaced by a continuous process.

Repeated perceptual experience of a particular quality or trait enables patterns to be recognized. From these emerge what Dewey calls kinds, radically reconstructing traditional views: 'the idea of class membership is superseded by the idea that belonging to a kind renders each member a representative instance, or specimen, of the designated kind' (Sleeper, 1986, p. 147). In 'functional correspondence' (Dewey, 1938, p. 280) to the establishment of kinds, conceptual operations work to define categories which are indeed universal and abstracted from the existential world, but which derive their validity as 'instrumental intermediar[ies]' (p. 277) in the pursuit of knowledge.

Claims to knowledge are to be judged by 'their pertinency and efficacy in "satisfying" conditions that are rigorously set by the problem they are employed to resolve' (Dewey, 1941, pp. 182–3). So long as there is stability in a region of knowledge, habits and familiarities will lead to actions with results that are perceived as unproblematic, and theories will generate equally unproblematic propositions. Perception (observation) is thus successful to the extent that the perceptual cycle is stable and coherent; reflection (conceptualization) is successful to the extent that the reflective cycle is stable, coherent and in comportment with perceptual experience (Burke, 1994, pp. 158–64). Because of the nature of the process that generates it, all knowledge is tentative—for this reason, Dewey preferred to talk of 'warranted assertibility' (1938, p. 7) rather than truth.

In the pragmatist world, observation is inevitably laden with theory and theories are inescapably interconnected. As a consequence, 'our statements about the external world face the tribunal of sense experience not individually but only as a corporate body' (Quine, 1953, p. 41). Thus, 'the totality of our so-called knowledge or beliefs, from the most casual matters of geography and history to the profoundest laws of atomic physics or even of pure mathematics and logic, is a man-made fabric which impinges on experience only along the edges' (p. 42). In the face of recalcitrant experience, we can go beyond revision of any of the hypotheses under test to reject the statement of initial conditions, reject or reinterpret observations, or

question the principles of logic and mathematics involved.⁶ Quine proposes a principle of conservatism according to which we would retain those hypotheses which clash least with the rest of our body of knowledge and tinker with mathematics and logic last (Orenstein, 2002, pp. 82–4). In such a world, 'meanings of sentences are interdependent, so that what one means depends upon the meanings of others, and can be changed by a change elsewhere' (Dancy, 1985, p. 94).

A PRAGMATIST PERSPECTIVE OF FINANCIAL REPORTING

The problem situation of modern financial reporting can be characterized in terms of the separation of stakeholders and stewards that results from the scale and complexity of organizational activity (Bird, 1973, chapters 1-2). Contemporary reporting for profit-seeking entities within developed, market-based economies focuses largely on investors' decision-making needs and it follows that its problem is to contribute to optimal security investment decisions (and, possibly, optimal governance and strategic interventions), measured by their impact on investors' wealth. But resolving the problem situation involves extremely serious difficulties for the discipline. These revolve around the challenge of determining the relationship between satisfying investors' needs and the means available for so doing, namely the procedures by which accounting numbers are generated. Financial accounting is circumscribed—both in the definition of what *constitutes* the discipline and in its quotidian activity—in such a way that it terminates with the reporting of accounting numbers and thus without access to events that indicate their pertinency and efficacy in resolving the problem situation. Unlike engineers, who are able to observe if the bridges they have designed survive the weight of traffic, financial accountants rarely discover whether their accounting policy choices have optimized the wealth of investors.⁷ It is, of course, open in principle to accountants to conduct ad hoc empirical investigations but the linkages between reported accounting numbers, investor decisions and investor wealth are largely unobservable, highly complex and far from fully understood (Holthausen and Watts, 2001).

As a result, accountants must work with a truncated testing routine, resorting to indirect—often highly indirect—methods of determining the pertinency and efficacy of their knowledge. Their methods include: (a) employing users' (or proxy users') satisfaction as a proxy for the desired qualities, whether obtained systematically (e.g., by survey) or casually (e.g., during discussions with analysts), or inferred from investors' silence; (b) employing proxy measures of the resolution of the problem (e.g., security prices as a measure of long-term effects on investors' wealth); and (c) producing simplified models of the process employing limited data or 'quasi data' such as accountants' beliefs about how investors behave.

⁶ Orenstein (2002, p. 84) provides examples of possible revisions in mathematics and logic argued to follow from natural scientific observations.

⁷ In particularly egregious cases it may well become apparent that accounting policy choices have reduced investor wealth very substantially.

Faced with such severe difficulties, the temptation is to redefine the task as something more easily achievable. Practitioners may take the function of accounting to be the production of whatever numbers emerge from its procedures (Marley and Stamp, 1970, pp. 76–7). Academics may resort to the application of rigorous methodologies to whatever data are susceptible to study by those methodologies regardless of the value of the findings (which its critics would argue is the basis underlying market-based accounting research: Whitley, 1988; Williams, 2003) or to celebrating incoherence by embracing postmodernism.

But, armed with a pragmatist perspective, we can tackle the difficulties inherent in financial reporting's problem situation. This perspective reminds us that, in so doing, a scientific attitude, necessarily falling short of the strict application of generally specified scientific methods, can suffice, and that the best that can be done is legitimately to be regarded as good enough. The best that can be done is to be recognized (employing Burke's depiction of Deweyan inquiry, described earlier) in terms of the stability and coherence of the perceptual and reflective cycles and the comportment between them. The success of contemporary financial reporting practice, noted in the introduction, argues that the system broadly meets this test.

A crucial feature of classical financial accounting research, to be contrasted with most post-classical programmes, is its continuity with accounting practice (Most, 1982, chapter 3; Zeff, 1989; Sterling, 1990). The classical programme's acceptance, as its starting point, of the problem situation of financial reporting, and of the broad approaches and methods of financial reporting as practised, means that it shares the objects of knowledge of financial reporting—assets, liabilities, revenues, expenses and so on.⁸ This is what makes classical accounting research directly relevant to financial reporting practice and Dewey shows us that, provided it is conducted appropriately (e.g., applying a scientific attitude), it is legitimately to be regarded as the pursuit and acquisition of knowledge.

The pragmatist perspective offers an underpinning for the classical analysis of the objects, kinds and categories that come about from the directed operations of financial reporting in response to the tensions manifest within the accounting field. This analysis encompasses the evolution and current architecture of financial statements, including:

- 1. How the commercial, economic, social and legal events impinging on the field of financial accounting come to be transformed into objects of financial reporting knowledge. For example, how some resources become assets while others do not and how various instances of obligation become receivables or payables without there necessarily being a legal claim.
- 2. The shifts in appreciation of generic traits and conjugate ideational operations by which objects come to be grouped under such captions as inventory, finance expenses and current assets.

⁸ Post-classical programmes have objects of knowledge, of course, but they are generally accountants, their behaviour and their outputs (that is, accounting numbers as such), rather than the objects of knowledge of accountancy.

- 3. Why and how accounting's objects of knowledge are, from time to time, reconstructed; for example, the reconstitution of certain debit balances under construction contracts from inventory to debtors (Rutherford, 2007a, pp. 282–5) and of revenue and liabilities under customer loyalty schemes (Cairns, 2007).
- 4. The interdependence and interpenetration of accounting meanings, which is particularly visible because of the articulation of the financial statements. For example, how the meaning of goodwill is affected by the meanings of 'asset', 'intangible' and 'separable intangible'.⁹

On Dewey's view of the potential contribution of his pragmatism to social critique, discussed earlier, a pragmatist underpinning supports a normative as well as a descriptive approach to the analysis of financial reporting, so long as the normative stance is linked to the resolution of its problem situation.

Radical academic critique of the conceptual framework project stresses the socially constructed nature of the financial accounting world and the consequent scope for political manoeuvring (see, e.g., Tinker, 1991). Hines (1991, p. 322) criticizes the framework adopted by the U.S. Financial Accounting Standards Board as a 'web of circularity' because its concepts depend on other concepts which are not comprehensively defined, and because, 'whilst intended to be prescriptive, it is largely descriptive' (p. 327). Hines actually calls for academics to avoid assisting the project but a mainstream pragmatist perspective offers a different view of the project itself and of the possibilities of academic input to it, while accommodating the socially constructed nature of the financial accounting world. The framework's fundamental emphasis on useful information parallels pragmatism's focus on the resolution of tension in the problem situation, while relevance and faithful representation can be read in terms of the pursuit of warranted assertibility, relevance being an issue here because assertibility is tested in the context of the problem situation. For mainstream pragmatists, a scientific attitude becomes socially useful; attempts at reform building on a past trajectory of practice which—considered in the large—has been successful are legitimate; the holistic, interpenetrating, nature of the system becomes not a sign of weak or devious thinking but an inescapable characteristic of knowledge; and the status of any conceptual framework as a 'work in progress' is understood. Consequently, the academic wing of the financial accounting community can make its contribution to the work without shame.

AN ILLUSTRATION: THE CONCEPTUALIZATION OF ASSETS

This section sketches out how the evolution of accounting's conceptualization of assets can be characterized as the Deweyan pursuit of knowledge. Its purpose is not to demonstrate that those involved understood their undertaking in these terms;

⁹ On a Quinean analysis, presented with an anomalous finding, the web of knowledge can be preserved by an adjustment at a number of different points. For example, if goodwill is determined not to be an asset, the apparently anomalous effect of large write-offs in the absence of evident loss of value may be avoided by redefining separable intangibles so that hitherto unrecognized items such as mastheads and customer lists can be recognized (Rutherford, 2007a, p. 265).

indeed, at the core of Dewey's model are parallel moves which do not represent separate cognitive processes that an individual could be aware of themselves conducting in isolation one from the other, namely the functionally interdependent cycles of existential awareness and conceptual model-building. Rather, the purpose is to show how a Deweyan perspective can underpin accounting theorization and justify it as the rigorous and systematic acquisition of knowledge.

We can pick up developments early in the nineteenth century after a long period of relative stability (Littleton, 1933, p. 156). Ownership of enterprises is largely proprietorial, that is, contributors of risk capital are closely connected to the management of the business. Bookkeeping has moved on from its medieval form to incorporate nominal accounts, initially as by-products of a double-entry method driven by rules of thumb, then schematized in various forms of 'personification' and now as elements in a systematic model of the proprietor's business, with assets representing an inventory of proprietor's properties (or resources). There is a careful demarcation between assets and expenses, because the latter have ceased to represent properties of the proprietor, but little effort is made to distinguish different types of expense, or to separate expenses, losses and taxes, because all represent changes in proprietor's capital. These developments took place unevenly through time and geographically but, overall, a remarkably consistent pattern can be discerned in the U.K., the U.S.A. and continental Europe (Littleton, 1933, p. 183).

Thus a problem situation, owners' need to track and manage their commercial capital, experienced in qualitative terms as streams of various resources into and out of the enterprise, has been transformed into a settled and coherent whole by existential and conceptual operations. The former established by perceptual experience the relevant qualities and traits-the commercial character-of individual items of resource encountered in day to day activities: for example the durability of machinery versus the transitory nature of labour as opportunities for exploitation. The latter, in cyclical interaction with the former, resulted in the construction of a model of resource-exploiting and wealth-building activity that recognizes certain patterns among the individual items of resource to yield, among other things, categories such as assets, which are now conceptualized as proprietor's properties, and expenses. In very broad terms, these conceptual operations make use of forecasts of the consequences of actions, in this case, whether the exploitation of a resource in a given period will or will not leave a property for further exploitation in future periods. Knowledge has emerged in the form of a warrant for asserting that items identifiable as assets possess characteristics such as being available for exploitation by, and contributing to the wealth of, a proprietor. The perceptual cycle, the observation of items in the day to day world, is stable because items behave in accordance with expectations guided by habit, for example, items recognized as assets do indeed remain available for exploitation over time; the reflective cycle is stable because, for example, the model's distinction between assets and expenses is consistent with other features such as the determination of proprietor's wealth. Further, the contents of reflection are in comportment with perceptions of the properties of items actually encountered: for example, the characteristics of items perceived as resource

inflows do indeed enable them to be classified as assets or expenses but not as neither or both.

The stability of the knowledge embodied in proprietorship accounting was upset by a change in financial reporting's problem situation resulting from increasing separation of ownership and control, and hence investors' need for information to take investment decisions, as described earlier. The conceptualization of assets as proprietor's properties was undermined by factors such as: (a) the general move to incorporation, which reinforced the view of the (incorporated) entity as separate from its shareholders and as the owner of the assets (and equities) of the business, so that the investor's asset is an aliquot share of the incorporated entity and he or she does not own any individual business asset; (b) the large number of investors and the frequency with which any group of investors changed composition, making it implausible to link individual assets to individual investors; (c) the remoteness of investors from assets, making it implausible that investors would be able to grasp the available opportunities for exploitation, either cognitively or economically; and (d) the claims of other parties, such as creditors and preference shareholders, on assets viewed as items of wealth. Rather, investors need to understand resources as contributing to an entity's (and its managers') performance and potential. Those resources are owned by the entity itself and their physical existence and legal status are no longer the existential qualities directly relevant to the problem: 'a brick wall is nothing but mud on edge if its capacity to render economic service has disappeared' (Paton, 1968, p. 143).

The disturbance to the pertinency and efficacy of knowledge about assets as proprietor's property is resolved (for some) by a reconceptualization in terms of service potential held by the business. Thus existential operations establish by perceptual experience qualities of resources relevant to their capacity to contribute to future revenue-earning activities while conceptual operations, as always in cyclical interaction with the former, build a model in terms of service potential. As before, these conceptual operations make use of forecasts of the consequences of actions, in this case, whether a resource available at a given point in time will contribute to future revenue.

The conceptualization of assets as service potential is part of a wider model of financial reporting generally known as entity theory. Although the development of this approach is often credited to William Paton (1922), for example by Chatfield (1977, p. 224), numerous antecedent expository works dating back over many years can be identified in the U.S.A. and Europe (Littleton, 1933, pp. 193–203) and Paton certainly saw himself as bringing the exposition of accounting up to date with practice rather than inventing a new system (Paton, 1922, p. xiii; Edwards, 1989, p. 73).¹⁰ Hence it is reasonable to see the reconceptualization of assets, and entity theory generally, as emerging from existential engagements with the problem situation resulting from the modern corporate form.

¹⁰ Other scholarly writers addressing the issue included Irving Fisher and his student John Canning (see, e.g., Canning, 1929).

PRAGMATISM AND THE WRITINGS OF CLASSICAL THEORISTS

None of the writers generally offered as exemplars of classical theorizing (American Accounting Association, 1977; Beattie, 2002; Riahi-Belkaoui, 2004) explicitly espoused a pragmatist epistemology, but then classical theorists, at any rate prior to the 'golden age' (Nelson, 1973, p. 4), said little about philosophical issues (Deinzer, 1965, p. 41; Gaffikin, 1987). They were, after all, at an early stage in theorizing about the subject and many were trying to appeal to practitioners (American Accounting Association, 1977, p. 29), so that they would have been reluctant to offer very much argumentation that this audience might find abstruse.

Deinzer's 1965 study aid for courses in accounting theory did employ an explicitly Deweyan approach (see especially pp. v and 156) and found indications of pragmatism in the writings of a number of classical theorists. He viewed Paton's Accounting Theory (1922) particularly favourably (Devine, 1966, p. 190)—recall that this is the work generally credited with documenting the move to entity theory. Deinzer also concluded that criteria for standards developed by Paton and A.C. Littleton in their 1940 monograph are partially consistent with Deweyan principles (1965, p. 86). Devine's review of Deinzer (1966, p. 189) suggests that pragmatist themes can be found, too, in Littleton's Structure of Accounting Theory (1953). Littleton was certainly aware of pragmatism (1953, pp. 132, 137-8) and pragmatist themes in the work include his view that 'accounting theory ... is simply thinking that is focused upon doing' (p. 132); a distinctly Deweyan account of Darwin's thought (p. 137); the belief that 'accountants, if they will, can consciously adopt attitudes like those cultivated by scientists' (p. 150); the important role he ascribes to trial and error in the emergence of accounting practices (e.g., p. 185); his view of experience as closely related to experimentation, so that 'both ... result in an accumulation of knowledge' (p. 185); and the emphasis he gives to means-consequences (e.g., pp. 150, 208). Littleton (1962), in turn, argued that Maurice Moonitz's The Basic Postulates of Accounting (1961) contains pragmatist elements.

One important feature of the writings of many classical theorists that is consonant with a pragmatist approach is the way in which a problem situation is taken to be central to the pursuit of knowledge. Paton's 1922 study held that 'it is the function of accounting to ... present value data in such a fashion that the owners and their representatives may utilize wisely the capital at their disposal' (p. 7), coming close to the view of financial reporting's problem situation set out earlier. Paton is typically classified as a normative-deductivist or true income theorist (e.g., by Riahi-Belkaoui, 2004) yet he appears to regard income as information for decision-making rather than a Platonic ideal. Edwards and Bell (1961), again generally regarded as true income theorists, also saw income as information for decision-making (American Accounting Association, 1977, p. 7). The decision modelling school, as its name implies, gave explicit attention to decision needs and one leading member of the school, Robert Sterling, actually includes in the development of his theory consideration of 'the problematic situation' (Sterling, 1970, section heading, p. 132).

Though less explicit than deductivists, some inductivists did discuss a problem situation similar to that outlined in this paper: see, for example, Hatfield (1927,

p. 381). Paton and Littleton (1940) were explicit about the users of financial statements (pp. 1–2), but less clear about their information needs. They did, however, point to the importance of accountancy contributing to social welfare by enabling capital to flow to those enterprises most efficiently serving the public interest, as reflected in rate of return (p. 3), so that it would be reasonable to infer that the purpose of financial reporting is to enable investors to take the decisions that will result in this end. Littleton (1953) argues that 'it is an economic purpose of accounting . . . to produce data helpful to business management and investors' (p. 12) and goes on to suggest that this help comes in providing 'clues' to identifying good and bad operating policies (p. 12), which would, presumably, result in higher returns.

The pragmatist conception of objects of knowledge as socially constructed, but constrained to refer to existential conditions by their efficacy in resolving the problem situation that brings them about, provides an underpinning for classical accounting inductivism. One prominent inductivist, Ijiri (1975), clearly viewed accounting knowledge as socially constructed (Archer, 1998, p. 303) and inductivists certainly aimed to describe practices that were the outcomes of consensus among practitioners and not the idiosyncratic views of individuals.

The American Accounting Association's (1977) survey drew attention to inductivists' willingness to 'interpose occasional normative deductive reasoning' (p. 6) and to the fundamentally normative-deductive position of writers who held that the practices from which they had inferred goals of financial reporting were to be valued on the grounds of their meeting those goals (pp. 9–10). This combination of inductive and deductive reasoning is of particular relevance because one feature of Dewey's theory of inquiry is that, among the dualisms he rejects, is induction versus deduction (Dewey, 1938, p. 432; see also Deinzer, 1965, pp. 50–1; Sleeper, 1986, p. 25). His theory 'incorporates and assimilates inductive and abductive inference as conjoint complements of deductive inference' (Burke et al., 2002b, p. xvii);¹¹ induction is employed in the perceptual phase of inquiry to organize 'existential material so that it has convincing weight' (Dewey, 1938, p. 432) while deduction is employed in the reflective phase. Neither yields knowledge in itself: what is needed is the two modes operating in 'functional correspondence' (Dewey, 1938, p. 432). Thus, so far from constituting a confused admixture of induction and deduction, the work of some of the classical theorists, and particularly Littleton, can be seen as following this Deweyan synthesis.

Three contributions to the scholarly literature of the 1960s (Dopuch, 1962; Deinzer, 1966; Beams, 1969) explicitly or implicitly advocated the use of pragmatist thinking but none described its application in detail. C.T. Devine regarded pragmatism as one of his 'foundation beliefs' (Williams, 2001, p. 695), though his writings range over a variety of theoretical perspectives and, indeed, he characterized himself as 'a bit of a grasshopper' (quoted in Williams, 2001, p. 694). His review of Deinzer (Devine, 1966), already referred to, included an extensive addendum commenting on

¹¹ The term abduction or abductive inference is used in pragmatism (and elsewhere) to refer to the process of hypothesis formation.

Dewey's theory of inquiry and an essay appearing in 1985¹² discussed a number of aspects of pragmatism taken up in this paper, including the problem situation (p. 56), Dewey's 'two interlocking roads: the factual and the ideational' (p. 56), the role of objectives (p. 57), warranted assertibility (p. 58) and the way in which classes are formed (p. 60). Neither of these sources links pragmatism directly to specific work in developing financial accounting theory.

An illuminating example of the difficulty of locating the epistemological position of classical theorists can be observed in the work of R.J. Chambers, one of classicism's most significant methodologists (Gaffikin, 1988). Deinzer (1965) includes Chambers in a list of 'accounting writers who have emphasized deductive systems' (p. 45) and implies, albeit in the form of a discussion question, that 'Chambers assume[s] that data are "given" in experience, and that the basic problem . . . is in selecting the right beginning data' (pp. 63–4), making him a positivist. Gaffikin (1988) argues that Chambers' writings make it 'increasingly clear that the formal methodology to which he was alluding was hypothetico-deductivism' (p. 18).

But let us consider what Chambers actually wrote. His most famous contribution to the methodological literature (Gaffikin, 1988), the 'Blueprint' article (1955), argued that an accounting theory should proceed 'upon the same basis substantially as any other theory; that is, by building up a series of relevant propositions from a few fundamental assumptions or axioms' (p. 19). It went on to say that, 'it is ... one of the greatest pleasures of the theorist to put his hypothesis to the test of reality ... This process of checking back is of the nature of scientific method. It is followed to secure that no unreal or unjustifiable assumptions lie beneath the argument' (p. 19). Now this description is certainly consistent with positivist hypothetico-deductivism. But it can also be consistent with Deweyan pragmatism, provided that the deductive modelling is seen as part of the reflective phase of the pursuit of knowledge and not as complete in itself.

Thus, the issue is, how did Chambers see 'the test of reality'? In a later paper he returned to this question, this time putting the point in rather different terms: 'that a conclusion has been reached by careful argument from antecedent propositions (axiomatic or derived) is not enough; it must be tested by reference to the phenomena represented by the concepts it requires' (1960, p. 38). Further, he suggested what would be involved in the testing:¹³

the proposition that 'cost is the proper basis for accounting for fixed assets,' must not only be shown to follow from antecedent propositions; it must also face the test of practice ... Every deviation from the cost basis, every expression of business opinion in criticism of that basis, every practice which serves to make good deficiencies of the cost basis, provides a test; and the test is not at the level of expert practice, but at the level of business operation. What is sought is not evidence of agreement on a formula by experts, but evidence of disagreement between the proposition and the real events and relationships its adoption is expected to influence. (Chambers, 1960, p. 38)

¹² Many of his writings were widely circulated well before they appeared in print (Williams, 2001).

¹³ Chambers returned to this issue in his book *Securities and Obscurities* (1973a), in an article about the book (1973b), and in a reply to a review of the book (1974).

In these passages we can discern a distinctly pragmatist flavour: phenomena are represented by concepts given by theories (rather than existing independently of them) and the testing of a proposition is to be a practical, operational activity carried out in the context of resolving the problems facing business people. Without by any means claiming him for a full-blown Deweyan, when Chambers says such things as 'every practice which serves to make good deficiencies in the cost basis . . . provides a test', we might even regard him as coming close to acknowledging the possibility that the observations emerging from existential operations are 'not self sufficient and complete in themselves' but rather 'selected and described . . . for a purpose' (Dewey, 1938, p. 113).

When he came to formulate the accounting theory for which he is famous, Chambers (1966) continued to work within a broad framework consonant with pragmatism, for example regarding inquiry as springing from confrontation by a problem (pp. 8 and 20, quoting Dewey at p. 20, note 1); accepting that the interpretation of objects and events depends on experience (p. 23, quoting Pierce at note 6); and, above all, giving primacy in his system to the satisfaction of ends (chapter 2). However, in designing the specifics of his system, Chambers confined himself to deductive modelling and sought to address a highly generalized problem situation, namely financial decision-making in the large, thereby disregarding the difference between particular problem situations relating, on the one hand, to an investor's investment in a proportion of a continuing business and, on the other, to management's investments in specific projects (Whittington, 1983, p. 125; see also the debate between Demski, 1973, and Chambers, 1976). Although he could defend his system on the grounds that the information produced was independent of the particular preferences of individual users, and would be of some relevance to external investors (Chambers, 1966, pp. 154-6; 1976), its limited relevance to this category of user severely weakened it (Tweedie and Whittington, 1984, pp. 55-6, 191).

Another 'golden age' theorist whose epistemological position is more elusive than it first appears is Sterling, whose key work (1970) apparently embraces 'scientific realism' (p. 42). Now, 'traditionally, scientific realism asserts that the objects of scientific knowledge exist independently of scientists and that scientific theories are true of that objective (mind-independent) world' (Fine, 2005, p. 950), and we must assume that Sterling regarded accountants as akin to scientists. But he emphasizes that scientific realism is merely an assumption (1970, p. 42), concedes that it 'requires qualification in contemporary science' (p. 42), and goes on to explain that another assumption he is making is that truth is found in agreement among qualified observers (p. 44). Since one condition of being held to be qualified is that an observer has the '*right* thinking cap, or as some say, the *right* preformed theoretical construct' (p. 44, note 6, emphasis supplied); and since 'the way we judge right from wrong thinking caps is by agreement among "qualified" observers' (p. 44, note 6), it turns out to be the case that 'one requirement for qualifying as an astronomer is to hold a heliocentric view. Yet holding that view affects the perceptions that we are trying to judge' (p. 44, note 6). Such a nuanced view has something in common with pragmatism, depending on when and how 'thinking caps' are considered to be acquired-not a matter on which Sterling comments.

Sterling goes on to explain that 'the reasoning process in the organism is set up to handle problematic situations as they occur' (1970, p. 47) and appears agnostic as to both the relationship between concepts and observations (pp. 48–9) and the detailed nature and function of theory construction, citing sources for pragmatism among other schools (p. 49, note 7). His epistemological position appears broadly consistent with pragmatism and the centrality he gives to modelling decisions (as a form of problem-solving) in the acquisition of knowledge underlines this.

Richard Mattessich, who began work in 'the golden age', has devoted a great deal of effort to the construction of a highly elaborated epistemological model of accounting as an applied science (for a summary, see Mattessich, 1995). His epistemology differs from Dewey's, for example in taking accounting and other applied sciences to be epistemologically discontinuous with pure science, although the difference here reflects his view of pure rather than applied science.¹⁴ However, in its fundamentals Mattessich's model is consonant with pragmatism since it includes, at its core, an insistence that, as an applied science, accounting should be concerned with objectives and appropriate means-ends relations (Mattessich, 1995, chapter 11), accepts the interpenetration of facts and values (p. 190; see Putnam, 1995, p. 57), and recognizes that the accounting world embraces a socially constructed reality (chapter 3).

Most golden age theorists are now thought of as having been concerned mainly with the advocacy of some form of accounting for changing prices, and thus, viewed from the perspective of the last 30 years of relatively modest inflation, as having failed in their prescriptions for reform. Their efforts to respond to a problem situation requiring information for decision-making in the face of unstable prices did in fact contribute significantly to practitioners' (e.g., standard-setters') efforts to resolve the problem, as noted in the introduction. The demise of current cost accounting can be attributed to a further change in the problem situation, namely the re-emergence of relative price stability (Tweedie and Whittington, 1997).¹⁵ In any event, other aspects of golden age theorization, such as more careful and systematic exposition of user needs and other aspects of the problem situation, influenced emerging practices in other areas and especially the conceptual framework project, another contribution from classical theorizing noted in the introduction.

Since the 1960s, few researchers have shown much interest in pragmatist thinking. Merino has advocated pragmatism as one of a diversity of approaches contributing

¹⁴ Mattessich also stands outside mainstream classical financial accounting research in that he considers his work demonstrates the need for a radical and comprehensive reconstruction of accounting (1995, pp. 207–9), a position consistent with his belief that contemporary accounting is in a state of profound crisis (1995, pp. 3–10, 211) but not with the evidence cited in the introduction.

¹⁵ Even modest levels of inflation undermine the reliability of pure historical cost over time but the immediate impact of price changes, and thus the urgency of reform, is substantially lower when prices are rising only slowly. The introduction of current cost accounting was made more difficult by resistance from preparers, a phenomenon consistent with Dewey's view of knowledge as a social endeavour and a strategy more likely to succeed when inflation is modest. It is sometimes suggested that a further hurdle was governments' disinclination to adopt the system for tax purposes. If so, this impediment was scarcely the fault of the golden age theorists, but in any event it has been argued elsewhere that the issue is something of a red herring (Rutherford, 2007b).

to a 'new history' of accounting (Merino and Mayper, 1993; Merino, 1998) and has used pragmatist social, psychological and ethical theories, including those of Dewey, in studies of the development of proprietary theory (1993) and the 1930s reform of securities legislation in the U.S.A. (Merino and Mayper, 2001). In so doing she somewhat distorts Dewey's opinions on accountancy. She claims that 'pragmatists depicted accounting as a technique that created incentives for business to engage in socially dysfunctional behaviour' (Merino, 1993, p. 175), supporting her claim with references to a work by Dewey which is actually critiquing Benthamite utilitarianism by using accountancy *as an analogy* for utilitarianism (Dewey, 1922, pp. 213–14). In the work, Dewey actually says of accountancy,

that the device of money accounting makes possible more exact estimates of the consequences of many acts than is otherwise possible, and that accordingly the use of money and accounting may work a triumph for the application of intelligence in daily affairs. (p. 214)

Alexander and Archer (2003) employ Putnam's formulation of pragmatism, among a number of ideas, to analyse the relationship between a meta-rule such as representational faithfulness and lower order accounting rules but are not concerned with the development of lower order rules as such.

CONCLUSION

This paper offers an epistemologically robust underpinning for the approaches and methods of classical financial accounting research, derived from mainstream philosophical pragmatism. This shows that the classical programme is legitimately to be considered as pursuing and acquiring valid knowledge and rescues it from charges of empirically uninformed normativity. It is not suggested that classical theorists embraced an explicitly or comprehensively pragmatist position but it is not necessary for the successful pursuit of knowledge that those who seek it be aware of epistemological considerations. As it happens, significant elements of pragmatist thinking can be identified among many classical theorists and this strengthens the claims of the programme.

Within a pragmatist orientation, the concepts, categories, distinctions and relations embodied in accounting practice are to be evaluated in terms of the functional fitness of observation and ideas in resolving the stress in financial reporting's problem situation, that is, the stability and coherence of the perceptual and reflective cycles involved in addressing the problem situation and the comportment between them. This orientation encourages us to work from the point to which the evolution of financial reporting has brought us so far and to see theory and existential operations as developing together in correspondence with each other.

In the face of limited progress towards the development of operational recommendations for reform by the advanced social scientific methods of post-classical programmes, pragmatism argues that the traditional research tools of classical theory represent (at least currently) the best that can be done to contribute to the resolution of financial reporting's problem situation, always provided that they are applied with a scientific attitude.

The motivation for this paper has been to facilitate a revivification of the classical programme: to allow classical financial accounting research to be re-established as one of the core programmes within the scholarly community, thereby enabling academics to re-engage with the practical problems of contemporary financial reporting from an epistemologically robust platform. There is no suggestion that post-classical programmes lack validity in their own terms or that they should be abandoned; indeed, in the same way that some have suggested that pragmatist philosophy can bridge continental and analytic philosophy (Margolis, 2006, p. 5), it may be that it can offer a bridge between classical and post-classical accounting research.

In its day, the classical programme had its successes, for example in contributing to various conceptual framework projects and to the development of current cost accounting in both private and public sectors (and achieving long-term change in accounting for infrastructure in the public sector). Ironically, standard-setting is increasingly driven by the content of conceptual frameworks and is thus influenced by the theorization embodied therein (see, e.g., International Accounting Standards Board, 2005), but with little input from the scholarly community. I do not claim that a revival in classical research is guaranteed to enable the academic community to offer major improvements in financial reporting. I do, however, suggest that, in the light of the limited success of post-classical programmes in this direction, and the ensuing gulf between academia and practice, it is certainly worth reviving the classical programme.

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