

ENGAGEMENT, EDUCATION AND SUSTAINABILITY

A REVIEW ESSAY ON ENVIRONMENTAL ACCOUNTING

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Environmental accounting (EA)[1] research has emerged over the last 20 years as a distinct thread of academic research within the broader area of social accounting (see, e.g. AAA, 1975; Belkaoui, 1984; Dierkes and Preston, 1977; Estes, 1976; Gray, 1990; Gray, Bebbington and Walters, 1993; Gray, Owen and Adams, 1996; Gray, Owen and Maunders, 1987; Guthrie and Parker, 1989a, 1989b; Johnson, 1976; Parker, 1986; Ullman, 1976). At the core of social and environmental accounting (SEA) research activity are two concerns:

- (1) There is dissatisfaction with conventional accounting practices, either in terms of the social and environmental consequences which arise from the application of accounting tools and techniques, or with the theoretical basis which underlies conventional accounting (Gray *et al.*, 1996).
- (2) SEA has been concerned with exploring and developing new forms of accounting which are more socially and environmentally benign and which have the potential to create a fairer more just society.

In this manner there is, *prima facie*, a case to be made that SEA is an enabling, empowering and emancipatory form of accounting in that it provides both a critique of existing practice and develops alternative accounting practices. This review essay seeks to explore this contention and to evaluate EA's enabling force by examining three themes:

- (1) the extent to which EA engages with and transforms practice;
- (2) the enabling potential of EA via accounting education;
- (3) sustainable development, as an emerging area of EA research (which is also linked to social accounting) in which EA's enabling ability could come to the fore.

A more detailed consideration of the meaning of the word "enable" provides the starting-point to the essay.

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The *Oxford English Dictionary* (1989) provides the following (pertinent) meanings of *enable*: to authorise, sanction, empower, to give legal power to license to... to give power to (a person), to strengthen, make adequate or proficient ... to supply with the requisite means or opportunities to an end or for an object (p. 201).

With these meanings in mind, it would seem that in order to make a case for EA being an enabling accounting, the following questions need to be addressed:

- To whom is power to be given (that is, who are we seeking to enable)?
- What is the person(s) given power to do (that is, on what end or object is EA focused)?
- How is this power to be given (that is, what means do we use to seek this goal)?

In attempting to answer these questions an explicitly normative approach is undertaken which rests on the perceived role of academics in a societal context. While the relationships between academia and society are complex, a number of accounting writers have explored possible links and, in particular, examined the relationship between accounting's research, practice and education functions. For example Lee (1989), summarizing much of the material in the area, observes that a variety of commentators have expressed concern that "research appears to exist in increasing isolation from education and practice" (p. 237) – a state of affairs that is usually viewed as being detrimental to both research and practice (Lee, 1989) and indeed, an assumption implicit in EA's desire to engage with practice. It is these relationships which constitute the subject-matter of the next two sections. The first examines the link between research and practice, while the second section looks at the research-teaching link.

Engagement

The ability of research to support the development of practice attracts comment from time to time. While most commentators argue that academics do not offer solutions which practitioners (such as standard-setting bodies) find readily useful (see Whittington, 1995 and Gray, 1996, for a reply), the thrust of the argument here is slightly different. In particular, a case is developed to support the contention that EA critically engages with practice in an attempt to transform that practice, often in directions which practice itself is reluctant to develop. It is this question of engagement which is at the core of EA as an

enabling form of research. The *Oxford English Dictionary* (1989, p. 247) indicates that to engage involves urging, exhorting, persuading and inducing people to see a particular point of view and, in doing so, to win them over as adherents to that point of view. Engaging becomes enabling when the changed point of view results in activities which are in some seen seem powering, or which reduce inequalities and injustices that presently exist.

The perceived desirability of engagement which enables is evident in the writings of the critical school [2]. For example Sikka, Willmott and Puxty (1995) speak about “critical engagement in public policy” (p. 114), and assert that “intellectuals can act as confronters of orthodoxy and agents of change” (p.115). Likewise, they explicitly state that they “believe in the capacity of intellectuals to generate alternative discourses that are capable of unsettling established “regimes of truth” in a way that can facilitate processes of change” (Sikka *et al.*, 1995, pp. 116-17). Gray (1992a) describes this work as reflecting an intellectual radicalism in that the “‘intellectual radical’ takes on a dissatisfaction with the way things are. This suggests a desire for social change” (p. 401). The radicalism of the EA project is similar to that expressed above, but differs on one important point. Engagement in the EA project seeks to engage directly with practice in an attempt to change that practice. Gray (1992a) summarizes this position when he talks of the “political radical” who recognises that his or her project is one of seeking social change and that in sight and debate— of subverting discourse – are not the only means of seeking this. Such scholars will seek various means to try and move agendas ... and ... will propose “new ways of doing” that will also shift attitudes as well as shifting practice (p.401).

Indeed, it is this distinction between *intellectual* and *political* radicals which forms the basis for the critical school’ scritique of EA and it is to the secritiques that this essay now turns (see also, Cooper, 1995; Richardson, 1987, on this point).

The critiques of EA derive from two sources [3]. First, there are those critiques that have been level led at the social accounting project and which one would expect are applicable to EA as well. Second, there are critiques which are levelled directly at EA. Further, these critiques can be distinguished from each other on the intellectual and theoretical bases they use. Critiques have emerged from a Marxist (or Marxian) perspective (e.g. Puxty, 1986; 1991; Tinker, Lehman and Neimark, 1991), a Feminist perspective (e.g. Cooper, 1992) and a deep green perspective (e.g. Maunders and Burritt, 1991). The insights from each provide different lenses through which to see and judge the enabling potential of EA, and each of them find it implausible, if not impossible, for an enabling form of EA to be developed in the manner adopted in the EA project. At the core of the concerns of the critical school (as defined in[2]) is whether environmental accountants’ engagement with

practice avoids being captured by the powerful interests with which they engage (which could be seen as being capital, masculinity/patriarchy and anthropo centricism, respectively). For example, Tinker *et al.*, (1991) question the ability of social accounting to be emancipatory because it reflects the underlying political values and anomalies of the system it purports to change. As such, social accounting practices are seen as being manipulated by a dominant ideology *in support of* that ideology. In a similar vein, Puxty (1991) cautions that to extend social reporting is itself no challenge to the powerful... since it leaves the basic structures in place, and can even lead to their legitimisation since the powerful can point to their existence as evidence of their openness in listening to criticism, it paves the way for precisely the extension of power (p.37).

Further, he claims that “legitimation can be very harmful indeed, in so far as it acts as a barrier to enlightenment and hence progress” (p. 39). Direct attacks on EA focus on slightly different grounds. For example, under the feminist critique Cooper (1992) asserts that the “introduction of ‘green accounting’, however well thought out, will, under the present phallogo centric system of accounting do nothing to avert today’s environmental crisis. In fact, it would make matters even worse” (p. 36). In a similar vein, Maunders and Burritt (1991), employing a deep green perspective, conclude that the “light green approach [to environmental accounting] is irredeemably contaminated by its hidden (ideological) assumptions” (p.12) and hence is “open to capture” (p.17) by those with “a vested interest in down-playing ecological impact”(p.12). Despite these criticisms, there are possibilities for an enabling social accounting to be developed, and one supposes that this would be the case for EA as well. For example, Puxty (1991) himself notes that “notions very similar to current social accounting *in the appropriate context*” (p. 44, emphasis in the original) may be helpful in social development. Likewise, Neimark (1992) recognizes the potential of properly organized and conducted external social audits. The key, however, is that any enabling potential derives from practices that challenge the structural elements supporting existing practice.

Two related questions become pertinent at this point. The first relates to evidence of the capture of, or enabling by, EA. The second question is conditional on the first. Given the nature of the critiques which can be brought to bear on EA, and given the evidence available to support or refute these critiques, what conclusions can be drawn concerning the enabling ability of EA? Each of these questions are dealt with in turn.

Capture by dominant groups is evident in some elements of the EA project. Debates surrounding issues such as asset valuation, liability recognition (especially the identification and measurement of contingent liabilities), and the measurement and disclosure of environmental costs and levels of environmental investment (see Gray *et al.*,

1993) take for granted a conventional accounting and business framework, and merely consider the applicability of that frame work to the special cases which arise from the environmental agenda. As a result, this part of EA does not address broader concerns nor the structure in which business and accounting practices exist. Hence EA could be seen to have been captured and restricted by this framework in that it fails to bring out other issues. Much of the management accounting-related initiatives exhibit the same characteristic. Management accounting tools and techniques developed with the natural environment in mind, for example, investment appraisal techniques including environmental criteria, budgets which explicitly recognize environmental spending requirements and altered overhead allocation procedures can make environmental elements of operations more visible. However, these initiatives focus on financial and operative imperatives rather than environment-centred considerations and as such it is difficult to see how they could be enabling in the manner suggested above. Power (1991a), develops this case further and suggests that rather than merely constituting lost opportunity, this capture of the environmental agenda poses a more serious problem. Using the example of environmental auditing, Power (1991a) suggests that it has enabling potential because it constructs, “by virtue of rendering selectively visible, relations of accountability” (p. 39). On the other hand, he recognizes that environmental auditing may also be seen “as a powerful discursive reductionism ... appropriat[ing] environmental issues and translat [ing] them into its own economic and risk based language” (p. 39), thereby robbing the environmental audit of its potential protest-driven nature. It is this tension which Power and others identify that makes EA problematic. Sikka and Willmott (1995) assert that “[a]ccounting calculations are increasingly privileged as, by default, values of humanity, justice and fairness are devalued”(p.8). By implication, they suggest that while the intention behind the expansion of conventional accounting to encompass environmental matters may be emancipatory, the very nature of accounting is such that it will capture, colonize, pacify and make routine EA practices and thus rob them of their radical intent (see also Power, 1991a). While noting this tendency, a more hopeful picture emerges in a smaller sub-set of cases.

Gray *et al.*, (1995b), reporting on a large-scale interview and questionnaire survey of organizational responses to the environmental agenda, noted a variety of reactions to that agenda. While they document reactions which are consistent with the suggestion that business (as a powerful societal group) have rejected or colonized the environmental agenda, they also note that for one group of respondents this appeared not to be the case. For this group, the environmental agenda opened up the opportunity to question “central

myths of the organization and ... [permitted] new forms of discourse both within the organization and between the organization and external participants". They suggest that, as a result, "standard business practice" could be questioned and from that the "potential for morphogenetic change" (Gray *et al.*, 1995b, pp. 227-8) exists. Further, they quote an environmental director of a multinational chemical company who clearly identified conflicts between the demands of the environmental agenda and the statusquo:

I know we are not sustainable – but what the hell do I tell my fellow directors and my shareholders? We should shut up shop? That may be the right answer but it isn't going to be accepted you know!

This reaction suggests that at an individual and personal level there is recognition of the demands for substantial change to the structure of society which the environmental agenda presents. Gray *et al.* (1995b) note that this leads to a situation where the "distinction between personal values 'inside' and 'outside' the organization becomes blurred" (p. 228). How personal recognition of this sort is translated into structural change is by no means clear. However, the seeds for change are present and this of itself would appear to be emancipatory and may offer a potential way forward.

A specific area where EA's *enabling* potential is more evident is that of environmental reporting. Environmental reporting can be argued to have had a more actively enabling role within EA primarily because it develops anew area of accountability. Evidence for the enabling ability of environmental reporting is promising. For example, Gray *et al.* (1995b) note that "it became clear ... that environmental reports were not just gateways out of the organization but also gateways into the organization" (p. 231). This suggests that the *process* of environmental reporting affects the organization which is reporting in ways which could be enabling in a broader sense. Further, they quote the managing director of a leading environmental discloser who indicates that:

We can now say, having put our head above the parapet and not had it shot off, that the importance and value of openness and transparency in the way it leads to increased understanding, better public relations and reduced antagonism, greatly outweighs the costs which owe more to industry's fears than to fears than to "reality" (p. 231).

This creates the potential for a two-way interaction between stakeholder and organization which of itself may be enabling or manipulative. Once again the critical school would be sceptical of the extent to which such an interaction could be enabling, given the different power relations between participants. While there is no doubt that the power differential is great, it is clear also that an increase in openness and the process of communicating along the channels created by environmental reporting are having a profound effect on a significant number of organizations[4]. Furthermore, it is in the context of environmental

reporting that structural changes are starting to take place. For example, it is now mandatory for certain Danish and Dutch companies to provide systematic environmental accounts of their activities (see Vedso, 1996, for an outline of the Danish law in this respect). While it is too early to know how this development will affect the standard of environmental reporting, or how it will affect company activities and their relationship with society, it does appear to be the start of structural change which the critical school supposes is a pre-condition of enabling societal changes. If one wished to change the whole societal system then legal requirements for environmental reporting may seem trivial, but it could be seen to be a step on the way to more fundamental change. However, the critical school's concerns remain alive in that environmental reporting has yet to systematically question the basis of organizational operations.

In summary, it would appear that the critical school has considerable, but not total, support from an examination of EA activities (a consideration of accounting for sustainable development is given later). There does appear to be capture and, hence, one could be doubtful about the extent to which EA is or can be enabling. However, capture is not total and, in particular, environmental reporting (in the "right" context) has the potential to change power relationships in a constructive manner which could, tentatively and in time, create the conditions for a dialogue on other areas of change. This does, however, leave us with the problem of the enabling ability of the "mainstream" of the EA project in the light of the relevance of the critical school's concerns. From an intellectual and theoretical perspective the school's critiques are persuasive and fatal to these elements of EA and raise very difficult questions for the EA project.

The resolution of these tensions can be found by returning to Sikka *et al.*, (1995) and to Gray (1992a) with regard to the ideas they develop concerning the "political radical" (see also Gray(1992b) and Willmott, Puxty and Sikka (1993), for some of the debate concerning the possibilities of such a role). For many EA researchers the choice to continue to engage in the face of the critiques offered is one that rests on personal conviction and political choice, which in itself defies rational support. Further, while the critiques of EA are persuasive they offer, in the main, no suggestions of how to overcome the problems they identify. As such, they are disruptive (and hence could be enabling in that sense) but do not engage with the EA literature to offer advice and suggestions which would be enabling in a practical sense to researchers in the area – indeed, it may well be inappropriate for them to do so. However, some synergy may be created if the critical school's arguments are developed in conjunction with the EA project. It would be fair to say that the EA project could not be as successful as it has proven to be in engaging with practice were it not for the presence of the critical school. In particular, the critical school increasingly provides an intellectual standard against which to evaluate the extent to

which capture and legitimation may be happening, and hence what is the appropriate response to this in an attempt to keep the radical potential of EA alive (see Gray, 1992a; Gray, Kouhy and Lavers, 1995a). Further, it is plausible to suggest that the ideas emanating from the critical school have reached a wider audience than they would otherwise have because they have been used within EA research activities. EA could be seen as resting in an area between conventional accounting practice (with which it engages in an attempt to change) and the critical school (from which it draws its theoretical ideas), thus enabling an interplay of ideas between the two groups. If critical accountants and conventional accountants have difficulties engaging directly with each other (for an example of this see Solomons, 1991a, 1991b; Tinker, 1991), then EA could provide a sphere of debate within which this could happen. Academically and politically, this would appear to be an enabling mechanism.

Clearly, the jury is out on the enabling potential of EA which allegedly arises from its engagement with practice. There are clear examples of business and accounting capture of the environmental agenda, but likewise there is some evidence that this capture is not complete. The critiques offered by the critical school are powerful in this regard. However, it is equally clear that the choice is not *either* EA *or* critical accounting, rather, a synergy between the two exists. Exploiting this synergy could well strengthen the enabling potential of both schools. This essay now turns to the enabling potential of EA which may be developed via accounting education.

Education

Day (1995) argues that “the possibilities of changing accounting practices depend just as much on transforming current generations of accounting students’ understandings, as on transforming current practitioners, and their understandings” (p. 104). Therefore, any consideration of the enabling potential of EA needs to consider how EA interacts with accounting education. Lehman (1988) establishes the enabling and emancipatory potential of education when she suggests that it should “by definition... be a human advance, something we can morally approve of, denoting an increase in human achievement”. She also envisages that education would enable students to “question rules and standards” (Lehman, 1988, p.77). Likewise, Galbraith (1972) is supportive of a critically orientated education, asserting that education that accords with the needs of the industrial system does not have a natural aspect of interest, plausibility or importance. Much of it is dull. The learning that enables an individual to participate effectively in the development of the monogramming toaster does not have an intrinsic air of social urgency. Nor does preparation for the manufacture of automobiles in a world gorged with vehicles, or of a more potently, precisely and diversely destructive missile in a world which has already arranged extensively for its own incineration (p. 367).

The parallels with accounting education are evident – it seems relatively unproblematic to describe the teaching of variance analysis as being a little dull. In contrast EA education, focusing on examining and seeking solutions to environmental problems, is likely to excite, challenge and invoke the “air of social urgency” noted by Galbraith above. The discussion of EA’s potential in this area needs, first, to be set against the backdrop of debates concerning accounting education.

At present in accounting education circles there is considerable speculation as to whether an enabling educational experience, as envisaged by Lehman (1988) and Galbraith (1972) is taking place. For example Gray, Bebbington and McPhail (1994), summarizing much of the literature in the field, note the existence of a “university teaching dominated by technique acquisition” which generates “neither practically trained individuals who can be ‘immediately useful in the office’ nor educationally developed individuals with a sophisticated capacity to enquire, reason, conceptualize and evaluate” (p.52; see also Power, 1991b; Puxty, Sikka and Willmott, 1994, for a similar critique of professional accounting education). Gray *et al.* (1994) argue that this type of education plants the seeds for a lack of ethical maturity which may, at least in part, be linked to ethical failures of practising accountants. This lack of ethical maturity does not appear to be directly related to the overall ethical maturity of the individuals surveyed. Rather, McPhail and Gray (1996) argue that students display different levels of ethical “awareness” in fields outside of accounting and they suggest that something unusual is occurring in accounting education which selectively robs students of ethical awareness only within the sphere of accountancy. In particular, they suggest that “the way in which accounting is conceived, constructed and taught makes it inevitable that accounting students will experience intellectual and moral atrophy” (McPhail and Gray, 1996, p.3) in this context. Against this background, teaching EA may help remedy some of these perceived problems.

The potential of EA to empower both students and educators has been the basis of recent research (see Humphrey, Lewis and Owen, 1996; Lewis, Humphrey and Owen, 1992; Owen, Humphrey and Lewis, 1994, for UK evidence, and also Blundell and Booth, 1988, for an account of an Australian experience). While EA education remains a minority subject in the accounting curriculum, it provides a number of bases on which to contribute to a more holistic education. Gray *et al.* (1994) assert that social accounting and, by implication, EA require “students to make explicit the value system implicit in conventional accounting” and hence “requires student[s] to expose the ethical values they take for granted and to question – although not necessarily reject – the ethics of their accounting studies” (p. 65). In a similar vein, Humphrey *et al.* (1996) note the claimed potential of the subject area for challenging conventional accounting standpoints, making students clarify their own ethical positions and enabling them to develop deeper

understandings of the extent to which accounting is implicated in processes of social and political control (p. 80).

Likewise, McPhail and Gray (1996) suggest that environmental issues and concerns activate ethical concerns and awareness in students.

This evidence suggests that EA education may have an enabling effect. However, it should be recognized that it is difficult to make a cause-and-effect linkage between education and some enabling outcome because of the invisibility of many of the outcomes of education. A changed or enhanced perception of the role of accounting in society is not always evidenced in observable terms. However, narratives from educators suggest that EA is creating change, for example Humphrey *et al.* (1996), quote an educator who asserts, that education “should challenge who you are and social and environmental accounting material not only does it, but this makes them work harder”(p.84). Despite this, Humphrey *et al.* (1996) note that there are relatively few academics actually teaching social and environmental accounting (SEA) and that their courses appear to rest on individual initiatives rather than on any systematic development of EA education.

In summary, it would appear that EA education offers a significant opportunity to enable the next generation of accountants to understand better the biases and limitations of conventional accounting, as well as to develop an appreciation of the possibilities introduced by EA. However, it is also clear that where courses are offered they are rarely compulsory and the level of student uptake is low. This will seriously limit a wider enabling of the student body by the introduction of EA and hence does not bode well for the achievement of large-scale enabling which could precede wider structural changes in society. Despite this reservation, the enabling potential of EA for those who undertake it as a part of their course of study remains potent.

Sustainability

A relatively recent, and perhaps the most important and challenging, development on the EA agenda has been the elaboration of the concept of *sustainability* so as to constitute a significant public policy goal. The introduction of this concept into the business and accounting literature has profound implications for the themes of enabling and engagement introduced in this essay. The starting-point of this section is with a consideration of the definition, the possible meaning and the contradictions inherent in the concept of sustainable development. Accounting research in this area is then explored and the emancipatory potential of the whole area is considered.

The most commonly accepted expression of sustainable development is that drawn from the “Brundtland report” which defines sustainable development as that which “meets the needs of the present without compromising the ability of future generations to meet their own needs” (UNWCED, 1987, p. 8). While this definition underspecifies what a “sustainable society” would look like, it provides a useful starting-point for the consideration of the concept. Goodman and Redclift (1991) note that sustainability is “more than a new word for the environment” (p. 2). Rather, the pursuit of sustainability involves an examination of both environmental and developmental issues and the interplay between these concepts.

The contradictory and potentially radical nature of sustainability becomes apparent once it is realized that ideas about environment and development have, at least in the past, drawn from opposing intellectual traditions. Redclift (1987, p. 199) characterizes “environment” as being concerned with the “limits which nature presents to human beings”, while “development” is concerned with the “potential for human material development locked up in nature”. To combine the two concepts without modifying either is clearly problematic. Therefore, it seems clear that some changed meaning of “development” is necessary within the concept of *sustainable development*. Grubb, Koch, Munson, Sullivan and Thompson (1993) identified this tension in the *UNCED Conference* (the “Earth Summit” in Riode Janeiro) *Proceedings*, where they note: there was a fundamental paradox in the fact that UNCED participants almost universally interpreted the “D” (development) to mean the process of poor counties getting richer, along an economic path similar to that followed by the industrialised counties, whilst the whole point of the “E” (environment) was to encourage such countries to “leapfrog” that path of development to a wealthy but sustainable state (p.32).

The presence of this paradox requires further consideration. Redclift (1987) suggested that sustainable development “means more than seeking a compromise between the natural environment and the pursuit of economic growth. It means a definition of development which recognizes that the limits of sustainability have structural as well as natural origins” (p. 199). Earlier he had suggested that: “development” be subjected to redefinition, since it is impossible for accumulation to take place within the global economic system we have inherited without unacceptable environmental costs. Sustainable development, if it is to be an alternative to unsustainable development, should imply a break with the linear model of growth and accumulation that ultimately serves to undermine the planet’s life support systems (Redclift, 1987, pp. 3-4).

Again, in the context of UNCED, Grubb *et al.* (1993) identified a parallel in noting that if: the end-point [of development] is supposed to be so radically different from the current resource-intensive pattern of industrialised countries, a central question has to be how the

already industrialised countries are supposed to develop towards such a state. Sporadic attacks by some developing countries on the consumption patterns of the North, and the need to encourage cleaner technologies, did not amount to any clear vision of alternative paths for Northern development ... There seemed little recognition of the fact that the UNCED agenda was incoherent unless “development” was broadened to include questions about the future development of industrialised countries (p. 32).

Therefore, the key structural question inherent in sustainable development appears to be how to organize our economic systems such that development (under a revised definition) takes place without undermining the environment, on which all present and any future development rests. This is essentially why sustainable development is such a radical concept – it goes to the heart of how we organize our economic lives. For example, sustainable development calls into question the assumption that economic growth, as it is presently constructed, is a “good thing”. Further, in its commitment to social justice it requires a reconsideration of how the “ends” of development (which at its narrowest could be defined as economic wealth)[5] is distributed in the current generation (as well as its distribution between this and future generations). These are issues on which conventional accounting is not silent. A substantial body of literature exists which links accounting intimately to questions of this kind and concludes that accounting plays a vital supporting role in the creation and perpetuation of the current economic order (see e.g. Hines, 1988; Hopwood and Miller, 1994; Neimark, 1992; Tinker, 1984, 1985, 1991). Given this, any attempt to account for sustainability will need to reflect the tensions which exist between conventional accounting (with its record of wealth accumulation and its focus on the pursuit of profit) and the demands for a just and equitable society.

Work in the area of accounting for sustainable development is at the fledgling stage [6]. However, in the literature to date it is possible to discern elements both of the business attempt at capture of sustainability and of the reassertion of the radicalism inherent in the concept. Two surveys of business conceptions of sustainable development have been conducted (Bebbington and Thomson, 1996; Gray and Bebbington, 1994) which provide evidence of this. Gray and Bebbington (1994) note that capture of sustainability has been attempted by business representative organizations. The ICC’s Charter for Sustainable Business does not actually mention sustainability ... the influential analyses provided by, for example, The Business Council for Sustainable Development and The International Institute for Sustainable Development offer absolutely no diagnosis of what sustainability actually might mean for business nor any assessment of how it might be achieved (p. 2).

Bebbington and Thomson (1996) quote a manager who asserts that “basically what is needed is to substitute better products for existing ones, increase the efficiency with which we do business and detoxify what we have at present while maintaining economic

growth ... this should happen in the next cycle of investment ... say 10-20 years” (p. 24). In contrast, other businesses are more cautious on this point. Ciba Geigy Ltd note: “at first sight the concept of sustainable development seems straightforward. But if its implications are examined, it becomes clear that a fundamental rethink of attitudes towards production and consumption is required on the part of companies, society and the individual” (Ciba Geigy, 1992, p. 14). Likewise, one environmental manager, when asked if economic growth and sustainability were mutually compatible, replied: “God, I hope so” (Bebbington and Thomson, 1996, p. 27). This material strongly suggests that while there has been an attempt to capture and sanitize sustainable development of its radical content, sustainable development has fought back and for a significant minority of businesses it remains a radical concept which raises fundamental questions concerning business practices. Accounts of sustainability also keep this radical potential alive.

For example, in one of the earliest works in the area, Gray (1992a) proposed an operationalization of sustainability which draws from capital maintenance concepts developed in environmental economics (see e.g. Daly, 1980; Turner, 1987, 1988) to develop the idea of calculating a “sustainable cost calculation” of an organization’s activities. Sustainable cost involves an attempt to derive a parallel accounting system which provides calculations of what additional costs must be borne by the organisation if the organisational activity were not to leave the planet worse off, i.e. what it would cost at the end of the accounting period to return the planet and biosphere to the point it was at the beginning of the accounting period (Gray, 1992a, p.419).

He concludes that if these costs were deducted from an organization’s profit to obtain some idea of an environmental value added there is a strong “probability ... that no Western company has made a “sustainable” profit for a very long time, if at all” (Gray, 1992a, pp. 419-20). Business reactions to this (see Bebbington and Thomson, 1996) recognize the radical nature of the idea. They quote environmental managers one of whom noted: “I think the answer to sustainable cost calculation is likely to be horrifying...my heart stops when you think about the amount of money that would be involved” (p. 42). As such the sustainable cost calculation is a powerful accounting device for disrupting business unsustainability by using the language of business and accounting to illustrate just how far away we are from a sustainable state. (See also Bebbington and Tan (1996, 1997) for a discussion of an attempt to make such a calculation within an organizational context and Rubenstein (1994) who attempted something similar with a forestry company.)

While the sustainable cost calculation may be engaging and enabling, perhaps the most enabling aspects of the sustainable development agenda concern how it has reintroduced social issues, and hence social accounting, to business. This was inevitable, given the

focus of sustainability on development as well as on environmental issues, and it opens up a large area of investigation. See Gray *et al.* (1997) for more detail on this front.

In summary, while sustainable development appears to be an uncontested and self-evident goal, a closer examination of the concept raises a host of substantive questions about the way in which the world is presently organized and how society should be organized in the future. Sustainability goes to the core of the relationships between economy, environment and society. It is imbued with a radical agenda as it calls into question the central tenants of Western economic life in a manner in which past debates about the environment have not. In seeking to enable a societal shift from our presently unsustainable mode of living to one where human kind lives in harmony, one with another and with their environment, sustainable development is a radically enabling concept. Only time will tell if it evades capture from the business - driven agenda. However, the evidence to date, while being mixed, appears to suggest that sustainability is successfully holding its own against such capture.

Conclusions

At the outset of this essay it was suggested that in order to make a case for EA being an enabling form of accounting, the following questions needed to be addressed:

- (1) To whom is power to be given (that is, whom are we seeking to enable)?
- (2) What is that person to be given power to do (that is, on what end or object is EA focused)?
- (3) How is this power to be given (that is, what means do we use to seek this goal)?

By focusing on the themes of engagement with practice and education, this essay has sought to argue that, albeit problematically, EA has enabling potential. It seeks to engage with practice in a manner which empowers voices which are currently not heard on business agendas. For example, Gray (1992a) believes that EA has the “potential for contribut[ing] to accountability and transparency in participative democracy” (p.399). Likewise, Power (1994) notes that the greening of accountancy is “allied to certain democratic aspirations for the transformation of working life”; and that it may assist in “promoting a new moral vocabulary and new categories of relevance and visibility” (p. 382) in organizations. EA does this via engagement with practice as well as through the often neglected route of accounting education. It is probably impossible to define what enabling EA looks like. Rather, the focus of EA research should usefully be on the process undertaken in order to conduct that research and how it is communicated so that its radical import is evident. In particular, the expansion of the environmental agenda to consider sustainable development introduces an enabling role for EA in keeping

sustainability problematic for business and in articulating sustainability in accounting terms which provide a challenge to business practices. To conclude, while the enabling potential of EA is contestable and contingent on evading capture, it has had, and is likely to have in the future, a role to play in building a more fair and equitable society.

Notes

1. Within this essay the term “environmental accounting” is used to encompass research activities focused on exploring:
 - the financial consequences of the environmental agenda which will impact on financial accounting practice;
 - changes to management accounting practices;
 - the field of environmental reporting; and
 - accounting for sustainable development.See Gray *et al.*, (1993) for an outline of these activities. This includes the teaching of this broad subject area.
2. In a manner similar to Neimark’s (1992) I am using the term “critical” to describe a “heterogeneous group of accounting scholars who view the public accounting profession’s claim to neutrality and independence with scepticism” (p. 4) and who are concerned either to eliminate accounting’s present role in organizations and society on the basis that it is inappropriately powerful or to radically reformulate accounting practice so that it satisfies more emancipatory objectives. Within this broad church of scholars there is much diversity.
3. The critiques focused on here are those derived from the critical school. This does not imply that other school so thought do not offer critiques of SEA; see, for example, Benston (1982).
4. In making this assertion I am drawing on private conversations with representatives of organizations as well as on meetings between organizations and stakeholder representatives. Much of what is discussed in these contexts is not in the public domain. However, what is clear from these discussions is that something subtly different from what was observed in the social accounting debates of the 1970s and 1980s is taking place.
5. Under a more holistic view, wealth ceases to be linked solely to economic wellbeing. Rather, a wider array of elements could be included in measuring the success of development. See, for example, Anderson (1991).

6. Intriguingly, but quite unrelated, is a reference in the AAA's *Statement of Accounting Theory and Theory Acceptance* (1977) which notes that possible users of accounts could include "future generations"(p. 2).

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