University of Wollongong
Research Online

Faculty of Commerce - Papers (Archive)

Faculty of Business

2001

Environmental Accounting and Accountability: Can the Opaque be Transparent?

Jane Andrew
University of Wollongong, jandrew@uow.edu.au

Publication Details

This article was originally published as Andrew, J, Environmental Accounting and Accountability: Can the Opaque be Transparent?, Interdisciplinary Environment Review, 2 (2), 2001, 201-216. Original journal available here.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

Environmental Accounting and Accountability: Can the Opaque be Transparent?

Abstract
Accounting and the environment can no longer be considered mutually exclusive. Accountability forms part of the philosophical justifications for current accounting practice, and as such, it is a concept that may provide a pivotal grounding upon which environmental issues may be recognised within its practice. This paper examines the radical possibilities of environmental accountability, the contribution that this could make to a new practice of accounting and ultimately, a pathway out of the environmental crisis that could be forged by such changes. Central to the development of the ideas within this work is a critique of the relationship between accountability and transparency.

Keywords
Environmental accounting, corporate transparency

Disciplines
Business | Social and Behavioral Sciences

Publication Details
This article was originally published as Andrew, J, Environmental Accounting and Accountability: Can the Opaque be Transparent?, Interdisciplinary Environment Review, 2 (2), 2001, 201-216. Original journal available here.

This journal article is available at Research Online: http://ro.uow.edu.au/commpapers/166

ENVIRONMENTAL ACCOUNTING AND ACCOUNTABILITY: CAN THE OPAQUE BECOME TRANSPARENT?[I]

Dr. Jane Andrew, The University of Wollongong, Australia

ABSTRACT

Accounting and the environment can no longer be considered mutually exclusive. Accountability forms part of the philosophical justifications for current accounting practice, and as such, it is a concept that may provide a pivotal grounding upon which environmental issues may be recognised within its practice. This paper examines the radical possibilities of environmental accountability, the contribution that this could make to a new practice of accounting and ultimately, a pathway out of the environmental crisis that could be forged by such changes. Central to the development of the ideas within this work is a critique of the relationship between accountability and transparency.

I. INTRODUCTION

> *Transparent:* a. transmitting rays of light without diffusion so that bodies behind can be directly seen; b. bright, clear, free from attempted disguise, frank (Oxford Dictionary, 1964, p. 1380).
>
> *Opaque:* a. Not reflecting or transmitting light, not shining, impenetrable to sight; b. Not lucid, obscure (Oxford Dictionary, 1964, p. 847).

It has long been assumed that accounting[1] is a technical discipline, relying on objective rules in order to passively organise information for decision-making purposes (Hines, 1988; Power, 1997). Any review of mainstream accounting literature would suggest a certain level of diversity in focus, but it is also apparent that the underlying principles of accounting have remained relatively static and assumed to be homogeneous[2] (Arrington & Francis, 1989; Andrew, 1999/2000). This has meant that accounting information is often seen as a set of financial data that fulfils certain regulatory and voluntary standards, and provides the means through which an organisation can satisfy its accountability requirements (Mouck, 1994). Unfortunately, when such assumptions are repeated often enough, they become invisible and/or self-fulfilling, making it difficult to see beyond the set of core 'mainstream' assumptions (Chua, 1986; Hines, 1988; Nelson, 1993). Underlying the practice of accounting is the notion of accountability (at least in part), and in this paper I argue that it is through an investigation of accountability that accounting could be transformed into a more 'environmentally conscious' discipline.

.

II. BEYOND THE LIMITS: MORE THAN FINANCIAL ACCOUNTS?

Instead of presupposing that accounting information must be financial, accounting can be seen to be the provision of an 'account of an event' (Gray, 1992). Giving and receiving accounts is something we all are engaged in, be it in the form of narratives, literary stories, the nightly news, exchanging news with friends, or in our teaching, writing and marking (Nelson, 1993). Accounts of events take on multiple forms, they are as diverse as the people that inhabit our lives, neighbourhoods and globe and they are certainly not limited to financial or numerical accounts. They are implicitly and explicitly subjective, contextual, ideological and political, and in this context it is easy to see that they would not be passive or neutral 'accounts' (Chua, 1986; Gray 1992; 1994; 1994a; 1998). However, when the information that is provided by accountants is considered, with the emphasis it places on a 'financial account' of an event, the objectivity of the account becomes central to its legitimacy.

The reductionist nature of such a practice belies its serious ideological implications. If we start with the assumption that accounting should be financial in nature, we will fail to acknowledge the ethical and ideological implications of such a focus. It also suggests that accounting should remain silent when an 'event' does not have an agreed market value[3] (Gray, 2000). If such an assumption is challenged, then the idea of 'transparency' comes into question as it presupposes that information can be presented in a self-revealing and passive manner - an idea that is more suited to technical information (and even here, it often fails) and may perpetuate the assumption that information should be framed within prevailing discourses of objectivity[4]. As Power argued "green issues can be absorbed into the existing professional rubric of corporate practice and economic reason" (1991, p.38). And he also suggested that we should remain aware a concept like transparency can be "seen as potentially constructing, by virtue of rendering selectively visible, relations of accountability; an inversion of the traditional view of the sources of accountability" (Power, 1991, p.39).

From this perspective the accountability function of organisations has been increasingly discharged through the presentation of objectively derived data. However, this fails to acknowledge that in the presentation of data there are implicit (and sometimes explicit) ideological imperatives[5] (Power, 1991). This dominant view of accountability is largely technical and procedural, however, accountability has important ethical and moral components that generally fail to be explored in the mainstream accounting literature (largely because they do not conform to the requirements of objective representation). Although interpretations of accountability at a conceptual and practical level are infinite and are limited only by the imagination (see Gray, 1998), within the accounting literature it is not surprising that accountability is often linked to the provision and receipt of financial information. This has become even more embedded in our ideas of accountability as modern capitalist economies have become synonymous with the global 'norm'.

It is not surprising that the assumptions discussed previously have dominated, but it is not the only possibility for accounting, especially when

faced with a future that is revealing itself to be environmentally unsustainable. If accounting is one of the principle measures of an organisation's 'success', then currently this 'success' relies heavily on the exclusion of social and environmental information and the failure of accounting to recognise these 'costs or benefits' within the determination of the 'success' of the reporting entity (Gray, 2000). If financial accounting was to be relied on for decision-making purposes, it actually encourages organisations to adopt an environmentally irresponsible and exploitative path. The advent of environmental accounting has sought to address this issue.

However, if environmental accounting solutions are to make a significant contribution to solving some of the environmental issues that face our communities, then the implications of 'accountability' must be considered in all its possibilities. This means considering the role it could play in stimulating the development of ethical and moral accountability, as well as the technical and functional accountability that is currently served. Such a perspective requires that the assumptions underpinning dominant discourses of institutions, corporations, or social practices such as accounting need to be reconsidered and transformed, rather than extended. In regard to accountability, it requires a shift in the type of disclosures made available and also the underlying values that motivate such disclosures. The reasons for exploring the broader context in which accounting operates is neatly suggested by Zimmerman who wrote that "ecological problems cannot be solved simply by tinkering with the attitudes and practices that generated those problems" (1994, p.3).

This would suggest that assuming accounting 'as is' and then attempting to add to it an environmentally sensitive dimension may cause more harm than good (Hines, 1991; Cooper, 1992; Lehman, 1999). This is especially the case when the practice, as it currently stands, encourages environmental negligence (Gray, 2000). This leads into the following discussion as the definition of accountability is not as concrete as the current practices of accounting and it leaves open the possibility of seeing how accounting could emerge as a socially and environmentally responsible activity.

III. ACCOUNTABILITY: BUILDING ENVIRONMENTAL POSSIBILITIES?

As has been mentioned, notions of accountability underpin justifications of the practice of accounting. This perspective holds that information is provided in order to facilitate public scrutiny and to hold the actions of parties to 'account'. According to Cousins & Sikka (1993) "accountability is a key concept in the management of social affairs. Its meaning is dependent upon relations of power and has always been contested. It can be changed through social struggle and practice" (p. 53). Accountability, in the traditional sense is both a concept and a process through which we can be held to account and we can hold others to account[6]. It is generally defined as "the requirement that an individual give reasons for his or her action" (Chew & Greer, 1997, p. 293), but it can be expanded to include groups larger than the individual, such as corporations or governments[7]. Financial information

(such as accounting disclosures, financial reporting, budgeting) is by no means unimportant, but is not the only way accountability can or should be facilitated. Gray et al's (1996) suggested definition of accountability raises this issue. They claimed that accountability can be defined as the "(d)uty to provide an account (by no means necessarily a financial account) or reckoning of those actions for which one is held responsible" (Gray et al, 1996, p. 38). They have also argued that accountability can contribute to 'free and fair' society because it holds out "the possibility for the development of accounting in a way in which individuals are better informed and empowered, in which inequities in wealth are potentially exposed and the inequalities of power are somewhat reduced" (Gray et al, 1996, p. 42).

From such a perspective the idea of accountability could play a significant role in re-orienting social values towards the environment. However, contingent on the idea that accountability can empower people, is the idea that the information provided is the kind that enables empowerment. Such an assumption could suggest that accountability (through the promotion of transparency) is neutral and ideologically sterile. In doing so, this fails to acknowledge that there is a great deal of information already available that could be used to hold a corporation to account for its actions regarding the exploitation of labour or the environment (Esmeralda Explorations is a good example[8]), yet many still go unchallenged. Perhaps this is partly a result of the power inequities that prevail within contemporary democratic societies, partly because we are not taught to 'read' such information with a critical eye (which has ideological implications in and of itself) and partly because it is not only a lack of information that means that organisations are not held accountable. Instead, it is possible that we are ill-equipped to deal with the ethical and moral dilemmas that such information presents to us, and that the development of such responses will never be self-revealing or transparent. This is still a position that sits somewhat uncomfortably within a framework that allows for concrete truths to reveal themselves and undervalues the subjective responses that make up the diversity of a community's reaction to environmentally and socially irresponsible behaviour.

Going back to the point made by Gray *et al* (1996), unfortunately the reverse could also be true - information could also be used to impose certain ways of viewing the world that disempower people. From this perspective, appeals to greater 'transparency' is problematic as corporations and governments are driven by certain agendas and are founded within certain ideologies (such as profit maximisation, accountability to shareholders, or the maintenance of the status quo). Such information is never neutral and if it is considered to be ideologically sterile it can be highly misleading. This raises an important concern surrounding the dimensions of accountability that are allowed to emerge (accountability to whom, for what, under what circumstances). As meaning is always framed within complex and competing interests, the information provided in order to scrutinise a company or a government always needs to be interpreted as a representation of reality, rather than 'reality' itself. Calls for and claims to transparency will never overcome this problem. As the technical dimensions of information are generally easier to represent within the dominant objective framework, the other dimensions of accountability (moral, ethical, value-laden) dimensions

are less likely to emerge. Yet these are vital to any well-rounded understanding of accountability as an exchange of socially produced information (with all its corresponding problems of inequity and power.

IV. TRANSPARENCY AND DEMOCRACY?

Although transparency and democracy would appear to be quite complementary terms, this relationship also provides the foundation of much dissatisfaction within modern democratic societies. It is often argued that accountability and transparency facilitate the ideals of liberal democracy (Gray et al, 1996). In other words they are seen to help expand freedom and fairness through openness and if it were as simple as this it would be a wonderful tool. But it is undeniably more complex. In regard to this, Gray et al (1996) argued that the assumptions that underpin liberal economic democracies also inform accounting and accountability relationships, in that the state is seen to be small and neutral, individualism is given centrality, freedom is held as fundamental to the operations of the system and it is assumed that people come to exchanges equally (agency theory provides good evidence that these assumptions are alive and well in accounting theory). As such, Gray et al (1996) argued that accounting theory and practice has accepted (flawed) theories of individualism and self-interest, whereby it is assumed that all decision making can be facilitated 'fairly' and all outcomes are rational consequences of deliberate choice (or at least can be).

The assumptions that operate within such a framework suggest that where there are examples of exploitation (sweatshops or logging old growth forests), inequity (homelessness or poverty), or pollution (smoke stacks or leaching of toxic chemicals into waterways) we either choose to stop or to change these outcomes rationally and on the basis of 'freely exchanged information' (Gray et al, 1996 explored this). Many have pointed out that this 'liberal democratic' ideal is flawed because it places too much emphasis on the role of the individual (Eckersley, 1996; this is critiqued by Lehman, 1999) and it also deals poorly with issues of distribution and fails to consider seriously the effects of power inequities (these may come from historically constructed prejudices on the basis of race, gender or class, Cousins and Sikka, 1993). It also too readily assumes that transparency can be achieved and in making this assumption it may be possible to relinquish the moral and ethical responsibilities of the account-giver, though claims that they have acted in an 'open' manner.

The problem with linking accountability with transparency as though social and environmental inequities can be resolved in this scenario is that it is unlikely they are purely the result of inadequate information (Gray et al, 1996; Eckersley, 1996). Hobart (1995) considered this idea in relation to 'knowledge' and its ability to privilege and de-privilege certain views. He wrote that "even were knowledge on the increase, what of those who are barred from enjoying it, although they are entwined in its snares? There is a darker side of knowledge: the fear of failing to master it, of being excluded from it, of becoming its object. How knowledge appears, indeed what it is, depends on how you are situated to it" (Hobart, 1995, p.49).

In relation to this, the accountability/transparency connection delimits debate to one of more 'open' information, rather than encouraging us to think about the ways that corporations act in relation to the environment. In the words of Bauman, it may be yet another "reproduction of legitimation" (1992, p.110). If this is the case, it fails to demand a change in the moral and ethical positions of such organisations. Exploitation is deeply entrenched in consumer culture, and information combined with an ability to critically 'read' that information may go some way towards addressing this dimension of modern capitalist societies. But we also need to encourage corporations to make ethical decisions, and provide the community with information about these decisions - and this is the very type of information that could never be provided in a 'transparent' manner because it would also be value laden and multi-dimensional, requiring both representation and multiple interpretations within our communities. Yet it is this very type of information that may get to the heart of the notion of environmental accountability. On this point Lehman has argued "the strict liberal accountability frameworks perpetuate the status quo by simply providing additional information to stakeholders without critically investigating what corporations are doing to the natural environment" (1999, p. 218).

This suggests assuming that accountability enables more informed choices and decision-making is not a particularly good starting point, because it inevitably enables certain choices and offers information that can allow certain perspectives to emerge whilst disallowing others. This belies the complex processes that operate in the construction and framing of meaning - and if calls for 'transparency' are to be fruitful in scrutinising an organisation's environmental credentials, then this must be considered.

V. A NOTE ON 'TRANSPARENCY'

> The real power of accounting perhaps lies in the way in which, as a structure of meaning, it comes to define what shall and shall not count as significant (Roberts, 1991, p.450).

There are two main problems with the idea that 'transparency' will lead to enhanced accountability: firstly, it suggests that information can be self-revealing and that the way it is 'framed' and interpreted does not play an integral part in the process; and secondly, it ignores the inequitable distribution of power within our communities - which may mean that only certain information can be demanded, having the potential to place more power in the hands of the account giver.

As Cousins and Sikka (1993) have argued, the notion of accountability cannot be separated from those other ideas that define the terrain of accountability and as such it is linked directly to the notion of 'power'. Accountability in this way is often 'naturalised', such that it becomes difficult to explore exactly why we are held to account for some things and not others (Chwastiak, 1998 explored this in relation to the Defence Industry); why we consider some disclosures an invasion of privacy and others a matter of 'freedom of information' (Arrington, 1999); why some social structures are empowered more heavily than others to call members of

a society (corporations, judiciary, government, individuals) to account (Sinclair, 1995). In much of the accountability literature, the idea of encouraging 'transparency' is central, such that information should be represented without obstruction. Although this is an admirable project, it also assumes that there is the possibility of transparent information devoid of the technologies employed in its representation. The idea that a 'truth' can be revealed has been considered throughout the western philosophical canon, and contemporary social theory has suggested that truth can never be removed from context, just as the idea of 'transparency' cannot be removed from the context in which it emerges and operates. As Usher argued, a "text can speak *a* truth even though they cannot speak *the* truth" (1993. P.109).

The idea that information can enhance accountability rests heavily on the assumption that it is possible for information to be transparent, or interpreted in ways that make it more transparent. This argument rests on the principle that corporations, individuals or governments should provide more information to enhance the visibility of the process of decision-making and to enable public scrutiny. As it is impossible to have 'all information' and it is redundant to assume that such information would be read or circulated in the same way by all people across context, it may be argued that we are better served by considerable vigilance in reading and contextualising disclosures. In doing so, it may be possible to point to the links between these and other social or environmental relationships, whilst suggesting what sorts of social realities may be constituted or challenged by the provision of this type of information. Offering accounts for scrutiny in and of itself is not enough, however understanding how the accounts delimit thought, action and accountability is an important area of concern (Chwastiak, 1998). However, we should be cautious about calling for more information simply on the grounds of enhancing transparency as it may perpetuate the assumption that 'see through' truths are possible - a belief that may play into the hands of corporations.

This is supported by researchers who argue that idea of accountability are open to 'capture' by organisations, corporations and governments (Deegan & Rankin, 1996; 1996a; Beder, 1997; Lehman, 1999). Although many including Gray (1992), maintain a non-interventionist position, Gray et al have also argued that the self regulatory approach to environmental issues has meant that recognition of the environment has had more to do with "advantage, public relations and image construction" than it does with "information, accountability and transparency" (1992, p. 257; this is also supported by Owen, 1994). As this is possible, if not a 'reality' (see greenwashing discussions by Beder, 1997) some of the environmental accounting literature has suggested that notions of environmental accountability should be debated and contextualised beyond traditional boundaries, rather than through an extension of these (Maunders & Burritt, 1991; Lehman, 1995; 1999; Birkin, 1996).

This discussion has also occurred within contemporary environmental literature along with fields such as philosophy, sociology, science and technology studies and cultural studies, whereby 'mainstream' approaches to environmental issues have emerged as an extension of the current framework, evidenced by literature within much environmental theory (areas such as 'sustainable development', 'ecological modernisation',

‘environmental management’ and ‘eco-efficiency’ as discussed by Zimmerman, 1994; and within the accounting literature by Lamberton, 1998). Radical environmental literature challenges the assumptions employed in the traditional framework and calls for radical shifts and explorations into ‘ways of thinking’ about nature. These perspectives provide challenges to foundational ontological and epistemological assumptions that have informed our relationship with and metaphors of nature (including radical ecology, deep ecology, social ecology, ecofeminism, postmodern environmental ethics) (Merchant, 1980; Zimmerman, 1994).

In this sense, accounting information can become a powerful and persuasive tool and it can provide a source of information that contributes to the greater goal of accountability (as can a number of other styles of accounts) but these play a role in constituting our discourses of accountability. They are never disinterested acts and are therefore never entirely transparent. Calls for greater transparency may be well meaning, but they rely heavily on the assumption that traditionally opaque sites of inquiry can be made transparent. Perhaps more information is important, and more information that is different in kind to that already being circulated, but this should not rest purely on a call for greater transparency. Instead, the ideological reasons and motivations for disclosing certain things and not others need to be considered, addressed and challenged.

VI. OTHER POSSIBILITIES OF ACCOUNTABILITY

Having discussed and problematised the notion of ‘transparency’ it is important to consider some other possibilities of accountability. To avoid the implications that have been raised, it is argued that notions of accountability and processes of achieving such accountability need to be contextualised. The work of Gray et al (1997) has also called for a contextual understanding of accountability, placed within an understanding of the ideological and discursive constructions that operate within the practice of accountability. Although this appears to be close to a traditional definition of accountability, they argued that “(t)he nature of the relationships - and the attendant rights to information - are contextually determined by the society in which the relationship occurs” (Gray et al, 1997, p. 334).

They also argued for a perspective that endorses “polyvocal citizenship” (Gray et al, 1997, p. 335) in order to facilitate the dispersed and multi-dimensional voice of those participating in an accountability relationship. Such an approach challenges the fundamental power inequities existent in a traditional approach to accountability, however the anti-interventionist approach that accompanies this has left much of this ‘accountability’ in the hands of voluntarism and corporations (Gallhofer & Haslam, 1996; Lehman, 1999). A considerable amount of the alternative accountability literature holds that the accounting function can be extended to include issues of social and environmental responsibility, whereby corporations (and perhaps governments, see Burritt & Welch, 1997) can be transformed in order to fulfil broader imaginations or desires for accountability (Gray et al, 1987; Gray, 1998). This could occur through self-regulatory practices, such as disclosure (Deegan & Rankin, 1996; 1996a), internal environmental

management procedures (Stone, 1995), environmental policy formulation (Gallhofer & Haslam, 1996; Tilt, 1997), or regulatory practices, such as legislation, taxation, or pollution permits (Gibson, 1996; Lehman, 1996; Milne, 1996; Wambsganss & Sanford, 1996).

There is also an argument that suggests accountability should and could seek to "reflect symbolically upon the practical interdependence of action: an interdependence that always has both moral and strategic dimensions. Current forms of organisational accountability embody a split that falsely seeks to separate these dimensions" (Roberts, 1991, p. 356).

Roberts (1991) dealt with the notion of power in the construction of accountability, suggesting that "rituals of hierarchical accountability" (1991, p. 359) determine what is to be made visible and what is to be left invisible. This, he argued, is the product of disciplinary practices that includes and rewards, or excludes and punishes, based on what are claimed to be objective standards of 'reason'. However, it is in this context that Roberts (1991) argued that definitions of accountability have been able to flourish because of the reliance on a separation of its procedural and moral dimensions (a view also considered by Lehman, 1995; 1999). This separation has increasingly privileged procedural concerns at the expense of the moral, bestowing technologies such as accounting with the responsibility to facilitate a 'procedural' and 'neutral' process of accountability.

Lehman has pointed out some of the problems, stating that the "sense of urgency within environmental accounting betrays the project, however, because accountants seem so eager to do something even if it short circuits the whole project" (1999, p. 238). And further, Lehman "cautions accounting theorists committed to change through the existing social system" (1999, p. 221). Such that he "takes issue with earlier liberal democratic accountability models which, with hindsight, fail to tackle the social causes of the environmental crisis. Thus social and environmental accounting frameworks have the potential to perpetuate the destruction of the natural world that they are meant to protect" (Lehman, 1999, p. 221). Although accountability may play an important role in the social re-imagination of the human/non-human relationship, care must be taken that the assumptions that underpin such arrangements are not misleading.

VII. CLOSING THOUGHTS

The construction of a transparent and open society has been suggested as the main purpose of accountability (Gray, 1992; Lehman, 1999), but such openness and transparency can only exist if representation is a function of difference, acknowledged to always be partial, incomplete and in a state of flux, and suggestive of multiplicity rather than singularity (Cooper, 1992). In so doing, the limitations of the notion of 'transparency' need to be acknowledged, and it can be seen as a concept open to manipulation and exploitation for specific purposes. If claims to 'transparent information' provide the basis upon which accountability can be facilitated, then it is

likely that such claims will be misleading at best, and at worst, such claims could perpetuate environmental exploitation.

This paper has shown that the idea of transparency is contingent on a philosophical assumption that social relations can be revealed 'truthfully'. If this assumption is destabilised, the integrity of environmental accountability when it is based on claims of transparency is undermined. As this work asserts that reality cannot be revealed in an absolute sense, the idea of 'transparency' is always open to further critique and consideration. It is not self revealing as it suggests and can easily be mobilised as a rhetorical strategy that may inhibit attempts to exchange information in a way that enhances our accountability for actions taken for or against the environment.

As such, it has been suggested that an environmental accountability framework that fails to consider the functions of power and 'difference' will only superficially address the environmental crisis. This is a failure that may serve to silence potentially transformative narratives that rely on knowledge (be it moral, ethical, emotional, spiritual, cultural, engendered and so on) that lays outside of dominant representation, limiting the enabling possibilities of environmental accountability within the context of global environmental problems (Hines, 1991; Cooper, 1992; Lehman, 1999). If accounting and accountability are to contribute to the pathways out of the environmental crisis, it will require a radical reconsideration of social, ethical and moral contexts, rather than simply the provision of more 'transparent' information. It is important that these issues continue to be considered because, although hierarchical relationships and liberal economic democratic principles may dominate the 'accountability' literature, as Burritt and Welch have noted "(n)o accepted perspective on environmental accountability has yet emerged in the literature" (1997, p. 534).

APPENDIX

DOMINANT ASSUMPTIONS OF MAINSTREAM ACCOUNTING

Beliefs About Knowledge

Theory is separate from observation that may be used to verify or falsify a theory. Hypothetico-deductive account of scientific explanation accepted.

Quantitative methods of data analysis and collection, generalization favoured.

Beliefs About Physical and Social Reality

Empirical reality is objective and external to the subject. Human beings are seen as passive objects, not makers of social-reality.

Single goal of utility maximisation assumed for individuals and firms. Means-end rationality assumed.

Societies seen to be essentially stable, conflict can be managed.

Relationship Between Theory and Practice

Accounting specifies means, not ends. Acceptance of institutional structures.

Source: This is taken from Chua, W. F. (1986), "Radical Developments in Accounting Thought", The Accounting Review, Vol. LXI No.4, pp, 601-632.

ENDNOTES

[i] I would like to thank Dr. Gary O'Donovan, an anonymous reviewer and members of the Department of Accounting and Finance at the University of Wollongong, particularly Prof. Michael Gaffikin and Dr. Mary Kaidonis, for their insightful comments on this paper. These comments and suggestions have improved the manuscript substantially. All errors remain mine.

[1] Accounting has two main sub-divisions: 1. **Financial accounting**, which is generally concerned with the public presentation of an organisations economic position. This is regulated by legislation and self-regulated by professional bodies and includes the production of financial reports. 2. **Management accounting** – the production of unregulated internal information in order to enable decision making within an organisation. This paper is generally concerned with financial accounting, but management accounting could also be affected by the discussion that takes place.

[2] Chua (1986) discussed the assumptions that dominate the accounting mainstream. In her opinion, the general practice of accounting rests heavily on the belief that an external reality exists, and that the accountant's job is to represent this objectively. See the appendix for a summary of these.

[3] Dillard wrote that "(t)he technical is, in fact, dominated by the social, thus substantially and ideologically constraining the possible technological manifestations. Within this context, accounting is fundamentally directed toward preserving and enhancing the capitalists' control over the means of production" (1991, p.10).

[4] Although to be 'objective' remains a quality that is celebrated in Western societies, it is increasingly under challenge.

[5] Objectivity often denies a place for ethical and moral components because these are inevitably subjective and impossible to 'measure reliably'. It can also be used to assert power by representing information in uni-dimensional ways (such as dollars rather than people/trees/culture) whilst at the same time claiming no part in its representation. The reductionist practices undertaken in any objective representation of an event are no less abstract than other representations such as narratives, yet we have offered them a privileged place and often denied this association.

[6] The consequences of which may be paradoxical in that this broad interpretation has both liberating and disciplinary potential.

[7] This links to the concept of pluralism in political theory, as structures that exist beyond the individual are recognised to hold power (Eckersley, 1996).

[8] Esmeralda provided information in its annual report suggesting the high level of environmental risk attached to its mining operations. It even disclosed the fact that there had been a minor cyanide leak at the plant prior to the major spill. All the information points to a company with only limited concern for its environmental impact - yet it took a major disaster for its practises to be called into question. This is an example of how 'disclosure' or apparent 'transparency' was not enough to stimulate action on the behalf of the company or the communities affected by its operation.

REFERENCES

Andrew, J. (1999/2000), "Measurement and Imperialism in the 'New Millennium'", *Pacific Accounting Review*, January 2000, pp. 23-27.

Arrington, E. (1999), "Anxious Attitudes and Blue Bodies", *Critical Perspectives on Accounting*, Vol. 10, pp. 1-11.

Arrington, C. E. and Francis, J. (1989), "Letting the Chat Out of the Bag: Deconstruction, Privilege and Accounting Research", *Accounting, Organizations and Society*, Vol.14 No.1/2, pp. 1-29.

Beder, S. (1997), *Global Spin: The Corporate Attack on Environmentalism*, Scribe Publications, Melbourne.

Birkin, F. (1996), "The Ecological Accountant: From the Cognito to Thinking Like a Mountain", *Critical Perspectives on Accounting*, Vol.7 No.3, pp. 231-257.

Burritt, R. and Welch, S. (1997), "Accountability for Environmental Performance of the Australian Commonwealth Public Sector", *Accounting, Auditing and Accountability Journal*, Vol.10 No.4, pp. 532-561.

Chew, A. and Greer, S. (1997), "Contrasting World Views on Accounting: Accountability and Aboriginal Culture", *Accounting, Auditing and Accountability Journal*, Vol.10 No.3, pp. 276-298.

Chua, W. F. (1986), "Radical Developments in Accounting Thought", *The Accounting Review*, Vol. LXI No. 4, pp. 601-632.

Chwastiak, M. (1998), "Star Wars at the Bottom Line: The Accounting Forum for Defense Contractors", *Accounting, Organizations and Society*, Vol. 23 No.4, pp. 343-360.

Cooper, C. (1992), "M[othering] View On: "Some Feminisms and Their Implications for Accounting Practice", *Accounting, Auditing and Accountability Journal*, Vol.5 No.3, pp. 71-75.

Cousins, J. and Sikka, P. (1993), "Accounting for Change: Facilitating Power and Accountability", *Critical Perspectives on Accounting*, Vol.4, pp. 53-72.

Deegan, C. & Rankin, M. (1996), "Do Australian Companies Report Environmental News Objectively?", *Accounting, Auditing and Accountability Journal*, Vol. 9 No.2, pp. 50-67.

Deegan, C. & Rankin, M. (1996a), "The Materiality of Environmental Information to Users of Annual Reports", *Accounting, Auditing and Accountability Journal*, Vol. 10 No.4, pp. 562-583.

Dillard, J. F. (1991), "Accounting as a Critical Social Science", *Accounting, Auditing and Accountability Journal*, Vol.4 No.1, pp. 8-28.

Eckersley, R. (1996), "Greening Liberal Democracy: The Rights of Discourse Revisited", in Doherty, B. and de Geus, M. (Ed.) (1996), *Democracy and Green Political Thought: Sustainability, Rights and Citizenship*, Routledge, London, pp. 212-236.

Doherty, B. and de Geus, M. (Ed.) (1996), *Democracy and Green Political Thought: Sustainability, Rights and Citizenship*, Routledge, London.

Gallhofer, S. and Haslam, J. (1996), "The Direction of Green Accounting Policy: Critical Reflections", *Accounting, Auditing and Accountability Journal*, Vol.10 No.2, pp. 148-174.

Gibson, K. (1996), "The Problem With Reporting Pollution Allowances: Reporting is Not the Problem", *Critical Perspectives on Accounting*, Vol.7, pp. 655-665.

Gray, R. (1992), "Accounting and Environmentalism: An Exploration of Accounting Needs of Gently Accounting for Accountability, Transparency and Sustainability", *Accounting, Organizations and Society*, Vol.17 No.5, pp. 399-425.

Gray, R. (1994), "Corporate Reporting for Sustainable Development: Accounting for Sustainability in 2000AD", *Environmental Values*, Vol.13 No.1, pp. 17-45.

Gray, R. (1994a), "Social and Environmental Accounting, Accountability and Reporting: New Wines in Old Skins or Silk Purses From Sow's Ears", *Accounting Forum*, Vol.17 No.4, pp. 4-30.

Gray, R. (1998), "Imagination, A Bowl of Petunias and Social Accounting", *Accounting, Organizations and Society*, Vol.9, pp. 205-216.

Gray, R. (2000), "Greening the Bottom Line: Can Accounting Respond to Environmental Concerns?", Information for Development in the 21st Century,_http://www.id21.org/static/2cnh1.htm.

Gray, R., Dey, C., Owen, D., Evans, R. and Zadeck, S. (1997), "Struggling with the Praxis of Social Accounting: Stakeholders, Accountability, Audits and Procedures", *Accounting, Auditing and Accountability Journal*, Vol.10 No.3, pp. 325-364.

Gray, R. H., Owen, D. and Maunders, K. (1987), *Corporate Social Reporting: Accounting and Accountability*, Prentice Hall, London.

Gray, R., Owen, D. and Adams, C. (1996), *Accounting and Accountability: Change and Challenges in Corporate Social and Environmental Reporting*, Prentice Hall, London.

Hines, R. (1988), "Financial Accounting: In Communicating Reality, We Construct Reality", *Accounting, Organizations and Society*, Vol.13 No.3, pp. 251-261.

Hines, R. (1991), "On Valuing Nature", *Accounting, Auditing and Accountability Journal*, Vol.4 No.3, pp. 27-29.

Lamberton, G. (1998), "Exploring the Accounting Needs of an Ecological Sustainable Organisation", *Accounting Forum*, Vol.22 No.2, pp. 186-209.

Lehman, G. (1995), "A Legitimate Concern For Environmental Accounting*", Critical Perspectives on Accounting*, Vol.6, pp. 393-413.

Lehman, G. (1996), "Environmental Accounting: Pollution Permits or Selling the Environment", *Critical Perspectives on Accounting*, Vol.7, pp. 667-676.

Lehman, G. (1999), "Disclosing New Worlds: A Role for Social and Environmental Accounting and Auditing", *Accounting, Organizations and Society*, Vol. 24, pp. 217-241.

Maunders, K. T. and Burritt, R. L. (1991), "Accounting and the Ecological Crisis", *Accounting, Auditing and Accountability Journal*, Vol.4 No.3, pp. 9-26.

Merchant, C. (1980), *The Death of Nature: Women, Ecology and the Scientific Revolution*, Harper and Row, San Francisco.

Milne, M. J. (1996), "Capitalizing and Appropriating Society's Rights to Clean Air: A Comment on Wambsganss and Sanford's Accounting Proposal", *Critical Perspectives on Accounting*, Vol. 7, pp. 681-695.

Mouck, T. (1994), "Corporate Accountability and Rorty's Utopian Liberalism", *Accounting, Auditing and Accountability Journal*, Vol.7 No.1, pp. 6-30.

Mouck, T. (1995), "Financial Reporting, Democracy and Environmentalism: A Critique of the Commodification of Information", *Critical Perspectives on Accounting*, Vol.6, pp. 535-553.

Nelson, J. S. (1993), "Account and Acknowledge, Or Represent and Control? On Post-Modern Politics and Economics of Collective Responsibility", *Accounting, Organizations and Society*, Vol.18 no.2/3, pp. 207-229.

Owen, D. L. (1994), "The Need for Environmental Accounting Standards", *Accounting Forum,* Vol.17 No. 4, pp. 32-46.

Power, M. (1991), “Auditing and Environmental Expertise: Between Protest and Professionalism”, *Accounting, Auditing and Accountability Journal*, Vol. 4 No.3, pp. 30-42.

Power, M. (1997), “Expertise and the Construction of Relevance: Accountants and Environmental Audit”, *Accounting, Organizations and Society*, Vol.22 No.2, pp. 123-146.

Press, D. (1994), *Democratic Dilemmas in the Age of Ecology*, Duke University Press, Durham.

Roberts, J. (1991), “Possibilities of Accountability”, *Accounting, Organizations and Society*, Vol.16 no.4, pp. 355-368.

Sinclair, A. (1995), “The Chameleon of Accountability: Forms and Discourses”, *Accounting, Organizations and Society*, Vol.20 No.2/3, pp. 219-237.

Tilt, C. A. (1997), “Environmental Policies of Major Companies: Australian Evidence”, *British Accounting Review*, Vol. 29, pp. 367-394.

Wambsganss, J. R. and Sanford, B. (1996), “The Problem with Reporting Pollution Allowances”, *Critical Perspectives on Accounting*, Vol.7, pp. 643-652.

Zimmerman, M. E. (1994), *Contesting Earth's Future: Radical Ecology and Postmodernity*, University of California Press, London.