

**NSW PUBLIC SECTOR
ACCRUAL ACCOUNTING:
WHY DID IT HAPPEN AND
HAS IT MATTERED?**

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TO

Motoko, Emi and Erika

AND

The memory of the late Professor June Pallot

ABSTRACT

In 1988 the New South Wales (NSW) Government was the first in Australia, and amongst the first in the world, to commit to implement accrual accounting for its General Government Sector. Subsequently, accrual accounting has been implemented by numerous governments, including all Australian governments. This thesis examines why the NSW Government decided to implement accrual accounting and the impact of this accounting change on decision making within a General Government Sector organisation. The historical account is derived from a combination of archival and oral data sources whilst an organisational learning theoretical frame is used in a single-site case study to understand the impact of accrual accounting on managerial decision making.

The history of the NSW Government adoption of accrual accounting is characterised by five notable features. First, the whole-of-government initiative was implemented with remarkable speed. Second, the change was aided by the actions of an epistemic community, in which private sector consultants were most active. Third, the change was justified through expected improvements in accountability and management. Fourth, a period of resistance to the change was followed by an absence of critical discussion on the implications of the change as forces supportive of the change synergistically combined. Fifth, the change is explained by mimetic forces that initially coalesced around phantom images, presented by consultants, and subsequently recognised self-interest as an integral part of the change to accrual accounting.

The impact of accrual accounting on management decision-making at an organisational level from has been mixed. Information acquisition has expanded in that new sets of accounting data are collected. However, information distribution has been unchanged by accrual accounting whilst information interpretation only marginally changed at a top management level with no discernible change at operational levels. Organisational memory has been altered by accrual accounting in that additional accounting skills and information are now held. However, use of that organisational memory is severely impeded by organisational objectives and constraints that effectively render accrual accounting information irrelevant to public sector managers' concerns.

Policy implications arising from this project are that an alternative model of accrual accounting is required together with the dual recognition that centrally imposed change may produce unpredicted change at an operational agency level and that accounting change needs to be matched to organisational characteristics. Additionally, improvements in asset management, as sought by advocates of accrual accounting, could have been delivered by non-accounting means and there is little prospect for improved managerial decision-making from the current model of accrual accounting.

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LIST OF ACRONYMS AND ABBREVIATIONS

<i>AA</i>	Accrual accounting
<i>AAS</i>	Australian Accounting Standard
<i>AARF</i>	Australian Accounting Research Foundation
<i>AASB</i>	Australian Accounting Standards Board
<i>ABC</i>	Activity based costing
<i>ABS</i>	Australian Bureau of Statistics
<i>A-G</i>	Auditor-General
<i>AIS</i>	Accounting information system
<i>AMS</i>	Asset Management System
<i>ASA</i>	Australian Society of Accountants
<i>Aust</i>	Australia
<i>CEO</i>	Chief Executive Officer
<i>CPA</i>	Certified Practising Accountant
<i>C&L</i>	Coopers & Lybrand
<i>DET</i>	Department of Education and Training
<i>DRT</i>	Deloitte Ross Tohmatsu
<i>DSE</i>	Department of School Education (a predecessor to DET)
<i>ED</i>	Exposure Draft
<i>EIS</i>	Executive Information System
<i>EOI</i>	Expression of Interest
<i>EU</i>	European Union
<i>E&Y</i>	Ernst & Young
<i>FMI</i>	Financial Management Initiative
<i>FTE</i>	Full-time equivalent
<i>GAAP</i>	Generally Accepted Accounting Principles
<i>GE</i>	General Electric
<i>GFS</i>	Government Finance Statistics
<i>GGS</i>	General Government Sector
<i>GTE</i>	Government Trading Enterprise
<i>GL</i>	General Ledger
<i>HO</i>	Head Office
<i>HO-ACC</i>	Head Office interviewee with an accounting-related responsibility
<i>HRCA</i>	Human resource cost accounting
<i>ICT</i>	Information communications technology
<i>IFAC</i>	International Federation of Accountants
<i>IIR</i>	Institute of International Research
<i>IMF</i>	International Monetary Fund
<i>Indon</i>	Indonesia
<i>INTOSAI</i>	International Organisation of Supreme Audit Institutions
<i>MAS</i>	Management accounting system
<i>MN</i>	Methodological note
<i>NCS</i>	Net Cost of Services
<i>NPM</i>	New Public Management
<i>NPFM</i>	New Public Financial Management

<i>NSW</i>	New South Wales
<i>NSWG</i>	New South Wales Government
<i>NZ</i>	New Zealand
<i>OECD</i>	Organization for Economic Co-operation & Development
<i>ON</i>	Observational note
<i>PAC</i>	Public Accounts Committee
<i>PoC</i>	Promoter of Change
<i>PoI</i>	Producer of Information
<i>PFPP</i>	Privately Financed Project
<i>PMM</i>	Project Management Module
<i>PSAA</i>	Public sector accrual accounting
<i>PSASB</i>	Public Sector Accounting Standards Board
<i>PW</i>	Price Waterhouse
<i>RCAGA</i>	Royal Commission on Australian Government Administration
<i>RIPAA</i>	Royal Institute of Public Administration Australia
<i>RO</i>	Regional Office
<i>RO-ACC</i>	Regional Office interviewee with an accounting-related responsibility
<i>SA</i>	South Australia
<i>TAAP</i>	Treasurer's Accounting Advisory Panel
<i>TAFE</i>	Technical and Further Education
<i>TN</i>	Theoretical note
<i>UoI</i>	User of Information
<i>UK</i>	United Kingdom
<i>WPonGFI</i>	Working Party on Government Financial Information

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DECLARATION

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution to Mark Christensen and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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Mark Christensen

CHAPTER 1: Introduction

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1.1 PROLOGUE: INTRODUCTION AND BACKGROUND TO THE RESEARCH

Since the late 1980s, an increasing number of public sectors around the globe have participated in a ‘revolution’ (Boxall, 1998) of their accounting systems and have done so in a rush (Carnegie and West, 2003). The hurried overthrow of cash-based accounting with accrual-based accounting and its impact are the subjects of this research project. All accounting systems require a criterion upon which to identify if an accounting transaction has taken place and thus if such a transaction should be recorded. The simplest and easiest criterion to apply is whether cash has changed hands. Such a criterion is the defining feature of cash-based accounting systems¹. However, the more common criterion applied in commercial accounting systems is whether an economic transaction has occurred; such economic transactions may involve cash but they are not constrained to that requirement. Accounting systems that record transactions without restriction to cash transfers are referred to as “accrual systems” and although there are variations within such systems (Guthrie, 1998; Carlin, 2005) the significance, from the point of view of this project, is that these systems represent a marked deviation from cash-based accounting systems that have dominated in public sectors for very long periods.

In 1988 the New South Wales Government (NSWG) committed itself to implementation of accrual accounting across all parts of its public sector. That decision placed NSW at the forefront of public sector accounting reform since to that date most other countries (except New Zealand and Sweden) operated cash accounting systems in their public sectors. At one level this reform can be seen as being a mere technical change in the practices of accountants within the public sector. However, a significant literature exists that establishes accounting to be a socially constitutive practice which can shape “reality” and so influence

¹ Definitions are provided in Appendix 1.

democratic and distributive practices in society (indicative of parts of that literature are: Burchell et al., 1980; Burchell et al., 1985; Hines, 1988, 1989; Hopwood, 1983, 1996, 2000; McSweeney, 2000; Miller, 1992, 1994). Thus the move to accrual accounting was not merely a technical accounting change. Instead, it was a “means to the enactment of significant changes in the scope, scale and style of public sector administration and activity” (Guthrie, 1998, p. 1) and it has become “a code for much wider-ranging set of changes” (Conn, 1996, p. 82) and a notable instance of the Australian tendency for private sector accounting issues to take precedence over public sector accounting issues (Ryan, et al., 2007).

Conn’s (1996) reference to ‘much wider-ranging’ public sector reforms, of which accrual accounting was one, are frequently referred to as ‘New Public Management’ (Hood, 1995). New Public Management (NPM) can be characterised as a suite of reforms that embody two cardinal elements: a reduction in the degree of distinctiveness of the public sector compared to the private sector; and, a substitution of measures such as output controls, performance reporting and managerial discretion for rules designed previously to form a buffer against political and managerial freedom in the public sector (Hood, 1995, pp. 93-96). The political context in which NPM grew in Australia was framed by an ascension to power by the conservative parties at a Federal level in 1975 and subsequently in most States in the following years. These governments were sympathetic to a minimal state (Funnel, 2001a) based on market mechanisms to determination of resource allocations. At almost each change of government, the new conservative government implemented a commission of audit as a means to identify opportunities for public sector reform (English et al., 2005). Thus, from 1975, various governments in Australia became active in public sector reform and so the ground for radical reform, such as public sector accrual accounting, became fertile.

At the mere technical level, accrual accounting is the recording and reporting of monetary representations of organisations’ financial affairs where economic transactions trigger those representations. The core of differences between cash and accrual accounting systems consists of timing and definitional issues which

determine what is measured, reported and analysed in the financial affairs of organisations. Most definitions of accounting (refer Appendix 1) resort to the point that accounting transactions may be recognised when cash changes hand (cash-based accounting) or when an economic event can be identified (accrual-based accounting). Frequently, accrual accounting is defined as being different to cash-based accounting because it (accrual accounting) is not limited to recognising only cash transactions. This means of definition, in which an apparent limitation to an alternative accounting system becomes an integral feature of the definitional subject, has been recognised as a rhetorical practice employed by advocates of accrual accounting to garner support for a change from cash-based accounting (Potter, 1999). Such an observation however, says nothing about the efficacy of accrual accounting in particular circumstances – such as in a public sector context. However, the fact that accrual accounting in the public sector has been defined by way of not being something else probably does indicate a perceived need to overcome significant opposition. That opposition was the product of inertia resulting from decades of consistent use of cash-based accounting in public sectors across the globe. In most jurisdictions, only cash-based accounting had been in use in the General Government Sector until the 1990s (for a documented exception, refer Scott et al., 2003).

Whilst accrual accounting had been considered for public sector use as early as 1828², after formal enquiry it was found to be a radical reform with an inadequate match to the public sector requirements of accountability and control (Scott et al., 2003). Subsequently, during the 1980s as attention turned towards public sector performance rather than accountability and control, increased calls for accrual accounting again emerged. The early advocates in this second vanguard have been described as zealots motivated by a desire to achieve conformity of public sector administration to market principles (Wynne, 2003; Barton, 2005a). Indeed, zealous support for accrual accounting persists and is being used contemporaneously as a means to persuade non-adopters who have continued in their use of cash-based accounting as well as exhorting adopters to maintain the

² For accounts of English and American considerations of accrual accounting for public sector contexts refer, respectively, to Edwards et al., 2002, and McTaggart, 1992.

faith in accrual accounting³. Thus a significant level of controversy has developed, and continues, around issues related to public sector accrual accounting (Lüder and Jones, 2003).

Although controversy has characterised public sector accrual accounting, in-depth empirical studies of its managerial impact in General Government Sector organisations are yet to be conducted, as will be shown in Chapter 2. In most jurisdictions, the longevity of public sector accrual accounting experience has been insufficient to be able to assess its impact without being clouded by issues of ‘teething problems’ (implying continued implementation issues). However, some of the early adopters of accrual accounting applied to General Government Sector organisations have now in excess of a decade’s experience and so they present as suitable candidates from which to fill the research void regarding the impact of accrual accounting. One such early adopter is New South Wales which is frequently cited as having been at the forefront of reforms in its financial administration (Ryan, 1998; NSW Public Accounts Committee, 1992; Tink, 1995; Funnell and Cooper, 1998; Carlin, 2005).

This chapter introduces a research project that has combined an historical study of the origins and development of accrual accounting for an early adopter and a case study of its impact on managerial decision making. The main import of this chapter is to lay the foundations of the thesis by next: detailing the research problem; justifying the research project; introducing its methods; outlining the thesis’ structure; and, describing the project’s boundaries. The chapter’s structure follows those purposes and with a conclusion section it orients the reader towards the contents of the following eight chapters.

1.2 THE RESEARCH PROBLEM

Given the extraordinarily long experience of cash-based accounting and the absence of accrual accounting in the world’s public sectors, an unavoidable general inquisitiveness arises: *why did public sector accrual accounting come to*

³ As a recent example of the exhortation to change, the CPA Australia Chair of the Public Sector Centre of Excellence gave advice to the Australian Public Accounts Committees: “It is by holding the passion for these changes (to accrual accounting) that you will drive the cultural changes within the organisations and really start to have your accountants, your management and the organisations reviewing and relying on their financial information.” (Pendleton, 2007, p. 9)

be implemented? A more profound inquisitiveness arises from the scale of the change to accrual accounting and the grandness of claims made on its behalf: *what impact, if any, has the change to accrual accounting had on the public sector?* These two curiosities sustain this project's express research objective, viz. to assess the origin and impact of accrual accounting in a public sector context. This section describes the shaping of these curiosities into the research questions that are addressed in this thesis.

In 2008, a number of public sectors operate using accrual accounting systems. However, in 1988 accrual accounting in the public sectors was limited only to those parts that had commercial objectives. Various known under different labels (for example, Government Trading Entities, Government-owned Business Enterprises, Statutory Authorities, etc) those parts of the public sector that were using accrual accounting were able to associate revenue with expense by virtue of their charging for goods or services rendered. In contrast, the General Government Sector (hereafter, GGS; previously known as the Inner Budget Sector) is characterised by a disconnection between its sources of funds (both revenues and transfers) and its expenses. That disconnection arises from the fact that the majority of GGS services are provided without direct charge for their consumption – instead, they are financed from Parliamentary appropriations of funds. Without a causal linkage between revenue and expense, one of the core rationales embedded in accrual accounting is absent. As a consequence and together with associated difficulties in accounting for many public sector assets, the applicability of accrual accounting in a GGS context has been challenged (McCrae and Aiken, 1994; Aiken and Capitanio, 1995; Carnegie and Wolnizer, 1995; Funnell and Cooper, 1998; Guthrie, 1998; Carnegie and Wolnizer, 1999; Funnell, 2001; Monsen, 2002; Carnegie and West, 2003; Barton, 2005a; Carlin, 2005; Christiaens and Rommel, 2008). These challenges and the consequential controversy surrounding public sector accrual accounting are in most part technical accounting issues that have remained problematic since the adoption of accrual accounting in GGS organisations. However, the existence and longevity of these issues highlight interest in the early adopters of accrual accounting since those jurisdictions have: first, had the longest periods in which to deal with the issues that have caused the accrual accounting controversy; and second, are able

to exhibit the impacts of the change to accrual accounting. Moreover, the cases of early adopters provide unique opportunities for understanding the genesis of the accrual accounting controversy. Given that the NSW Government, together with the New Zealand and Swedish Governments, was at the forefront of the move to accrual accounting, two fundamental research questions have therefore arisen and are addressed in this study:

- 1) Why did the New South Wales Government adopt accrual accounting for its General Government Sector organisations?
- 2) What has been the impact of accrual accounting on decision making within a General Government Sector organisation?

The first of these research questions looks to plausible explanations of the past whilst the second question assesses how the past is influencing the present. Thus, it is argued in this project that the two questions are strongly complementary in that they combine so as to provide a view of public sector accrual accounting that is contextually and empirically rich such that it is capable of assisting with public policy problems of the future. An explanation of why this research has worth is provided next.

1.3 JUSTIFICATION FOR THE RESEARCH

The contribution of this research may be fourfold: first, understanding NSW as a case of public sector accounting change; second, documenting the history of an early adoption of public sector accrual accounting; third, providing an empirically based assessment of the impact of accrual accounting on the management of an organisation; fourth, contributing to the national and international policy debate concerning the future of New Public Management (Hood, 1995) and its associated financial reforms. These contributions fit within the theme of assessing the impact of a significant element of New Public Management (NPM) since accrual accounting has become code for many other changes associated with NPM (Karan, 2001). In addition, the advance of public sector accrual accounting in many jurisdictions has continued and is now becoming very extensive (refer Lüder and Jones, 2003). Yet little is known about the origins of public sector accrual accounting or its impact. Calls for studies such as conducted by this research are becoming increasingly strong (Goddard, 2002; Potter, 2002;

Humphrey, 2005; Christensen, 2007) and follow Carnegie and Napier's (1996) call for historical studies of the development of conceptual frameworks for public sector accounting that have been promoted as being technically superior to traditional public sector accounting systems.

1.3.1 Governmental accounting change

In 1992, Lüder developed his Contingency Model of Governmental Accounting Innovation (hereafter, the 'Contingency Model') in an effort to better understand the factors that affect the adoption of public sector accounting innovations. It has received much attention and repeated application at a broad level of detail (Lüder, 1992; Lüder, 1994; El-Batanoni and Jones, 1996; Godfrey et al., 1996; Likierman, 1996; Montesinos and BARGUES, 1996; Pallot, 1996; Christensen and Yoshimi, 2002) such that it has proven to be robust and adaptable (Chan et al., 1996). However, the Contingency Model does not attempt to model the process by which accounting innovations are introduced in the public sector. As noted by Chan et al. (1996, pp.11-12): the process of change is treated as a 'black box' so "we need a process model of accounting research and development." Recent proposals of reform process models by Lüder (2002) and Pollitt and Bouckaert (2000) have been helpful in meeting this need, yet they have not been sufficiently tested.

The contribution of this research will be to document the history of the NSW adoption of accrual accounting and to use a process model of public sector accounting innovation as an illuminator of the observations in the history. The first part of this contribution relies on the expectation that historical accounting studies are worthwhile (Carnegie and Napier, 1996; Keenan, 1998) in that they can provide perspective to help policy makers understand the interrelationship between their decisions and political and organisational outcomes (Previts et al., 1990). Further, there is the possibility that participation in the process of governmental accounting innovation by certain groups (such as private sector consultants) may hold important implications for its impact on society. The second part of this contribution is expected to be a variant of the Contingency Model that can be replicated in different circumstances to better understand the course of events when a government adopts accounting innovations.

1.3.2 NSW accrual accounting history

With only some exceptions (Christensen, 2002, 2005; Potter, 1999, 2002; Ryan, 1995, 1998, 1999), the extant literature in respect to public sector accrual accounting does not focus on explanations of why the change took place. Although it relates to Australia, even Ryan's and Potter's work does not deal specifically with NSW. Some sources have briefly speculated as to what may have been important in particular instances of the change (eg. Perrin, 1998, p.10) but there is a dearth of research on either the origins or the consequences of public sector accounting change (Ryan 1995). Further, with the exception of the work of Walker (1995a and 1995b), Guthrie (1994) and Ryan (1995) there is a dearth of detailed case studies of the organisational elements leading to the practices of public sector accounting in the context of public sector accounting (Wildavsky, 1988; Broadbent and Guthrie, 1992). Nevertheless, a decade of experience with accrual based financial reporting is now available and so it can be expected that the next major research issue to be addressed will be cost/benefit studies (Potter, 2002). Although studies of the costs and the benefits of adopting accrual based reporting are fraught with difficulty (Funnell and Cooper, 1998) they cannot be fully informed unless they begin with an appreciation of why the change occurred and what policy objectives were expected by the actors in the decision.

1.3.3 Assessing the managerial impact of accrual accounting

Preliminary research has shown that improved managerial decision-making was advanced as an important benefit expected to be achieved from public sector accrual accounting (other benefits advanced by supporters were related to improved accountability). Given these arguments and the continued strong support for accrual accounting (see for example, <http://www.ifac.org/PublicSector/#CurrentPrograms>) an empirically informed analysis of its impact is desirable (Humphrey, 2006). Such an analysis is of growing importance because there are increasing calls for resolution of various technical problems resulting from the application of a business model of accrual accounting to the public sector especially in the areas of assets definition and valuation (Barton, 2002; Carnegie and Wolnizer, 1999; Newberry, 2002a; Potter,

2002). An appreciation of the processes that have influenced the managerial impact of accrual accounting will have two levels of utility:

- At a system-wide level, this appreciation may influence future accounting change in the public sector.
- At an organisational level, this appreciation may improve the adaptation of public sector accrual accounting reforms so as to maximise their decision-making impacts.

1.3.4 Policy debate contribution

A growing debate is emerging regarding the impact of financial reforms associated with NPM. The most relevant part of the debate around NPM is centred on the desirability of accrual accounting to the public sector in general (Guthrie, 1998; Christensen, 2007) and the business model in particular (Barton, 2002). In part, this debate continues an old discussion in which the desirability of separate accounting standards for the public and private sectors was debated (Walker, 1989). However, the current debate extends to ask whether the so-called 'sector neutral' approach that evolved from the past debate is in fact neutral (Newberry, 2003; Vinnari and Nasi, 2008). The potential contribution from this research is to provide an empirically informed assessment of the model of accrual accounting that has been applied as a result of past decisions. This assessment will aid future decision making regarding the shape of public sector accounting.

The four contributions outlined in this section are products of the project as an entity yet the project has two distinct methodological parts which are introduced in the following section and will be detailed in Chapter 4.

1.4 METHODOLOGY

This project adopts two methodologies: first, an historical methodology and second, a field study methodology. In respect to the historical methodology, many authorities argue that we 'do' history in part to understand the present (Previts, et al., 1990; Carnegie and Napier, 1996; Fleischman, et al., 1996b; Funnell, 1996; Parker, 1997; Hoskin and Macve, 2000; Napier, 2001; Parker, 2001). With that motivation, this project adopts an approach that relies on oral and documentary data sources and arranges that data so as to present a plausible explanation of the

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NSW Government's decision to adopt accrual accounting. As will be detailed in Chapter 4, it was considered that archival sources of data were overly restrictive and so significant actors in the history were asked to provide oral data. The risks of that data source are acknowledged but are consciously entertained in the expectation that additional data are available to provide improved insights beyond those which the archive can reveal.

The evidence gleaned from archival and oral sources is classified and categorised with the aid of a model of governmental accounting change and subsequently interpreted within a theoretical framework provided by institutional theory and the literature on epistemic communities. It is recognised here that history is (re)written as data, interpretation and topics change thus the objective here is to provide an initial comprehension of why the NSW Government adopted accrual accounting for its GGS organisations.

The second methodology employed is a single site field study focussed on how the adoption of accrual accounting has affected decision making at that site. A large GGS organisation with relatively stable objectives but a turbulent external environment is used as the research site. That site provided rich data sourced from interviews of employees and related parties such as central agencies and from reviews of archival data. The data is analysed within a theoretical framework provided by the management science school of organisational learning. That framework is built on an expectation that organisations can learn (expand the range of alternative responses to environmental change) through the appropriate use of three processes (information acquisition, information distribution and information interpretation) and one construct (organisational memory). It is intended that this project's use of an organisational learning framework is compatible with Laughlin's (1995 and 2004) 'middle range' where prior theory assumes a 'skeletal' role around which the roles of the observer and the degree of subjectivity in empirical engagement are constructed. Thus this project makes a number of methodological choices: first, it adopts a field study methodology leading to a critical-discursive analysis; second, it develops a qualitative data narrative; and third, its data collection methods utilise interviews, observations

and documents. These historical and field study methodologies are explicated in more detail in Chapter 4.

1.5 OUTLINE OF THE REPORT

This report is presented in three parts: Chapters 1 to 4 inclusive present the research problem, the relevant literature and the research methods; the second part of the report is found in Chapter 5 which presents a response to the project's first research question; and, the third part consists of Chapters 6 to 9 which present findings regarding the project's second research question as well as a concluding chapter.

The core of this report is found in three empirical chapters: Chapters 5 (presenting a history of the adoption of accrual accounting), 7 (reporting findings that deal with two aspects of organisational learning as influenced by accrual accounting) and 8 (reporting findings related to the other two aspects of organisational learning). Chapter 6 also presents empirical results in that it provides the organisational context and background of relevance to the case study reported in Chapters 7 and 8. This report is structured as follows:

- Chapter 1 provides an introduction to the research area.
- Chapter 2 presents a review of the public sector accrual accounting literature by describing that literature, its limitations and its gaps.
- Chapter 3 reviews the organisational learning literature and pays particular attention to the contributions that have emerged from the management science school of organisational learning.
- Chapter 4 details the methodological choices made in this project in order to first present a history of the NSW adoption of accrual accounting and second to identify the managerial impact in a GGS organisation.
- Chapter 5 fulfils the principal concern of presenting an interpretational history of the adoption of accrual accounting in the NSW GGS.
- Chapter 6 situates the GGS organisation in which the field study of the impact of accrual accounting was undertaken. It does that by describing pertinent features of the organisation and its external environment.
- Chapter 7 presents the first half of findings regarding the managerial impact of accrual accounting. Those findings relate to how accrual

accounting has influenced information acquisition and information distribution within the organisation under study.

- Chapter 8 presents the second half of findings regarding the managerial impact of accrual accounting. Those findings relate to how accrual accounting has influenced information interpretation and organisational memory within the organisation under study.
- Chapter 9 concludes the thesis by identifying its contributions, summarising its findings, describing its limitations and suggesting areas of future research. It also demonstrates that the combination of historical studies with in-depth field studies can produce the richest understandings that can best equip us for the future.

1.6 DELIMITATIONS OF SCOPE

The boundaries on this research are primarily threefold: first, it is limited to NSW; second, for its interpretive history, it is confined by time to the period of 1977 to 1996; and third, in its assessment of managerial impact, it is constrained to a single, large, GGS organisation over a specified period of time. Rationales for choices made in respect to these boundaries are outlined in this section and further detailed in Chapter 4.

1.6.1 Why only NSW?

The research is limited to NSW because NSW was the first Australian State or Federal government to introduce accrual accounting. By excluding other governments, the research is able to eliminate ‘follow-on’ factors that result from observing the actions of an inaugural change. Additionally, interest in the historical study is heightened by the factors that led NSW, as a pioneering adopter of reform, to move to accrual accounting.

1.6.2 Why 1976 to 1996 for the history?

As will be further explained in Chapter 2, the justification for confining the history to the period of 1976 to 1996 is that this period covers the life of the government that had determined the path to implementing accrual based financial reporting. Additionally, the early part of that period covers a time when accrual accounting was beginning to be advocated with increasing force within NSW.

However, whilst extending the period earlier may provide additional background it is likely to add less explanation than the data relating to the years that are included in the study. To shorten the period of this research so as to cease immediately following the initial implementation of accrual accounting (1992) would unnecessarily hamper the research since it would exclude some primary data (for example, Parliamentary enquiries) that might be helpful in illuminating a history of the change to accrual accounting.

1.6.3 Why one GGS organisation for a consideration of impact?

Assessment of the role of accounting information in decision-making is assisted if the analysis is limited to one GGS organisation primarily for three reasons. First, assessments of managers' explanations of their uses of accounting information are not confounded by different types of problems found across more than one organisation with varying objectives, contexts and organisational cultures. Second, limitation of the case to one organisation allows data gathering from a single set of managers; additionally, some of these have experience covering cash (before introduction of accrual accounting) and accrual accounting in the chosen organisation. Third, as will be explained in Chapter 6, the chosen organisation has had a relatively stable set of objectives over time. Therefore, any observed changes in decision-making are more likely to have resulted from altered accounting information than other factors.

Appendix 1 provides details of pertinent definitions to assist comprehension of the remaining chapters.

1.7 CONCLUSIONS

This chapter has introduced the research project that seeks to assess the origin and impact of accrual accounting in NSW GGS organisations. The background to that research project was outlined and its justification previewed given a precise of the research problem. The dual methodologies addressing the historical aspects of this project and the managerial impact perspective were described in brief and definitions of significant terms were provided. The final part of the chapter outlined the project's delimitations of scope. With the introduction to the research

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project as provided in this chapter, the next chapter presents a review of the relevant literature on public sector accrual accounting.

CHAPTER 2: Public Sector Accrual Accounting Literature Review



2.1 OVERVIEW

This chapter reviews the large body of public sector⁴ accrual accounting literature. Its objectives are to describe what is known to date about the topic area, describe the types and limitations of extant studies and identify the gaps in the literature. To achieve these objectives, focus is placed on contributions with historical and/or technical perspectives to aid both of the major aims of this study: to understand ‘why’ the NSWG adopted accrual accounting for its general government services sector; and, to understand the impact of the change.

In its review of the literature, this chapter identifies 145 contributions of varying relevance to this research and organises its discussion as follows:

- first, a brief discussion of accrual accounting as a technology is provided;
- second, discernible patterns in the literature are identified;
- third, arguments advanced in favour of accrual accounting in the public sector are recounted;
- fourth, arguments advanced against accrual accounting in the public sector are presented; and,
- fifth, documented histories of accrual accounting in a public sector context are reviewed.

Finally, the chapter offers some conclusions derived from its discussion to assist the dual purposes of this research.

2.2 PUBLIC SECTOR ACCRUAL ACCOUNTING

Carlin (2005) rightly describes the public sector accrual accounting literature as being peripatetic. However, such a description is perhaps an understatement when

⁴ Where the term ‘public sector’ is used it is meant to relate to the General Government Services sector as opposed to government trading enterprises.

considering the literature on accrual accounting as a technology since it is in many ways fundamental to commercial accounting technique. For that reason, this section commences with a brief description of accrual accounting as a technology *per se*, and that description forms a base on which the subsequent public sector focus is built in the remaining sections.

2.2.1 Accrual accounting as a technology

Regardless of the sector to which it is applied, accrual accounting refers to the gathering, ordering and reporting of information regarding expenses, revenues, assets, liabilities and net worth derived on a basis which recognises transactions at the time an economic event occurs. Typically, accrual accounting is defined by way of contrast to cash accounting in which transactions are only recognised when cash is exchanged (Potter, 1999); it has even been defined as “all accounting procedures that differed in any way from the cash basis” (James, 1950, p. 310). Being the accounting system enshrined in accounting standards, accrual accounting has achieved a taken-for-grantedness in the private sector that is rarely challenged or analysed (for an exception, refer Takatera and Sawabe, 2000) but is also the foundation for much of the accounting theory literature and forms an empirical testing ground for much positivist/functionalist capital market literature. A search of the word ‘accrual’ in abstracts of *The Accounting Review*, *Journal of Accounting Research*, *Journal of Accounting and Economics*, and *Contemporary Accounting Research* returned a total of 204 articles⁵ and is indicative of the emphasis in this literature on issues that arise from accrual accounting. That literature is not reviewed here but is used to demonstrate some themes that have relevance when accrual accounting is applied in a general government services context.

The most important issues debated in the general accounting literature in respect to accrual accounting have been:

- Time in accounting: whether the accrual of certain items flouts the accounting period as a temporal ordering device (Chambers, 1989).

⁵ The results of these searches conducted using EBSCO Premium were: *The Accounting Review* = 99 articles; *Journal of Accounting Research* = 33 articles; *Journal of Accounting & Economics* = 41 articles; *Contemporary Accounting Research* = 31 articles. The searches were conducted in September 2005 covering each serials’ complete years of publication.

- Definition of assets and the issues that arise from apportioning their revenue-earning over their life (Mautz, 1988; Pallot, 1990; Takatera and Sawabe, 2000).
- Determination of income (Littleton, 1953; Edwards and Bell, 1961; Macintosh, et al., 2000).
- Manipulation of accounting (resulting from unavoidable exercise of judgement required by accrual accounting) and associated ‘earnings management’ phenomenon (Healy and Wahlen 1999).

Since these issues are unresolved in private sector accrual accounting, it is perhaps unsurprising that they also attract discussion in the public sector accrual accounting literature that is reviewed in the remainder of this chapter.

2.2.2 Overview of the public sector accrual accounting literature

The literature on public sector accrual accounting issues reflects the character of public sector accounting in that there was a long period of relative disinterest and quiet until the 1990s when a frantic period of activity and change followed. That frantic activity is still a feature of the literature and so this review aims at identifying a number of themes identified in the extant body as well as suggesting what might be considered as the major trends in the literature. A wide selection of the extensive body of literature is identified in Appendix 2 and, although it is not argued as being exhaustive, the selection presents a reasonably robust picture of the extant literature. In Appendix 2, contributions are characterised according to number of features (if applicable):

- first, the publication is classified as being either: official (authored by a government official, department, committee or similar); industry (authored by a practicing accountant, accounting firm and/or a professional body); academic (authored by an academic); or historical (providing a historical perspective); and,
- second, for each publication, excluding the histories, it is asked whether the publication:
 - i offers some advocacy: being one of support for public sector accrual accounting; opposition; a call for change; or a questioning of it.
 - ii expresses concern about asset issues in the public sector
 - iii argues the public sector accounting standards should be sector-neutral or sector-specific
 - iv makes predictions about the impacts of accrual accounting: being either external – changed accountability – or internal such as changed managerial decision making
 - v argues that accrual accounting is representative of some broader political and organisational theme.

In reading Appendix 2, a number of explanatory points should be noted. First, the body of literature excludes contributions that relate to accrual accounting in government business undertakings but does include contributions that deal with broad aspects of public sector accounting and management as long as there is explicit mention of accrual accounting. Second, the list is not exhaustive⁶ but does cover most Australian contributions and aims to capture the more substantial non-Australian sources. Third, some contributions have been classified as ‘historical’ in that they provide a historical narrative of one or more jurisdiction’s experience⁷ of accrual accounting whilst other contributions may relate only to experience of accrual accounting in a limited sense or for a specific type of public sector function such as museums. Fourth, the classifications used are blunt and subject to argument but the table nevertheless presents a useful overview of a rapidly changing body of literature. In its presentation, the appendix lists contributions in two periods (pre-implementation by NSW of accrual accounting and post-implementation) and all contributions are shown in chronological order.

Without attempting to explicate the contents of each of the 145 sources identified in Appendix 2, the remaining discussion of this chapter will focus on the following issues that highlight the overall nature of the prior literature and the gap therein of relevance to this research:

- The nature and changes in advocacies for public sector accrual accounting and the associated changes in the sources of contributions to the literature (Section 2.2.3).
- Arguments against public sector accrual accounting and discussions regarding relationships between accrual accounting and more broad issues of public sector management (Section 2.2.4).
- Findings related to histories of accrual accounting in the public sector (Section 2.2.5).
- Summation of the public sector accrual accounting literature (Section 2.2.6).

2.2.3 Advocacies and sources

Perhaps because accrual accounting for non-profit organisations was a controversial and significant departure from long standing practice, its literature is strongly characterised by the presence of advocacies both for, or against, its

⁶ For example, it does not include Australian Accounting Standards nor does it represent an exhaustive coverage of academic conference publications on the subject.

implementation. The advocacies in favour of adoption were strongest in number in the early stages of the period covered by Appendix 2 and they were largely from sources that are labelled as ‘official’ (bureaucrats, politicians, officially sanctioned bodies such as enquiries, working parties and similar) or ‘industry’ (accountants, professional bodies, consultants). Thus in the period 1981 to 1993 when NSW had achieved its implementation of accrual accounting, 80% of publications were from official or industry sources and almost all of these offered a positive endorsement of the move to accrual accounting. In contrast, in the second period, 1994 to 2005, the heavy influence of official and industry publications fell such that over the complete period (1981 to 2005) these two sources accounted for 38% of publications. The natural corollary of this dissection is that the academic discussions and histories started to appear more slowly but finished the period in the ascendancy, in numbers at least, such that over the full period they generated 90 of the total of 145 publications. It is not the objective of this review to offer reasons for the pattern noted above⁸, however identifying the pattern assists in an understanding of the large literature and a synthesis of its main points that is provided in the remainder of this chapter. The discussion here will follow the trend of the literature: arguments in support are discussed next followed by arguments opposed to the reform.

2.2.3.1 Arguments for accrual accounting: official and industry support

The early literature is dominated by arguments for accrual accounting predominantly from officials or practising accountants. Whilst those individuals did not represent officially sanctioned views until after the formal decision to adopt accrual accounting in 1988, their employment affiliation was usually identified when they wrote or spoke as though that was relevant to their views. Thus the classification of the source of these arguments is relevant to this review especially since the views supporting accrual accounting lacked empirical evidence, perhaps because of the ‘early days’ nature of the commentaries. Instead,

⁷ The jurisdictions are shown by way of abbreviation in parentheses: ‘Aust.’ = Australia; ‘EU’ = European countries; ‘Indon.’ = Indonesia; ‘UK’ = United Kingdom.

⁸ The literature on professional change would be useful in dealing with the interesting question of why this pattern of change in the public sector accrual accounting literature is apparent. For example, early in the literature when practitioners dominated and academics appear to have been relatively quiet would be contrasted with the latter stage when the practitioners appear to have

those contributions rely on normative views often presented in a zealous manner (Christensen, 2002) and frequently only on emotive grounds (Carlin, 2005). These views can be characterised as being one or more of the following:

- Accrual accounting in the public sector will make it comparable to the private sector and that would be an inherently sensible thing to do (see for example, Egol, 1987a; Regan, 1987a).
- Accrual accounting is defined as the opposite of cash accounting and so would avoid the problems that arise from cash accounting through timing manipulation, asset misuse and ignorance of non-cash costs (see for example, NSW Public Accounts Committee, 1988; DioGuardi, 1992).
- Accrual accounting will improve external accountability (see for example, Carpenter, 1987b; Robson, 1988) and prevent manipulation of public finance by politicians (Regan, 1987b).
- Intergenerational equity will be improved by accrual accounting reports (see for example, Walker, 1987).
- Accrual accounting will provide full and accurate cost data and so improve the efficiency of the public sector especially in respect to its asset usage (see for example, Humphry, 1989; Balding, 1991; Rowles, 2002a).

Since most of these arguments were advanced before practical application of accrual accounting in a General Government Services sector had been implemented, it is perhaps understandable that they lacked an empirical base (Humphrey, 2005). However, increasingly, there is evidence emerging that the arguments presented have, at the very least, confronted some significant implementation affects and unanticipated complexity in transferring an apparently tried-and-proven accounting technique to a new environment (Ezzamel et al., 2005). This evidence leads to a discussion of arguments calling for rejection, change or challenge of the reform, as provided in the following section.

2.2.4 Arguments against accrual accounting: opposition, change or challenge

As noted by Carlin (2005), each of the lines of argument supporting public sector accrual accounting are ripe for criticism since they are presented largely in a data free environment. Increasingly there is criticism of the move from cash to accrual accounting (Guthrie et al., 2003) as is shown in Appendix 2 where the incidence of advocacies classified as ‘against, change or question’ significantly outnumbered advocacies ‘for’ in the years following NSW implementation of accrual

moved on to other issues whilst academics are catching up with post-implementation issues and critiques of the worth of the change.

accounting⁹. The majority of the critical literature identified in Appendix 2 presents one or more of the following reasons to conclude that the case in favour of public sector accrual accounting is likely to be based more on hope than expectation:

- The definition of ‘asset’ based on private sector standards is problematic in a public sector context and creates contortions in meanings (Pallot, 1992; Carnegie and West, 1997; Carnegie and Wolnizer, 1997; Funnell and Cooper, 1998; Carnegie and Wolnizer, 1995, 1997, 1999; Barton 2000; Broadbent and Laughlin, 2002; Barton, 2005a).
- The ‘matching concept’ is problematic in a non-profit context where effort expended does not necessarily relate to revenue earned (Barton, 1999a; Monsen and Nasi, 2001; Monsen, 2002; Chan, 2003).
- Accrual accounting in the private sector is bedevilled by manipulation and like all accounting systems it is socially constitutive (Hines, 1988) without inherent superiority to alternative accounting systems in terms of ‘accuracy’ (Walker, 1989; Broadbent and Guthrie, 1992).
- Accrual accounting, as implemented in a number of public sectors, has produced confusing and sometimes counter intuitive financial statements (Pallot, 1997; Barton, 1999b; Pilcher, 2000; Mellett, 2002; Barton, 2004; Hodges and Mellett, 2004; West and Carnegie, 2004).
- Accrual accounting has been closely interconnected with other public sector reforms and so should be seen as a part of the rhetoric surrounding those reforms (Mellett and Williams, 1996; Guthrie, 1998; Newberry, 2002b; Barton, 2003; Kelly and Wanna, 2004; Newberry and Ellwood, 2004; Newberry and Pallot, 2005b). This point is expanded upon in Section 2.5 below.

It is not intended here to fully review all of the literature that has argued against accrual accounting. However, two important findings from the review of this part of the literature are briefly discussed below. First, that the relationship between improved management and accrual accounting is contested theoretically and second, that accrual accounting represents implementation of a broader scheme of reform – a type of Trojan horse in which the accounting change is not an ends but is a means to introduce other more important change. These issues are discussed in the next two sub-sections.

⁹ In the years prior to implementation, advocacies ‘for’ accrual accounting, shown in Appendix 2, outnumbered other advocacies 32 to 9. In the years following implementation, advocacies classified either as ‘against, question or change’ outnumbered those ‘for’ 57 to 22.

2.2.4.1 Confirming claims that accrual accounting improves management: a gap in the literature

There is ample argument supporting scepticism of the claims that were made in favour of accrual accounting during the early years prior to 1994 as depicted in Appendix 2. This is not limited to what can be depicted as a technical and semantic focus (Carlin, 2005) but also extends to the contributions that have offered substantive reasons for sector-specific approaches or have warned of the need to consider accrual accounting within a broad contextual perspective in which themes of change are identified. Nevertheless, the most important conclusion arising from this aspect of the literature is that both the cases for and the cases against the impact of accrual accounting on managerial decision making have not yet been thoroughly examined in an empirically based study of accrual accounting in operation (Funnell and Cooper, 1998; Guthrie, 1998; Newberry, 2002b; Carlin, 2005; Ellwood and Wynne, 2005). This is clearly an outstanding empirical question and thus is a significant gap in the literature. As part of that gap, over a decade ago, Carnegie and Wolnizer (1995) issued a challenge for the advocates of accrual accounting to answer four specific questions dealing with assignment of monetary values to public sector non-financial resources and recently Carnegie and West (2005) have noted that these specific questions still remain unanswered. Whilst this is true there have been some limited attempts to address some aspects of elements impacting on the managerial impact issue:

- Jones and Puglisi (1997): in a survey-based assessment of Australian government departmental managers, conclude that those managers had doubts that accrual accounting information, when available, would change their decision making; however, this survey's relevance is constrained by the fact that most respondents had either no or very limited experience using accrual accounting in General Government Sector organisations.
- Pilcher (2000): a survey of local government managers concludes that there is confusion in their compliance with AAS27 and thus the usefulness of accrual accounting information for decision making about assets must be questioned.
- CPA Australia (2000): in a survey of 25 organisations' accounting policies and systems, the conclusion was reached that many organisations continued to operate dual cash and accrual systems thus "much effort will be needed to extract benefits of the reforms at agency level" (p. 22). Although this survey asked two questions on the usefulness of accrual information for decision making by Chief Executive Officers, the raw data for responses to these questions is not reported and the study is limited by its small sample size, the lack of anonymity for respondents, the limited

range of available responses to questions (either yes/no or upto 4 alternatives) and the close identification of the survey with CPA Australia and KPMG Canberra.

- Thompson (2001): using content analysis of financial reports and interviews of managers in seven New Zealand museums, this study concluded with an expectation of improved management although evidence of realisation of that expectation is not presented.
- Carlin and Guthrie (2001): examining accrual output-based budgeting in Queensland and New Zealand education organisations, they conclude that documentation did not significantly differ from the input, cash-based budgets and so improved management was unlikely.

Excluding the limited studies noted above, the remainder of the literature is normative in nature and where it makes comments on the managerial impacts of accrual accounting those comments mostly rely on theoretical perspectives of published accounting reports. Thus detailed case studies, based on empirical evidence and making theoretically grounded explanations of observed changes in managerial decision making and other organisational impacts of accrual accounting, are absent from the extant literature.

One of the challenges facing case studies of public sector accrual accounting is the unavoidable complexity arising from the interconnection of accounting change with organisational and managerial change (Carlin, 2005) in a typically unstable environment. One element of this complexity is that accrual accounting has been identified as a means to implementation of other changes and thus assessed as being more than a technical accounting change, notwithstanding that all public sector accounting is inherently contextual (Broadbent and Guthrie, 1992). The literature that makes comment on this aspect of accrual accounting is discussed next.

2.2.4.2 Accrual accounting as a Trojan horse

Whilst the discussion above establishes that the extant literature is void of studies demonstrating the impact of accrual accounting on managerial decision making, perhaps one of the most remarkable features of the literature identified in Appendix 2 is the significant incidence of articles since 2002 that have linked accrual accounting to some thematic view of public sector change. That is, accrual accounting is seen as an element within a theme of change involving apparently diverse matters such as privatisation, private sector management practices, public

sector purchaser-provider relationships, outsourcing and funding levels. These contributions focus not on the managerial impact or micro arguments but instead on the accountability arguments and a broad conception of ‘what is going on here?’ although they essentially pick up the ‘accountingisation’ of the public sector (Power and Laughlin, 1992, p. 133). At a broad level these contributions relate to Hood’s (1995) conceptualisation of NPM and Olson et al’s (1998) discussions of New Public Financial Management. However in more recent times scholars have identified evidence that specifically links accrual accounting to Public Choice Theory (Barton, 2005a), privatisation (Newberry and Pallot, 2005b) and neo-liberalism (Newberry and Ellwood, 2004). Evidence for these claims has emerged as experience of accrual accounting has grown and as research into the adoptions has expanded (Christensen, 2002; Newberry, 2002b; Potter, 2003). Indeed, the links to non-accounting reforms was identified in the NSW case early when an official noted that “the term ‘accrual accounting’ has become a code for much wider-ranging set of changes” (Conn, 1996, p. 82). Thus a lesson from the literature broadly arguing against accrual accounting in the public sector is that historians would be well advised to adopt a healthy scepticism of the claims made on behalf of accrual accounting and, without prejudging the evidence, consider the relationship of this accounting change with other managerial and political changes. In the following section, histories of public sector accrual accounting are reviewed in this light.

2.2.5 Histories involving public sector accrual accounting

Within the literature that provides some historical insights to public sector accrual accounting there are two categories: first, those articles that provide a long term view of public sector accounting; and second, those that consider more recent experiences of public sector accrual accounting in specific jurisdictions. Both categories are relatively small in number and only the latter category are noted in Appendix 2 since the first category generally only have minor or tangential references to longer term considerations of accrual accounting in the public sector.

The main use of the literature that makes some long term reference to accrual accounting is that it establishes that the essence of this ‘revolutionary change’ and the “single most important development for the future (of public sector

accounting)” (Robson, 1987, p. 12) has been considered and even implemented briefly many years past. For example, Edwards et al., (2002) traces an English enquiry held in 1828-29 into the “manner in which the public accounts are kept ... directing our particular attention to the consideration as to how far it may be practicable and advantageous to employ the mercantile system of double entry” (British Parliamentary Papers, 1829, vi(b), cited by Edwards et al., 2002, p.641). That enquiry rejected accrual concepts for government accounting whilst accepting double entry bookkeeping (Edwards et al., 2002). Also in Europe, Monsen (2002) records that German experiments with commercial accounting in the “total public sector” failed prior to 1750 (p. 41, citing Walb, 1926). Similarly, although not as long ago, Pallot (1994) notes that New Zealand produced financial statements on an accrual basis for a short period beginning 1930 but ceased that practice during World War II. On a different continent but decades earlier, in the USA, recommendations for accrual accounting were rejected in the late 1890s (Stalebrink and Sacco, 2003). Back in the Antipodes, accrual accounting was used and then discontinued in some NSW public sector hospitals between 1936 and 1975 (Scott et al., 2003). Thus there is ample evidence that public sector accrual accounting had both been considered and in some cases implemented prior to the 1990s when it dramatically re-appeared on the public sector scene on a widespread scale. Another significant finding from this literature is that the isolated cases of experimentation or rejection of accrual accounting were geographically and chronologically unrelated so that there was no mechanism available to link these experiences across the long periods of time and distances involved.

When we turn to histories covering accrual accounting in the post-1980 period, we face another relatively small literature but one with a central focus on public sector accounting reform in which accrual accounting is central. That literature is identified above in Appendix 2 and consists of contributions by Brorstrom (1998), Christensen (2002 and 2005), Ellwood (2001), Guthrie (1998), Heald (2005), Lüder and Jones (2003), Potter (1999 and 2003), Robinson and Harun (2004), Ryan (1995; 1998; and, 1999) and Ryan et al., (1999). These contributions are briefly summarised below in Table 1.

Source	Jurisdiction	Period	Comment
Brorstrom (1998)	Sweden	1986-1997	A narrative charting the stages leading to 1998 public sector financial accrual accounting standards
Christensen (2002)	NSW	1983-1993	A history of the change to accrual accounting
Christensen (2005)	NSW	1987-1993	A history of the role of consultants in the promotion and adoption of accrual accounting
Ellwood (2001)	UK	1980-1999	Examination of conceptual frameworks for three levels of government
Guthrie (1998)	Australia	1983-1996	Deals with Commonwealth Government accounting reform and identifies two argued reasons for accrual accounting: economic decision making and accountability
Heald (2005)	UK Central Government	1998-2002	Measures timeliness and audit qualifications in the transition from cash to accrual reporting and finds room to improve certification lags and audit qualifications
Lüder and Jones (2003)	10 European countries	1990-2002	Describes 2002 situation at both local and national level for each country but traces back some countries' experiences of reform leading to accrual accounting
Potter (1999)	Australia	1987-1995	By examining the language used in accounting regulation (standards, exposure drafts and Conceptual framework) shows how certain words became privileged with little critical reflection or understanding of implementation issues
Potter (2003)	Australia	1976-2001	Traces the promotion of accrual accounting especially in museums through the AASB's Conceptual Framework project

Robinson and Harun (2004)	Indonesia	1992-2002	Uses Christensen's (2002) revision of Lüder's Contingency Model and shows Indonesia's adoption of accrual accounting was a response to economic crisis but has faced significant implementation barriers
Ryan (1995)	Australia	1984-1993	Identifies the NSW Greiner Government decision as being crucial in the Commonwealth's move; also shows importance of Auditors-General and accounting policy unit staff
Ryan (1998)	Australia	1984-1996	Documents three phases in the development of Commonwealth public sector accrual accounting: issue creation (to 1983), issue expansion (1984-88) and policy response (1988-96)
Ryan (1999)	Australia	1992-1996	Documents a policy network of the accounting profession and government regulators in public sector standard setting; identifies a lack of sustained debate on the effect of introducing accrual accounting standards
Ryan et al., (1999)	Australia	1992-1993	Presents a case history of ED55 (leading to the first PS accounting standard on accrual accounting – AAS29 issued in 1993 – and shows relatively low response rate by Big Six consultants but strong representation by the Auditors-General and Treasuries.

Table 1: Public sector accrual accounting post-1980 history literature

Considering the 14 historical contributions shown in Table 1, three important points for this research emerge: first, that a comprehensive history of the NSW adoption of accrual accounting is absent from the literature; second, whilst accrual accounting has been non-trivial much is unknown about its past; and, third, there is a sense that accrual accounting has been promoted by forces that deserve further research. Each of these points are discussed in the following three sections.

2.2.5.1 NSW public sector accrual accounting history: a gap in the literature

Although the historical contributions shown in Table 1 concentrate on Australia, with the exception of Christensen (2002; 2005), no work has examined the NSW adoption of accrual accounting. This is a gap in the literature that needs addressing for at least three compelling reasons. First, the NSW adoption was the second adoption in a subsequent series of adoptions that form a clear international trend (Lüder and Jones, 2003; Carlin, 2005; Ellwood and Wynne, 2005). This is in contrast to the much earlier, unrelated considerations and experimentations with accrual accounting discussed above and thus the NSW adoption stands as a significant event that may have some explanatory power about subsequent events¹⁰ and the mechanisms that created this international trend. Second, interest in accrual accounting in both developed and developing countries is generating curiosity about the origins of this technology; some of that curiosity is shown in Table 1 and it is probable that the literature will grow as other jurisdictions' histories are written. It is important that the historical context of public sector accrual accounting be as long as is supported by the data and so the early adopters, such as NSW, with longer experience of accrual accounting will be important. Third, a history of NSW accrual accounting, as an early adopter, may assist internationally comparative research of public sector accounting reform experiences. Presently there is only a small extant base of such comparative work (Olson et al., 1998; Christensen and Yoshimi, 2002; Newberry and Ellwood, 2004; Christensen and Yoshimi, 2005; Guthrie et al., 2005) but as such comparative work expands it is likely that classification of jurisdictions into early, follower and late adoptions may assist in discerning richer explanation of this international trend thus the NSW case will be an important 'foundation' case for some of those comparisons. That these comparisons might have worth is partly a result from the non-trivial but, at this stage, unknown nature of the change to accrual accounting as discussed next.

¹⁰ This point does not mean that history should be expected to produce a series of progressive events (refer to Chapter 4). Notwithstanding, the limited literature on the Australian Commonwealth Government's adoption of accrual accounting clearly attributes a significant importance to the preceding NSW adoption (Ryan, 1995 and 1998; Funnell and Cooper, 1998; Potter, 2003).

2.2.5.2 Public sector accrual accounting: non-trivial but unknown

Each history in Table 1 notes some element of significance of public sector accrual accounting. Additionally there is a growing literature that attests to some facets of why accrual accounting has been a non-trivial phenomenon; for example:

- Although the cost of implementation has not been documented, there are indications that it has been expensive¹¹ (Ellwood and Wynne, 2005).
- At least in some jurisdictions “it would appear that a cost-benefit analysis of the implementation of the accrual framework will never be possible” (Funnell and Cooper, 1998, p. 238) and it also seems that accrual accounting has been accorded “a privileged status in the sense that it seldom has had to pass the kind of *ex ante* value-for-money test that the new public financial management regime wishes to impose on all other forms of public service expenditure” (Humphrey, 2005, p. 479). For further views on this theme, refer Froud et al., (1998), Chow et al., (2005), Carnegie and West (2005), Ellwood and Wynne (2005) and Barton (2004).
- As noted above (Section 2.4.2), a number of studies have shown that accrual accounting is not simply a technical matter but that it has been implicated in fundamental changes to public sector management and in wider political matters.
- There is a body of evidence that, as a result of the accrual accounting opportunity, the accounting profession changed its relative disinterest in the public sector to an active interest in a short period of time in the late 1980s (Chua and Sinclair, 1994; Christensen, 2002; Kent, 2003; Christensen, 2005) but this requires further research (Goddard, 2002).
- There is evidence that the decision to adopt accrual accounting in the public sector, and decisions about accounting standards for that adoption, were made without sufficient critical consideration of implementation issues (Potter 2003; Barton 2005a) and as a result there has been a negative impact on timeliness and quality of accounting reports (Heald, 2005), at least initially.

The above points that emerge from the limited histories of public sector accrual accounting point to the conclusion that much is unknown about the topic area but that it is linked to some major changes worthy of further research. Partly this is attributable to the rapid promotion of accrual accounting and so amongst the literature that has applied historical lenses to public sector accrual accounting there have been attempts to identify mechanisms that facilitated its rapid promotion. One such method of promotion is discussed in the following section.

¹¹ As indication of the ongoing cost of public sector accrual accounting, Ellwood and Wynne (2005, p. 162) cite the increased number of qualified accountants employed by the UK central government from 600 in 1989 to 2200 in 2003.

2.2.5.3 Public sector accrual accounting promotion: epistemic communities

There is a strong curiosity about whether it is possible to identify any mechanisms responsible for the growth of accrual accounting in the public sector. Such mechanisms may hold the key to better understand why accrual accounting took hold since 1988 whereas it did not take hold in the earlier examinations and experimentations. One of the first tentative suggestions in this regard was offered by Laughlin and Pallot (1998) when they questioned whether there had been a cooperative group of people who acted in concert to support certain beliefs in their efforts to reform public sectors. Building on the work of Haas (1992) they describe such a grouping as an epistemic community and they speculate as to two communities that may have been present in the support of new public financial management: an intellectual community of policy advisors and other interested parties such as academics and a second pragmatic community led primarily by private sector management consultants (p. 389). Narrowing their focus, Laughlin and Pallot then speculate:

Accrual accounting is an interesting growing world-wide movement traceable to the need to make the public sector more like the private sector and particularly to encourage the introduction of capital charges. Whether this is evidence of the dominance of similar forms of accounting or accountants in the epistemic communities advising policy makers across the world must, however, await further research to answer. (p. 392).

Laughlin and Pallot's (1998) speculation regarding epistemic communities is taken up by a number of researchers examining public sector change as summarised in Table 2.

Source	Subject	Comment
McSweeney and Duncan (1998)	The emergence of the Financial Management Initiative in the UK	An epistemic community might have been in place but further research is needed to confirm this
Lapsley and Oldfield (2001)	Management consultants as public sector change agents	Supports view that management consultants have formed an epistemic community based on public sector reform
Carnegie and Napier (2002)	Possible themes for internationally comparative accounting history research	Argues that research on epistemic communities would be fruitful for internationally comparative work
Potter (2003)	The AASB's Conceptual Framework project as applied to the public sector	Confirms presence of an epistemic community in support of change
Christensen and Yoshimi (2002)	Comparison of NSW and Hokkaido moves to accrual accounting	Confirms activities of international management consultants as an epistemic community in both Japan and NSW
Christensen (2005)	International management consultants' role in NSW accrual accounting decision	Confirms the presence of consultants promoting and subsequently implementing accrual accounting with evidence that they acted openly and beyond profit maximising motives
Potter (2005)	Methodological issues in analysing accounting change	Argues that research of epistemic communities is an important element in understanding accounting change

Table 2: Public sector epistemic community literature

Given the positive findings from this small body of literature and given other work identifying epistemic communities outside the accounting literature (see for example, Tiessen, 1999; Creplet et al., 2001; Miller and Fox, 2001), it is proposed to utilise concepts drawn from the literature on epistemic communities in Chapter 5 which presents a history of NSW public sector accrual accounting. This approach is consistent with Potter's suggestion that concepts of epistemic communities would be an aid in "an obvious opportunity for studies ... (being)

the process by which accrual-based accounting and reporting practices have become ‘the norm’ in public sectors located in many countries” (2005, p. 282). Further explication of the concept and use of epistemic communities is provided in Chapter 4, Methodology.

2.2.6 Summation of public sector accrual accounting literature

In a large body of literature some significant themes and trends have been identified of relevance:

- Discussion and even experimentation of public sector accrual accounting has a long history extending at least to 1828 but such instances prior to 1980 were unrelated to each other.
- Following 1980 there was a rapid growth in discussion of public sector accrual accounting that mostly emerged from official and professional sources with a growing awareness between these sources.
- Most of the official and professional sources were supportive of the change to accrual accounting arguing that the change would deliver improved efficiency, increased accountability and greater comparability with other sectors of the economy.
- Most of the academic sources contributing to the debate were either questioning the change or opposing the change, arguing that sector neutral accounting approaches would create problems because of the unique attributes of public sector assets and the inapplicability of the matching concept in the public sector.
- A recent trend in the debate about accrual accounting has been a strong tendency to associate the change with other public sector reforms and efforts to identify why this association is in place.
- Calls for evaluations of the impact of accrual accounting are increasing notwithstanding arguments by some that the precise impact will never be known because accrual accounting cannot be easily separated from other reforms that have impacted on the public sector.
- A number of scholars have demonstrated the worth of shining historical perspectives on public sector accrual accounting but there is a gap in the literature in respect to early adopters of accrual accounting such as NSW.

2.3 CONCLUSIONS

This chapter has reviewed the wide and rapidly growing public sector accrual accounting literature. The purposes of this review have been to describe what the literature establishes as known about accrual accounting in the public sector and, by identifying any limitations in that literature, to identify its gaps. That literature’s vibrancy demonstrates considerable scholarly activity representing the expectation of worth in its endeavours. Three clear trends have been identified in the changes of the literature: first an early trend for supportive contributions

mostly from official sources with some industry contributions; second, a later trend for calls of opposition, challenge or change coming mostly from academic sources; and, third, a growth in the number of histories involving accrual accounting. Describing the supportive and non-supportive (opposition, challenge, or change) contributions has assisted to clarify the *a priori* expectations of what accrual accounting may influence in its implementation and so that will be helpful in assessing the impact of accrual accounting in a field study. However, that assistance would be of minor significance if the review had not revealed a most significant finding from the point of view of this research: despite significant interest in public sector accrual accounting, there is no extant empirical assessment of its impact. This is a significant gap that this research aims to redress.

The other gap identified by this review is the absence of documented histories of early adopters of public sector accrual accounting such as the NSW Government¹². This is surprising given the high level of interest in public sector accrual accounting and the observation that the present trend towards accrual accounting had its present day origins in early adopters such as NSW. Thus this research has the expectation that an understanding of the history of the NSW adoption will partly enlighten an assessment of its impact whilst also adding to the body of knowledge that can assist internationally comparative assessments of accrual accounting and analyses of the trend towards public sector accrual accounting.

This chapter's review of the literature on accrual accounting has shown an increased turbulence as the dearth of empirical studies emerges as a pronounced problem and as calls for changes to a sector neutral approach to accounting standards are increasing in number and strength. That turbulence is likely to call forth additional approaches to examine the past, present and future of accrual accounting in the public sector. Two such approaches are historical and case study methods as proposed for the two questions posed in this research.

In the next chapter, the organisational learning literature is reviewed in order to form the basis from which a case study of accrual accounting within a single-site

can be launched. Following that, and an exposition of the methodological choices in Chapter 4, Chapter 5 utilises the material of this chapter by presenting a history of the NSW Government's decision to adopt accrual accounting and that in turn enriches the case study presented in Chapters 7 and 8 dealing with the impact of accrual accounting on organisational learning within a General Government Services sector organisation.

¹² With the exception of Christensen (2002 and 2005).

CHAPTER 3: Organisational Learning Literature Review

3

3.1 ORGANISATIONAL LEARNING AND ITS PARENT DISCIPLINES

At the dawn of the new century in 2001 it was possible to reflect that the last quarter of the previous century had been dominated for organisational scientists by an “unprecedented obsession with organizational transformation and improvement” (Robey et al., 2000). A good deal of this obsession dealt with the role to be played by management information systems in improved performance. Perhaps this interest can be dated back to the work of Argyris and Schön (1978) and their claim that organisational learning would underpin success in changing organisations [with over 1,000 citations of their book, Argyris and Schön deserve a special place in the organisational learning literature (Easterby-Smith and Lyles, 2003)]. Interest in organisational learning was heightened in the 1990s as evidenced by creation of a specialised journal (*The Learning Organization*) and special issues devoted to organisational learning in *Organization Science* (1991); *Organizational Dynamics* (1993); *Accounting, Management and Information Technologies* (1995); and, *Journal of Organizational Change Management* (1996). The “enormous interest” (van der Bent et al., 1999) in organisational learning is unabated and so it “promises to be a dominant perspective with influence on both organisational research and management practice” (Robey et al., 2000).

As the organisational learning literature has grown, expressions of frustration with the ‘broad church’ nature of organisational learning concepts have increased (Wang and Ahmed, 2003). Organisational learning scholars have also had various degrees of success in dealing with the inevitable anthropomorphism problem that arises from attempted extensions of human (and other biological organism) phenomena such as cognition and memory to social and organisational

phenomena (Walsh and Ungson, 1991). Thus Huber (1991) notes that ‘organizational learning’ has become a broad metaphor with only “a very small proportion of the work presented in forms and forums that give it social or administrative value” (1991, p. 88). Pentland (1995) also describes the current literature as being “theoretically fragmented” (p. 1). Jones (1995) thus warns that “if the concept of organisational learning is not to be rapidly discredited ... then it would seem necessary that writers on the subject include a more explicit discussion of the particular interpretation they are using than is typically the case at present” (p. 75). In response to such criticisms and frustrations with organisational learning, a number of authorities have provided reviews in which they have dissected the body of literature into its constituent disciplinary perspectives, each with its distinct ontological view (Huber, 1991; Easterby-Smith, 1997). Such dissections help in recognising that organisational learning can provide multiple lenses with which to better understand phenomena of interest. As shown in Table 3, each lens derives from an academic perspective and Easterby-Smith identifies six: psychology and organisational development; management science; strategy; production management; sociology; and, cultural anthropology (1997).

Discipline	Ontology	Contributions/Ideas
Psychology and organisational development	Human development	Hierarchical organisation; importance of context; cognition; underlying values; learning styles; dialogue.
Management science	Information processing	Knowledge; memory; holism; error correction; information; single and double loop learning.
Strategy	Social structures	Power structure and hierarchy effects; conflict is normal; ideology and rhetoric; self-interest.
Production management	Competitiveness	Internal-external interface; levels of learning; networks; direct experience; population-level learning.
Sociology	Efficiency	Productivity; learning curve; endogenous and exogenous learning sources; production design.
Cultural anthropology	Systems of meaning	Culture as cause and effect of learning; beliefs; potential cultural superiority.

Table 3: Disciplines of organisational learning (Source: Easterby-Smith, 1997, p. 1087)

Of particular interest here is the management science school of organisational learning since it suits the research interest in question: understanding how a changed accounting system has impacted on decision making within an organisation. Since the management science school exhibits a “natural affinity between organisational learning and information processing” (Pentland, 1995) it is most capable of throwing light on how a changed accounting system can impact on an organisation. This conclusion is not to deny the importance of contributions from other elements of the organisational learning literature but it is based on the realisation that accounting systems are a subset of information systems in general.

The remainder of this chapter is organised as follows: first, a discussion of organisational learning definitions is provided; second, literature relevant to the four parts of the management science school of organisational learning is discussed; third, a review is provided of the literature applicable to accounting information systems where organisational learning concepts have been applied; and, fourth, implications for this research are concluded.

3.2 CONCEPTS OF ORGANISATIONAL LEARNING

Researchers wishing to use prior literature are inevitably drawn into selecting definitions of concepts that they judge to be helpful to their research objectives. In the case of organisational learning there are many alternative definitions from which researchers can, and do, choose. Indeed, “few phrases have entered the language of organization science with less apparent concern for establishing a common definition than *organizational learning*” (Robey et al., 2000). Perhaps the initial definition of some standing was provided by Argyris and Schön (1978) describing organisational learning as an ongoing construction of organisational theory-in-use developed by private enquiry. This definition espouses individuals’ learning actions, such as discoveries, inventions and evaluations, being encoded so that the whole organisation learns. In this way Argyris and Schön (1978) depict the organisation as being a sum of its individuals but yet being more than a mere collection of individuals. Thus they identify the paradoxical nature of these concepts. That paradox is partly explained by Kim’s (1993) point that “organizational learning is more complex and dynamic than a mere magnification of individual learning” (p. 40); this arises because of intervening factors such as

motivation, reward systems, management control systems (Kloot 1997), group polarisation, management styles and so on.

The inherent paradox of organisations being both the sum of individuals and yet more than that sum, depending on their organisational performance, is a pointer to a core concept within the organisational paradigm: organisational memory. Robey et al., (2000) make the concept of organisational memory central to their definition of organisational learning as “an organizational process, both intentional and unintentional, enabling the acquisition of, access to, and revision of organizational memory, thereby providing direction to organizational action”. This definition however is only of use if its central concept of organisational memory can be operationalised. Organisational memory is described by Robey et al., (2000) as being “a general term that implies that knowledge may be stored in a variety of repositories, both human and artefact” (p. 131). Kim (1993) also offers a broad conceptualisation of organisational memory: everything contained in an organisation that can be retrieved. For example, a compilation of invoices is part of organisational memory. So too are the recollections of what to do when a hoax bomb threat is received by telephone. Perhaps the ilk of the latter illustration are more informative in touching on the importance of organisational memory: it defines what “an organization pays attention to, how it chooses to act, and what it chooses to remember from its experience” (Kim, 1993). From the point of view of this research, with its interest in relating management decision making to altered accounting systems, the retrievable nature of organisational memory is important and is further discussed below in Section 3.4. This importance derives from the consistent recognition that effective accounting systems must provide information that is retrievable in a timely, useful and accurate manner (Ijiri and Jaedicke, 1966). As noted by Atkinson et al., (1997) “since established accounting routines are part of the organizational memory, any theory of management accounting change is likely to involve aspects of organizational learning” (p. 86). The concern with storage of knowledge reflects a management science perspective to organisational learning that finds its interest in gathering and processing information.

The management science perspective of organisational learning has been provided with a “respected contemporary view” (Easterby-Smith, 1997) by Huber (1991). Huber adopts a behavioural conception by arguing that “an organization learns if, through its processing of information, the range of its potential behaviours is changed” (p. 89). This definition is applicable to any entity, whether an individual, a goal-seeking grouping of individuals forming an organisational entity, or a society. Equally, the definition allows for explicit and implicit learning but anticipates four sets of learning-related constructs that will assist in explaining an entity’s learning outcomes. The four constructs that make up the management science school of organisational learning are: knowledge acquisition; information distribution; information interpretation; and, organisational memory. Section 3.3 describes these four components. However, before that, it is useful to further explore some of the difficulties implicit in the application of the management science concept of organisational learning.

3.2.1 Knowledge, information and data

Huber (1991) has been criticised for usage of the terms ‘knowledge’, ‘information’ and ‘data’ as virtual synonyms (Jones, 1995). Huber acknowledges this practice but he offers an indication of his thinking when he notes: “I have, however, tried to use *information* when referring to data that give meaning by reducing ambiguity, equivocality, or uncertainty, or when referring to data which indicate that conditions are not as presupposed, and have tried to use *knowledge* when referring to more complex products of learning, such as interpretations of information, beliefs about cause-effect relationships, or more generally, ‘know-how’” (Huber, 1991, p. 89, note 1). The higher level importance accorded to the term *knowledge* is indicative of the core of organisational learning theories since they give priority to ways of understanding how organisations go about making decisions. The decision making focus of organisational learning is returned to later in this chapter (Section 3) at the completion of this discussion of organisational learning concepts.

Whilst perhaps being symptomatic of the looseness of organisational learning terminology, the ability to interchange organisational learning terms that are capable of more precise meaning is problematic. One problem that arises is the

confusion as to how the learning entity does its learning: can organisations learn independently of their constituent individuals? Jones (1995) critiques the literature that assumes that organisations can learn independently of individuals and concludes that it has a number of problems. These problems “may be traced to the way in which the terms organisational and learning are interpreted (where) organisational is taken as referring to the object undertaking the learning, and learning is treated as the summation of a number of relatively simple, technical properties” (Jones, 1995, p. 64). The summation referred to by Jones is a property known as knowledge and it resides in individuals whom the organisation can, and does, integrate by providing structural arrangements of co-ordination and co-operation (Johanson et al., 2001). The distributed and coordinated nature of individuals’ contributions to task performance (Robinson, 2001) is based on their knowledge and it is those contributions to which organisational learning refers. Thus a preferred approach is that the learning in question is conceptualised as being done through individuals.

If learning is done through individuals it is consistent with the view that human interpretation is fundamental to organisational learning. The information systems literature is helpful in understanding human interpretation in that it generally distinguishes between “data as symbols that represent, describe or record states of the world; information as the purposeful interpretation of data; and knowledge as the retained understanding arising from interpretation” (Jones, 1995, p. 64). Thus data are inputs to some process that interprets them and reaches some understanding of the issue at question where that understanding becomes knowledge upon its retention. Such a simple depiction of learning is a useful starting point but calls for an explication of organisational learning as a behavioural process.

3.2.2 Organisational learning as a behavioural process

As noted above, human interpretation is fundamental to some views of organisational learning. Attribution of human characteristics to organisations can create anthropomorphism issues but emphasises on human interpretation in organisational learning see organisational learning as a behavioural process with one or both of:

- a dependence on the learning behaviours of the individuals within the organisation; and/or,
- an impact on the behaviour of the organisation.

The first mentioned feature follows from the view that organisational learning is linked to the learning by individuals (Kim, 1993) and that all activities within organisations are part of the interpersonal relations that make up the social fabric of the organisation. No part of the organisation, least of all the cognitive processes within it, can stand outside the social character of the organisation. However, this point does not remove confusion as to what makes up learning in the behavioural process and so it is capable of further refinement. As noted by Jones (1995), the literature takes various views as to what learning done by individuals can be counted as organisational learning and at least four types can be discerned:

- anything pertaining to the individuals forming the organisation, regardless of whether that learning relates to the organisation as an entity;
- anything where the subject and object of the learning is the organisation itself;
- anything concerned with organisational members' work; and,
- anything that changes behaviour in an organisation (where behaviour extends beyond mere awareness).

The strongest form of what constitutes organisational learning is the requirement that organisational behaviour changes as a result of the learning that has been undertaken by organisational members. Thus organisational learning is observed in the manifestation of altered behaviour in the form of new responses or actions based on an organisation's interpretations of events. Those interpretations reflect cognitive developments that are part of organisational learning. This concept of organisational learning is "predominant in the mainstream (organisational learning) literature" (Jones, 1995, p. 68) and consistent with the definitions adopted by Huber (1991), Kim (1993) and Fiol and Lyle (1985). However as noted by Fiol and Lyle (1985), it is important to distinguish between the two phenomena of organisational cognition and organisational behaviour since:

"one is not necessarily an accurate reflection of the other. Changes in behavior may occur without any cognitive association development; similarly, knowledge may be gained without any accompanying change in behaviour" (Fiol and Lyles, 1985, p. 806).

Nevertheless, from the point of view of this research, the understanding that organisational learning produces behavioural change is useful in order to assess if an altered accounting system has led to, or at least been associated with, altered managerial decision making. This also points to two other matters covered by the organisational learning literature that this research should consider. These matters are the relationship between organisational learning and environmental change and the role of senior managers in organisational learning. The literature's contributions to these two issues are discussed in the next two sub-sections.

3.2.3 Organisational learning and environmental change

Rarely do organisations find themselves in a stable environment. Thus environmental change is a constant feature of organisational life and must be dealt with in order for an organisation to survive and prosper (Atkinson, Balakrishnan et al., 1997; Kloot, 1997). Indeed the organisational learning literature initially defined organisational learning as being a (generally positive) adaptation to environmental change (Argyris and Schön, 1978) and “much of the scholarly literature on organizational learning is devoted to understanding the conditions under which such adaptation does not occur ... (since) to say that organizations adapt to their environments is too simple, for organizations select and enact the environments that they respond to” (Robinson, 2001, p. 59).

Even researchers who use a different concept of organisational learning must take a stance on the relationship between organisational learning and environmental change since the predictive ability of the organisational learning paradigm requires explanation of what change would take place in a turbulent environment for categories of organisation that both learn and do not learn. The literature is helpful on this point since other researchers have discussed how there are levels of organisational learning that bear a relationship to the extent and nature of environmental change that the organisation is facing. For example, Dixon (1994) argues that the extent of organisational learning must be equal to, or greater than, the rate of environmental change. However, Fiol and Lyles (1985) show that turbulence of environmental change can produce varying ‘appropriate’ levels of learning. Thus a mature and stable industry might appropriately see lower levels of organisational learning than an industry facing technological and/or social

change. However, an organisation in a turbulent environment might also observe high levels of behavioural change simply as an effort to be seen to be doing something thus creating an illusion of learning and managerial control (Fiol and Lyles, 1985).

As a further instance of research that has considered environmental change and organisational learning, Kloot (1997) shows that organisations in turbulent environments will require generative learning typified by paradigmatic change resulting in new shapes and structures within the organisation. Organisations exhibiting what Kloot calls adaptive learning in turbulent environments are only changing to the extent necessary in order to survive. Kloot's work is built on the concepts of single and double loop learning introduced by Argyris and Schön (1978). Single loop learning occurs when organisational strategies responding to environmental change are formulated within a constant framework of norms. In contrast, double loop learning involves restructuring of organisational norms thus altering the frame of reference for understanding the organisation's environment. The literature reflects a reverence towards double loop learning as though it is a higher order achievement of dynamic organisations (Argyris and Schön, 1978; Easterby-Smith, 1997; Forrester and Adams, 1997; Kloot, 1997; Buckmaster, 1999). However, Sinkula (2002) argues that double loop learning can be "exhausting and unnecessary" (p. 257) and Huber (1991) notes that whilst the distinction between single and double loop learning appears critically important, there has only been limited empirical research and "it may be that more systematic empirical studies will not find the two types of learning to be distinct in practice" (p. 93).

From the preceding discussion it is apparent that the organisational learning literature provides a number of alternative views as to the relationship of organisational learning and environmental change. Thus this research will adopt the *a priori* expectation that an organisation facing a turbulent environment will exhibit some form of behavioural change that can be associated with the cognitive processing of its members. The greater the rate of environmental change, the greater would be the expectation of behavioural change exhibited by the organisation. This expectation does not preclude observations to the contrary but

such observations would lead to the conclusion that the expected relationship between environmental change and organisational learning was not present. This *a priori* expectation also points to the need to understand the role of senior managers in respect to organisational learning and this is discussed in the next sub-section.

3.2.4 Senior managers and organisational learning

Since there is an expected relationship between environmental change and organisational learning, it can be expected that senior managers can be of significant importance in relation to organisational learning. On one scale this might be simply due to their importance in the organisation given their leadership roles. However, this expectation stems more from the external orientation given to senior managers compared to other organisational members. Senior managers are charged with managing the organisation's external relations be they customer relations or associations with industry, government and competitors. Thus senior managers have greatest contact with the external environment and so it is unsurprising that the organisational learning literature has a special emphasis on the importance of learning by senior managers (Jones, 1995).

The analogy of senior managers being the 'brain' of their organisation is sometimes made in the more popularist management literature. This anthropomorphic metaphor serves to highlight that certain individuals in organisations might hold enough power and authority to enforce the legitimacy of their beliefs although the correlation between position or seniority and legitimacy might be problematic in some organisations. Nevertheless, legitimation and authority are essential aspects of knowledge construction (Latour, 1987) and so this is yet another reason, in addition to senior managers' external orientation, as to why the linkage between senior management and organisational learning is important.

An emphasis on the role of senior managers in organisational learning reinforces the approach that considers organisational learning as a behavioural process as discussed in sub-section 2.2 above. In addition, as noted by Pentland (1995), it is important to take into account the fundamentals of organisational learning: the socially constructed, distributed and embedded nature of knowledge. By focussing

on the roles of groups of individuals such as senior managers¹³ it is possible to conceptualise organisations as “social collectives that construct, organize, store, distribute, and apply knowledge through primarily social means” (Pentland, 1995, p. 2). Such a conceptualisation adds strength to the organisational learning paradigm since it facilitates an understanding of how groups of individuals may behave in relation to organisational knowledge. “Knowledge is always embedded in some social collectivity and is subject to the cultural assumptions, practices, and power relations operating within that collectivity” (Pentland, 1995, p. 3). Additionally, the advantage of viewing the socially constructed nature of organisational learning is to counter the pervading objectivist epistemology found in much of the organisational learning literature (Pentland, 1995) where ‘learning’ becomes commodified in order that it might be acquired by progressive organisations. Instead, it is important to recognise that there is a social process at work within organisations and that process shapes the changed behaviour that can be observed.

The essence of the discussion in Section 2 is that the organisational learning literature offers a range of choices for researchers. Of these choices the ones of use to the research question here are:

- organisational learning is done via the individuals who constitute the organisation;
- organisational learning can be defined in terms of behavioural outcomes;
- environmental change will influence organisational learning;
- senior managers will have a significant role in organisational learning; and,
- the socially constructed nature of knowledge ensures the behavioural process that makes up organisational learning is on-going.

Arising from these choices of frame for this research is the use of the management science school of organisational learning. This is discussed in the following section.

¹³ Without denying the role of other, non-managerial, groups in organisational learning.

3.3 MANAGEMENT SCIENCE SCHOOL OF ORGANISATIONAL LEARNING

The management science school of organisational learning is founded on the intuitive connection between learning and information systems (Pentland, 1995) and the expected link between information and managerial decision making. As a result it is characterised by three high level processes and one construct that reflect the ways in which learning results from handling information and so constructing or encoding some retained knowledge. The three processes are information acquisition, information distribution, and information interpretation. The additional, and essential, construct is organisational memory. Each of these processes and the organisational memory construct are discussed in the four following sub-sections which take advantage of the work of Huber (1991).

3.3.1 Information acquisition

Information acquisition is the process by which information is obtained by the organisational entity. Such acquisition is initially congenital in that it occurs partly prior to the entity's formal creation (for example, incorporation of a corporation) but it is the subsequent and on-going process throughout the entity's life that forms the basis of whatever organisational learning is to occur since new knowledge is central to organisational learning (Kloot, 1997). Huber (1991) identifies four other sub-processes in addition to congenital learning: experiential learning, vicarious learning, grafting and searching and noticing. These information acquisition sub-processes are briefly discussed in this sub-section.

Experiential learning is quite varied and the literature identifies at least four categories¹⁴: (1) experiments: tests designed to improve understanding of cause-and-effect relationships between organisational actions and outcomes; (2) self-appraisal: monitoring objective measures of organisational performance and reaching some assessments of same; (3) unintentional or unsystematic learning: activities that did not emerge from a planned approach to learning but nevertheless have had an impact on organisational learning; and, (4) experience-based learning curves: the predicted relationship between length of experience and

¹⁴ Huber (1991) discusses five categories but he notes that one such category ('experimenting organizations') "has had almost no effect on either practice or research" (p. 94) and so it is not discussed here.

outcomes. In respect to the research that has been undertaken on experiential learning, Kim (1993) argues that it best accommodates operational and conceptual learning and Huber (1991) concludes that a great deal has been learned especially about the obstacles to organisations' learning from experience (p. 95, Table 1):

- Organisational members function imperfectly as sensors of experience and their performance is impacted upon by their position, background and style.
- Organisational performance feedback can be distorted or delayed until after the need for learning has passed.
- Units capable of learning from the experience may not have access to the information relating to the experience because of message routing or organisational politics.
- 'Consequences' of actions so perceived within the organisation may be unrelated to the actions that organisational members associate with them – a condition described as 'superstitious learning'.
- Competence in certain processes, perhaps as a result of learning curve effects, may erroneously lead organisation members to conclude that those processes are superior to others.

Vicarious learning is related to experiential learning but the important difference is that the experience is second-hand, that is, it is derived externally of the organisation itself. Huber correctly associates the large body of literature on institutional theory as being an important component of the vicarious learning literature. Of particular relevance here is the work of DiMaggio and Powell (1983) in explaining the forces that lead to similarities within organisations. They identify three forces leading to isomorphism in organisations: coercive, mimetic and normative. Coercive isomorphic forces are driven by resource dependency relationships extending beyond the organisation under study. Mimetic isomorphism occurs in periods of uncertainty in which organisations thus tend to mimic a 'successful' peer. Normative isomorphic forces result from professionalisation because members of a profession have similar worldviews and their associations become conduits for the diffusion of ideas. Ideas of organisational isomorphism have become highly influential and although probably socially constructed, the concept of mimetic isomorphism has become a center piece of institutional theory applications (Mizruchi and Fein, 1999). However, it is difficult to make sharp distinctions between the three forms of isomorphism (Czarniawska and Joerges, 1996; Modell, 2002). Thus Modell (2002) draws on Oliver (1991) to propose a useful duality of coercive and voluntary isomorphism.

Oliver (1991) also presents a conceptual framework to predict alternative organisational responses to isomorphic pressures and so deals with the criticism that institutional theory presents organisations as overly passive and conforming¹⁵.

An additional contribution arising from the institutional theory literature is that learning can be influenced by a decoupling of structure and activity (Meyer and Scott, 1992). In a wide range of accounting studies, decoupling has been shown to have a potential to provide organisations with a means by which the impact of accounting change can be mediated (for example: Abernethy and Chua, 1996; Lapsley and Pallot, 2000; Modell, 2004; Gomes et al., 2008). Thus institutional theory provides a label ('decoupling') to help describe the phenomenon by which forces for change may, in appearance at least, be accommodated by an organisation yet the reality of learning outcomes may diverge from those institutional pressures.

Related to change outcomes, Oliver (1991) notes that organisational strategies responding to change may vary from passivity to active resistance. Within Oliver's typology is a response she describes as an 'acquiescence' strategy in which the organisation decides on deliberate acceptance of the change in question. An acquiescing organisation may adopt three alternative tactics, one of which Oliver calls 'imitation': the "conscious or unconscious mimicry of institutional models, including, for example, the imitation of successful organizations and the acceptance of advice from consulting firms or professional associations" (1991, p. 152). Thus there is a strong consistency between part of Modell's voluntary isomorphism, DiMaggio and Powell's mimetic isomorphism and Oliver's imitation tactic within an acquiescence strategy. However, the organisational learning literature does not appear to have linked these developments in institutional theory with the precepts of organisational learning although they are useful in understanding vicarious learning.

In addition to vicarious learning, another form of information acquisition is known as grafting in which organisations admit new members who have knowledge not previously available within the organisation. As a result of such

¹⁵ Oliver (1992) also argues that institutional theory would be improved by giving attention to factors that cause erosion or discontinuance of established or institutionalized organizational practices, that is,

grafting, the knowledge base of the organisation is increased. Corporate takeovers may be large scale instances of this type of experiential learning and whilst there is a growing body of literature on the strategy and finance aspects of such takeovers, “empirical studies of knowledge acquisition through grafting are scarce” (Huber 1991). In contrast, there have been studies examining the last of the information acquisition processes discussed by Huber: searching and noticing.

Searching and noticing encompass both deliberate processes of information acquisition and unintentional processes. The deliberate processes include scanning and focused search where the difference is essentially one of scope of enquiry whilst the unintentional acquisition of information is described as noticing. In his summary Huber (1991) notes that “the thrust of much of the literature is that organizations will initiate focused search when (1) a problem is recognized and (2) some heuristic assessment of the costs, benefits and probabilities involved suggests that a search-justifying threshold value has been reached or exceeded” (Huber, 1991). However, Huber also notes that the learning-by-searching literature suffers from two weaknesses: a lack of conceptual work and inadequate theory-testing field work (p.100). Huber also notes that not all searching is carried out for the purposes of learning since frequently decision makers will search for information to legitimise a prior decision. Thus information acquisition may be observed without it necessarily being associated with organisational learning processes.

In summary of the literature on information acquisition from an organisational learning perspective and with the point of view of this research in mind, it is worth noting that a large body is available and that it serves to identify specific means by which information acquisition may be associated with organisational learning. These means may to some extent be substitutes for each other but nevertheless the literature establishes the fundamental expectation that information acquisition is the initial and necessary process of organisational learning. The subsequent process is information distribution and that is discussed in the following sub-section.

3.3.2 Information distribution

Information distribution is the process of sharing information within the organisation (Kloot, 1997). The ways in which information is distributed within an organisation have been associated with both the occurrence and breadth of organisational learning (Huber, 1991) such that wider distribution is associated with increased ability to learn. However, information distribution has physical dimensions that introduce considerations of how organisational members will pass information to other members and what delays and distortions might be associated with that passing. In the distribution of information, it will often be likely that new combinations of information will arise and these combinations might be potentially extremely important in the achievement of organisational learning outcomes. As all MBA programs are keen to reinforce with their students: the successful organisation will be the one that best combines and coordinates its various business functions such as marketing, production, finance, strategy and so on. Such coordination is based on information from each of those functions being combined so as to make new and meaningful information. In recognition of the importance of this point, there have been many studies related to information distribution in organisations arising from organisational behaviour and organisational communications disciplines. Nevertheless, some aspects of information distribution are “prime candidates for empirical study” (Huber, 1991) as in the case of the distributional impacts of internal employee transfer. In place of these under-researched areas of information distribution are found studies that deal with the mechanical or computing aspects of how distributed information systems function within organisations and the contributions of such systems to organisational learning.

Within the information technology discipline is a literature dealing with information distribution issues that partly relate to organisational memory (refer sub-section 3.4 below). However in addition to that literature, research has also dealt with automated data retrieval and use technologies that are designed to support organisational learning as well as being means to support communication and discourse. “Communication among members is essential to organizational learning because members must both contribute to and share the contents of various memory bins, and they must communicate in order to subject existing

memory to scrutiny and experiential tests” (Robey et al., 2000, p. 173). As a result of the importance given to communicating, and recognition of the role of computer-based information systems (Pentland, 1995), research discussing discourse has considered collaborative tools such as Lotus Notes and distributed databases. Some of that research has found that “such systems acquire different meanings and interpretations in different parts of the organization” (Robey et al., 2000, p. 181). The differing frames of reference found amongst organisational members are part of the explanation offered as to why information distribution can be problematic but additional factors may be:

- A lack of awareness of organisational needs for various pieces of information (Huber, 1991).
- Impediments of organisational size and system design that might make some means of information distribution such as face-to-face meetings ineffective (Pentland, 1995).
- Automation of information distribution with embedded processes might obscure information need (Robey et al., 2000) and might also result in important aspects of environmental change being ignored (Gill, 1995).

In addition to the information systems literature on information distribution there is a significant literature on the human relations aspects of sharing information within organisations. This literature is multi-faceted and includes discussions on the behavioural aspects of accounting information distribution that establish the importance of considerations taking into account the social dimensions of organisational practice.

Thus the literature on information distribution establishes that distribution is an essential part of organisational learning, and that it has implications for both the ‘human’ and computing sides of organisations. However, it warns of possible impediments to learning resulting from certain aspects of distribution of information. The discussion of information distribution is also useful in leading to identification of some of the research issues arising from both information interpretation (Section 3.3.3) and organisational memory (Section 3.3.4). These issues are discussed next.

3.3.3 Information interpretation

Information interpretation is the process by which information is given meaning and so converted into knowledge that will have usefulness in shaping theory-in-

use (Argyris and Schön, 1978). Typically information is capable of multiple interpretations and Huber (1991) argues that increased organisational learning is associated with an increased number of interpretations since this reflects a wider range of alternative potential behaviours. Equally, a higher level of organisational learning is reached when units within the organisation develop shared understandings of the multiple information interpretations.

Shared interpretations of information do not necessarily imply agreement on action since different organisation members may not share the same goals. Additionally, there are significant issues of limits to rationality within organisations that will impinge on both information interpretation and action-taking based on that interpretation. March and Olsen (1989) have provided a seminal exposition to the limits of rationality in organisations and their work is generally taken as a useful contribution to institutional theory (Mouritsen 1994). “Any attempt to approach organizational learning as a rational process must accept severe limitations” (Fogarty, 1996, p. 4). A major limitation is the recognition of inadequate human cognitive habits arising from faulty attribution of causality to individuals and overlooking long-term and unintended consequences. Additionally, “in ambiguous situations, people tend to see what they expect and to take far more notice of evidence that confirms rather than disconfirms their preconceptions. All these facts reduce opportunities for learning” (Robinson, 2001, p. 62). In addition to these human failings it can be expected that organisations will exhibit continuous political activity (Easterby-Smith, 1997) which might partly arise from ‘defensive reasoning’ (Argyris and Schön, 1978) in uncertain and complex situations where threat or embarrassment might be anticipated (Robinson, 2001). Recognition of these limitations to rationality in organisations has caused the management science school of organisational learning to be criticised as being politically naïve in its faith in free and open exchange of information (Easterby-Smith, 1997). Nevertheless it is proposed here to take note of the limitations to rational organisational behaviour, such as information interpretation, and to proceed to a consideration of other factors that might influence information interpretation.

The factors that are important in determining the extent of shared interpretations of information are uniformity of framing; richness of media; information load on units; and, the extent of unlearning needed before a new interpretation may be generated. Each of these factors is briefly discussed in this sub-section.

3.3.3.1 Uniformity of framing

Framing refers to a person's prior cognitive map or mental model. This is important because it provides the transfer mechanism that shapes information interpretations and allows individuals to be partial repositories of organisational memory (Kim, 1993). There is a large literature on frames as a means of interpretation deriving from the work of Goffman (1959; 1974) where he defines frames as "guided doings" (1974, pp. 21-25) that cognitively guide observations and understandings of "what is going on here?" (p. 25). That is, they give a sense of meaning by providing a structure based on prior experience that facilitates information interpretation. But framing is not the only thing shaping information interpretation: routines and information systems are also important and these in turn make up part of the organisation's management control system (Kloot, 1995). The social nature of management control systems comes to the fore here since management control systems are in fact socially enacted means of creating knowledge in organisations (Pentland, 1995). The important point to note here is that there is a two-way relationship between uniformity of framing and the management control system and this relationship will shape information interpretation occurring in the organisational learning process.

3.3.3.2 Richness of media

Media richness is defined as the capacity of the information carrier to change mental representations within a specific time period (Huber, 1991). Thus information interpretation that takes place can be influenced by whether it is conveyed in a face-to-face meeting, a written report, a computer message, and so on. An assessment of media richness needs to be made by considering the information being conveyed and interpreted.

3.3.3.3 Information load

Information overload detracts from effective interpretation (Huber, 1991) and different abilities to process information will result in different units within the organisation having disconnected interpretations of information. As a result it might be useful to understand the information processing abilities of units within any organisation being studied.

3.3.3.4 Unlearning

Unlearning is the process through which knowledge is discarded (Huber, 1991). This is done in order that a new set of routines can be adopted and used so as to add improved value to stakeholders (Sinkula, 2002). Unlearning is typically a problem-triggered (Oliver, 1992) action involving the intentional throwing away of obsolete and misleading knowledge and so at its extreme it will be associated with efforts to “reorient organizational values, norms and/or behaviors by changing cognitive structures” (Sinkula, 2002, p. 255). One method of unlearning is to remove from the organisation individuals who are too closely associated with the ‘old’ routines that need to be replaced. “Organizations ... often remove their top managers as a way to erase the dominating ideas, to disconfirm past programs, to become receptive to new ideas, and to symbolize change” (Nystrom and Starbuck, 1984, p. 53). Another method of unlearning is to encourage individuals to eliminate from their thinking the ‘old’ knowledge. However, risk aversion and past experience might both increase the difficulty of achieving change in the ways of thinking within the organisation. Huber (1991) notes that there is merit in empirical studies examining whether any impetus for action associated with unlearning generates learning activity that is incremental or far removed from that which was discarded in the unlearning process. This issue is one of high relevance to accounting change research since alterations to accounting systems are often not ends in themselves but are part of a strategic change designed to alter managerial action in other fields such as customer service, expense reduction, product innovation and so on. In the research in question here, the adoption of public sector accrual accounting, it is noted in Chapters 2 and 5 that significant managerial and accountability results were expected from the adoption of public

sector accrual accounting. Thus it is useful for this research to consider issues of unlearning.

Summarising the relevance of the literature on information interpretation, the following points emerge as being significant to the current research:

- a higher level of organisational learning is reached when units within the organisation develop shared understandings of the multiple information interpretations;
- a number of factors are likely to impede rational decision making within organisations when viewed from the organisational perspective (notwithstanding Mouritsen's (1994) valid point that individuals within an organisation may be acting rationally – that is, with self interest);
- information interpretation is the process by which individuals give meaning to information and this is done within a number of frames that cognitively guide their observations and understandings;
- the appropriateness of the media used to convey information will influence information interpretation;
- the volume of information being handled will impact on its interpretation; and,
- before information associated with a new set of routines can be interpreted, unlearning of existing routines that are inconsistent with the new may be required; such unlearning can occur through change of personnel and/or altered frames.

3.3.4 Organisational memory

As noted in Section 2 above, organisational memory is a central concept to organisational learning. Without access to knowledge encoded and stored in a retrievable manner, the range of organisational behaviours cannot be altered thus organisational learning would be absent. Yet despite the importance and centrality of organisational memory, Walsh and Ungson (1991) were able to conclude some two decades ago that there is only a limited understanding of this concept and Huber (1991, p. 107) argued that it has “received relatively little empirical study”. Additionally, there are differences in the literature as to how to operationalise the concept of organisational memory, especially if a broad definition is applied.

An early broad, but influential, definition of organisational memory was provided by Walsh and Ungson (1991) as “stored information from an organization's history that can be brought to bear on present decisions ... as decisional stimuli and responses that are preserved in particular storage bins and that have behavioural consequences when retrieved” (p. 61). This definition has been useful

for categorising general groupings of organisational memory devices and processes but it has had limitations when applied empirically (Kim, 1993, p. 43). Partly in response to the problems arising from broad definitions of organisational memory, Olivera (2000) conceptualises it as being made up of dispersed knowledge and the integrating mechanisms making that knowledge available. These integrating mechanisms are organisation memory systems such as databases, records systems, electronic bulletin boards, best practice compilations and so on. Using this conceptualisation, organisational memory is empirically identifiable through memory systems “characterized by the processes by which knowledge is collected, maintained and accessed” (p.816). The focus on memory systems that have a tangible character and involve some human interface rather than ‘storage bins’ is useful since it:

- facilitates research of organisational memory in larger organisations with a number of units that need access to information held by other units since it places emphasis on means of access;
- is more in tune with technological developments that have improved the distributed nature of information held in multiple-user databases; and,
- allows study of geographically dispersed organisations’ organisational memory.

However, the memory systems emphasis does mean abandoning efforts to incorporate tacit knowledge in the concept of organisational memory because the memory systems must be explicit and involve interaction with people. Conceptualising organisational memory as a grouping of memory systems helps to focus on the extraction of knowledge for decision making purposes but it detracts from the other purposes of organisational memory such as maintaining routine behaviours, cultural norms or shared interpretations (Olivera, 2000, p. 812). Such limitations are not problematic to this research since accounting information systems are explicit and represent tangible systems that are covered by Olivera’s definition.

Since Huber (1991) and Walsh and Ungson (1991) noted the lack of empirical studies of organisational memory, a number of empirical studies delving into organisational memory have been completed. Some of those studies have developed site-specific inventories of organisational memory features.

One inventory of organisational memory features is provided by El Sawy and Bowles (1997) in respect to automated information systems designed to provide a technological answer to the encoding, storing and retrieving of information dealing with customer support. Whilst this work is useful it does suffer from a problem that Anand et al., (1998) identify: the tendency to see organisational memory from an information technology perspective. Another empirical study of organisational memory was provided by van der Bent et al., (1999) but it was not limited to one aspect of knowledge such as customer support nor was it limited to information technology. Instead van der Bent et al., (1999) set themselves the target of identifying “concrete memory carriers operationalized in a more precise sense” (p. 383) in order that they could test for the organisational learning impact of two phases of organisational change. At their research site they identify three broad areas of activity which they call organisational memory carriers (“structure, system and procedure”) and within these carriers they identify 46 activities in order to reach a ‘concrete’ level of data analysis arising from their participant observation, focused interviews, audits, document analyses and non-participant observations. As a result of their work, van der Bent et al., (1999) were able to use the organisational memory concept to reach conclusions about the impact of organisational change strategies employed at their research site.

Like van der Bent et al., (1999), Olivera (2000) was also driven by the criticisms of the non-empirical nature of work on organisational memory. Olivera’s research site was a multinational consulting organisation and his research objective was to empirically assess how the organisation collected, stored and provided access to its experiential knowledge. As noted above, Olivera adopts a memory system perspective and identifies systems such as social networks, information centres and computer-based systems such as Lotus Notes and intranet applications. Within each system he analyses content, structure and operating processes since these three features “are likely to influence how individuals perceive and use organizational memory systems” (Olivera, 2000, p. 814):

- content: the types of knowledge held in the different memory systems will vary according to their content such as accounting vs non-accounting, general vs specific, declarative vs procedural, and so on;
- structure: the ways in which information is organised and indexed characterises the structure of the memory system; for example, some

memory systems will be centralised such as corporate data bases where knowledge is available to all organisation members whereas some will be dispersed such as social networks where the knowledge is located where individuals are found and access to that knowledge will depend on social network factors; and,

- operating processes: the operation of a memory system is characterised by the ways in which knowledge is collected, maintained and accessed. Accounting based memory systems will generally collect information on a routine basis via repetitive business transactions or on some pre-determined events based criteria whereas non-accounting based memory systems may collect knowledge through some filters that decide what is to be retained and what is to be discarded. In respect to maintenance, the main issue will be the degree to which updating is centralised such as accounting systems or organic such as social networks and electronic bulletin boards. Access to memory systems is characterised by Olivera (2000) as a duality of people-based or computer-based methods.

To summarise the relevance of the literature on organisational memory, the following points emerge as being significant to the current research:

- organisational memory is a central concept to organisational learning and so must be given priority in any research program seeking to use the organisational learning paradigm as its theoretical structure;
- whilst a broad conceptualisation of organisational memory is predominant in the literature, a more narrow definition that focuses on specifically identifiable memory systems means that the concept can be operationalised from an empirical point of view; and,
- memory systems that constitute organisational memory must have some interaction with organisational members and so they can be analysed and understood from research that identifies their content, structure and their operating processes of collection, maintenance and access.

3.3.5 Summation of organisational learning literature

The above discussion provides ample evidence of the appeal of the organisational learning paradigm to a very wide range of scholars. The extent of the literature is wide and characterised by multiple concepts that sometimes conflict or overlap. An apt metaphor for the literature is a series of volcanoes (Easterby-Smith, Crossan, et al., 2000) that have emerged and subsided over time reflecting a dynamic and volatile research effort with multiple and changing foci of interest. Nevertheless, the literature is substantial and steadily growing, yet without a convergence on a tightly rigorous systematic structure of concepts. As a result, there is a paramount need for researchers who seek to use the organisational learning framework in their research, to clarify the definitions they will apply in their research.

Organisational learning definitions that emerge from the management science school and revolve around information acquisition, distribution and interpretation together with organisational memory are appealing to the research in question here. This appeal arises from the explanatory power of these concepts towards the operation, in an organisational context, of an accounting system with the stated aims of meeting the information needs of decision makers. An organisational learning framework thus makes possible empirical research in accounting change by systematically unpacking the information acquisition, distribution and interpretation impacts of an accounting system and the organisational memory aspects of stored accounting information. The above discussion identifies a number of features of each of these parts of the management science school that need careful consideration as will be discussed in Chapter 4 (Methodology) but prior to that the remaining section of this chapter will review the research literature where organisational learning concepts have been applied to studies of accounting systems.

3.4 APPLICATION OF ORGANISATIONAL LEARNING TO ACCOUNTING RESEARCH

In considering future directions for organisational learning research Vince et al., (2002, p. 5) ask “might we also need to expand reflection on organizational learning in unexplored mainstream areas such as marketing and accounting?” Describing organisational learning in accounting research as an ‘unexplored area’ might be an overstatement (for example, Ahrens and Chapman, (2007) acknowledge that accounting is implicated in organisational learning) but it is indicative that the body of relevant empirical research is small. A larger body of work that does link management issues (including accounting) with organisational learning may be characterised as journalistic and lacking empirical data but its usefulness to this research is limited and so it is not reviewed here.

Although only forming a small part of the organisational learning literature, there are some studies involving accounting issues that invoke organisational learning concepts. In this section these studies are reviewed within categories that bear some relationship to parts of the research topic of this research: first, studies related to the public sector; second, studies discussing accounting change; and

third, studies relating organisational learning and aspects of accountants’ work. Table 4 provides an overview of this categorisation of work reviewed here.

Subject/Topic	Source
Public sector	
Budgeting	Forrester & Adams (1997)
Management control	Kloot (1995; 19997); Kloot et al., (1999); Batac and Carassus (2009)
Outcome measurement	Buckmaster (1999)
Performance measurement	Barrados & Mayne (2003)
Hospital payment system change	Pettersen (1999; 2001)
Accounting change	
Activity based costing	Driver (2001)
Management accounting systems	Granlund (2003), Busco et al., (2002, 2006)
Participative budgeting	Shields & Young (1993)
Human resource costing and accounting	Johanson (1999)
Measurement of intangible assets	Johanson, Martensson and Skoog (2001)
Accountants’ work	
CPA work and learning opportunities	Watkins & Cervero (2000)
Accounting consultation units	Salterio & Denham (1997)
Accounting information system design	Ouksel et al., (1997)
Team work in public accounting firms	Kleinman et al., (2002)

Table 4: Categorisation of accounting and organisational learning literature

3.4.1 Public sector accounting

One application of organisational learning concepts to accounting in the public sector is provided by Forrester and Adams (1997) in their analysis of why public sector budgetary reform has had a dismal legacy. They argue that budgetary reform must pay attention to the organisational context and show that typical budgetary reforms have at best been limited to single-loop learning outcomes. There are four reasons why public sector budgetary reforms have been limited to the simplest form of learning. First, “budgeting produces information to ensure that activities remain within the limits set by the budget (reports on inputs, activities, and even outputs), not to question the limits” (Forrester and Adams, 1997). Second, consideration of accountability requirements encourages public servants to protect themselves and so in some instances they will obscure information and generally put budgetary requests in the best light. Third, because

budgets follow lines of responsibility, they reflect organisational fragmentation that will limit cross-organisational initiatives. Fourth, budgetary reforms have not had a history of overtly recognising the organisational context within which the reforms are being implemented.

Although Forrester and Adams (1997) do not provide an empirical base to support their conclusions, their work is useful in pointing to the importance of the organisational context when understanding public sector accounting. Another study that provides emphasis to the organisational and environmental change contexts of public sector accounting is that of Kloot (1995; 1997) in which management control systems and organisational learning are the foci. Kloot's research applies Huber's (1991) definition of organisational learning and so uses the management science school constructs of information¹⁶ acquisition, information distribution, information interpretation and organisational memory. Applying these constructs in a field study, Kloot is able to show that two local government organisations, both facing the same environmental change (amalgamation of councils, compulsory competitive tendering and legislated reporting changes) experience different learning outcomes. The differences in learning outcomes are attributable to different approaches taken to the organisations' management control systems, in particular their costing and reporting systems. Kloot's (1997) work was replicated by Batac and Carassus (2009) in a French municipal government and their findings complement Kloot's since they show that for accounting control systems to stimulate organisational learning, decisions will be influenced by the information provided and whether the learning takes place at an administrative or political level.

Kloot's study (1995; 1997) was extended by Kloot et al., (1999) to consider the linkages between organisational learning and five factors that were impacting local government management accounting. In addition to compulsory competitive tendering, they considered corporate planning, amalgamation and boundary

¹⁶ Kloot uses the term "knowledge acquisition" rather than "information acquisition" but she does not discuss the differences between information and knowledge. As noted earlier in this Chapter (refer Section 3.2.1) a preferred nomenclature is to describe data that reduces uncertainty as being information and to refer to the products of learning, those being interpretations of information, as being knowledge. If that nomenclature is used, then Kloot's usage of "knowledge acquisition" is less preferable than "information acquisition" since it appears to place that activity beyond the acquisition stage and into the distribution and interpretation stages.

reform, changing organisational models and budgeting practices together with financial accountability. Their study examined 23 municipalities and data was collected from semi-structured interviews of 12 CEOs, 9 finance directors, 2 management accountants, and other (unspecified) senior staff. From this qualitative data Kloot et al., (1999) conclude that redesigned management accounting reports allowing business unit and lower-level managers to take responsibility for their results had elements of knowledge acquisition, information distribution and interpretation, and the reports became part of the organisational memory of these municipalities. Their study also demonstrates that some forms of organisational learning depend heavily on information acquired and distributed by management accounting systems.

Another study related to organisational learning and public sector accounting is provided by Buckmaster (1999) arguing that non-profit organisations can promote organisational learning through improved outcome measurement. Buckmaster's work is normative in nature based on a literature review and a critical analysis of issues that have prompted interest in outcome measurement. An additional study comparable to Buckmaster's interest in performance measurement and organisational learning is provided by Barrados and Mayne (2003). They also review the available literature and present a normative argument that organisational learning depends on deliberate efforts to acquire and use empirical data on performance. Whilst the work of Buckmaster (1999) and Barados and Mayne (2003) is of interest in that it links outcome measurement and organisational learning, it is only of limited usefulness because its absence of empirical support confines it to *a priori* theorising.

An article with a strong empirical base that invokes an organisational learning framework within a public sector accounting context is presented by Pettersen (2001). Like Granlund (2003) (refer Section 3.4.2 below), Pettersen starts from the perspective that management accounting systems are an important means for organisations to ensure they have in place shared understanding and conceptual schemes. Beginning with an analysis of budgetary and accounting data from seven Norwegian county hospitals, Pettersen then focuses her research in a case study of a single large hospital to describe the process of organisational learning and

change in respect to payment reforms at a clinical level. The data for the case study was gathered over a two year period using interviews of key informants, participant observation and document studies to answer two questions: first, how do hospitals at a county level adjust to accounting information? And second, how is accounting information defined and interpreted at the clinical level in a hospital?

Pettersen's study concludes, on the basis of her documentary analysis, that a stable and consistent budgetary deficit over a seven year period was evidence that the hospitals interpreted a deficit as a budget and income driver. She describes this as an extension of learning that had taken place as experience with budget deficits and subsequent acceptance of overspending grew. This learning created a frame within which hospital managers understood "the only way to get more money is to overspend" (p. 579). Pettersen's attention then turns to the clinical management level in order to understand how the learning process had affected the introduction of a reformed payment system based on per-case payments. She identifies a cycle of experiential learning in which the clinical managers changed their behaviour but, because of inadequate cost information to forecast the budgetary effects of the accounting changes, their learning did not result in the desired effects. Instead the increased complexity in calculating prices and hospital revenues in the absence of clinical level cost data meant that increased operational deficits were incurred.

The worth of Pettersen's (2001) study to this research is that it is a rare instance of a robust empirical study using organisational learning to better understand public sector accounting practice. It demonstrates that an organisational learning theoretical framework is both workable and enlightening. Pettersen's (2001) study is also reinforced by a broader, survey-based study (Pettersen, 1999) which applies an organisational learning framework to consider the unintended consequences of NPM reforms in hospitals. In this earlier study Pettersen focuses on the two cultures found in hospitals: clinical and administrative. She finds that the information interpretation required for organisational learning:

can differ widely among the members of an organisation, because of different cultural orientations. ... The physicians and the nurses represent the logic of appropriateness through their professional education and experiences, while the

administrative staff represents the logic of consequentiality. In a logic of consequentiality, behaviours are driven by preferences and expectations about consequences, expressed in formal budgets, accounting standards and plans. In a logic of appropriateness, action stems from a conception of necessity rather than preferences (Pettersen, 1999, p. 381).

The lack of coupling between these two cultures stands as a block to organisational learning which can be restated as being a lack of uniform framing (refer 3.3.3.1 above). As a result of the block to organisational learning, a paradoxical nature of financial management practices emerged: the administrators adopted NPM terminology but the doctors and nurses did not change their practices and this organisational hypocrisy brought success to the hospitals because the environment noticed the hospital's effort to become more business-like. Even though little clinical change occurred the reforms were institutionalised and became part of the hospitals as symbols and rituals. This observation points to a complexity that is beyond the capacity of survey-based research to elucidate. Thus Pettersen concludes that to understand what is happening at the operational level of the organisation (in this case, clinics) it is necessary to closely observe the daily work within the organisation and thus to conduct case study research.

Summarising the public sector accounting organisational learning literature, Pettersen's works (1999; 2001) are the strongest demonstrations of the usefulness of the organisational learning paradigm for studies of the impact of accounting change. They also demonstrate the need for case study methodologies in order to explain complex phenomenon. However, whilst Pettersen's work is also supported both in emphasis and methodology by Kloot's (1995; 1997) and Kloot et al's (1999) research, the remainder of the public sector accounting organisational learning literature is largely characterised as being normative in nature without an empirical base.

3.4.2 Accounting change

Changes in accounting systems have been examined, to a limited extent, within an organisational learning focus. One such study is reported by Driver (2001) in which she describes a "mini case study illustrating how activity based costing can serve as a tool for organizational learning" (p.94). The case demonstrates some aspects of a purposeful implementation activity based costing (ABC) that can be used to ensure that generative learning results: widespread involvement and

commitment amongst organisational members; significant effort put into educational activities related to ABC; provision of tools such as spreadsheets and reporting mechanisms designed to facilitate organisational memory; and maximisation of self-managed activities in the ABC process. Whilst Driver argues a theoretical connection between the implementation and operation of an ABC system with organisational learning, her article is short of specific empirical support for that theoretical exposition and does not deal with some of the emerging criticisms of ABC that seem contrary to organisational learning (for example, the point that ABC and downsizing have become associated (Jones and Dugdale, 2002)).

Another study of accounting change that makes recourse to organisational learning is that of Granlund (2003) in which he presents a case of how a new management accounting system was developed after the acquisition of one company by another. Granlund (2003) concludes that the cultural and operational frictions experienced in the merger could have been reduced by a common MAS which could have “facilitated shared learning in providing a common interpretative scheme through which new values and norms (structures) can also be produced and reproduced” (p. 235). Thus the importance of uniform framing of issues in order to achieve required information interpretation is reinforced. Further, Granlund’s work demonstrates the potential role of management accounting systems in providing that uniform framing through a common interpretative scheme based on agreed concepts and vocabulary. Thus Granlund issued a call for “future research (to) also address the implementation of new MAS in the newly formed group and/or in the recently acquired companies, and its implications for learning new strategic and operating agendas” (2003, p. 237).

Although not referred to by Granlund (2003), one study that did relate to his call for studies of management accounting systems in newly acquired companies is provided by Busco et al., (2002) in their single-company case study. The relevance of that study to this research arises from its use of an organisational learning framework to explain how a privatised former public sector company was affected by the imposition of a new management accounting system when it was purchased by the multinational GE. The new system was the ‘GE Way’ with

a significantly different approach to management than was in place in the previously publicly operated company. The main differences in approach related to use of numeric “integration of financial and nonfinancial performance indicators” (p. 48). The ‘GE Way’ had “a powerful impact on established frames of meaning” (p. 49) and Busco et al., (2002) illustrate how the company went through a process of ‘unfreezing’ or unlearning, in order to integrate into the GE network of companies. In making that adjustment the company exhibited organisational learning arising from the new management accounting system and developed “shared organizational knowledge and values ... giving engineers and other non-financial personnel a common language of accountability based on financial and non-financial metrics” (p. 51). Busco et al., (2006) later extended this study by exploring how management accounting systems can be implicated in processes of learning to identify ‘trustworthy’ solutions to organisational crises. Thus both studies by Busco et al., (2002, 2006) utilise organisational learning frames to better understand management accounting change.

Within management accounting systems, interest has been focused on budgeting and a study provided by Shields and Young (1993) has related its findings to organisational learning. Shields and Young undertook a survey-based study in which they asked corporate controllers of the S&P 500 about their organisations’ participative budgeting, information asymmetry, budget-based incentives and firm-based performance. Although their research objectives did not seek to explicate organisational learning *per se* they concluded that to understand participative budgeting it is necessary to explain its antecedents and one important antecedent is organisational learning. They conclude that an important implication of their research is that “participative budgeting arises in response to the need for an organization to learn about its environment, which may correspond to the difference between its present knowledge state and a more knowledgeable information state. Thus, as the firm’s ignorance about its environment increases, participation becomes more valuable as a means of generating and communicating information” (p. 278).

In another study that has linked organisational learning and changes in accounting systems, Johanson (1999) reports the results of a meta literature review in which

he examined case studies of human resource costing and accounting (HRCA). Johanson's purpose was to derive a model of inhibitors to effective use of HRCA by examining the learning process and he concluded that knowledge, motivation and commitment can each present barriers to the implementation of HRCA. Deriving implications from his research, Johanson (1999) argues that training, information, reward, target setting and cultural systems have to be carefully managed to overcome inhibiting factors concerning knowledge, motivation and commitment. Nevertheless, he also concludes that although there is evidence of learning processes being initiated through HRCA, it has received only lukewarm managerial support. Although not conclusive about this, Johanson suggests that the unenthusiastic managerial support for HRCA may derive from its reduction of managers' freedom of action brought about by the clarity provided by HRCA. Thus again the importance of taking into account the social impact of accounting system changes is brought to the fore when organisational learning effects are being studied.

A related study that went beyond HRCA to the measurement of intangible assets is provided by Johanson et al., (2001). Adopting a case study methodology and organisational learning as part of its framework of analysis, this study examined eleven Swedish companies' efforts to associate measurement of intangibles to their value creation efforts. Thus an accounting change, being the introduction of measurement changes related to assets, is examined and Johanson et al., (2001, p. 433) conclude that "intangibles that are subject to measurement are changed because of organizational learning, i.e. dominating beliefs have changed and coordinated action has taken place". This finding demonstrates the utility of an organisational learning framework in identifying the linkage between accounting practices and management decision making and it reinforces the point, noted in Section 3.3.3.1 above, that uniformity of framing will influence the degree of information interpretation and subsequent organisational learning.

From this review and critique of the accounting change organisational learning literature, it can be seen that a number of scholars have discerned worth in using an organisational learning framework to understand accounting change. In most cases these scholars have adopted organisational learning at the outset of their

work but in other cases such as Johanson et al., (2001), a grounded theory approach has resulted in the subsequent adoption of organisational learning as a lens with which to proceed in the research. In addition to this conclusion, the following aspects of this body of literature emerge as being relevant to the proposed research:

- In all but three studies, case study methods have been used; one study (Driver, 2001) is almost lacking empirics, another study (Johanson, 1999) is a meta literature review, and a third study (Shields and Young 1993) uses survey techniques.
- The studies have had a concentration on management accounting issues.
- The relationship between accounting change and uniformity of framing is important and whilst the accounting system can provide a “common interpretative framework” (Granlund, 2003, p. 235) and can be used to reduce cultural differences (Busco et al., 2002), organisational learning can be reduced where managerial indifference demonstrates a low level of uniform framing (Johanson, 1999).
- Where accounting change is to be successful in achieving altered management decision making (that is, organisational learning), a degree of unlearning or ‘unfreezing’ is required (Busco et al., 2002) and this in turn is related to move to an altered framing within the organisation.

3.4.3 Organisational learning and accountants’ work

A small number of studies have applied organisational learning concepts in attempts to better understand specific aspects of accountants’ work. One such study, (Salterio and Denham, 1997), examines organisational memory within large Canadian public accounting firms’ consultation units and conclude that significant variables affecting organisational memory within the firms were: the resources devoted to the consultation units; structure of the units; mandate given to the units by the firms’ partners; and, the availability and amount of documentation relating to prior consultations. In addition to policy advice that emerges from identification of these variables, the value of this work is its empirical specification of organisational memory in an accounting environment.

Another study of accounting work with recourse to organisational learning is a Monte Carlo simulation of idealised decision making that tests for the impact of three accounting information system (AIS) design variables on the organisational learning outcomes associated with the AIS (Ouksel et al., 1997). Adopting a simplistic and deterministic model based on eight assumptions they conclude that learning outcomes are influenced by decision making rules within teams (for

example, by a leader after consulting all team members or by a vote of teams members), the structure of teams and the overlap of information available to teams. However their results are based on an abstraction of the organisational learning process without information asymmetries, agency issues or the dynamics of complex problem solving where the nature of the information and problem might change before a decision can be made. As a result Ouksef, et al., (1997, p. 18) conclude “alternative methodological approaches such as field studies, organizational surveys and controlled experimental tests of the simulation results need to be performed to either substantiate or refute the preliminary findings of this study”.

The issue of learning opportunities found in different organisational types is studied by Watkins and Cervero (2000). Taking up the call for some methodological variety in analysing the existence of learning opportunities, Watkins and Cervero use comparative field studies based on data derived from interviews, surveys and documentary sources. Their research objective was to compare the presence of learning opportunities provided to practising accountants in a CPA firm and in a financial services firm. In their findings they conclude that there was no material differences in the comparative learning opportunities and that “both workplaces were structured to support the evolving learning of a CPA and significant attention had been paid to creating a context supportive of learning in both organizations” (p. 192). Whilst the research objective of Watkins and Cervero’s study is not centred on the proposed research, it has some relevance in two respects. First, it demonstrates the usefulness of field study methods in organisational learning in an accounting context and second it provides 31 specific instances of how individual learning can be aggregated to form organisational learning. In doing so, these observations add empirics to illuminate the paradox identified by Argyris and Schön (1978) which depicts the organisation as being a sum of its individuals but yet being more than a mere collection of individuals.

Kleinman et al., (2002) also study learning opportunities in CPA firms although their analysis concentrates on the impact of teams on organisational learning. Using a survey instrument to gather data, they apply a structural equation test of a

model designed to identify the attributes of teams that create learning forums. Their interest lay more in teams in professional workplaces than in CPAs *per se* but they do reach some interesting conclusions relevant to the work of accountants. One reason why they choose to focus their research within CPA firms was their expectation that the rapid rate of change in accounting work and in the competitive external environment of CPA firms would result in an increased need for organisational learning. Further, there was an *a priori* expectation that if the firms failed to exhibit increased organisational learning, there would be consequential changes in job-related phenomena such as role stress, job burnout, organisational commitment, intention to leave and job satisfaction. Upon analysis of their data, Kleinman et al., conclude that individual learning did significantly affect the accountants' job-related attitudes. Such learning that was focused on the job context and the development of skills contributed to increased positive attitudes towards team work and resulted in a willingness to contribute to others. Whilst their findings in respect to job-related phenomena and learning confirmed expectations, an interesting finding was that "in the accounting area, ... socialization to politics of the firm had relatively limited effects on job-related attitudes (thus raising the unanswered question whether this was) due to the technical nature of the accounting profession and the logical assumption that technical skills are most important determinants of success in such firms?" (p. 455). The weak relationship between socialisation to politics and accountants' job-related phenomena, may have implications in light of the importance of uniform framing for information interpretation since an indifferent approach to organisational politics is likely to be manifest in non-uniform frames. Thus it may be that the accountants' frames may differ from, say, managers, and so their contribution to organisational learning may be impeded. This query also raises the issue of whether the nature of accountants' work influences their ability to contribute to learning outcomes in organisations experiencing turmoil. That is, it is unresolved whether technical aspects of accounting processes and outputs, especially in non-accounting organisations, intervene in the processes of learning such as information acquisition, information distribution and information interpretation. This issue is likely to be of importance in a study of the implementation and effects of a new accounting system in the public sector especially during a period of turmoil created by NPM reforms.

From the organisational learning literature related to the work of accountants, a relatively small body of work has identified the following issues of relevance to this research:

- Accountants' work is important in its contribution to organisational memory and this contribution can be influenced by its organisation and management (Salterio and Denham, 1997).
- Methodologies used to study the organisational learning impacts of, and on, accountants' work have been varied and have included both quantitative and qualitative approaches.
- Learning opportunities provided by organisations for their accountants do not appear to be materially different between specialised accounting firms and firms without an accounting specialisation (Watkins and Cervero, 2000).
- It is unknown whether the technical aspects of accountants' work results in a lower level of uniform framing between managers and accountants and so interferes in the ability of accountants to contribute to information interpretation within organisations – especially non-accounting organisations.

3.5 CONCLUSIONS

This chapter has reviewed the wide and disparate body of literature that use concepts of organisational learning. There have been a number of differing ontologies underpinning the various parent disciplines that have contributed to organisational learning literature and so it is natural that competing concepts and definitions are observed. Much of the debate about organisational learning has revolved around: interchangeability of concepts related to knowledge, information and data; importance of behavioural processes related to learning; significance of environmental change for learning; and the role of senior managers in organisational learning outcomes. After discussing some of the implications arising from these debates, this chapter focused on the management science school of organisational learning and sought to review the constituent parts of that literature.

The management science school of organisational learning has a strong affinity to information systems thinking in that it is founded on three processes related to information (acquisition, distribution and interpretation) and one construct related to storage (organisational memory). However, warnings of the risks arising from the objectivist epistemology that pervades much of the management science literature (Pentland, 1995) serve to remind researchers that the perspective

provided by the management science school needs to be used carefully. The literature is reassuring in this regard because a number of authors have pointed to the behavioural aspects of the processes related to information. For example, in respect to information acquisition the non-mechanistic nature of processes at play is demonstrated in the following observations:

- Performance by individuals as sensors of experience is irregular and impacted upon by their position, background and style.
- Organisational performance feedback can be distorted or delayed.
- Message routing or organisational politics may impede access to information within the organisation.
- ‘Superstitious learning’ (where unrelated events are spuriously associated with each other) may occur.
- Learning curve effects and other process improvements may erroneously lead managers to conclude that those processes are superior to others.

The information acquisition literature also points to a branch of organisational theory that has much to offer to analysts of organisational change: institutional theory. As noted in Section 3.3.1, institutional theory has developed a large body of literature seeking to explain how vicarious learning is related to organisational change – either isomorphic changes or alternative reactions to pressures to change. Linkage between institutional theory and organisational learning precepts is not a strong theme in the literature but it is apparent that the two can provide reinforcement of each other as analytic frameworks. The literature review has also demonstrated the importance given to information acquisition as an initial and necessary process of organisational learning.

The information distribution literature demonstrates that there are both human and computing implications arising from the ways in which organisations internally distribute information. Some of these implications are problematic (for example, a lack of awareness of organisational needs for information; impediments of organisational size; automation of information distribution obscuring information needs) but they also serve to reinforce the human relations aspects of sharing information within organisations.

In respect to the information interpretation literature, significant points arising are:

- shared understandings of the multiple information interpretations lead to higher levels of organisational learning;

- when viewed from the organisational perspective, rational decision making may be impeded in the ways in which information is interpreted;
- cognitive frames are determinant in information interpretation;
- information interpretation is influenced by the appropriateness of the media used;
- the volume of information being handled will impact on its interpretation; and,
- unlearning of existing routines may be required before information associated with a new set of routines can be interpreted.

The organisational memory literature complements the abovementioned three elements of the management science school of organisational learning. Organisational memory is a concept that is central to organisational learning and so must be given priority in any research program seeking to use the organisational learning paradigm. Some difficulties arise from the broad conceptualisations of organisational memory but some studies have shown that it can be empirically operationalised (El Sawy and Bowles, 1997; van der Bent et al., 1999; Olivera, 2000). In order to do so, it is necessary for researchers to identify content, structure and operating processes of organisational memory collection, maintenance and access.

In addition to the non-accounting specific organisational learning literature reviewed in this chapter, attention has been given to the smaller body of literature that has applied organisational learning concepts to accounting issues. That literature was categorised into three types: public sector accounting literature; accounting change literature; and, accountants' work literature. In the first mentioned category, the work of Pettersen (1999 and 2001) and Kloot (1995 and 1997) both demonstrate the usefulness of organisational learning as a framework to understand public sector accounting change. In the second category, there is also an emphasis given to field studies but not exclusively so. This literature tends to focus on management accounting issues and the themes of uniformity of framing and unlearning are strong. In the third category, the literature is both small and relatively inconclusive but it does raise the issue of whether the technical aspects of accounting intervene in organisational learning processes especially in non-accounting firms experiencing environmental turbulence.

As noted by Atkinson, et al., (1997) "any theory of management accounting change is likely to involve aspects of organizational learning" (p.86). The

Chapter 3 – Organisational Learning Literature Review

literature reviewed in this chapter demonstrates that the application of organisational learning concepts to public sector accounting change is worthwhile. It also points to some of the potential problems such as interchangeable terminology, and so serves to warn researchers that a robust methodology is paramount in order to achieve meaningful research. The methodology employed in this research is discussed next in Chapter 4.

CHAPTER 4: Methodology



4.1 OUTLINE: TWO METHODOLOGIES

The importance of research methodology lies in the fact that it makes research practice possible (Keenan, 1998). This chapter has two aims: first, to discuss methods used in developing a history of the NSW adoption of public sector accrual accounting and second, to describe the methodology chosen to identify the managerial impact of accrual accounting on a single agency.

Many authorities argue that we ‘do’ history in part to assess the present (Previts et al., 1990; Carnegie and Napier, 1996; Fleischman, et al., 1996b; Parker, 1997; Hoskin and Macve, 2000; Napier, 2001; Parker, 2001). However, the presentation of a history requires different methods to those used in assessing the impact of a change even though historical and field study methods are both susceptible to similar problems (Miller et al., 1991). In this chapter both sets of methods are discussed and efforts are made to provide linkages between them in order to demonstrate that the argument for historical understanding is empirically justified. The two parts of this research (history and managerial impact) form a coherent body that is grounded in the often argued, and infrequently delivered, justification of history. Nevertheless, for clarity of exposition, this chapter will separately deal with the methodologies used in the two elements of the research.

In respect to the history methodology, the discussion here is organised around four sections: accounting historiography; gathering data; interpreting data; and finally, a summation and commentary on the limitations inherent in the chosen methodology used to present the history in Chapter 5. In respect to the assessment of the managerial impact of accrual accounting, the methodology discussion is organised around four issues: characteristics of field studies; data gathering methods employed; data analysis, and finally, a summation and commentary on the limitations inherent in the chosen methodology.

4.2 HISTORY METHODOLOGY

4.2.1 Accounting historiography

Since the early 1980s, accounting history as a discipline has undergone remarkable growth such that it is vibrant, wide in scope and characterised by multiple approaches (Miller et al., 1991; Parker 1999; Fleischman and Radcliffe, 2003). Sometimes these multiple approaches have led to conflict and paradigmatic ‘warfare’ between antagonistic camps (Funnell, 1996, p. 40). Such debates signal progression in building a community of scholars since, in a Kuhnian sense, a ‘mature scientific community’ must debate its shared grasp of paradigms (Bryer, 1998) and increasingly the literature evidences calls for recognition that alternative perspectives of accounting history should be welcomed (Mills, 1993; Carnegie and Napier, 1996; Funnell, 1996; Fleischman et al., 1996a; Parker, 1997; Chua, 1998; Merino, 1998; Boyns and Edwards, 2000; Fleischman and Radcliffe, 2003; Parker, 2004). Although this discussion will not fully cover the debate between alternative schools of accounting history (refer Parker, 1997, pp. 124-9) it will use some of the contributions to that debate to address important matters that will necessarily shape aspects of the history presented in Chapter 5. Those matters are first, what constitutes accounting history and its worthwhile topics; second, the role of objectivity and truth in accounting history; and third, doing history.

4.2.1.1 What constitutes accounting history and what makes worthwhile topics?

Accounting history can be defined as “the study of accounting thought, practices and institutions in the past”¹⁷. From the ‘traditional’ accounting histories to the ‘new’ accounting histories, there has been a commonality that all have dealt with some conception of accounting in the past. Traditional accounting history has been characterised as limiting its domain of interest to the history of mechanical and procedural techniques (Loft, 1986; Cooper and Puxty, 1996), often double-entry bookkeeping, written in isolation of their social, economic and organisational contexts (Funnell, 1998). In contrast, there is an increasing recognition that accounting is socially constitutive in that it reflects its

¹⁷ The definition offered here borrows from the 1970 American Accounting Association’s definition except it avoids limitations of seeing accounting history as reflecting an evolution of change (refer Napier, 1989).

environment whilst also shaping that environment (Hines, 1988) and that histories of accounting should acknowledge this fundamentally essential characteristic of accounting. Thus the taken-for-granted world of accounting – the record keeping and technical practices of accounting – tends increasingly to be the background (Hopwood, 1992, p. 125) to more interesting depictions of the past of accounting in which accounting is recognised as being “an activity which is both social and political *in itself*” (Loft, 1986, p. 138). For example, as explained by Carnegie and Napier (1996, p. 18), a history dwelling only in a ledger may conclude that depreciation was charged but a history that expands its sources and its topic may be able to explain why depreciation was charged, what role it had in other strategies, what significance it had and so on. Thus selection of topic can be a definitive point as to what to expect from the resulting history (Bryer, 1998).

Prominent amongst accounting history topics have been “moments of eruption” (Hobsbawm, 1998, p. 118) that represent a crisis in which accounting features in some way (Miller et al., 1991, p. 401). Walker (2000) offers three substantive reasons for this pre-occupation: first, crises suggest the imposition of an external and objective force on the accounting profession; second, turbulence says something about the structures that surround accounting; and, third, crises generate voluminous source materials that might serve to show the effect of the crisis on both the accounting profession and its jurisdictions. Whilst these reasons might justifiably point to topics that are of interest to accounting historians, there has been conflict within the discipline as to the appropriate weight to be given to progression within accounting history (Carnegie and Napier, 1996; Fleischman and Tyson, 1997) and there has been recognition that the world of accounting is often one in which inertia dominates (Oldroyd, 1999, p. 94). Thus in discussing progress in accounting history, Napier (2001) argues that progress is a choice of historical explanation that should neither be privileged nor pilloried since “there is no single true narrative: historical events can be ordered in a narrative - ‘emplotted’ - in different ways” (Napier, 2001, p. 23). Extending this in relation to choice of topic and methodology, Napier continues: “Narratives of accounting that make use of a progress emplotment, showing how the environment gives rise to new problems, how individuals and groups experiment with solutions, and how

these solutions either succeed ... or fail ... are just as valid as histories as narratives that claim not to make judgements of success or failure” (2001, p. 25).

Regardless of whether a crisis or a period of change are chosen for the time-related aspects of the history (Parker, 2004) a range of worthwhile and interesting topics exists and a variety of conceptions of accounting within accounting histories is present (Gomes, 2008). Carnegie and Napier (1996) present an impressive list of potential topics for accounting historians including institutional histories that enquire into what factors influenced standardisation of public and private sector accounting practice. Within that topic Carnegie and Napier in particular see considerable research opportunities in questioning how, in Australia and New Zealand, “‘commercial’ accounting practice came to be seen to be technically superior to traditional public sector accounting systems” (p. 25). Perhaps the most notable element of commercial accounting practice moving into the general government services sector is the adoption of accrual accounting for purposes of both financial reporting and managerial decision making. Thus calls for histories of accrual accounting in the public sector have been made in the accounting historiography literature as well as in the public sector accrual accounting literature as reviewed in Chapter 2.

Without further elaborating other worthwhile accounting history topics, it is apparent that the aim to present a history of the adoption of accrual accounting within the public sector is a contribution to the accounting history field. Although such a history could, conceivably, concentrate only on the limited technical aspects of the change from cash accounting to accrual accounting, such a constrained history would be of limited use. Instead, greater utility would be in a history that seeks to understand the interactions of the accounting change with its social and organisational context. Using prior literature on public sector accounting (refer Chapter 2) and the accounting historiography discussion here would point to a range of questions that such a history might care to address; for example:

- What generated an interest on the part of decision-makers for a change in long established public sector accounting practices?
- Was there a dominant doctrine compatible with adoption of accrual accounting and if so how did accrual accounting fit into that doctrine?

- What were the decision-makers' expected effects of accrual accounting on external and internal accounting and accountability?
- By what means did knowledge-based organisations, including private sector consulting firms, influence accounting policy decision-makers?
- What were the barriers to implementing accrual accounting and how were these barriers overcome?

In addressing these types of questions it is necessary to adopt some stances on historiographic issues and this section will thus discuss issues of objectivity and truth in history before turning to the 'doing' of accounting history.

4.2.1.2 Objectivity and truth in accounting history

Written histories are presented as narratives that attempt to make sense from the events upon which they are based (Funnell, 1998b). Whilst the narrative may claim to be 'empirical' as opposed to a fictional narrative, it is nevertheless a literary artefact based in language and efforts of discovery thus it cannot attain status as a truth statement (Jenkins, 1991). Such is not a criticism of history as an endeavour since "truth acts as a censor" (Jenkins, 1991) that privileges certain interpretations, shuts down others and regulates all where word and world and word and object remain separate. Truth statements cannot capture the higher order complexity with which the social sciences confront researchers. Historians of the past who argued that they discovered truth about a particular historical phenomenon tend now to be viewed as "embarrassing relatives" (Funnell, 1998b, p. 157) attempting to seek a singular truth that is built on prior truths in a type of 'historical verticality' (Funnell, 1996). Thus both accounting and non-accounting historians have increasingly expressed dissatisfaction with presumptions of factuality, objectivity and truthfulness in histories (Miller et al., 1991; Tosh, 1991; Merino, 1998). Such presumptions are unachievable since histories must rely upon an unavoidably limited archive (Sy and Tinker, 2005) and must step outside a positivist paradigm in order to consider context in equal weighting with content (Funnell, 2001). Thus an outcome of the paradigmatic and methodological discussions of 'new accounting history' has been a growing consensus that historical objectivity is an impossibility (Carnegie and Napier, 1996; Cooper and Puxty, 1996; Fleischman and Tyson, 1997).

Although the foci of interest here are the historiographic practices that may be employed to develop accounting histories, it is important to recognise that the

limitations of these practices are not unique. Instead, “as a research method, historiography is no more subjective than other social science methods” (Goodman and Kruger, 1988, p. 317) since all field study is beset with problems of interpretation, issues of authenticity and bias of sources, and questions of completeness of archives (Miller et al., 1991, p. 400). Nevertheless, to avoid pursuit of objectivity is to “abdicate responsibility for controlling and correcting bias and to foist it onto the reader” (Mills, 1993, p. 802). As a result, various accounting historians have addressed this perplexity and some prescriptions to approach it are:

- Meld aspects of confirmatory induction with scepticism (Goodman and Kruger, 1988, p. 319).
- Desire and continually strive to see things the way they really were by maintaining self-awareness, a commitment to truth and a capacity for critical thinking and analysis (Parker, 1997, pp. 134-5).
- Carefully consider the issues ensuring historical subjectivity and explicitly communicate the philosophy of history adopted in the research (Fleischman et al., 1996b, pp. 60-1).
- Avoid the ‘illusion of objectivity’ by making explicit the theoretical framework adopted and by acknowledging that “a focus by any particular lens must provide only a partial explanation of a given phenomenon” (Merino, 1998, p. 612).
- Recognise that the past is unordered until an historian’s narrative is written yet that narrative represents a powerful means to advance preferred views so new narratives and counter-narratives need to be welcomed initially on the same historical issues and more increasingly on new issues that show “the political roles of accounting through its ability to constitute social relations” (Funnell, 1998b, p. 156).

None of these prescriptions overcome the causes of subjectivity in history. Nevertheless as noted by Hobsbawm “without the distinction between what is and what is not so, there can be no history” (1998, p. ix). So for example it can be agreed with a high degree of objectivity amongst most of today’s accounting historians, that the NSW public sector moved to accrual accounting in the 1990s. However to extend beyond that observation and to reach conclusions to the types of questions posed in Section 4.2.1.1 above can only be done with the recognition that future historians may offer alternative conclusions and explanations, grounded in either the same evidence and/or new evidence. As long as those historians follow sound historiographic practices in their use of that evidence, the additional alternative history will stand with equal utility as its forerunner. Some of those practices are discussed in the following section.

4.2.1.3 Doing accounting history

Even though much of the recent growth of accounting history has been attributed to a diversity of approaches and topics, with calls to avoid a “universal standard for undertaking or evaluating historical research or writing” (Parker 2004, p. 3), Funnell (1998b) observes that basically the same tools are used by most accounting historians. As soon as formulating a research question that involves an historical uncertainty, the researcher needs to employ historical research tools. The tools to be noted here are source discovery; authentication and analysis; metamorphosis of evidence; and, narrative creation.

4.2.1.3.1 Source discovery

The uncovering of source materials often involves an archive at least as the “basic starting point” (Carnegie and Napier, 1996, p. 30) but also involves finding data in other locations and forms. Using only a rough hypothesis (Funnell, 1996) to guide the search, the accounting historian benefits from hard work, organised effort and possibly serendipity to uncover sources of some relevance to the research question. Typically those source materials are documents but another significant source, with notable advantages and disadvantages, is oral testimony¹⁸ (Tyson, 1996; Parker, 1999). However, “very few oral history projects have been undertaken in accounting” (Tyson, 1996, p. 92) so the majority of accounting history research is grounded in an archive (Funnell, 1996; Fleischman and Tyson, 2003; Llewellyn, 2003). Although most accounting historians might dwell in an archive or at least substantially attend to documentary evidence, there is significant disagreement on the extent of justifiable reliance on the archive. As discussed in the following section, there are issues about the veracity of the sources but more fundamentally it must be recognised that the sources available to the historian are incomplete because they were not exhaustive in their contemporary time and since then many have perished either by accident or design (Tosh, 1991, p. 134). Thus the choice of data sources is an unavoidable, though often unacknowledged, epistemic choice in historical research (Sy and Tinker, 2005). But also opposed to the extreme regarding the inadequacies of the archive, are the majority of accounting historians who now argue that without

recourse to source data the output can only amount to a vacuous activity built on inadequate foundations (Napier, 1989). In that recourse to source data, it must be recognised that historians are constrained by their available time and resources. Those constraints are generally unavoidable and they too serve to increase the reason why objectivity is a claim beyond the discipline of history. This is especially so since discovery of source data is only an early phase in the development of a history and it must be followed by authentication and analysis.

4.2.1.3.2 Authentication and analysis

Once source materials (including testimonies and interviews of individuals) are discovered the historian will turn to authenticating and analysing these sources (Goodman and Kruger, 1988, p. 315). The task here is to determine if the sources are credible, believable and representative. In this way historiography “forces the researcher to question the authenticity, informational value, and merit of each datum as evidence before it is used to construct and support hypotheses” (Goodman and Kruger, 1988, p. 320). Since it can be argued that all source materials have a bias¹⁹ the historian’s task is partly to discover such aspects of the sources being used. A natural outcome from this is a tendency, where possible, to increase data gathering so as to check for consistency between sources. Equally, it can be useful to achieve a mix of types of sources (for example: official versus personal; written versus oral or photographic; sanctioned versus unauthorised).

The steps taken to authenticate and analyse historical data are influenced by the historian’s view of history since some might feel that facts speak for themselves and so need only discovery and verification whereas other, more critical, scholars will view the sources as literary texts that reconfigure ‘reality’ and so require detailed analysis of their words, rhetoric and omissions (Fleischman et al., 1996b, p. 62). Thus the judgemental nature of historical authentication and analysis is paramount and unavoidable. However, the judgement used in this stage of the historian’s craft can in part be assessed through the success achieved in the next

¹⁸ This research makes use of oral sources and the implications of this source of evidence are discussed later in this chapter.

¹⁹ In some instances the bias of source documents was deliberate and hidden; for an interesting instance consider the Venetian copyist Baldan who misled the music world for centuries after he falsely attributed some of Vivaldi’s work to Galuppi: Talbot, M. (2004), “Recovering Vivaldi’s lost psalm”, *Eighteenth-Century Music*, 1(1): 61-77.

task: the ordering of the discovered, authenticated and analysed data. That ordering of data has been described as a metamorphosis of evidence into a coherent and probable picture (Fleischman et al., 1996b, p. 62). The implication follows that once the historian has left behind a documented history addressing the research topic, that history in turn becomes a secondary source which following historians may use, reject or ignore depending on their purpose, energy and paradigm with the recognition that similar evidence can lead to different histories (Funnell, 1998b; Parker, 1999) as well as different conclusions²⁰.

4.2.1.3.3 Metamorphosis of evidence

To make sense of the evidence gathered, accounting historians must undertake a judgmental process contingent on the historian's perception of contextual variables relevant to the period being studied (Previts et al., 1990, p. 9). This construction of history results from the historian's individual consideration of the evidence and alternative theoretical frames (with an ever-present willingness to reject theory where it is disconfirmed by the evidence remembering that a 'good' theory is one that holds up until it is replaced by a better one).

One of the challenges faced by all historians in their metamorphosis of evidence is the degree to which they allow their present-mindedness to intrude on their aspiration to be true to the past (Tosh, 1991, p. 145). The present provides a powerful reason for interest in any form of history (Fleischman et al., 1996b; Previts et al., 1990) and it is impossible for historians to exclude the present from their descriptions and understandings of the past (Fleischman and Tyson, 1997). It is a matter of paradigmatic selection as to whether the historian aims to understand the transformation of our present into the past, as sought by historians influenced by Foucault's writings and even positivist historians (Napier, 1989), or to understand how the past as a history came to govern us today (Parker 2004, p. 17), as sought by more traditional historians. Regardless, there is a continual danger of present-mindedness in which present-day ideas and motivations are

²⁰ For an interesting example of a re-writing of accounting history refer to Funnell's (2001b) assessment of the anti-Semite Sombart's work in respect to double-entry bookkeeping. By considering the previously ignored context of Sombart's work, Funnell is able to demonstrate that prior historians' treatments of this topic are difficult to sustain.

ahistorically²¹ brought into the interpretation of source materials from the past (Jenkins, 1991; Mills, 1993, p. 801; Parker, 2004). Thus in the selection of a topic of interest to contemporary readers, it is important that source materials are allowed to speak without being muffled by the historian but s/he cannot avoid the creation of a narrative, as discussed next.

4.2.1.3.4 Narration creation

Increasingly, historians acknowledge that without narrative, history would amount to “little more than chronologies, antiquarianism and archivalism” (Funnell, 1998b, p. 146). Thus after discovering, questioning and ordering data sources, the historian’s next task is to create a narrative that presents a plausible and probable story about the events that characterise the history at the centre of the research objective that began the journey. Whilst the pleasure of travelling on that journey from question to plausible answer provides sufficient purpose to justify the historian’s efforts at a personal level, it is nevertheless important to focus on the writing destination as much as the journey (borrowing from a comment by Chambers whilst levelling a criticism towards a fellow accounting theoretician in 1966; refer Gaffikin, 2003). Continuing that metaphor, it is equally important that the work of prior travellers be incorporated in that historians need, in their journey, to consider prior work in both the form of secondary sources and theoretical structures that can have relevance to their chosen research topic.

A focus on the presentation of a narrative that presents believable and engaging explanation of the events requires the historian to recognise that additional explanations may be presented based on the same or different source data. These additional explanations may prove to be incremental knowledge (Parker, 1997, p. 130) or by way of counter-narrative, may prove to be contrary explanations (Funnell, 1998b). Regardless, each explanation must at least aim at “a ‘satisficing’ approach – to try to understand the past as best we can, realizing that the knowledge will be forever imperfect” (Mills, 1993, p. 802).

²¹ Napier (1989, Note 11) provides an illustration of this from Watts and Zimmerman’s conclusion that, given the present-day view of financing structures, 1620 developments in dividend covenants revealed efforts to reduce the agency cost of debt.

4.2.1.4 Accounting historiography summation

This section's discussion of accounting historiography leads to the conclusion that whilst an historian cannot experience the past as it was (Parker, 1997) s/he can aim to use that which has survived the transition from past to the present (for example, archival and oral data) to present a history of the past (Fleischman et al., 1996b, p.60). Whilst doing so, historians, and their audiences, must always be aware that the surviving set of evidence is limited by both the events of the past and the circumstances of the present including research issues such as methodology, theory, archival management, access, confidentiality, and recollection of persons involved in the history. Thus histories represent a series of judgements and decisions made in their creation. In the history presented in Chapter 5, four notable judgements emerging from the discussion in this section are:

- The first judgement relates to overall purpose and in that regard, it is proposed here to follow Miller and Napier's (1993) emphasis on "the discursive nature of calculation (including) ... the language and vocabulary in which a particular practice is articulated, the ideals attached to certain calculative technologies, and the rationales that set out the aims and aspirations of various authorities" (p.633) although that emphasis does not necessarily situate this work within the Foucaultian school. Instead, the purpose of this work is to provide a history in which the reasons for the change from cash to accrual accounting are identified and the identities and affiliations of individuals involved with the decision are revealed.
- A second judgement made in this work is that its purpose is to extend beyond description and to provide explanation of the events that it observes. However, it does not exclude alternative explanations and it is not confined within a teleological approach to accounting change within the public sector.
- A third judgement is that the topic under investigation is not necessarily one dimensional and thus there is a need to seek out multiple sources of data and to allow each data source to confirm or reject other sources.
- Finally, it is judged that truth and objectivity are beyond historical research but that it is necessary to ground this work in data and theory. In doing so it aims to achieve a marriage of archival research to theory about processes of governmental accounting change.

Collectively the four judgements noted above and the myriad of individual decisions made in executing the research, amount to an acquittal of the historian's craft. Thus every effort is made to deliver this history using sound historiographic practices whilst meeting the two obligations that all archival researchers should observe (Fleischman and Tyson, 2003, p.43):

- first, to assist future researchers by fully describing the archives examined (including their location, the types of documents contained, reference numbers if available, and details of access); and,
- second, to inform the reader of the theoretical grounding used in the research so as to best aid an assessment why certain documents were selected for analysis and reporting.

With this understanding of historiographic issues, the next two sections explain the stances taken in this research regarding data gathering and data interpretation.

4.2.2 Gathering data: public sector accounting change

With the belief that primary source materials are best able to reveal the past (Tyson, 2000), the data used to develop this history comes primarily from three sources:

- documented primary sources found in archives of organisations with some role in the events; for example, NSW Treasury, NSW Auditor-General Office, NSW Public Accounts Committee, and the Government Accountants Group;
- oral histories provided to the research by prominent individuals involved in the events; and,
- secondary sources presenting some informed commentary on the events either contemporaneously or more recently.

Each of these data sources are described in this section and following that is a description of the way in which these data sources have been ordered so as to present the data in a form suitable for interpretation. However, some brief comment on the period under study is first necessary. The period chosen is from 1976 to 1996. This period includes sufficient developments prior to and immediately after the NSW Government's initial accrual based financial reporting and so allows an understanding of the causal factors behind the significant accounting change. Appendix 3 provides a timeline that is helpful in understanding the major events during the period covered by the research. To extend the period earlier may provide additional background but it is likely to be redundant notwithstanding the awkward empirical point that researchers of new formations must start with the acknowledgement that at some point that formation did not exist (Miller and O'Leary, 1998, p.712). To shorten the period to immediately following the initial implementation of accrual based financial reporting (1992) would unnecessarily hamper the research since it would exclude

some primary data (for example, Parliamentary enquiries) that might be helpful in clarifying stated intentions of the change to accrual accounting.

4.2.2.1 Archival data

Extensive use of archival data has been made for this research. Although the events related to public sector accrual accounting are too recent to have had relevant documents formally placed in public archives, there are repositories of files and documents that are identified in this section in order to assist future researchers wishing to re-visit this history.

The largest archival data source was provided by NSW Treasury since it was the central agency driving the move to accrual accounting. Permission was sought from and granted by the NSW Treasury Secretary to facilitate access to 'live' and archived files held by NSW Treasury. The only constraint placed on this access was a confidentiality agreement that placed an obligation on the researcher to provide draft copies of reports resulting from the research to the NSW Treasury. Office facilities including photocopying were provided by NSW Treasury and full access to its file records system was provided so that various interrogations of its records database could be conducted. File titles examined were created in the period 1976 to 1998 since there was some expectation by the NSW Treasury records staff that the latter years saw creation of files from loose papers held by staff with responsibility in earlier years for various aspects of accrual accounting introduction. Even though the main events under study ended around 1994, some files with a later creation date were still examined and a number of later working papers were also interrogated.

As a result of a number of interrogations of file titles, 36 files were called for and were reviewed over a four month period in 2004. Analysis of these files resulted in a further 21 files being reviewed thus bringing the total number of files examined to 57. Files archived were provided within two working days of being called. Material considered relevant to the research was photocopied for later analysis and files were then returned to either archive or active use. Files reviewed are identified by NSW Treasury file number in Appendix 4. These files included minutes of NSW Treasury and inter-departmental implementation committees, correspondence between NSW Treasury and individuals and organisations with an

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interest in public sector accrual accounting, file notes from NSW Treasury officers, NSW Treasury Directions, and a host of other relevant documents.

Other primary documentary data sources reviewed were provided by the NSW Public Accounts Committee and the NSW Auditor-General Office. The NSW PAC archive was accessed with permission of the President of the NSW Legislative Assembly. Access was limited to files and working papers related to a series of seminars conducted by the NSW PAC in 1988, 1994 and 1996 and allowed photocopying of relevant parts of files. Eight files were reviewed and they covered the period 1987 to 1996. These files included minutes of meetings, correspondence between the PAC and individuals and organisations with an interest in public sector accrual accounting, file notes from PAC staff, and reports on seminar outcomes. The NSW Auditor-General Office archive was accessed with the permission of an Assistant Auditor-General and it predominantly related to files being reviewed upon his retirement. These files dealt with pre-implementation issues and had a special focus on cultural assets. In addition to the above mentioned archives, some documents were provided by interviewees and unsuccessful attempts were made to access Australian Society of Accountants documents but only its publicly available documents have survived the passage of time (the Australian Society of Accountants is now known as CPA Australia). A notable source available from the public archive is a video recording of speeches delivered at the important 1987 capital city seminars organised by Arthur Andersen and the Australian Society of Accountants.

Collectively the primary documentary sources available to this research were extensive but not sufficient. It was apparent that the documents were either silent or inadequate on some issues and additional data was needed to explicate the events being considered. That additional data is provided by oral histories and some limited secondary sources discussed in the next two sections.

4.2.2.2 Oral history data

Oral history is based on people talking about their experiences (Hammond, 2003, p.85). This source of data is potentially rich and is perhaps the only source available where events are relatively recent such as is the case for this research. Oral histories may provide data that allow the research to look beyond the

‘official’ story and expose constraints imposed by the written record since “printed evidence is one-way: silent and unable to respond to comments, questions and observations” (Hammond and Sikka, 1996, p.86). In the research conducted here, oral history is particularly relevant because it allows a select group of major identities in the events to explain their perspectives of those events (Collins and Bloom, 1991). These individuals have not documented their roles nor are they likely to since there are commercially sensitive restraints and many of them now maintain busy lives beyond the interest or time availability required for documentation of these events. Whilst some literature has severely criticised use of oral sources (O’Farrell, 1979), more contemporary historians recognise that all histories, whatever their data sources, are selective and biased (Laughlin 1987; Hammond, 2003). As a result, emphasis needs to be placed on validity and reliability with an awareness of the vagaries of oral testimony (Moore, 1989) without at the same time seeking the holy grail of pure scientific and unbiased histories. With due care of the problems that may arise from the use of oral history, as discussed below, it “offers the potential for broadening the options for enquiry in many fields of accounting history research” (Carnegie and Napier, 1996, p.29) and so it forms a solid base of evidentiary data used in this research.

Since “many historians rank oral testimony very low on a scale of reliability” (Moore, 1989, p.4) it is worth noting some of the challenges presented to the historian by the form and existence of oral data:

- One significant challenge arises from the dilemma that in order to analyse interview data it is necessary to edit and transcribe recordings. Yet this very process will remove important clues to their meaning including tone of voice, pauses and gestures (Hammond, 2003, p.86). In this research this challenge was partly addressed by maintaining contact with selected interviewees after the interviews. Sometimes that contact was by telephone but mostly it was conducted via email and allowed clarification of certain issues where required. Full notes of conversations or complete copies of email communications were kept in these cases.
- Historians are challenged by the recognition that informants do sometimes respond differently to the same question when asked by different researchers (Thompson, 1988). This leads to questions of validity and reliability however this challenge might be lowest in research such as this where comments are not specifically attributed to individuals since they were given the assurance to that effect when they approved their participation (Consent Form provided to each interviewee and approved

by Southern Cross University Ethics Committee is at Appendix 5). However the primary defense against this concern is the triangulation of data achieved across multiple interviewees and across oral and documentary evidence.

- The willingness and ability of interviewees to openly and honestly share what they know varies with time. Interviewees who have retired have been shown to be more forthcoming with information than those still in employment (Thompson, 1988) yet recollections may be coloured by nostalgia for the past or by some sense of past grievance (Parker 1997). Equally, recollections may be censored by a reluctance to reveal potentially sensitive and controversial information (Hammond and Sikka, 1996). In this research, this challenge has been partly addressed by seeking corroboration or rejection of points in conflict arising from oral data as discussed below.
- Assertions may be made with less rigour and care compared to those documented in writing (Parker, 1997) and so corroboration by other interviewees can be important. In this research, a semi-structured interview approach was used and so corroboration was mostly achieved since multiple interviewees in each category of interviewee were able to comment on the same sets of events. However, there were instances in the oral histories where individuals were privy to singular perspectives that were not capable of corroboration such as for example where a Premier reported on his politico-administrative strategies personally formulated or where a consultant commented exclusively on his company's approach to public sector accrual accounting.
- As when working with other forms of historical evidence, the historian can influence what oral testimony is considered by choosing who to interview (and who to ignore) and also by selecting the type and mode of questions (O'Farrell, 1979). In this research, the interviews were conducted in a semi-structured manner that gave interviewees minimal direction and prompting to encourage them to tell the story of accrual accounting as they recalled it. This approach maximised the interview's flexibility and allowed it to take different directions as the interviewee felt appropriate (Collins and Bloom, 1991). Each interview, with one exception, was recorded and note taking was kept to a minimum in order to facilitate the flow of information and the interviewer focused on being a 'good listener' so as to pose follow up questions when justified.

As a result of these challenges to oral testimony, documentary data sources described in Section 4.2.2.1 are used to provide some element of data triangulation (Patton, 1990, p. 187). Whilst documentary data sources may corroborate the oral histories, care about such corroboration or its opposite, contradiction, is required since "the need to adjudicate between accounts, so that some are judged true and others false, ... should be resisted, the preference being for an approach that takes an interest in how different accounts (or patterns in data) are produced" (Seal, 1999, p.58). In part, the care taken in conducting

interviews to gather the oral data has meant that corroboration between interviewees' comments and/or documentary sources was sought.

Appendix 6 provides details of interviewees' relevant role/s and their categorisation into one of three cohorts, the date of the interview, its mode (face-to-face or by way of telephone) and the length of the interview. In order to implement the undertaking to preserve anonymity of comments but still cite the comments as evidence, each interviewee was given a code and a unique number within the three categories²² of interviewees:

- Promoters of change (Code: PoC);
- Users of information (Code: UoI); or,
- Producers of information (Code: PoI)

The interviews were transcribed and subsequently analysed in conjunction with the data gathered from written sources (refer Section 4.2.2.1) whilst taking into account the challenges of oral history as described above.

Each of the challenges of oral history has been considered, recognised and accounted for where practicable in this research. It is nevertheless acknowledged that these challenges exist and they have been placed in the balance that weighs the advantages provided by the data gathered in interviews of the key individuals. In the following section, the discussion briefly describes assistance provided to the research by secondary data sources.

4.2.2.3 Secondary data

During the late 1980s there was some academic discussion of public sector accrual accounting (refer Chapter 2). That discussion is treated here as secondary sources rather than primary data for two reasons: first, as will be seen, there is little evidence that the discussion influenced the primary decision makers in the events; second, at best these data sources only serve to provide some contextual background to the events being studied. These secondary sources are not the events themselves and so they are treated differently from the primary data sources – both documentary and oral.

²² The interviewee categories arise from the application of a Contingency Model of governmental accounting change as described in Section 4.2.2.4.

4.2.2.4 Ordering the data: a model of governmental accounting change

As noted in Section 4.2.2.2, oral data was gathered from individuals who were shown by archival data to have played a role in events related to the adoption of accrual accounting. In identifying these individuals, a preliminary estimation of their respective roles was made based on a well respected model of governmental accounting change as developed by Lüder (1992; 1994; 2000). A variant of Lüder's model has been tested in respect to the adoption of accrual accounting by the NSW Government (Christensen, 2002) and found to have had good explanatory power. Lüder's model was formulated to better understand factors affecting adoption of public sector accounting innovations. The variant used by Christensen (2002) posits that change is explained by interactions between five modules: stimuli, promoters of change, information users, information producers, and implementation barriers. Lüder's model and variants of it have been widely applied (Lüder, 1992; Lüder, 1994; El-Batanoni and Jones, 1996; Likierman, 1996; Montesinos and Bargues, 1996; Pallot, 1996; Khumawala, 1997; Monsen and Nasi, 1998; Yamamoto, 1999; Godfrey et al., 2001) such that it has proven to be robust and adaptable (Chan et al., 1996, p.9). As such Lüder's model offers itself as a suitable candidate to use in sieving and categorising data to produce a theoretically informed history of the adoption of accrual accounting. Primarily this has allowed the individuals providing oral histories to be classified into the following three categories:

- *Promoters of Change*: identifiable people and/or organisations that promote recognition of the problem and promulgate a solution. Although these promoters are identifiable, they may not be publicly active nor necessarily known to the general public. However, they are known to the Users of Information either through personal contact or through the office held by the Promoter. The Promoters' motivation to use their access to a User is influenced by epistemic considerations (Laughlin and Pallot, 1998) or self-interest, including financial gain.
- *Users of Information*: political actors including Ministers, Opposition members and political advisors but also including the Auditors-General, Public Accounts Committees, Parliamentary Committees and active lobby groups. In contrast to Lüder the revised model does not attribute any significant role to the general public or citizens. This is consistent with the literature regarding low or no usage of public sector accounting reports by citizens (Rowe, 1991; Mayston, 1992; Rutherford, 1992; Hay, 1994; Walker, 1995b; Copley et al., 1997; Coy et al., 1997; Ryan et al., 2000) and Lüder's more recent version of his model (Lüder, 2002). The advantage of excluding the general public is that it avoids the uncertainty

surrounding the usefulness of annual reports to the public (Ryan et al., 2000). Additionally, operationalising the 'general public' as a concept and measuring the socio-structural variables suggested by Lüder present difficulties that outweigh the benefit of considering this variable which at best is thought to be a 'background influence' (Pollitt and Bouckaert, 2000, p.33). Exclusion of the general public means the Users category consists of political and administrative operatives as well as any clearly identifiable lobby groups. The rationale for this is that political actors are motivated by the pressure to remain politically competitive to use public sector accounting reports. Similarly, administrative actors with an accountability role (Auditors-General and Public Accounts Committees) may also turn to accounting information. This depiction of Users is consistent with Pollitt and Bouckaert's (2000) description of the role played by a political and administrative elite in public management reform.

- *Producers of Information*: bureaucratic actors with some responsibility for accounting information. This responsibility can be exerted by a central agency (typically Treasury or Premier's Department) as well as by managers of line agencies where CEOs, financial controllers and accountants hold responsibility for accounting outputs.

Using these three categories of actors, the research gathered data as described above and that data was interpreted using theoretical frameworks described in the next section.

4.2.3 Interpreting the data: institutional theory and epistemic communities

The discussion here aims to provide only a general framework used to interpret the historical data. That framework draws on two theoretical bases: institutional theory and epistemic communities.

4.2.3.1 Institutional theory

Institutional theory, including its component parts such as New Institutional Theory and Neo-Institutional Theory, has been a dominant body of thought in organisational literature since the 1970s. It is of relevance to this research since it draws on issues of legitimacy within organisations and seeks to explain forces that impact on decision making within organisations including vicarious learning as discussed in Chapter 3.

Legitimacy is a core concept within institutional theories that seek to explain organisational change (DiMaggio and Powell, 1983; March and Olsen, 1989; Mouritsen, 1994). Of particular relevance here is the work of DiMaggio and

Powell in explaining the forces that lead to similarities within organisations. As reviewed in Chapter 3, they identify three forces leading to isomorphism in organisations: coercive, mimetic and normative (DiMaggio and Powell, 1983, p.150) However, given the difficulty of making sharp distinctions between the three forms of isomorphism (Czarniawska and Joerges, 1996; Modell, 2002) thus Modell (2002) draws on Oliver (1991) to propose a useful duality of coercive and voluntary isomorphism.

As noted in Chapter 3, Oliver (1991) discusses various organisational strategies for dealing with change pressures. The theoretical consistency between part of Modell's (2002) voluntary isomorphism, DiMaggio and Powell's (1983) mimetic isomorphism and Oliver's (1991) imitation tactic within an acquiescence strategy suggests worth in this research using its data to examine if Oliver's hypothesised antecedent conditions were present so as to predict the likely adoption of an acquiescence strategy on the part of the NSW Government in its adoption of accrual accounting.

Oliver (1991) hypothesises the following predictors of an acquiescence strategy:

- High anticipated economic or social fitness: an agreement with the values that underpin the calls to increase the organisation's economic or social accountability.
- Low degree of multiple, conflicting constituent expectations: conforming to one constituent's expectations is supportive of other constituents' expectations.
- High resource dependence: relying on the source of change for resources.
- Low intervention in substantive organisational decision making: the change does little to reduce discretionary decision making by the organisation.
- High degree of prior diffusion of the relevant change: broad diffusion within the organisational field implies unquestioned social validity.
- High degree of environmental uncertainty: difficulty in predicting future states of the world.
- High levels of interconnectedness: dense inter-organisational relations among occupants of the organisational field.

Relevant to the question of interconnectedness in this case is the role played by the accounting profession. In that regard the work of Greenwood et al., (2002) in understanding change in institutionalised fields is useful. They present a model of institutional change that involves, amongst others, a stage of 'theorisation' in which general organisational failings are specified, abstract possible solutions are

justified and so moral and/or pragmatic legitimacy is accorded to the change. There is a risk that ‘theorisation’ is evocative language implying an evincive and rational argument but there is no support for this implication in Greenwood et al. In the theorisation stage Greenwood et al., argue that professional associations play a very important role even though they concede “few studies have focused upon (this) stage” (p.61). Scarbrough (2002) provides one such study by considering the stages by which new management knowledge develops and he argues that theorisation is predominantly undertaken by professional bodies whereas subsequent diffusion is undertaken by consultants. As a result there is value in this research using its data to examine the role of the accounting associations and consultants in the institutionalisation of accrual accounting in the NSW public sector.

An additional theoretical lens that considers the roles of likeminded groups, such as professional associations and their members, is provided by work analysing epistemic communities and that lens is discussed in the next section.

4.2.3.2 Epistemic communities

Epistemic communities are groupings of individuals and organisational members who share common values and act in concert to support certain beliefs such as for example, in the case of the environmental movement (Haas 1992). These communities are typically small in their membership and trans-national in their nature since the issues of concern to their members usually cross national borders. Because the issue is one that demands attention in the minds of the community members, they are active in bringing it to the attention of those in power and in promoting an evolution of policy (Adler and Haas, 1992). That is, a core function of an epistemic community is to identify specific ‘problems’ and ‘issues’ that require attention (Laughlin and Pallot, 1998; Potter, 2003). The small but growing body of literature on epistemic communities in accounting change points to the advantage of being able to empirically identify the ways in which the ‘theorisation’ (Greenwood et al., 2002) of new ideas can take place.

Potter (2003) provides a robust empirical example of an epistemic community related to public sector accounting change in his study of the development, promotion and defence of accrual-based accounting standards for the APS,

specifically in the case of not-for-profit public museums. Lapsley and Oldfield (2001) also invoke concepts of epistemic communities in their exploration of the role of consultants in public sector accounting change in the UK and conclude that the consultants possess a motivation close to the idea of an epistemic community with certain skills for sale. Similarly, both Laughlin and Pallot (1998) and Carnegie and Napier (2002) discuss the potential empirical benefit from examining the functioning of epistemic communities in public sector accounting change. Accordingly, this research uses insights provided by epistemic community literature to identify specific individuals and the values they represented to policy makers in their promotion of change.

4.2.4 Summation and limitations

The above discussion has provided a justification for the approaches taken in the historical aspects of this research. That justification rests in a view that history is (re)written as data, interpretation and topics change. Hence 'the history' of accrual accounting in the NSW public sector presented here aims to provide the initial interpretation of events based on the evidence gathered by this research. The evidence used here is based on archival searches and oral sources. It has been initially classified and categorised with the use of a model of governmental accounting change so as to allow subsequent interpretation within the theoretical framework provided by institutional theory and epistemic communities. However, it is worth noting some of the limitations that arise from this approach.

Most of the limitations are inherent to the nature of historical research, in particular:

- Some facts relevant to the history may not be known (this is particularly likely in the case of the influence or lobbying of self-interested organisations) and so this history may simply be incomplete (Previts et al., 1990).
- Some oral history primary data may be inaccurate as a result of interviewees' inadequate recollection of events and/or their altered current-day perceptions of those events (Parker, 1999). However, the use of documentary primary data may lessen the impact of this unavoidable limitation.
- The research generalisability is restricted by the inability of narrative historical research to generate strictly causal findings as opposed to findings of reasonable plausibility. The performance measure to be applied to accounting history might be its ability to explain (Keenan, 1998). However one explanation cannot be expected to nullify other alternative explanations (Carnegie and Napier, 1996) since each historians' efforts to make the past

coherent can only be achieved through their individual interpretations of it (Gaffikin, 1998). However, “all empirical research is partial and incomplete and theoretical and methodological choices are inevitably made whether appreciated or not” (Laughlin, 1995, p.65).

- The nature of historical analysis is paradoxical. As time passes there may be more data available as archives are released but there is also an increasing probability that structural changes may have taken place such that the findings of the research in question may bear less relevance to new institutional settings.
- The ability to generalise beyond NSW governmental accounting to other Australian States or to other countries would need to be tested by additional research. Research has shown that public sector reforms are changed into different shapes when they meet local administrative cultures (Olson et al., 1998; Christensen and Laefreid, 1999). Therefore, it is likely that this research dealing with one such change (accrual accounting) may be overly influenced by its ‘NSW-centricity’ for it to be strictly predictive of alternative governmental accounting innovations.

The remainder of this chapter deals with the methodological aspects of an assessment of the managerial impact of accrual accounting.

4.3 MANAGERIAL IMPACT METHODOLOGY

As noted in Chapter 2, amongst the reasons advanced for moving public sector accounting to an accrual basis, improved managerial decision-making was prominent. Those arguments continue primarily with official and professional support although as shown in Appendix 2 there is a growing tide of argument calling for either change or rejection of public sector accrual accounting and an increasing number of scholars linking accrual accounting with “a much wider-ranging set of changes (to public sector management and administration)” (Conn, 1996, p. 82). Importantly, arising from the literature review provided in Chapter 2 is the finding that the extant literature lacks an empirically grounded assessment of the impact of public sector accrual accounting on managerial decision making. The second part of this research is aimed at filling that gap by conducting a single site case study in which the organisational learning impact of accrual accounting is examined. Thus this section will outline the methodological issues arising from the field study reported in Chapters 7 and 8.

The discussion that follows is organised around four issues: characteristics of field studies; data gathering methods employed; data analysis including the relationship

between methodology and theory choices, and finally, a summation of the chosen methodology and commentary on its limitations.

4.3.1 Field studies

A single case design is relevant where the phenomenon being researched has not been accessible to prior researchers and the research represents an exploratory study of a relatively recent phenomenon within its real-life context (Yin, 1984). Therefore a field study research methodology is adopted for this part of the research since it is probably “the only reliable method to mine human experience using the people involved in the behaviour under study” (Atkinson and Shaffir, 1998, p.45).

Field research studies in accounting have been more frequently utilised since researchers such as Tomkins and Groves (1983), Scapens (1990) and Parker (1994) argued their suitability to accounting research and McKinnon observed that “relatively few accounting researchers have been formally exposed to field study methods” (1988, p.34). Nevertheless the application of field study methods to accounting and management research has produced a “quite eclectic literature” (Ahrens and Dent 1998, p.2). Within the varied applications of field research, Ferreira and Merchant (1992) have identified at least four key features:

- Direct and in-depth contact with organisational actors provides a primary source of data, often from interviews and direct observations.
- A focus on real tasks or processes (rather than situations artificially created by the researcher).
- A research design that is not totally structured but evolves as field observations proceed.
- The data presentation includes relatively detailed descriptions of the relevant organisational context and practices.

This research’s field study is intended to deliver access to intimate, contextually sensitive knowledge of actual management practices (Keating 1995) by allowing observation of events in their natural setting (Atkinson and Shaffir, 1998). The relationship between the dependent and contextual variables is likely to be interactive, so rich or detailed descriptions of these interactions are required. However, the research needs to yield more than description and so a linkage with prior theory is a high priority. At the same time an appropriate balance between open-mindedness and focus (Ferreira and Merchant, 1992) means that if the prior

theory appears inadequate, alternative hypotheses or research questions can be developed and additional data collected. In this process it is recognised that there is a tension between the use of theory and the need to allow new theory to emerge. A consequence of this tension is the need to be careful to avoid allowing explicit theoretical constructs (Ahrens and Dent, 1998) that might overly filter rich field materials.

Rich field materials on the social structure within the organisation being studied and the attitudes and behaviour of decision makers in the organisation are required in order to understand the role of accrual accounting information in decision-making processes. The mere presence of accounting records does not attest to their use nor does it “help us to deduce the internal management purposes for keeping them” (Hoskin and Macve, 2000, p.107). A field study methodology suits these requirements and whilst not providing statistical generalisation the results of the research should provide analytic generalisation by being generalised back to prior theory. Characteristic of field studies is a small sample size (Kasanen et al., 1993) although sample size *per se* should not be a distinguishing feature of field research (Ferreira and Merchant, 1992, p.5). In this research the sample selection is purposive since it is based on a single organisation with managers who have both pre- and post-accrual experience within the same organisation. The single case sample also assists in the development of a close relationship between the researcher and the sampled organisation. In turn, this relationship generates detailed data that can be subject to analysis with the aid of an appropriate theoretical framework.

The selection of a theoretical frame of reference (refer Section 4.3.3 below) is problematic and is necessarily situated in time and place with an unavoidable favouring (and disfavouring) of certain descriptions of the phenomenon of public sector accrual accounting. Whilst this is a limitation (Czarniawska, 1997) it serves more as a warning to other researchers who may seek to transfer the results of this research than as a constraint on the research which aims at theorising substantive empirics. Equally, those researchers will need to understand how the data was gathered for this research and this is discussed in the next section.

4.3.2 Data gathering

Whilst the positivist research tradition attempts to separate hypothesis formulation, data gathering and data analysis, typically field study research finds that these stages tend to occur simultaneously and interactively throughout the research. “A behavioural consequence of this is that the factual data and the researcher’s interpretation of that data may become intermingled, leading to the former being contaminated by the latter and highlighting the potential for observer bias” (McKinnon, 1988, p.46). A recommended approach to deal with this danger is for the researcher to rigorously maintain a series of notes:

- Observational notes (ONs): the ‘facts’ best kept as verbatim recordings or transcripts of what the researcher hears or sees and these are best recorded before turning to interpretation;
- Theoretical notes (TNs): “the researcher’s developing ideas about the data in the ONs” (McKinnon, 1988, p.46); and
- Methodological notes (MNs): descriptions of the research strategies used in the collection and analysis of the data.

The field study for this project is concerned with processes of information use within a single organisation and a retrospective account (Czarniawska, 1997, p.65) is developed. The field study accesses texts such as interview records and researcher reflections as well as memos, file records, official documents, public documents, budget papers, and so on. These texts require interpretation and treatment as parts of a conversation relating to the past: an organisationally based discourse describing the relevance of accrual accounting information to managerial imperatives. Access to documents and individuals necessary to develop this discourse was granted by the organisation under study on the condition of confidentiality and unfettered access to files and individuals resulted.

Initial data gathering focused on access of relevant files and working papers related to accounting systems and decision making processes in addition to organisational change. Chapter 6 provides detail of the organisational change and contextual circumstances impacting on the organisation as a whole for the period 1988 to 1994. This period was chosen since it extends from the cash based accounting system to one year after conversion to accrual accounting. However, interviews of staff currently employed by the organisation (and two staff no longer in its employ) relate to current information use and decision making within

the present organisation structure and context. A total of 25 employees were interviewed as detailed in Appendix 7. All interviews, except four, were recorded and transcribed. A number of staff were interviewed more than once as is indicated in Appendix 7 and the average length of interview was 68 minutes.

Interviews of staff can be classified into those dealing with the production of accounting information for other parts of the organisation and those using accounting information and/or making decisions with or without accounting information. Appendix 7 identifies the interviewees with responsibilities that rest primarily in those two categories and also relates their duties to a Head Office or Regional focus. The target for the interviews is the provision of rich information on the functions, roles and interactions affected by accounting information. Semi-structured interviews were used to gather data from the informants in a manner that allowed them to respond in ways they consider appropriate thus allowing their interpretations and meanings to surface in the interview data (Layder, 1993). Additionally, interviewees in the second category are managers who could be both interviewed and observed in routine activity within the organisation. Such routine activity is observed in order to appreciate how accrual accounting information is being used in managerial decisions. It is recognised that the selection of respondents for interview and observation is a sampling process and that “the sample is comprehensive, drawing from all categories of people involved in the phenomenon” (McKinnon, 1988, p.50).

The forms of participant observation used is categorised as ‘limited interaction’, ‘active control’ and ‘passive presence’ using McKinnon’s (1988) typology. Limited interaction involves talking with participants either in casual conversation or questioning form whereas active control relies on an explicit interview format. In addition, passive presence was used in order to observe decision making in which the presence of the researcher is understood by participants but there is no interaction with the researcher. The use of limited interaction and active control forms of participant observation is considered favourable from the points of view of minimising observer-caused effects and observer bias (McKinnon, 1988). However, there are concerns that passive presence participant observation can carry risks of reduced validity and reliability because participants may try to

second guess the researcher's purpose and so mask their behaviour that might have otherwise occurred in the absence of the researcher. As a result of these concerns, data generated by the passive presence form of participant observation is relied upon less than data generated from limited interaction and active control forms of participant observation.

In addition to the primary data from interviews and observation, documentary data sources are also examined in the form of departmental files, working papers, Treasury Instructions, Director-General memos and so on. As noted by Ferreira and Merchant (1992), virtually all field study research uses additional data collection methods to complement primary data gathered from interviews. Collectively this data will form the empirical corpus to be analysed using the framework discussed in the next section.

4.3.3 Data analysis

The field study data is analysed within a theoretical framework that provides keys to assessing the managerial impact of public sector accrual accounting. This is done through the identification of behaviour change associated with processing of a new set of accounting information. This is an element of organisational learning defined as the range of potential behaviour changed as a result of processing of information (Huber, 1991) and reviewed in Chapter 3. As a brief summary of the discussion in Chapter 3, the organisational learning framework derived from the management science school consists of:

- information acquisition, being the processes used to obtain information;
- information distribution, reflected in the processes used to share information from various sources in order to generate new information or understanding;
- information interpretation as a process that gives distributed information one or more commonly understood interpretations; and,
- organisational memory, being the process that stores information for future use.

Each of these elements of organisational learning help explain why it is relevant as a theoretical base to the task of understanding the impact of accrual accounting on managerial decision making. As noted in Chapter 3 (Section 3.4.2) a number of scholars have taken advantage of an organisational learning framework to understand accounting change and their efforts assist this research since the

change from cash to accrual accounting potentially involves an impact on each of the four elements of organisational learning. The theoretical constructs provided by the four elements of organisational learning each present relatively definitive aspects of organisational life, including the behavioural processes related to learning and decision making, that will highlight if accrual accounting information has changed decision making and if so, how this has occurred. A natural consequence then is that data must be gathered in order to be analysed within the organisational learning framework.

The method of data analysis is based on coding of transcribed interviews and documentary sources into elements concordant with organisational learning components. In each coding, a relationship between accounting information (either cash or accrual based) and the various elements of organisational learning is identified and recorded. Additionally, the documentary data is used to provide context and explication of where an expected (predicted by theory) relationship is either absent or present. Collectively, these instances of relationships and absences of relationships are then used to determine a pattern between accrual accounting information and organisational learning in the form of a narrative arising from the data. As a result, there is a clear connection between the choice of theoretical framework and the case study methodology used in this research. It is this connection that is further discussed in this section.

Relying on the prior discussion of organisational learning as a theoretical framework (Chapter 3), the discussion here does not detail the theoretical framework but aims only at describing the relationship between the choices made in this research in respect to its theoretical framework and methodology. As noted by Laughlin (1995; 2004) these choices must be made, explained and defended in order that future researchers can assess the data analysis and consequential conclusions arising in the research. The choice of organisational learning as a theoretical framework is one that uses concepts to explicate practice and thus as described by Llewellyn (2003) it creates meaning and significance by linking the subjective (for example, 'what is good decision making in the organisation under study?') with objective realms of experience (for example, 'has accrual based accounting information been used in this decision?'). This 'conceptualising level'

(Llewellyn, 2003) of theorising is compatible with Laughlin’s ‘middle range’ where prior theory assumes a ‘skeletal’ role and the role of the observer and the degree of subjectivity in empirical engagement is structured (Laughlin, 2004). Subsequent choices of method and methodology are consistent with this level of theorising:

- methodology: field study leading to critical-discursive analysis;
- data narrative: qualitative; and,
- data collection methods: interviews, observation and documents.

Table 5 presents a schema that summarises this research’s choices in respect to methodology and theory.

<i>When researching organisations and practices made up of people and non-human phenomena</i>	<i>In this research of the managerial impact of public sector accrual accounting</i>
Choice to be made:	Selection made:
General empirical pattern	Skeletal/conceptual utilising the management science school of organisational learning
Relevance of prior theory (at outset of research)	Skeletal attempting to link praxis with concepts
Role of observer and subjectivity in empirical engagement	Structured analysis within a single site field study
Methodological approach	Critical discursive analysis
Data narrative	Qualitative
Data collection methods	Interviews, observation and documents

Table 5: Methodology and theory choices (derived from Laughlin, 2004)

4.3.4 Summation and limitations

The above discussion has provided a justification for the approaches taken in the managerial impact aspects of this research. That justification begins with the recognition that the research topic is one about actions of people within an organisation and so a qualitative approach is adopted. In order for that approach to be theoretically informed an organisational learning framework is applied at a skeletal or conceptual level. That framework facilitates data analysis gathered from a single site field study where individuals with either (or both) an accounting or managerial function are interviewed. Primarily the interviews focus on the role of accrual based accounting information in the organisation’s knowledge acquisition, information distribution, information interpretation and organisational

memory. Additional data is derived from observations made within the organisation and from documents such as memos, instructions, procedures manuals, budgets, minutes of meetings, working papers and formal files. Collectively, the data derived from interviews and other sources is analysed by determining patterns within the discourse that they represent. However, it is worth noting some of the limitations that arise from this approach.

Most of the limitations are inherent to the nature of qualitative research, in particular:

- Field study research has inherent limitations to statistical generalisability and risks problems of reliability and validity if executed without rigour. The risks of observer-caused effects and observer-bias are two potential problems requiring attention since the identification of managers with pre- and post-accrual experience will be necessarily limited to a very small cohort and so could make the selection of research participants problematic.
- Selection of the site is necessarily a compromise of access and interest with the consequential risk that idiosyncratic aspects of the organisation may confound the research results. For example, the site chosen and described more fully in Chapter 6, has been subject to significant uncertainty in its political and administrative contexts such that the use of accrual based accounting information may be different from an organisation with a more stable environment.
- The selection of a theoretical framework (the management science perspective of organisational learning) brings both advantages and limitations to the research. The possible disadvantages include a risk that free and open exchange of information is idealised in a naïve fashion such that rational organisational behaviour is privileged beyond its likelihood (March and Olsen, 1989; Mouritsen, 1994). Further, it is important to ensure that *a priori* conceptualisation is not so strong as to “deny the emergence of relevant theoretical interpretations” (Ahrens and Dent, 1988: 24).

4.4 CONCLUSIONS

This chapter has discussed the methodologies and theoretical frameworks adopted in both the history and managerial impact parts of this research. The history methodology aims, by saturating itself in sources of evidence – both oral and archival - to reach a pondered, insightful comprehension (O’Farrell, 1979, p.7) of why the NSWG adopted accrual accounting for its general government services sector. Developing this comprehension is aided by three theoretical tools:

- first, a variant of Lüder’s model of governmental accounting change in the ordering of data as it was gathered;

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- second, institutional theory in the interpretation of the politicians' and bureaucrats' actions in the history; and,
- third, epistemic communities in the interpretation of the consultants' actions in the history.

The methodology used for the managerial impact research is a single site field study that aims to assess how the adoption of accrual accounting has affected decision making at that site. An organisational learning theoretical framework is adopted with its focus on information acquisition, information distribution, information interpretation and organisational memory.

The following chapter, Chapter 5, implements the first part of the research arising from the methodological discussion provided here: presentation of an interpretational history of the NSW Government's adoption of accrual accounting for its general services sector. Chapters 6, 7 and 8 implement the second part of this chapter's discussion in order to present an assessment of the managerial impact of accrual accounting in a single public sector organisation.

CHAPTER 5: An Interpretational History of the NSWG Adoption of Accrual Accounting

5

5.1 OVERVIEW: THE STORY UNFOLDED

In this chapter the central concern is to present an interpretational history of the adoption of full accrual accounting in the NSW general government services (GGS) sector (at the time, the GGS sector was known variously as the 'Budget sector' or the 'inner Budget sector' but it stood separately from government business enterprises). By 1987 the NSWG was accruing salaries²³ in its GGS accounting and had moved all of its statutory authorities (government business undertakings) to full accrual accounting in which they accounted, amongst other things, for non-current assets and depreciation²⁴. However, Treasury resisted extension of accrual accounting into the GGS sector until the end of 1987.

The history of NSW's adoption of accrual accounting in its GGS sector is remarkable for many reasons but perhaps the most outstanding is the stark contrast in the speed of the change compared to the long history of cash accounting. The former is measured in months whereas the latter stretches over two centuries from the initial use of currency (refer Scorgie and Reiss, 1997) to 1992. During those centuries, NSW and other jurisdictions had seriously considered public sector accrual accounting. For example, in NSW Scott et al., (2003) argue that some parts of the public sector adopted and then dropped accrual accounting in the period 1936 to 1975. Equally, within the long established dominance of public sector cash accounting world-wide, there is evidence of serious consideration of public sector accrual accounting. Edwards et al., (2002) document English examination of public sector accrual accounting as

²³ Salaries accounted for some 70% of total cash expenses and so Treasury had long considered their accrual to be important in presenting meaningful information prior to calls for GGS sector accrual accounting (PoI, Interview 3).

early as 1828. Similarly, McTaggart (1992) documents advocacy for accrual accounting in USA municipal governments as early as 1890. However, each of these documented considerations of accrual accounting being applied in the public sector ended with the supremacy of cash-based accounting. Thus in 1987 in NSW, like every other jurisdiction at the time, accountants and bookkeepers in the GGS sector had virtually no experience of accrual accounting. Yet by October 1988 they knew that accrual accounting was to be the basis of their organisations' accounting. The speed of this change thus forms a central feature of this chapter's interpretational history.

This chapter draws extensively on Christensen's (2002; 2003; 2005) research²⁵ into the history of the NSW adoption of accrual accounting, the adoption of a business model of accrual accounting and the role of consultants in the change. The first part of the chapter describes how bureaucratic reluctance, political indifference and accounting profession reticence suddenly turned into triumph of revolutionary change. The chapter's second part describes the way in which NSW became imbued with a sense of reforming zeal: the role of private sector consultants in the implementation of public sector accrual accounting. Finally the chapter concludes with a brief summary.

5.2 TURNING ADVERSITY INTO TRIUMPH: 1976 TO 1991

Appendix 3 provides a timeline that is helpful in understanding the major events in the period of the research. Part of the justification for confining the history to the period of 1976 to 1996 is that the period includes sufficient time in which accrual accounting was not being considered but other reforms were beginning. This section deals initially with the beginning of this period in which reform was emerging as a theme. Then it considers the entry of international consultants as advocates of accrual accounting in the NSW GGS sector.

²⁴ Treasury did grant some exceptions to this requirement but did so only on an annual basis following requests from agency heads (PoI, Interview 7); these exemptions were formally ceased in 1989.

²⁵ These refereed journal articles were published from the thesis data in the course of researching and preparing this thesis..

5.2.1 Change adversity: the bureaucrats’ initial reluctance

Like all histories, the history of the NSWG’s decision to implement accrual accounting should be considered in the context of its time. Overwhelmingly, that context was one of increasingly rapid change building out of a protracted period of ossification. Two major enquiries heralded the period of change: the Royal Commission on Australian Government Administration (RCAGA) reporting in 1976²⁶; and, the Review of NSW Government Administration conducted by Professor Wilenski reporting in 1977 and 1982. Neither of these enquiries recommended accrual accounting but both set in train a series of changes that were to make it appear to be consistent with the overall direction of change. Public sector accrual accounting should not be seen as an isolated event in an indeterminate sea of change. Instead it was consistent with, and reinforcing of, the general tide of movement reflecting adoption of private sector practices in the management of public sector organisations.

A number of other authorities (Chua and Sinclair, 1994; Guthrie, 1994; Ryan, 1995; Kent, 2002) have noted that the RCAGA marks the beginning of calls to improve public sector accountability in Australia and the commencement of linkages between accounting and accountability. The RCAGA also partly set the scene for the Wilenski reports which established the extent of rigidity in the NSWG administration. Both of Wilenski’s reports were scathing in their assessments of performance and they charted a series of reforms that collectively meant change was facing the NSW public sector (Caiden, 1990).

The reforms resulting from Wilenski’s reports were being implemented by a Labour government whilst the Opposition conservative parties were increasing their electoral support. In most part that support grew from dissatisfaction with the Government but in part it also grew from a platform of change which was clearly enunciated as “running New South Wales like and efficient and effective business in the interest of its shareholders, the people of the State” (NSW Government, 1989, p. i). By 1988 with the election of the NSW Liberal Government led by the

²⁶ For a useful summary of this Royal Commission’s accounting impacts refer Parker, L. D. and J. Guthrie (1990).

Hon. Nick Greiner, the scene was set for a rapid growth in public sector reform (Halligan and Power, 1992).

Although there was a growing openness to change, this did not initially manifest in support for public sector accrual accounting. The accounting profession did not support GGS sector accrual accounting: “we make no plea for accrual accounting in the accounts of government” (ASA, cited in Chua and Sinclair 1994, p.687). Equally, the Public Sector Accounting Standards Board had explicitly given accrual accounting a low priority (McGuinness, 1988; also confirmed by PoI, Interview 5). Prior to 1987, advocates for the change were notable for their lack of impact. For example, the Auditors-General and some interested public servants (for example, Shand, 1983) had failed to achieve change to this point (1988). The previous NSW Auditor-General (Jack O’Donnell) had been somewhat constrained in his recommendation for accrual accounting, for example in his 1983-84 Annual Report he warned: “full commercial-type accrual accounting with, for example, notional depreciation to provide for replacement of school buildings and other non-commercial service assets, would be equally useless. ... It might satisfy some academics or blinkered accountants who cannot see beyond the mercenary needs of commercial accounting. It would add enormously to the cost of keeping the public accounts. It would make the public accounting almost incomprehensible for most readers and for management needs.” (NSW AGO, 1983, p. 4)

As further evidence of the hiatus for accrual accounting pre-1987, Ryan (1995, p.195) cites a PSASB Chairperson: “Humphry and Shand who were both high profile did not make any progress” (Richard Humphry then being the Victorian Auditor-General and David Shand then being a senior Commonwealth public servant). Equally, the outspoken NSW Auditor-General, Ken Robson, said of his advocacy for accrual accounting²⁷: “Everybody - and I mean everybody - was against me (about the need for accrual accounting). They thought I was an idiot or something” (Soh 1992a, p.12). This was consistent with other jurisdictions where “Treasury’s resistance to accrual accounting” was also reported openly (Ryan, 1990, p. 1)

²⁷ Ken Robson, NSW Auditor-General from 1985 to 1992 was the most outspoken of the Auditors-General (Ryan, 1995); for example, in 1987 he recommended to the NSW Treasurer that NSW

Reflecting the conventional wisdom that accrual accounting for GGS sector organisations was unwarranted, in the holiday season of 1986-87 it took Treasury only one month to craft an argument opposing accrual accounting when it was referred a letter from Mira Consultants (24 November 1986) advocating the change. In its main objection, Treasury noted that the change would “involve resolution of conflicting views on how to value public assets ... (and) the physically daunting and extremely expensive task of actually valuing the State’s assets” (Ken Booth, letter to PAC, 6 January 1987). It also refuted the accounting comparison of NSWG with BHP, concluding that “commercial financial statements are unlikely to assist in measuring performance in the delivery of Government services ... (and so) I do not believe there are sufficiently compelling reasons to adopt profit-centred concepts in accounting for general government administration” (Ken Booth, letter to PAC, 6 January 1987).

Treasury opposition to accrual accounting was maintained (PoI, Interview 7) until at least December 1987 when the NSW Treasurer announced formation of a task force to examine full accrual accounting (Treasurer Media Release, 22 December 1987). In 12 months, Christmas 1986 to Christmas 1987, Treasury had realised that its opposition to full accrual accounting in the general government services sector would probably not withstand the forces for change. Nevertheless, towards the end of this period, Treasury seemed to have a strategy of warning about the risks and costs of the change rather than presenting outright opposition. Thus in a speech prepared for the Treasurer opening a November 1987 accrual accounting seminar²⁸, Treasury identified ten problems (NSW Treasurer, 30 November 1987) and by February 1988 the Treasury Secretary made the grudging concession that accrual accounting was a second order priority (Allan, 1988). At the beginning of 1988, an election year, “Treasury saw that even if there wasn’t a change of government there would be further pressure for reform” (PoI, Interview 8). The story as to why Treasury changed its stance and “turned adversity into triumph” (PoC, Interview 11) is one that must take account of the international consulting firms’ actions, as discussed in the following section.

tertiary educational institutions use “modified accrual accounting” including the reporting of “allowances for assets employed” (Ken Robson, 31 August 1987).

²⁸ In this history, the November 1987 seminars are extremely important and they are discussed in Section 5.2.2.

5.2.2 The consultants enter

Important in building support for change was a series of seminars organised by Arthur Andersen & Co. (hereafter ‘Andersens’) in conjunction with the Australian Society of Accountants. These seminars mark a turning point from which clear impetus for public sector accrual accounting can be seen. “Accrual accounting went into the political agenda immediately after that (the Andersens seminars). Greiner picked it up and turned it into an election issue in March 1988, and as they say, the rest is history” (Ken Robson, Auditor-General quoted in Soh, 1992a). An increase in the number of newspaper articles noting either the problems of cash-based accounting or the promise of accrual accounting for the public sector evidences this claim (refer Appendix 8).

Evidence points to Andersens as being the main force behind these seminars. In a letter to the NSW Public Accounts Committee Chairman, Andersens Partner-in-Charge, Governments Services, wrote “I would like to invite you to a briefing titled ‘Can Accrual Accounting Work in Government’. The briefing will be conducted by Arthur Andersen & Co ... I would appreciate if you could either reply to me or my secretary ...” (David Hunter, 17 November, 1987). The view that Andersens were driving these seminars was also confirmed in interviews: “I saw it primarily as a marketing attempt by Andersen’s” (PoI, Interview 10). Similarly, the NSW Public Accounts Committee saw Andersens as the organiser of the seminar:

The Committee was delighted to see that your organisation was also involved in this area (accrual accounting) and organised a recent Seminar involving Mr Morton Egol of your New York Office (John Murray, 7 December, 1987).

The decisions by Andersens to underwrite the seminars and to bring two persuasive speakers from the US proved to be crucially important in advancing the cause of accrual accounting. These speakers were Morton Egol (Senior Partner, Arthur Andersen & Co., New York) and Ned Regan (Comptroller, State of New York). In his presentation, Regan spoke, in the past tense, of the New York State experience implementing accrual accounting. He noted that it cost about US\$10 million, took two years and had improved the way decisions were

made by politicians (Regan, 1987a). Regan’s presentation was followed by Egol, who set out some key success factors for successful implementation of accrual accounting in the public sector. The factor heading this list was “a proven methodology: use others’ experiences” (Egol, 1987a). These arguments, coupled with use of the descriptor “*Generally Accepted Accounting Principles*” (emphasis added), clearly presented the audience with an impression that accrual accounting was in practice in the public sector. The existence of a successful implementation of public sector accrual accounting was a powerful foil to Treasury’s concentration on problems and turned out to be perhaps the most powerful single factor in generating support for change. Secondary sources written close to the events (Moore, 1988; Soh, 1992a) and those with more time to introspect (Ryan, 1995; Christensen, 2002; Christensen, 2003) also confirm this attribution. This finding is a crucial one since it begins the identification of the effective promoters behind the idea of adopting accrual accounting.

As early as 1974, some actors in the decision to adopt accrual accounting had been exposed to arguments in its favour. The fact that these arguments had not taken hold with those decision-makers indicates the later effectiveness of the consultants in their support for accrual accounting. For example, Ryan (1995) documents some of the unsuccessful advocacy by a number of State Auditors-General and an influential UoI also identified a presentation by a Harvard Business School Finance Professor (M. Colyer Crum) arguing for public sector accrual accounting whilst visiting Sydney²⁹ (UoI, Interview 1). Given the importance then of the Andersen seminars, the remainder of this sub-section focuses on the arguments presented therein.

Table 6 summarises the arguments used by Regan and Egol and evidences some of their statements in support of those arguments. Whilst the singularly most persuasive argument was that both New York State and City had had favourable experience of using accrual accounting, other arguments also carried force. Collectively these arguments were reinforced by the apparent duality created by a debate about accrual accounting: to criticise cash-based accounting was to lead to

²⁹ Professor Crum was unable to confirm the content of his presentation but did recall visiting Sydney in 1974 (email communication, 1 February, 2001).

the conclusion of the desirability of its opposite, accrual-based accounting (Potter, 1999; Christensen, 2002).

Argument	Citation
Accrual accounting will reduce government deficit spending	“Sound financial systems discipline politicians” (Regan 1987b)
Accrual accounting tightens nexus between spending and revenue measures	“Spending and taxing decisions are now made in an open and disciplined environment. There is better spending – less spending – than would have otherwise occurred.” (Regan 1987b)
Accrual accounting has been implemented in New York State	“From a technical aspect it was one of the broadest and most complex accounting conversions ever to take place. ... So we started in 1979 and kept at it. The goal was to convert the State’s budget, accounting and reporting systems to reflect accrued (sic) accounting in accordance with what we called Generally Accepted Accounting Principles. We produced prototype financial statements on an accrual ³⁰ accounting basis, started a central accounting system redesign, and published official statements in the Annual Financial Report” (Regan 1987b, pp.3-4)
Accrual accounting reduces manipulation	“This is the point of our discussion – they (politicians) can no longer manipulate the books” (Regan 1987a, p.6)
Foreign direct and equity investment will avoid countries that don’t have accrual accounting	“Businesses ... are nimble ... they will set up operations elsewhere where governments better manage the affairs where they match their services and their costs so that businesses know what their real taxes are ... they can move in a day ... so this is tied directly to economic policy ... the question is: can government work without accrual accounting?” (Egol 1987b)
Consultants are available with expertise in the implementation of public sector accrual accounting	“to avoid reinventing the wheel, consultants can be utilized to provide efficiencies and minimise risks. In addition, the use of consultants greatly reduces the time-frame for achieving the objectives (of public sector accrual accounting)” (Egol 1987a, p. 4)
Cash accounting is not adequate so better management will follow from use of accrual accounting for performance reporting	“We are talking about much more than accrual accounting. It is the code word for improved information and reporting ... the top of the pyramid is management information so the first illusion I want to clear away is that cash basis bookkeeping is accounting – it is not an accounting method at all ... accounting seeks to measure economic events and cash basis accounting does not measure performance” (Egol 1987b)
Accrual accounting will improve public servants’ morale and performance	“Government has allowed itself to be reported (on the basis of minutiae). If I know there will be recognition of performance it will make sense for me to put my shoulder to the wheel because there will be an accounting. There aren’t those tools in government today. ... there can be a reward system created in government once there is confidence in these performance measures (from accrual accounting)” (Egol 1987b)

Table 6: Summary of consultants’ arguments advocating public sector accrual accounting (November 1987)

³⁰ Both the spoken version of the speech and a version later sent to the next NSW Premier, Nick Greiner, use the word “accrual” as shown here; however, the printed version of the speech

In addition to the arguments presented in the seminar, notable was the level of zeal shown by both Egol and Regan in their presentations. For example:

“I do believe that once accrual accounting is in, there will be some wondrous developments ...there is recognition that this is a subject of some importance that could potentially change the way the world works” (Egol, 1987b).

As if to underscore the need for zeal in arguing for public sector accrual accounting³¹, the point was made that Australia faced an opportunity to ‘create an exemplary financial system’ and “if you implement reform here in Australia, you will not only achieve benefits for your nation, but hopefully, influence those who are resisting the changes necessary to bring discipline to democracies elsewhere in the world” (Regan, 1987a, p.8). Following the seminars press reports were largely repetitive of the claims made by Egol and Regan with headlines such as ‘Great sales pitch for accrual accounting’ (Herald Business, 4 December 1987, p.21) and ‘US expert tells govts accrual is superior’ (Sydney Morning Herald, 2 December 1987, p.42).

Andersens’ promotion of accrual accounting in NSW was consistent with its support elsewhere. For example, in the USA where “Arthur Andersen & Co., had been a pioneer in promoting the adoption of accrual accounting in Washington” (DioGuardi, 1992, p. 33). Although at a later period, also notable is the Big Six firms’ roles in four USA States’ adoptions of Generally Accepted Accounting Principles (Carpenter and Feroz, 2001). Whilst research of consultants’ actions outside NSW is undeveloped, the research here throws further light on their actions in NSW. These actions were extensive and involved each of the transnational firms (the Big Six³² and their subsequent amalgamated entities). This section provides evidence of the actions in both promotion (Section 5.2.2.1) and

available from the official seminar papers (refer Regan, 1987a, p.3) use the acronym “GAAP” in place of “accrual” in this passage.

³¹ Zealotry was not limited to Egol and Regan but Regan also brought with him a background of campaigning for accrual accounting that was illustrated in a New York newspaper cartoon depicting Regan using his ‘Generally Accepted Accounting Principles’ to explain to the impoverished New York State citizen that “there’s only one true Santa ... and that’s you!”.

³² The Big Six firms then were: Arthur Andersen & Co.; Coopers & Lybrand; Deloitte Ross Tohmatsu; Ernst & Young; KPMG Peat Marwick; and, Price Waterhouse.

implementation (Section 5.2.2.2) subsequent to establishing accrual accounting on the reform agenda in November 1987.

5.2.2.1 Further promotion

Table 7 summarises the main promotional activities of various firms that formed part of the persuasion of both politicians and bureaucrats to accept the benefits of public sector accrual accounting.

Action [firm]	Period	Impact
Organised a three week USA study tour of 8 jurisdictions for Treasury staff, Scullion and Nicholls [Andersens]	Dec'87- Feb'88	Provided credibility to advocates of accrual accounting since Treasury approval for the study tour was based on the assertion that “there is no known instance of a Westminster style Government adopting full accrual accounting. Some states in America, particularly New York State together with the administration of the City of New York have adopted it. It is understood that other states have the matter under consideration” (Treasury memo, 4.12.87)
Presentation titled ‘The United States’ Experience’ to NSW Public Accounts Committee Seminar on accrual accounting [Andersens; Coopers & Lybrand; Price Waterhouse]	Feb. 1988	Further reinforced the view that accrual accounting was implemented and successful in the USA; this view was thus spread to a larger NSW audience – in excess of 200
Prepared report recommending accrual accounting in local government [Ernst & Whinney]	Feb. 1988	Used by The Audit Office to persuade Treasury of desirability of accrual accounting
Response to Commission of Audit term of reference to advise on the desirability of accrual accounting [Andersens]	Mar-Jul'88	Using the high professional standing of an international accounting firm, the strongly worded recommendation to adopt accrual accounting carried more weight than would a Departmental recommendation; this further legitimated the change
Advocacy of change in professional accounting fora such as ASA National Congresses, commercial conferences (eg. IIR), RIPAA National Fora and publications [Andersens; Coopers & Lybrand; KPMG Peat Marwick; Price Waterhouse]	1989 and later	Further reinforced support for accrual accounting and began to explain the advantages to the profession from a new role for accountants (Weeks, 1989)

Table 7: Consultants’ actions to promote public sector accrual accounting

The first mentioned action in Table 7 deserves some analysis since it was built on the main point established in the Andersens’ seminars at the end of 1987. The visit to New York State and other US jurisdictions by Treasury officers Nicholls and Scullion was expected to be a revelation about the impact of public sector accrual accounting. However, at this point the bureaucrats realised that a rose by any other name might *not* smell as sweet. That is, they realised that the Andersens’ usage of the word ‘accrual’ did not match theirs - in either jurisdiction or technique. Thus the power of words (Potter, 1999) became apparent: the words ‘accrual’ and ‘Generally Accepted Accounting Practice’ had been interchanged without definition or clear explanation and the result was that the Australian audiences had misunderstood the situation in the USA. This was a significant surprise noted under the heading “Result of visits to American units” in the subsequent report by Nicholls and Scullion: “The most important single factor to emerge from these visits is that no American State or municipality has moved to full accrual accounting” (Nicholls and Scullion, 1988, p.15). Thus “they were saying everyone in the States was all doing it (accrual accounting). Oh no, I have to tell you I thought our visit to the States - at the point where we saw what people were doing - it was pretty much complete waste of time” (PoI, Interview 7). This was because the ‘accrual accounting’ in the USA was not much different to NSW in that non-current assets were not recognised nor was depreciation being recognised in GGS sector organisations. As the Treasury officials flew west over the Pacific they pondered that, to their knowledge, no GGS organisation in the world had implemented full accrual accounting.

By 11 March 1988 when the Treasury officers returned from the USA with the revelation that the consultants’ emperor of GGS full accrual accounting was naked, the issue had moved at a rapid pace. At least eight articles appeared in Australian newspapers arguing for accrual accounting³³ or criticising cash based public sector accounting (refer Appendix 8) and the Opposition Leader had provoked a decision from the Treasurer (Media Release, 22 December 1987) to establish a task force to examine full accrual accounting in government. Also, in

³³ Some of the arguments grew in stature out of the consultants initial arguments. For example, the Sydney Morning Herald editorial soon after the consultants had returned to America asserted that accrual accounting had spread beyond New York State and City into other American State jurisdictions (SMH, ‘Greiner’s little time bomb’, 16 January 1988).

February 1988, the NSW PAC continued the momentum by organising another seminar on public sector accrual accounting attracting over 200 attendees³⁴ and a waiting list of another 50 (NSW Public Accounts Committee, 1988, p.i). Reference was made back to the assertions of New York State accrual accounting:

I recall that some of the papers given on that [accrual accounting] stressed enormously the advantages which New York State had derived ... they also gave us very practical examples of how assets are treated (Bishop, cited in NSW Public Accounts Committee, 1988, pp.69-70).

Thus in March 1988, it was apparent that a change of government would mean a high probability that Treasury would be expected to introduce full accrual accounting to NSW GGS sector organisations in the absence of overseas or local models. The realisation that “you can expect to hear a lot about the accruing liabilities for superannuation and long-service leave and asset depreciation if there is a change of Government” (Mitchell, 1988, p.12) meant that Treasury quickly turned its mind to the implementation of accrual accounting, and consequentially, its advantages. The next section discusses the means by which international consultancies helped to meet these needs of Treasury.

5.2.2.2 Implementation

Unabashed by the revelation that full public sector accrual accounting had not been implemented in the USA as asserted by Andersens, the consulting firms set about assisting implementation of the world’s second adoption of public sector accrual accounting. Table 8 summarises the main actions taken by consultants in conjunction with Treasury and Departments who were grappling with the challenge of implementation.

³⁴ Analysis of the attendees and the waiting list (held in the NSW PAC archive) show most were public servants from NSW GGS organisations but there were also public servants from every State, consultants, academics and politicians in the audience.

Action [firm]	Period	Impact
Conduct of a review of Treasury management and strategy [E&Y]	1989	Established new Branch (Accounting Policy) and created positions for implementation of accounting reforms
Appointment of 2 staff to service a ‘Help Desk’ in Treasury to answer queries on accrual accounting [C&L; E&Y]	1989 and 1990	Quick project implementation; Treasury also received frequent reports on project preparations
Secondment of a manager for 6 months as project manager in chosen ‘pilot’ departments ³⁵ to implement accrual accounting [each of the Big Six]	1990 to 1991	Project implementation was more quickly achieved
Suggestion to establish a Treasurer’s Accounting Advisory Panel (TAAP) [C&L]	1990	Institutionalised the consultants’ input on accounting reform in the public sector; because of its significance, it is discussed further in Section 5.3.1
Preparation of a Departmental Heads education program on accrual accounting [C&L]	1990	Promulgated the objectives, expected benefits and requirements of accrual accounting at the NSWG bureaucracy’s most senior level.
Development of a Financial Reporting Code for Budget Sector agencies converting to accrual accounting [C&L]	1991	Beginnings of technical accounting change in the NSW public sector and the first application of the business model to public sector accounting.
Representing Treasury on Accrual Accounting Implementation Steering Committee [C&L]	1992	Further established that Treasury was closely reliant on the international consultancies
Response to EOI leading to a Treasury register of 80 approved consultants for accrual accounting work [each of the Big Six and 2 nd tier firms]	1990 to 1993	Reinforced view that Departments needed outside assistance and expertise. Subsequently, every Department contracted a consultancy to implement the conversion to accrual accounting.
Review of policies and procedures for preparation of NSW State Public Sector Consolidated Financial Statements [PW]	1992	Established the scope of consolidation, treatment of prior period adjustments and treatment of adjustment for a prior \$3 billion overestimate of superannuation liability.
Post-implementation review of accrual accounting in 6 selected departments [Andersens; C&L; DRT]	1992	Reminded departmental staff of the importance of consultants’ assessments of their work and also reinforced the influence of the consultancies on the remaining 21 departments due to convert for 1992-93 financial year.

Table 8: Consultants’ actions to assist implementation of public sector accrual accounting

³⁵ Six managers were seconded, one each to: National Parks & Wildlife Service; Premier’s Department & Cabinet Office; Ministry for the Arts; Lands; Transport; Corrective Service and Sport, Racing, Recreation & Racing.

Public sector accrual accounting represented a major new field for the international consultants. “I don’t know how many consultants we employed but they were right through the place” (PoI, Interview 5). By 1993 when all organisations had converted their accounting systems, the consultancies had a greatly improved understanding of the NSW GGS sector. “It was expected, and I think it is now realised, that such skill transfer and such exchange (with consultants) is beneficial to NSW agencies as much as it is to the firms themselves” (Mellor, 1995, p.15). Strong evidence was gathered to support the view that the consultants saw public sector accrual accounting as both a sound business development as well as one that they genuinely believed would improve government administration: “they (consultants) were supportive of it and it was helpful to them” (UoI, Interview 1). A significant aspect of their support is shown in the voluntary work of the innovative Treasurer’s Accounting Advisory Panel (TAAP).

The TAAP was charged with being “an independent source of advice to the Treasurer and Treasury on emerging accounting issues affecting the public sector” (NSW Treasury 1991, p.30) and it consisted of partners from each of the large accounting firms volunteering their time and advice. The TAAP, announced in 1991 (Premier’s News Release, 28 February 1991), emerged from a suggestion by a Big Eight consultancy to the Premier and Treasurer (PoC, Interview 12; UoI, Interview 1) and followed a Treasury memo noting that “departments are not giving this issue the importance or urgency that would seem to be warranted in order to ensure success by 1991/92” (Treasury memo, 30 November 1990). The TAAP served the interests of both the government (through the provision of technical advice facilitating implementation) and the consultants (“by keeping the firms aware of governmental policies and direction in financial management reforms” (Treasury Briefing Note to Premier, 6 December 1990)). Standing as a striking example of non-competitive behaviour amongst the Big Six firms, the TAAP was also one of the ways in which the consultants were able to institutionalise their input.

The TAAP’s influence has been strongly evidenced: “the Panel was very important and was very successful” (PoI, Interview 5) and “it was a group of

experts saying this is the right thing to do” (UoI, Interview 1). Perhaps the innovative nature of seeking voluntary input from the Big Six at the time of significant reform engendered enthusiasm as reflected in the higher frequency of meetings (up to 6 per annum) at the TAAP’s beginning. In contrast, its meetings became less frequent as implementation proceeded. Early in its life, the TAAP’s meetings centred on technical accounting problems such as asset measurement and recognition as well as new financing methods’ implications being developed within the public sector (PoC, Interview 11). For each meeting, Treasury prepared an agenda and briefing papers upon which TAAP members’ opinions were sought. Whilst this did not commit the government to a particular course of action the archive reveals a concern by some TAAP Members that their views be recorded on controversial matters. Such controversial matters involved public sector specific issues where the accounting profession had left unresolved complexity³⁶. As a result both the archive and interview data support the view that the TAAP was problematic since it did not have a mechanism to resolve such matters (PoI, Interview 9). For example, the complexity of some matters was inadequately described in briefing papers so they were “left to hang in the air” (PoC, Interview 14) and resolution remained in the hands of the public sector accountants who appear to have selectively used opinions that may have supported their predilection (PoC, Interviews 11, 14 and 15).

Even though the TAAP’s workings seem to have frustrated both the consultants and the bureaucrats (PoI, Interview 9; PoC, Interview 14), the TAAP continued to meet beyond the production of the first accrual-based financial statements for 1993. The significance given to the TAAP by both the government and the participating consultants appears to explain the TAAP’s continued existence in the face of its operational difficulties. However, the epistemic foundation of the TAAP in the shared values of the international accounting firms appears to be the main factor in its continued operation. This issue is discussed further below in

³⁶ Examples of issues discussed early in the life of the TAAP include accounting for long term land and other property leases, cash flow statements, accounting for state taxes, revaluation of non-current assets, application of the Consolidation Standard (then AAS24) to the public sector, valuation of land under infrastructure assets, accounting for deferred maintenance, capitalisation of construction project costs, accounting for net assets transfers between agencies, valuation of forestry assets.

Section 5.3.1 but the next sub-section explains how the bureaucracy reacted to the consultants' actions.

5.2.3 The centre seizes reform

The discussion here aims to describe the ways in which NSW Treasury and the Premier's Department, as central control agencies, moved their support solidly behind the adoption of accrual accounting following March 1988. From the evidence shown above, it is apparent that by March 1988 it was likely that NSW would adopt accrual accounting for its GGS sector. Whilst the decision to do so was clearly a political one, there was an existing ally in Treasury who, although isolated, had been favourably inclined to accrual accounting for some years: "I think it is probably true to say that I was the person that thought that we should move to accrual accounting - in essence I was dissatisfied with the level of financial reporting and the usefulness of information we prepared in public accounts" (PoI, Interview 7). This section seeks to explain how that one officer was relatively quickly supported by the machinery of Treasury in the rapid move to accrual accounting after March 1988.

The two most important events in the immediate months after the change of government in March 1988 were the commissioning of an audit to review State administration and finances and the appointment of Victorian Auditor-General, Dick Humphry, as Director-General Premier's Department. Both of these events ensured the accrual accounting movement maintained its momentum. The audit (NSW Commission of Audit known as the 'Curran Report' after its private sector Commissioner) was intended as a quick review of the State's finances by the incoming government but one of its terms of reference was to advise on the desirability of public sector accrual accounting. The Audit commissioned Andersens to write a response and its finding was, unsurprisingly, extremely positive. The subsequent recommendation by the Commission that accrual accounting be adopted by the NSW public sector has been described as its "most innovative and radical" (Groom, 1990, p.153). The Curran Report was an explicit statement arguing for the application of a 'corporate management framework' which "features many of the management tools widely employed in the private

sector ... in tune with the approaches to public sector reform which are being quite widely proposed and adopted” (Groom, 1990, p.144).

The second most important event early in the Greiner Government, was the appointment of a past advocate of accrual accounting in the public sector to head the powerful Premier’s Department. That advocate was one of the State Auditors-General: Dick Humphry. Together with the NSW Auditor-General he had been forthright in his call for accrual accounting. In a 1986 research lecture he outlined the deficiencies of cash accounting (Humphry, 1986) and in 1987 he was more conclusive: “I argue that without accrual accounting, it is very difficult if not impossible, to carry out the crucial functions of government and the parliament” (Humphry, 1987a, p.124). He had also been the inaugural Chairman of the Public Sector Accounting Standards Board so by 1988, when he was appointed to head the NSW Premier’s Department, he was well versed in the issues facing a government seeking to implement accrual accounting for its GGS sector organisations. Thus Treasury had a strong ally in the other major central control agency³⁷ in the NSW Government administration as it moved forward to implement the Government’s wishes on accrual accounting.

On 9 December 1988 Treasury advised Departments (Treasury Circular No. G1988/15) that an accrual accounting implementation committee had been established with the target of bringing GGS organisations into accrual accounting in three to five years. That committee was made up of officers from Treasury (4), Auditor-General Office (1) and Premier’s Department (1). All three central control agencies were fully committed to the change. As could be seen later, they were well aware of the benefits to their standing in this innovation that promised to make “NSW unique amongst Australian Governments and amongst most Governments in the world” (Premier News Release, 30 October, 1988). The remainder of this chapter deals with how the bureaucracy positioned itself at ‘the cutting edge’ of reform through accrual accounting.

³⁷ The strength of this alliance was greatly increased by the abolition of the Public Service Board in 1988 by the new government and the assumption by the Premier of the position of Treasurer. Thus Treasury had no opposition to its agenda within the central control agencies.

5.3 NSW AS THE PUBLIC SECTOR REFORM LEADER: 1989 TO 1994

The discussion that follows is organised around interpretations of factors that led NSW to become the leader of public sector reform in Australia. As early as 1984, there were signs that being associated with ‘financial reform’ had political advantages in the NSW context (Australian Financial Review, 21 September 1984) since it was associated with calls for improved management of public resources. By 1988 when the new government was positioning itself as the best manager of ‘NSW Inc.’ (Greiner, 1989, p.i), the political benefit from reform was heightened. As evidence of this, the 1988-89 Budget Speech makes mention of NSW being the first State to move on financial reform, it has four mentions of NSW as the ‘first State’ and one mention of the ‘pioneering’ nature of change (1988-89 Budget Speech). The Treasurer also presented two special publications titled ‘Reforming the State’s Finances’ in the first two full years of reform (Greiner, 1989; 1990). These stressed the “exceptional level of achievement ... necessary if NSW Inc. is to become an efficient, effective and liquid enterprise with a gleaming future” (Greiner, 1989, pp.ii-iv) by delivering financial reform. Similarly, the 1990-91 Office of Financial Management Annual Report commenced with the Treasury Secretary noting that Treasury had changed “the State’s financial management, accounting and reporting systems to amongst the most advanced in the world” (NSW Treasury, 1991, p.i). Thus by the end of 1989 the NSW central bureaucracy was strongly supporting reform and it determined a path to push ahead with those reforms, including accrual accounting. Additionally, the politicians were so determined to implement accrual accounting that being “fairly costly or not costly ... would not have made any difference” (UoI, Interview 2)³⁸. The following explains these developments first in terms of the epistemic community that supported the bureaucracy and second by considering the institutional arrangements that were important in these developments.

³⁸ Perhaps indicative of the rush to implement accrual accounting is the fact that the total implementation cost is not known (refer NSW PAC 1996; reporting the findings of an enquiry into NSW adoption of accrual accounting). The irony of not knowing the implementation cost of a system partly justified on its ability to provide better cost data was not lost on the PAC.

5.3.1 The role of consultants: an epistemic community in action

The bureaucrats’ enthusiasm for change received succour and support from the *collection* of international consultants. In contrast to the usual competitive behaviour of these firms, the collective behaviour in supporting NSW as the pioneering reformer marks the essential feature of an epistemic community (Laughlin and Pallot, 1998) which is the subject of this sub-section. That epistemic community was based on a synergy of self-interest and public interest found in the shared goal of bringing public sector accounting closer to private sector accounting (Christensen, 2005).

The formation and operation of the Treasurer’s Accounting Advisory Panel evidence the existence of an epistemic community consisting of the international accounting firms. As noted above (Section 5.2.2.2), select partners of these firms voluntarily contributed their time to advise the NSW Government on its accounting reforms. They were acting in a non-competitive and professionally cooperative manner arising from the fact that “they (the consultants) were certainly supportive of a convergence of public and private accounting standards because it was in the interests of the good management of the State” (UoI, Interview 1). There was a sense that promotion of accrual accounting was appropriate because “it was right” (PoC, Interview 12) and so the international accounting firms were in the vanguard ahead of the accounting profession on the issue of the convergence of public sector and private sector accounting. This observation is consistent with the findings of Greenwood et al., where the same firms (but in Canada) were acting as “institutional entrepreneurs” (2002, p.73) on the question of the accounting profession’s expansion into business advisory services. In the case at hand, there was clear and honest recognition that the consulting firms would benefit from the change, as discussed below.

Internationally, the large accounting firms were experiencing falling margins on attest audits and this made consulting work more appealing to them (Pinault, 2000, p.231). Although the Australian data on consultant billing revenues is commercially confidential, an Andersen partner noted in 1990 that

what is generally happening in the current Australian environment ...
(is that) increased competition in the private sector has caused

accounting firms to develop services other than attest services, perceiving the public sector as a large potential market for such services and in turn increasing the awareness of the public sector to such services that private sector firms can provide (Banham, 1990, p.183).

The commercial pressure being experienced was manifested in falling margins as a result of the increased price competition for audit assignments between the large accounting firms that had been intensifying since the late 1980s (Jeppesen 1998). In responding to this commercial pressure on the consulting firms, it was admitted that the public sector could provide benefits to the firms: “for its part the private sector will benefit through an increased understanding of the public sector’s operations” (Banham, 1990, p.194). Prior to the move to accrual accounting, the Big Eight had begun to develop public sector consultancy assignments in information technology areas (Wright, 2002, p.196) and so a consultant-client relationship was beginning but only generating a minor part of these firms’ revenues (Joint Committee of Public Accounts, 1990; Soh, 1992b). Thus these firms could see their small consulting income growing larger through public sector assignments and some specifically made this connection in respect to public sector accrual accounting (PoC, Interviews 14 and 15). However, whilst self-interest can be easily discerned, it needs to be balanced with recognition of the epistemic community’s motive.

It would be too cynical a view to say that public sector work was previously a whole area that their firms did not have available to them and that they were only looking for work (UoI, Interview 1).

To dismiss the consulting firms’ actions purely as expansion of their business would thus be too simplistic in this case and would underestimate the importance of the zealous advocacy for public sector accrual accounting. The zeal with which the consultants pursued reform was demonstrated in Section 5.2.2 and it extended beyond financial gain. Although some advocates could see a new amorphous market, they could not relate their activities to specific financial gain for their firms or their personal bonuses. Instead, they genuinely believed in the righteousness of their cause (Christensen, 2002; Barton, 2005a; Christensen and

Parker, forthcoming) and this belief contributed to the advocates’ theorisation of the proposal to adopt accrual accounting in the NSW public sector. Further, the consistency of accrual accounting concepts with the consultants’ prior training (including the accounting bodies’ professional qualifications programmes) and their experience produced a sense of inevitability, at least in the consultants’ minds, regarding accrual accounting (Christensen and Parker, forthcoming). The strength of this belief aided the acceptance of the epistemic community’s arguments by the NSWG bureaucracy and this is discussed in the next section.

5.3.2 ‘At any cost’: an institutional explanation of accelerated reform

Chapter 4 summarised Oliver’s (1991) hypotheses in respect to expected conditions conducive to an organisational strategy to acquiesce to change. The discussion above has shown the circumstances that prevailed in NSW around 1988 when the decision to acquiesce to accrual accounting was made and it demonstrates strong support for Oliver’s hypotheses³⁹. Although the change had not been broadly diffused, the consultants’ actions also lend support to Oliver’s diffusion hypothesis since they argued strongly that accrual accounting was used in overseas public sectors and it had been a success (refer Table 6). This evidences the need for an extension of Oliver’s hypothesis to incorporate the *belief* of diffusion. Such believed diffusion will naturally arise out of prior conditions and one such condition, as illustrated in this case, is concerted argument presented by carriers of change such as management consultants (Sahlin-Andersson and Engwall, 2002). Another condition may be the reputation of the parties reporting the existence of the diffusion (Corcoran and McLean, 1998) and this finds consistency in the work of March and Olsen (1989) and Mouritsen (1994) in their discussions of legitimacy and apparent rationality in organisations. Thus if highly reputed organisations can mount arguments about changes that have not yet taken place, they may be able to create an image of diffusion that will have an isomorphic effect.

³⁹ The one exception to conformity to Oliver’s hypotheses is that there was not unquestioned social validity arising from broad diffusion within the organizational field. This was not possible because broad diffusion had not begun. Instead, the NSW case (and the NZ case) constitutes an instance of deinstitutionalization in the wider field of public sector administration across western countries. It may be argued that as more and more jurisdictions moved to accrual accounting this hypothesis of Oliver is now confirmed but that issue is an empirical one that is beyond the boundaries of this research.

Analysis of images of change that have not yet taken place generates the need for a concept of phantom mimesis (Christensen, 2005). Phantom mimesis is a variety of mimetic isomorphism that is based on a phantom image or simulacrum (Baudrillard, 1994; Macintosh, 2002) of best practice where the phantom nature of the image may not be known to either the organisations promulgating same or, more likely, the organisations considering the implications of the image. Nevertheless phantom mimesis can be rational, self-interested behaviour that drives organisational decision-makers to accept change where they believe that change has worked elsewhere. In the case of NSWG consideration of accrual accounting, the epistemic community's creation of a phantom image of successful public sector accrual accounting was underpinned by the reputation of the Big Six and the means by which it theorised its arguments (Greenwood et al., 2002) in the form of criticisms of cash accounting (Potter, 1999).

Movement from deinstitutionalisation to institutionalisation requires organisational failings to be specified, abstract solutions to be justified and moral and/or pragmatic legitimacy to be accorded to the solutions (Greenwood et al., 2002). In the NSW public sector accrual accounting case there is a clear parallel between the actions of the consultants and this proposition because the consultants initially concentrated on a criticism of existing accounting systems and emerging from these criticisms were arguments supporting accrual accounting. A tight logical nature of this process arose from the duality of cash and accrual accounting as well as the definitional nature of accrual accounting being identified as *not cash accounting*. That is, criticisms of cash accounting automatically swung the argument to advocacy for accrual accounting. If cash accounting was the cause of inadequate asset recording, under-reporting of liabilities, unsatisfactory performance reporting and manipulation by politicians (Regan, 1987b), then the solution must be the opposite of cash accounting: accrual accounting. Thus, the consultants' arguments satisfied the two requirements of theorisation, first, a shared understanding of the problem and second, justification of the proposed change. Usually the theorisation stage is long and characterised by sustained repetition (Greenwood et al., 2002, p.72) but in the NSW case a remarkably short period of public discussion (nine months) was sufficient to achieve a shared understanding of both the problem and its solution. The facts of

this case however do not support Scarbrough’s (2002) argument that professional associations will create theorisation whilst consultants will then diffuse the changes. Instead, this case evidences the opposite sequencing. Such an outcome is understandable when the synergy of self-interest and public interest is considered with the resulting formation by the consultants of an epistemic community that was founded on the shared goal of bringing public sector accounting closer to private sector accounting.

The successful advocacy by the epistemic community was achieved through effective theorisation (Greenwood et al., 2002) of the change noted above and the use of phantom mimesis to persuade decision makers to accept the change. This is consistent with DiMaggio and Powell’s (1983) mimetic isomorphism and it is a particular instance of Oliver’s (1991) and Modell’s (2002) voluntary isomorphism as discussed in Chapter 4. It is also unsurprising to find a high level of consistency with Oliver’s (1991) hypothesized pre-conditions to an acquiescence strategy. Therefore, with the exception that there was no real-life instance of the change to be imitated, the imitation tactic described by Oliver is a useful description of what is observed in the case. So the creation of a phantom image of successful public sector accrual accounting implementation became a useful means to allow ‘imitation’ to be achieved but an important additional aspect of the consultant’s phantom image was their belief in its reality. That is, because accrual accounting in the private sector was an integral part of the training and daily work of the consulting firms, there is evidence to support their genuineness in presenting public sector use of accrual accounting as a real-world practice rather than a risky, untried practice with potential unintended consequences⁴⁰. The sincerity with which this belief was held was part of the foundations of the epistemic community and this strengthened the persuasive power of the mimesis. The consultants’ success was also assisted by the uncertainty that pervaded public sectors in Australia at the time.

DiMaggio and Powell (1983) identify uncertainty as one of the conditions in which mimetic isomorphism is likely to occur together with ambiguity on goals

⁴⁰ The contradiction in arguing that public sector accrual accounting was innovative and yet also already in practice did not attract criticism. Perhaps this was because the US-based jurisdictions were seen to be in a different orbit from Westminster-based jurisdictions such as NSW.

and an organisational lack of technological understanding. In the late 1980s in NSW, these conditions were present and they help explain the belated interest by the bureaucrats in public sector accrual accounting. The bureaucrats were susceptible to mimetic isomorphism because of their uncertainty in respect to the impact of any accounting system changes. They were uncertain in part because of inadequate information regarding NSWG's assets, in part because of the absence of accounting standards regarding problems unique to the public sector and in part because of unresolved technical accounting debates such as an appropriate recognition (or exclusion) regime for community assets (Pallot, 1992). They also worried about the impact of accounting changes on pressures to spend:

we (the Public Service) were very nervous about accrual accounting because once you throw in physical assets, because they are so big, they overwhelm the balance sheet and make it look extremely healthy (PoI, Interview 3).

The public sector managers' uncertainty can be likened to the uncertainty that some critical authors have identified in private sector consultancies. For example, Fincham (1999) points to the inherent uncertainty of the managerial task and the manner in which consultants match the intangible nature of their services to managerial uncertainty by speaking to managers' own understanding of their world. Wright (2002) also shows some Australian consultants deliberately attempting to create uncertainty in clients' minds before offering them a new managerial technology. Such talk is evidenced in this case as are other means of persuasion for the public sector to engage consultants. For example, Post notes that "information asymmetries can be exploited by service firms through the use of international brand names ... reputation appears to be the intangible asset that is exploited when a firm diversifies its activities. This may explain why accounting firms have so successfully developed their management consulting practices" (Post, 1998, p.704). In the case at hand, it is evident that the public sector managers' uncertainty was important and that they relied on the international brand name as an indicator of competency and standing relevant to the problem of implementing accounting change. Whilst the consultants persuaded the bureaucrats that the 'destination' of accrual accounting was assured, they were

able to reinforce uncertainty about finding the path to that destination without the aid of consultants.

It is ironic that the implementation path to public sector accrual accounting provided by the consultants did not produce solutions to the bureaucrats’ accounting problems. The consultants were not able to solve the technical accounting recognition issues⁴¹ and they subcontracted valuation work to valuers. Regardless, the promise of solutions was held out as the inevitable result of successful implementation of public sector accrual accounting in other jurisdictions. In institutional theory terms, this mode of argument and the ‘don’t reinvent the wheel’ encouragement (Egol, 1987b; Plater, 1988) as presented by the consulting firms can be characterised as voluntary isomorphism but the fact that the consultants were in advance of the accounting profession reduces the applicability of normative isomorphism as an explanation. Support found for voluntary isomorphism is also an interesting contrast with the conclusion of Carpenter and Feroz (2001) that early adopters of GAAP in the US were subject to coercive isomorphism as a result of resource pressures. Whilst a political concern about debt has been documented in the case of NSW (Christensen, 2002), it did not result in a restriction on the resources available to implement accrual accounting. Thus there does not appear to be evidence supporting coercive isomorphism as an explanation of the change. Indeed the change meant that increased resources were made available to the bureaucracy because of the ‘at any cost’ desire for implementation (UoI, Interview 2). The promise of increased resources and the benefits of being at the forefront of innovative reform became potent ingredients in the recipe of events, advocacies and reputations that led to central agency support for the change. Treasury benefited from the creation of a new Branch (NSW Treasury, 1989) which also changed its internal balance of power so as to improve the status of accountants compared to economists in Treasury (Ryan 1998; PoI, Interview 6). Treasury also received an increase in its

⁴¹ As an example, Treasury faced the difficult task of dealing with asset recognition and valuation issues where there was no market for those assets. As a result, a discussion paper and subsequent policy document was produced internally within Treasury since the profession and the consultants were silent on these important issues (NSW Treasury, “Policy Guidelines for Valuation of Physical Non-Current Assets in NSW Public Sector”, September 1990). Although a consultant seconded from a Big Six firm contributed to this Policy Guideline, it was confirmed that the Guideline emerged initially from NSW Treasury efforts (PoI, Interview 4).

budgetary allocation⁴² but the main gain to Treasury was the placement of it squarely back into the position of power over the new increasingly ‘accountingized’ (Power and Laughlin, 1992) public sector.

5.3.3 Summation and limitations

This section has focused on the period 1989 to 1994 and the means by which an epistemic community and institutional circumstances combined in making NSW a public sector reform leader. Both the membership and the activities of this epistemic community mark it as a transnational phenomenon and it is concluded that it was a synergy between membership of the epistemic community and its theorisation of a convergence of public and private sector accounting that supported private sector accounting practices and the skills for sale (Lapsley and Oldfield, 2001). In a period of public sector uncertainty, this synergetic combination of forces generated a demand for public sector accrual accounting and the beginnings of a revolution in public sector accounting in many other jurisdictions.

Whilst supportive evidence for this argument has been advanced, it is necessary to note limitations that are inherent to its approach. Inherent in the historical methods and data sources used in this research are its limitations. Placing today’s interpretations on yesterday’s events is a difficult task and in this instance additional recourse to theoretical frames has been necessary to deal with the question of what motivated the change of Treasury stance. The archive is silent on this issue save for argued acceptance of the case that was made for change. This begs the question as to why arguments that were unpersuasive until 1987, suddenly took on authority in 1988. Because of the inadequacy of accepting the archive, this research has called on evidence available from oral testimonies gathered from actors classified as Promoters of Change, Users of Information and Producers of Information. However the limitations of oral testimony are perhaps greatest when it is used to unveil personal motivation as is attempted here. Additionally, difficulty is presented to this research by the fact some individuals held more than one position during the period under study. For example, Dick

⁴² The archive reveals a Budget Branch concern that Departments may seize on accrual accounting as an excuse for more funds that would in fact be spent on different purposes (Treasury Circular No. G1990-19, 17 September 1990).

Humphry held the positions of PSASB Chairman, Victorian Auditor-General and NSW Premier's Department Director-General; such multiplicity of roles may confound classification of actors and consequent application of institutional theory.

Clearly, future scholars using this research need to take into account the abovementioned limitations as to its evidentiary base. Nevertheless, the option of relying only on an apparently self-serving and officially sanctioned archive is an unacceptable means of avoiding the limitations of oral sources. Perhaps those scholars will find themselves pondering Parker's (Parker, 2004) point that time is both an ally and an enemy to historians: an ally because extending hindsight might allow improved contextualisation but also an enemy since available evidence may be eroded by time.

5.4 CONCLUSIONS

The above discussion has provided an interpretational account of the NSWG decision to implement accrual accounting in its GGS organisations. Whilst the decision was made in 1988, its context dates from the beginnings of a period of reform marked by two major reforms of public sector administration in the Commonwealth and NSW public sectors. However, it was not until active promotion of the change by international consultants that opinions within the bureaucracy and the accounting profession began to change from opposition to support. Even though Treasury accepted and promulgated many other reforms it still resisted accrual accounting until the end of 1987 when its resistance turned to passiveness. That passive stance quickly changed in 1988 and when the formal decision was made in December 1988 Treasury had established an apparatus to achieve implementation. Given that the international consulting firms had strongly advocated public sector accrual accounting, the bureaucracy turned to the consultants for advice and assistance. This strategy on the part of Treasury was also promoted by the absence of action by the accounting profession and the standard setters in dealing with the problematic aspects arising from the application of accrual accounting based on the matching concept to organisations where sources of funds are unrelated to expenditures.

The speed of change is a marked feature of the history presented here. That rapid change occurred is attributed to the operation of an epistemic community made up of international consulting firms in conjunction with uncertainty and other institutional features of the NSW public sector such that it quickly adopted an acquiescence strategy. The consultants were able to effectively theorise the change to accrual accounting by first criticising the effects of cash accounting and second by creating a phantom image of successful implementation of accrual accounting in GGS organisations. That phantom image and the institutional features in place at the time, generated an instance of phantom mimesis as a sub-category of mimetic isomorphism. The underpinning provided by self-interest for both the consulting firms and the central control agencies served to reinforce the speed of the change but a concentration on self-interest leaves an inadequate understanding of why this change took place. The important complementary factor is provided by the belief that was the foundation of the epistemic community: that public sector accounting should be based on the same generally accepted accounting principles as found in the private sector.

This chapter has presented an historical account of the NSW Government's adoption of accrual accounting for its public sector and the strong support for this change emanating first from an epistemic community of international consultants and second, from the NSW public sector central agencies. Chapters 6, 7 and 8 turn to examine the managerial impact of accrual accounting in a single public sector organisation in light of the historical understanding of the broader movement towards accounting change imposed from the centre. Some of the rhetoric used in the 'selling' of public sector accrual accounting filtered down to individual agencies and so the historical context of the changes considered in the remaining chapters proves useful in understanding the movement for change and its imperatives. Some of those imperatives, especially being seen to be at the forefront of reform, stand in contrast to a model of organisational change built on rational decision making. It is to these issues that the remaining chapters turn.

CHAPTER 6: Organisational Context and Background



6.1 OUTLINE: AN ORGANISATION IN A SEA OF CHANGE

This chapter aims to situate the Department in the context in which its managers operate. First it presents an overview of the Department as it presently stands; second, it describes the external environmental factors that have had importance to the Department's managers; and third, it identifies some of the Department's responses to its environmental changes; these responses are both a product of the external environmental pressures as well as a factor impacting on internal decision making. From the point of view of the managerial impact of accrual accounting (discussed in Chapters 7 and 8), the contextual background provided in this chapter is important since it facilitates a more complete understanding of the pressures under which Departmental managers make decisions.

A significant feature of this research's aim is to provide an accounting history of a broad change (Chapter 5) and to relate that history to an assessment of an accounting change within a single site affected by that change. Thus this chapter discusses how the Department dealt with the need to comply with the NSW Government decision that its GGS entities convert their accounting systems from a cash basis to an accrual basis. For the Department, that conversion took place over a period of time ending in 1993 when the Department published its first accrual-based accounting outputs. Whilst Chapters 7 and 8 explain how accrual accounting has impacted managerial decision making in the period since 1993, that explanation is only complete when the historical and organisational context provided in this chapter is considered. As will be described in this chapter, the Department has been under significant external pressure and has responded in part to that pressure by implementing organisational changes. However, in the face of that organisational change, the Department's overall set of objectives has remained largely stable. Thus this chapter presents a view of an organisation with

an essentially stable purpose during a period of external turbulence and internal structural changes. These changes appear to have been responses to external pressures on the Department as it has strived to manage the resultant organisational instability coupled with a series of broad public sector reforms, one of which was accrual accounting.

6.2 OVERVIEW OF THE DEPARTMENT'S INTERNAL DIMENSIONS

This section provides a brief overview of various aspects of the Department in order to assist this Chapter's efforts to explain the Department's background and context. Summative information is presented that describes the Department as an entity⁴³. Since the research that follows in Chapters 7 and 8 focuses on only one, albeit significant, functional part of the Department, this section locates that part within the Department as a whole. It does this by first describing the Department's objectives, outputs and clientele and then second by noting the various dimensions that are constantly in the minds of Departmental managers as they grapple with strategic and operational decisions. Overall the Department is depicted as a large organisation with a relatively long history and important role in society. The dimensions covered in this section are:

- objectives, outputs and stakeholders;
- physical facilities (buildings, land and capital assets);
- financial dimensions in terms of assets, expenses and liabilities; and,
- human resources dimensions in terms of number and categories of staff.

Each of those elements of the Department's internal environment is discussed next.

6.2.1 Objectives, outputs and stakeholders

The Department's *raison d'être* is to provide publicly funded educational services. For school-aged children⁴⁴, these services are required under the NSW

⁴³ Data sources for different elements of the Department's internal dimensions have been provided by a number of publicly available reports published variously between 2005 and 2007. Whilst most of these reports have been published by the Department, a number have been published by central agencies or intergovernmental bodies. Although not sharing the same year of publication, these reports are the most recent available and collectively form a body of authoritative and official data capable of informing the analysis presented in this chapter.

⁴⁴ Compulsory attendance of school in NSW covers ages 5 to 16 and non-compulsory senior Secondary School (sometimes referred to as 2nd Stage Second Level School) is mostly for students aged in excess of 16 years.

Education Act (1990) but the Department and its various antecedents have a history of providing these services over 150 years – even predating the creation of Australia as a nation. The NSW Education Act (1990) establishes two educational entitlements for NSW children, being:

- a legally backed entitlement to education, irrespective of the child's personal or family circumstances; and,
- an entitlement to a high quality education that meets students' needs, provided through teaching and resources of an appropriate standard, in the school they attend (whether public or non-government).

In order to meet its over-arching objective, the Department has six budgetary programs that cover all of its activities. As noted in the Department's 2006 Annual Report, its programs and those programs' objectives are:

Program 29.1.1 Pre-School Education Services in Government Schools

Objective: To develop foundation skills in literacy, numeracy, personal and social development and prepare students for primary school.

Program 29.1.2 Primary Education Services in Government Schools

Objectives: To improve personal and social development skills and student learning outcomes for literacy and numeracy; and, prepare students for secondary education.

Program 29.2.1 Secondary Education Services in Government Schools

Objectives: To build on and extend skills learnt in primary school; to provide students with the social and intellectual skills necessary to participate fully in work, TAFE, university or further learning; and, to improve participation, access, educational outcomes and equity.

Program 29.3.1 Non-Government Schools Assistance

Objective: To provide assistance to non-government schools.

Program 29.4.1 Technical and Further Education (TAFE) Services

Objectives: To enable students to achieve greater educational standards and vocational competence; and, to increase opportunities for mobility in employment and to improve the performance and productivity of industry.

Program 29.4.2 Grants for Education and Training Services

Objective: To assist individuals, the community and industry achieve high quality and equitable outcomes from education and training.

Since this research centres within the schools-related parts of the Department, the interest here is confined to the first four abovementioned programs and so excludes Programs 29.4.1 and 29.4.2. That is, the more commercially-oriented Technical and Further Education (TAFE) part of the Department⁴⁵ is not described here. With that caveat in mind it is worth noting that the Department sees its core

⁴⁵ The TAFE part of the Department was excluded from this research because, over the period of study for this research, it was not consistently part of the Department and its objectives changed substantially by incorporating an increased emphasis on profit-making which differs from the GGS nature of the school-related functions of the Department.

business as being the provision of education services to school-aged children and that the following advantages (NSW Public Education Council, 2005, p. 4) underpin that provision:

- *School education is a 'public good'* which results from government intervention in the absence of which society's human capital would be diminished.
- *Economies of scale* result from the size of the NSW public school system in the provision of infrastructure (including building construction and maintenance, equipment and technology); managerial systems (including finances, properties and human resources); teaching resources; and, professional development.
- *Offsetting costs* are achieved such that the differential costs of educating students in different circumstances and with different needs can be spread across the whole cohort.
- *Quality control* is increased because the Department can exercise quality control through a range of accountability and reporting measures over the teaching and learning for a large proportion of the State's school children.
- *Coordination of future educational planning* (in the necessary adjustments of educational infrastructure and personnel to meet changing demographic, social and educational trends) is made more effective because of the Department's scope.
- *Efficient use of public resources* is achieved in two ways: first the reduction in unit cost resulting from economies of scale noted above; second, the sharing of resources with other sections of the community and other providers, such as pre-schools and community centres.

An underlying feature of the Department's existence, and the list of advantages noted above, is its large size. Table 9 presents enrolment measures that give some flavour to the massive size of the Department. As shown in Table 9 and the following parts of this Section, it is notable that the Department is responsible for educating almost three-quarters of a million students, it employed the equivalent of 94,807 full-time staff⁴⁶ in 2006 and its total expenditure for the 2006-07 financial year was \$10.7 billion. Although this research has not attempted to confirm the claim, it is indicative of the Department's self-image that a number of senior managers noted that the Department is the largest single educational provider in the Southern Hemisphere.

⁴⁶ The Department's total employment extends beyond its schools functions.

NOTE:

This table is included on page 139 of the print copy of the thesis held in the University of Adelaide Library.

Table 9: Select activity measures for the Department, 2005 (Source: Productivity Commission, 2007)

6.2.2 Physical dimensions

The significant physical size of the Department is notable in the following statistics as disclosed in the Department's 2006 Annual Report:

- 17,901 operating school buildings on 2,440 sites with a total floor space of around 7.56 million square metres organised into 2,239 separate schools.
- 5,386 demountable buildings on school sites, providing a further floor space of around 417,398 square metres.
- 10 regional offices servicing the Department's operational functions and four sites for its Head Office functions.
- In excess of 1 million email accounts are maintained by the Department for its students and staff.
- By 2012 the Department will have approximately 350,000 computers in use in schools for educational purposes.
- In 2005/06, estimated by interviewees to be a reasonably typical year, the Department was undertaking 57 major capital works, new works and works in progress to equip its school facilities to meet its changing needs. These projects totaled in excess of \$485 million in value.

In managing its large real assets the Department considers (NSW DET, 2003, p. 12):

- Achievement of value for money whilst ensuring optimal quality control and maximum benefit to schools.
- Compliance with Government Total Asset Management processes.
- Design of school facilities to meet the demands of delivering the evolving Primary and Secondary curricula where teachers and students engage in a changing variety of learning experiences.
- Attainment of school facility standards reflecting contemporary best practice in design and operation while encompassing a wide range of individual teaching and learning styles.
- Construction of school facilities that meet appropriate life cycle standards, climate conditions and include robust building elements appropriate to the school environment.

- Recognition that school facilities are major Government assets where affordable community access and usage is encouraged.

Current trends impacting on schools infrastructure are (NSW DET, 2003, pp. 12-13):

NOTE:

This table is included on page 140 of the print copy of the thesis held in the University of Adelaide Library.

Table 10 Trends impacting schools infrastructure (Source: NSW DET, 2003, pp. 12-13)

Given a demographic trend reducing the school age population and a concurrent increase in non-public enrolments, the Department has recognised that its new schools construction program will decline whilst its maintenance and repair efforts will be proportionately and absolutely more important. The Department's efforts regarding school building maintenance has received consistent criticism in the popular media and official sources (such as the NSW Auditor-General and the 2003 Inquiry into the Provision of Public Education in NSW). For example, in 2006 the NSW Auditor-General reported to Parliament:

The Department's maintenance plans for school buildings have been hampered by significant maintenance backlogs. The trend over the last four years indicates that the Department's maintenance plans are still not being achieved, with maintenance backlogs remaining virtually constant (NSW Auditor-General Office, 2006, p. 22).

6.2.3 Financial dimensions

The 2007/08 Budget allocated to the Department a total of A\$11.2 billion. Of this amount, \$8.6541 billion is spent within the Department's school function and \$773.3 million is distributed by the Department to non-Departmental schools under a Government funding arrangement. The Department budgeted to spend \$7.89 billion on schools recurrent expenditure including \$220 million on maintenance of its buildings plus an additional \$531 million in capital expenditure.

Whilst the Department's assets are large in value (recorded at \$17.6 billion in 2006), its liabilities are relatively minor at \$0.7 billion. Approximately 87% of the Department's liabilities are classified as Current Liabilities and the majority of these short-term liabilities are payables arising from day-to-day business that have been accrued at period-end. In contrast, only 4% of total assets are classified as Non-current Assets and so the financial structure of the Department can be seen to reflect its GGS nature in which most capital expenditure is financed by payments from Treasury whilst recurrent expenditures match appropriations made under the annual State Budget.

6.2.4 Human dimensions

As at June 2007 95,767 fulltime-equivalent staff were employed in the Department. Approximately 13,000 of those staff are employed performing duties unrelated to the Department's school education functions. Within the Department's schools functional area about 58,000 teachers are employed on a permanent basis together with 16,500 support staff. This data includes casual and temporary employees including those replacing employees on paid leave. In addition, over 19,500 qualified teachers are registered as seeking full-time employment with the Department and a number of these teachers may be casual

or temporary teachers seeking permanent appointment whilst the Department maintains a register of over 23,000 teachers who make themselves available to an online booking service matching schools with teachers for casual engagements⁴⁷.

School-based staff are classified as classroom teachers, teachers funded for specific equity programs, school executives, administrative staff who support students and teachers in class, teachers' aides, other direct student support personnel and general staff who maintain and operate plant, grounds and equipment. In addition to these school-based staff, head office and regional offices (non-school based) are staffed by officers classified into Teaching Service, Public Service or Senior Executive Service. Teaching Service staff are personnel holding educational qualifications with prime responsibilities covering provision of educational services to schools in areas such as early childhood, primary and secondary education, curriculum support, training and development, school self evaluation and improvement, equity services, student support and distance education. Public Service staff are responsible for statewide administrative, legal, policy development, planning, properties management, accounting and finance, audit, public relations, information, technology, employee relations and personnel functions.

The Department maintains rigorous registration systems requiring evidence of teaching qualifications before employing a teacher; as such, the majority of the Department's staff hold tertiary qualifications. Whilst 96% of the Department's staff are involved with front-line duties some 14,700 staff are employed on duties outside a school room and the proportion of staff who are school-based has been slightly increasing in recent years (refer Table 11). Of importance in Table 11 is the heavy concentration of staff in front-line and core educational activities meaning that the Department has a very high exposure to impacts on productivity and/or remuneration of these staff. Equally, the low concentration of staff involved with administration and non-educational activities means that the gains from improved productivity from those staff are not likely to be of relatively great significance to the Department. Nevertheless, because of the absolute quantum of the Department, any productivity improvements across the whole organisation,

⁴⁷ Some individuals register concurrently for both full-time and part-time employment.

even minor ones, are capable of providing sums of money that can achieve some other meaningful outcome.

NOTE:

This table is included on page 143 of the print copy of the thesis held in the University of Adelaide Library.

Table 11: Trends in Department staff (Source: Council on the Cost of Government, 1998; Note percentages refer to Department school education related total staffing)

6.2.5 Summation

With a student and staff complement exceeding 800,000; a history extending beyond the span of Australia as a nation; and, command of significant financial and physical resources, the Department is an important element in NSW society. As a result its activities affect a large number of families and voters within NSW and so it is understandable that it has a high profile (refer Section 6.3.2 below). The Department receives significant annual appropriations and its managers are acutely aware that society and government have high expectations of the

outcomes that should be achieved in its management of those appropriations and its use of its sizable stock of assets. However, in striving to meet expectations, the Department has faced a challenging external environment, as is discussed next.

6.3 THE DEPARTMENT'S EXTERNAL ENVIRONMENT: MORE THREAT THAN OPPORTUNITY

This section considers the external forces that were impacting on the Department immediately before, and since, its implementation of accrual accounting. Thus the starting point chronologically for this discussion is 1988 when the Department first learnt that accrual accounting was to be a requirement of the new Government. Over the period following 1988, the Department faced an external environment with four notable characteristics of significance to this research:

- a market share decline of reasonably constant proportions;
- consistent public controversy related to the Department;
- a jurisdictional competition between the State and Commonwealth Governments as to who had effective responsibility for various aspects of education; and,
- recognition that the introduction of accrual accounting within the Department and other GGS organisations was one part of an overall reform era that would be imposed by central co-ordinating agencies.

Each of those elements of the Department's turbulent external environment is discussed next.

6.3.1 A declining market share and increasingly competitive market

The environment in which the Department operates has been persistently hostile in the period studied from 1988. The most important and threatening manifestation of that hostility has been a shift towards alternative service providers and thus a loss of 'market share' by the Department. In the period of 1985 to 2000, the Department's share had consistently fallen from 74.22% to 69.42% (Review of Non-Government Schools in NSW, 2002, p. 27) and this was perceived by the Department to be its single largest threat. Coupled with a projected decline of 4% to 7% in the total number of school age children to 2020 (NSW Education Council, 2005, p. 69), the loss of market share manifests itself in materially significant reductions in the core business of the Department.

Progressively over the period relevant to this study there was increased recognition in the popular press (refer Section 6.3.2 next) and in official reports

that the drop in market share was “implicit expression of the popular belief” (NSW Public Education Council, 2005, p. 23) that the Department was failing to meet the aspirations of its potential stakeholders. Even though the Department responded to these forces with a number of structural and policy changes designed to influence its stakeholders (refer Section 6.4 below and NSW Public Education Council, 2005, pp. 118-20), there has been little impact on the market share decline. Additionally, the drop in market share was a resource-related problem because the State Government funded the alternative service providers based on their number of students which was rising in absolute terms.

Funding of education is inherently controversial in a system where education competes for funds against other purposes of government and where public education then competes for its share of the resulting total education allocation. In NSW, government funding to education is split between public schools, as operated by the Department, and privately operated schools. The allocation to private schools is largely driven by enrolments⁴⁸. Thus as students moved away from the Department, resources of alternative providers grew at the expense of the Department and so adverse competitive forces were strengthened.

The declining market share and increasing competition from private providers both reflected and magnified a consistent level of public controversy about various aspects of the Department’s performance.

6.3.2 Public controversy surrounding the Department

A notable feature of the Department’s environment is that it is subject to consistent and high levels of controversy. Evidencing this is the presence of reporters and editors assigned by the major daily newspapers to report on educational issues and a consequential large number of articles relating in some way to the Department. Also evidencing the extent of exposure to public comment is the Department’s allocation of resources to corporate communications. That function is headed by a senior executive reporting to the Department’s Director-

⁴⁸ Total funding to private providers has also been distorted by an increased per student funding provision by the Federal Government. For example, in 1996 for every \$1 spent on a public school student, \$4.40 was spent on a private school student but by 2005 that amount had increased by 28% to \$5.63 (Edsall, 2007). This together with an increased enrolment base meant a substantial shift of resources to private schools.

General (head) via an Executive Director. The Corporate Communications function reported the following outputs for the 2006 financial year:

- processed 6,155 items of Ministerial correspondence and 2,062 letters to the Director-General;
- coordinated the School Promotions Strategy Reference Group: worked with principals' organisations, parent bodies, and unions to support promotional activities for schools;
- introduced a newspaper for teachers and school support staff;
- supported schools in self-promotion with advice on, and training in, design and use of material;
- managed the Schools Public Information Centre: in 2006, more than 6,000 phone calls and emails were received;
- coordinated visits and information packages for 48 senior delegations from 22 countries; and,
- processed 360 requests for information lodged under Freedom of Information legislation.

A search of the *Sydney Morning Herald*, the daily newspaper with the largest circulation in NSW, covering 1988 to 2007, reveals 2,783 articles when using the search term "Department of Education". Although this is a blunt measure of media exposure⁴⁹ it is nonetheless indicative of the Department's managers' general concern about being under frequent scrutiny and not uncommon attack by the media. One manager noted during interviews that he monitored the daily newspapers to learn of any emerging problems relevant to the Department (HO, Interview 15).

In addition to noting the extent of the Department's media exposure it is useful to identify recurring themes of interest in the public media. These matters define the character of the public controversy that plays on the minds of the Department's managers. An in-depth and definitive analysis of the Department's media exposure is beyond this research but interviewees were asked what Department-related matters were most frequently covered in the media. There was a strong consistency of managerial impressions that media coverage, in particular newspaper coverage, focussed on:

⁴⁹ A raw measure of articles in which the Department's name is mentioned as a proxy for media exposure is weakened by the measure's inability to assess significance of individual articles (as indicated by word length, position in newspaper, etc), tenor of article and thematic issues

- declining enrolments in the Department’s schools;
- resource issues in the Department, in particular in respect to buildings and their maintenance;
- resource allocation to the Department and relative to other education providers;
- discipline of students within the Department’s schools;
- educational outcomes from the Department’s schools in both absolute terms and relative to other education providers as well as controversy over educational measurement;
- calibre of the Department’s staff (as perhaps indicated by competency, training, motivation, age-profile, etc); and,
- competition between the State and Federal Governments as to their roles in respect to education of school-aged children.

6.3.3 Jurisdictional competition between the NSW and Federal Governments

Although the Federal Government is not responsible for the provision of educational services to school-aged children, there has been a significantly increased degree of jurisdictional competition in this field arising from two main factors:

- increased operational intervention by the Federal Government in State public schools; and,
- increased funding by the Federal Government to non-public providers of school-aged education services.

The manifestations of Federal Government intervention in operational matters have been:

- requiring State Education participation in the National Assessment Program for subjects such as: Literacy; Numeracy; Civics and Citizenship; and, Information Communications Technology (ICT) Literacy;
- mandating formats of reporting to parents on educational outcomes for each child;
- prescribing school reporting to their communities regarding staff engagement and satisfaction levels;
- establishing funding conditions related to matters such as flag raising, employment conditions for teachers, and other priorities to the Federal Government; and,
- leading the Council of Australian Governments in “engendering a culture of continuing improvement in schools based on rigorous accountability frameworks and performance measurement” (Department Annual Report, 2006, p. 139) with the subsequent direction of resources to where they are most needed.

emerging from relations between articles. Additionally, the search result included some references to some Departments of Education in jurisdictions other than NSW.

Whilst Federal Government interference in operational matters has been irksome to the Department's managers, they have mostly complied because of the financial pressures which the Federal Government has been able to exert. These financial pressures have been aggravated by increased Federal Government funding to non-public schools and a view has emerged within the Department that this is the single most threatening feature of its external environment. The essence of this threat is seen in the shift from the 1980s when the majority of Federal funding for schools went to public schools to the 2005-08 quadrennium when approximately 74% of Federal funding for schools has been allocated to the 32% of students in nongovernment schools. Coupled with the NSW Government's 25% funding link for the non-government sector, the Federal increases in funding for that sector are causing significant problems to the public school sector in NSW and "this has the potential to destroy public confidence about the adequacy of resources available in public schools" (NSW Public Education Council, 2005, p. viii).

As a consequence of increased Federal funding for non-public schools there has been a notable "superior investment by non-government schools in their buildings and facilities (that in NSW) has been as much as seven times that in the public sector" (NSW Public Education Council, 2005, p. 10). Increased recurrent grants from the Federal Government have enabled many schools to invest their private resources in buildings and facilities thus creating a disparity in standards of facilities which advantages non-public school authorities in marketing their schools to parents. Resultant public perceptions of inadequate teaching and learning resources, poor maintenance and sub-standard buildings and facilities in public schools compared to non-government schools are a major concern to parents and thus contribute to the growth in enrolments in non-public schools noted in Section 6.3.1 above.

6.3.4 NSW Government public sector accrual accounting direction

The NSW Government's move to adopt accrual accounting was not uniquely focused on the Department. However, for the purposes of this research it is worthy of brief mention in the discussion of the Department's external environment. In consultation with the Department, NSW Treasury decided that

the Department would be the last large GGS organisation in NSW to convert to accrual accounting. This strategy resulted from the following considerations:

- the Department's large size increased anticipation of difficulties arising from the conversion;
- the Department had been extensively restructured between 1989 and 1991 with a change of Minister and Head of Department as well as a continuing external review mechanism⁵⁰; each of these factors created significant internal uncertainty that meant an added level of complexity in achieving major accounting system change;
- identification and valuation of the Department's extensive portfolio of real assets was expected to be an expensive and complex task;
- the wide range of different operations including the large number of individual schools meant that whole-of-Department reporting on a consolidated basis was likely to be a challenge; and,
- the decision was made to use the conversion to accrual accounting as an opportunity to install a new computerised accounting system and so it was recognised that additional time would be required for specification, modification and installation of the new system.

Interviewees who were present during the 1993 cutover to accrual accounting could recall being provided with training on the new system and differences between cash and accrual accounting systems. However no current or archived file record of the specific training could be found⁵¹ and recollections of the training were that it was limited to a single day for middle to senior level managers. Thus the impression gained from interviews and a review of available archival material on the Department's implementation of accrual accounting, is that an emphasis was placed on technical system-related matters with less emphasis on the impact of the change on staff or organisational matters within the Department. The Department's accounting and senior managerial staff accepted the need to comply with the Government's directive to implement accrual accounting and whilst they were very aware of the events discussed in Chapter 5⁵², they treated the change as an externally mandated requirement about which

⁵⁰ From 1988 upon the election of a new government, until October 1994, a standing Management Review of the Education portfolio was in operation in NSW charged with reviewing operational structures and administrative arrangements in the Department reflecting a "need for radical change and a need to turn the Department ... 'upside up'" (Scott, 1990, p. xiii).

⁵¹ The training was provided by a Big Four consulting firm but neither that firm nor the Department were able to provide copies of the contract or specifications of the training that was provided.

⁵² The Department's most senior accountant was a participant in the 1987 and 1988 seminars described in Chapter 5 and also provided evidence under oath to Public Accounts Committee enquiries into accrual accounting in the NSW public sector. As such, he and his staff were very aware of the arguments advanced for accrual accounting and the Government's expectations from the accounting change.

they had little discretion. At least with the benefit of hindsight, those managers employed by the Department at that time (and interviewed for this research) now recognise accrual accounting as one indication of a reform era in which much of the Department's administration was externally changed.

6.3.5 Summation

This section has presented a paradoxical picture of the Department as it grapples with its external environment: despite its size and importance, the Department is facing a threatening environment in which it is presented with forces that exceed its internal strengths as demonstrated by its inability to redress its main threat: falling market share. These forces result from larger political and social pressures that the Department is incapable of changing and so the Department has resorted to efforts to improve its internal strengths as it has attempted to achieve its core purpose as identified in Section 6.2 above. Nevertheless, the Department has been an organisation in a state of flux as is described in the next section.

6.4 ORGANISATIONAL RESPONSES TO CONTEXTUAL CHANGE

In the period 1988 to 2007, the Department has experienced significant change. This section outlines the extent of change by focusing on the Department's organisational structures, strategic directions and its overall mission.

6.4.1 Organisation structure changes

The most notable feature of the Department from 1988 to 2007 was a recurring pressure for and response to internal structural change. The period was characterised by a tension between devolution and centralization acting as opposing organisational tectonic forces that periodically erupted and have caused four earthquake-like structural changes:

- first, following a major review of the Department which began in 1988, a decision was made in 1989 to dismantle the strong central control of Head Office and to establish 10 regions with high levels of autonomy and each led by a manager with direct reporting responsibility to the Department's head;
- second, a move, in 1995, to a centralized structure from the decentralized structure that had been in place for five years. This new structure was reflected in abolition of the regions and installation of a two tier structure of 40 Districts and Head Office;

- third, the incorporation of another State-government controlled provider into the Department and reporting to the Department's head but being managed as a separate entity within the Department; and,
- fourth, a restructure in 2003 and 2004 so as to re-create 10 regions, reduce about 1,000 positions and share administrative staff (including regional accounting staff) and facilities between the two main, and previously separate, parts of the Department.

These organisational changes created significant periods of uncertainty within the Department because implementation of change in such a large organisation is necessarily time consuming. They also provide an insight into the Department's continuing tension between centralisation and devolution of decision making. That tension is natural given the size of the Department which means that centralisation can promise conformity of standards and strategic direction whilst also delivering reduced costs through economies of scale. However, centralisation also presents risks of slow communication and uninformed decision making; thus, devolution of power to regions/districts has been considered regularly as a response to adverse external conditions.

6.4.2 Strategic goals

The Department has five strategic goals in its Corporate Plan. Of these, four are relevant to the schools function:

- To deliver education and training that inspires students to succeed, fosters high expectations and prepares them for participation in a democratic and sustainable society.
- To value staff and provide a working environment that acknowledges their contribution and builds capacity.
- To maximise return on investment in education and training through responsive and sustainable management.
- To exercise strong leadership in Australian education and training through innovation and by shaping national policy and reform.

When these strategic goals are compared to statements of strategy at the beginning of the period of study, it is notable that they are very similar except for the last mentioned. That is, earlier statements of strategy did not aim to provide leadership to Australian education. However, the implications of the threatening external environment described in Section 6.3 can be seen when the educational leadership goal is decomposed into its contributing strategies, outcomes and indicators. In particular the clear thinking that the Department's declining enrolment trend

needs reversal is shown in the relationships identified for the educational leadership goal:

Strategies (one of seven strategies in respect to educational leadership):

- Shape national resourcing and accountability arrangements for education and training in NSW.

Outcomes (two of six):

- NSW positioned to shape national reforms for school education.
- National policy supports quality outcomes in NSW.

Indicators (two of three):

- Adoption of NSW initiatives at national level.
- NSW performance on national and international tests of student achievement relative to other states and territories.

6.4.3 A stable mission

Even though the Department has significantly changed its organisational structure and marginally changed its strategic directions over the last two decades, it has had a remarkably stable mission over that time. Its stated mission in 2007 is: “To improve the social and economic wellbeing of the people of NSW through a responsive and sustainable education and training system” (NSW DET, 2005). In 1987 its stated purpose was “to provide a statewide system of school education which is relevant to the needs and aspirations of students; responsive to community expectations; effective in the achievement of high quality educational programs; and, efficient in the use of available resources” (NSW DoE, 1987). Thus it is apparent that the Department’s core reason for existing – the provision of a public education service to school aged children – has been its unifying rationale from long before accrual accounting was contemplated through to the present.

6.4.4 Summation

As shown in Section 6.3, the Department has experienced turbulent times over the last two decades. In addition to the high levels of controversy surrounding the Department, there has been a persistent decline in its volume of core business. Its responses to these developments have been seen to be manifested in three ways:

- instability in organisational structures such that it has oscillated between centralisation and devolution;
- marginal change in its strategic goals so as to include an effort to direct the external environment; and,

- stability in its organisational mission with a strong consistency in its core reason for existing.

6.5 CONCLUSIONS

This chapter has discussed the context in which the Department's managers operate. Although the Department is very large and has a long history, the research reported in this chapter has not found a story of consistent change across each of the factors affecting its managers' decisions. Instead there has been a mix of stability (in its core reasons for existing), marginal change (in its strategic goals) and instability (in its external environment).

The Department's core reason for existing has been very stable but the environment in which it operates has been increasingly hostile. That hostility has been manifested in a shift towards alternative service providers and thus a loss of 'market share' by the Department. In the period of 1985 to 2000, the Department's share had consistently fallen from 74.22% to 69.42% (Review of Non-Government Schools in NSW, 2002, p. 27) and in 2006 for secondary school enrolments the Department's share was 62.4% (NSW Auditor-General, 2007, p. 18). This is perceived by the Department to be its single largest threat (NSW DET, 2005). Progressively over the period relevant to this study there was increased recognition in the popular press and in official reports that the drop in market share was "implicit expression of the popular belief" (NSW Public Education Council, 2005, p. 23) that the Department was failing to meet the aspirations of its potential stakeholders. Even though the Department responded to these forces with a number of structural and policy changes to influence its stakeholders (refer NSW Public Education Council, 2005, pp. 118-20), there has been little impact on the market share decline. Additionally, the drop in market share is a resource-related problem because the NSW Government funds alternative service providers based on their number of students. Thus as students move away from the Department, resources of alternative providers grow at the expense of the Department and so adverse competitive forces are strengthened.

Associated with these adverse competitive forces were changes in the resourcing of the Department. Like all other parts of the public sector there was both a rhetoric and reality around tightened resources but this has been heightened by the

Department's large asset base, specifically its holding of buildings that had been growing over the last 150 years. In many instances these buildings are requiring additional resources for maintenance and to improve their ability to meet more demanding levels of capability. This pressure is recognised in the fact that maintenance and depreciation expenses typically combine to represent about one-third of all expenses that are not employee-related. Thus the Department is keenly aware that utilisation of its building asset base is crucially important to its success.

Whilst the market share and resource issues are prominent in the minds of the Department's managers, so too are demands for change in the performance of the Department. Being vested in one State within a Federation of States, issues of comparison with other States are increasingly arising. Concurrently, the Federal Government began to change its directions regarding the Department's core business. Even though the Department is accountable to the State Government, the Federal Government has been increasingly interventionist regarding: how to measure and report the Department's success; funding conditions tied to specific payments from the Federal Government; declining demographics (resulting in fewer stakeholders for all providers); and, social changes causing altered stakeholder expectations.

Within the context outlined above it is also necessary to understand the Department's internal organisational changes over the period during which accrual accounting has been in place. The period has been characterised by a tension between devolution and centralization with four major organisational changes. These organisational changes created significant periods of uncertainty within the Department because implementation of change in such a large organisation is necessarily time consuming. A review of strategy documents covering 1992 to 2005, however reveal remarkably stable core objectives and activities in the face of this uncertainty. That review also reveals only a single mention of accrual accounting⁵³. However, other reforms that were changing the internal nature of the Department were: introduction of contractual and performance-renumerated employment for the senior executive; public-private

⁵³ The only mention of accrual accounting was found in the 1993-7 Plan which identified accrual accounting as one of 22 Actions intended to fulfil its last mentioned (10th) Objective: "equitable

partnership building acquisition; significant information and communication technology investments; productivity savings projects; risk management principles; expanded outsourcing of activities; and, development of a key performance indicator framework to monitor and publicly report Departmental performance.

In summary of the external and internal contexts of the Department:

- Market share was falling and this was seen as a threat as well as implying performance difficulties.
- Resource availability was constrained but demands on resources were rising particularly in respect to asset management.
- Four major organisational structure changes and a series of other internal changes contributed to protracted periods of internal uncertainty.
- Core objectives and activities remained stable and whilst accrual accounting received mention in strategy documents, it does not seem to have great importance.

The following chapter, Chapter 7, commences this study's assessment of the managerial impact of accrual accounting in the Department. It does that by identifying the effect that moving to accrual accounting has had on the Department's information gathering and distribution.

allocation and effective use of resources" but it does not seem to have any clearly stated significant sense of importance within that Objective.

CHAPTER 7: Impact on Information Acquisition and Information Distribution



7.1 INTRODUCTION

This chapter presents the first half of findings regarding the managerial impact of accrual accounting within a single GGS organisation. Using the management science school of organisational learning framework as discussed in Chapter 3, the impact has been examined first in terms of how observable change has emerged in information acquisition and information distribution. To complement the findings presented in this chapter, findings regarding changes in information interpretation and organisational memory will subsequently be presented in Chapter 8.

Recapping the theoretical framework determined in Chapter 3, the organisational learning framework is founded on an intuitive connection between learning and information systems. It consists of three high level processes (information acquisition, distribution and interpretation) and one construct (organisational memory). Information acquisition is the process whereby an organisation obtains new information allowing it to form an increased range of options from which to select in its reactions to its environment. The second process of organisational learning is information distribution, namely sharing of information within the organisation. The third process is information interpretation, being the process by which information is given meaning. Proceeding then from these three organisational learning processes, organisational memory is the stored information held in human or non-human repositories that can be used in current decision-making. This chapter deals with the first two of these organisational learning processes as they are observed within the Department in respect to accrual accounting.

It is important to note that this chapter and Chapter 8 need to be read in conjunction as the two chapters report on findings regarding the four components

of the management science school of organisational learning. These components are closely related and have strong implications for each other. For example, the findings in respect to new information sets, discussed as forms of information acquisition, impinge on information distribution in that new information sets may induce different methods of distributing that information. Equally, the manner in which information is acquired will probably influence the manner in which it is distributed within the Department. Therefore the close relationship between the components of the model is reflected in the contents of both this chapter and the following chapter.

The remainder of this chapter is organised as follows: first, information acquisition is considered in terms of three elements of accounting information: assets, expenses and liabilities. Second, the chapter proceeds to consider information distribution within the Department in respect to: assets, expenses, liabilities and organisational factors impacting on those accrual accounting information sets. Finally, the chapter concludes with some comments designed to lead to the considerations of information interpretation and organisational memory provided in Chapter 8.

7.2 INFORMATION ACQUISITION

The defining characteristic of accrual accounting, compared to its main alternative of cash accounting, is that it gathers and reports additional data. As a result of the increased data sets held in an accrual-based accounting system, some critics of cash-based accounting even deride it as not being accounting but instead merely relegated to the more lowly status of ‘bookkeeping’. Compared to a cash basis of accounting, accrual accounting systems gather data on the expiry of assets and liabilities which cash based accounting systems ignore. That is, the very existence of an accrual based accounting system will result in additional sets of data being acquired. As such it would hardly be surprising that the Department’s information acquisition had changed as a result of its adoption of accrual accounting. This section provides a description of the information sets arising from accrual accounting as are now held within the Department. This description forms the base from which the analysis turns, in Section 7.3, to a consideration of the distribution within the Department of the accrual-based information sets.

The difference between cash and accrual accounting can be correctly noted as one of timing in that at the end of the life of an organisation, cash and accrual accounting systems will record the same total financial performance (over the full life of the organisation) and the same financial position (at the end of the organisation's life). That difference of timing can however result in very different periodic financial performance and position data. This is manifested in availability of additional data sets of which the more notable sets for the Department are:

- Assets: values and associated information, predominantly related to land and buildings (accounting for roughly 99% by reported value of Departmental non-current assets and 97% of total assets).
- Expenses: predominantly the expiry of assets (depreciation and amortisation accounting roughly for 17% of Departmental non-employee related expenses) and the increase of liabilities related to quantification of employee entitlements.
- Liabilities: reported liabilities have not changed significantly in quantum due to the fact that the liability for future payments related to superannuation and other employee entitlements is assumed by the Crown Entity and thus not formally reported by the Department. Although total current and non-current liabilities only represent about 4.1% of total equity, a new data set on liabilities is now available to the Department.
- Each of the additional data sets now held as a result of the move to accrual accounting are discussed in the following subsections. The aim here is to describe the data sets and their derivation; in Section 7.3 the distribution of these information sets is discussed in order that their relevance to different levels of management within the Department can be understood.

7.2.1 Asset information

Since the introduction of accrual accounting, separate computerised records are kept for each asset valued in excess of \$5,000. These assets are predominantly Property, Buildings, Plant and Equipment with the most important categories being Property and Buildings. The cost method of accounting is used for the initial recording of these assets' values where cost is the cash or cash equivalent paid or the fair value of other consideration given to acquire the asset, including at the time of its construction. Subsequent valuation information for all these assets is determined on the basis of centrally managed asset registers⁵⁴ and periodic revaluation exercises cause changes in the recorded values for a number of significant assets.

⁵⁴ The most important of these registers relates to buildings and is discussed below. The other registers relate to plant and equipment.

Whilst revaluation practice is consistent with NSW Treasury policy (“Valuation of Physical Non-Current Assets at Fair Value TPP 07-1”), the Department employs specific practices that are financially feasible given its large number of buildings and properties. So as to revalue buildings, every five years valuation factors on a per square metre basis are determined by professional valuers who are contracted by the Department specifically for that purpose. Those factors indicate the cost to replace the building in a replacement or ‘as-is’ condition. Since many buildings are equivalent in purpose and design, it is feasible to classify buildings into a limited number of categories (building function types) and then to apply replacement cost measures against the varying conditions of these buildings within each category. Such revaluation practice avoids a much greater cost of valuation that would be incurred by presenting an individual valuation for each of the Department’s 17,901 buildings and still it meets the requirements of the Auditor-General. However, the revaluation method in use is only acceptable given a major commitment to creating and maintaining a large computerised database of the Department’s land and buildings. That system is known as the Asset Management System (AMS) which is operated separately and outside the formal accounting system but is used to produce information for financial accounting reports. Given the importance of the AMS to the Department it is discussed in Section 7.2.1.1.

Asset valuation data is recorded in both the Department’s accounting system and in the AMS relevant asset records that are maintained centrally but local managers with staff using those assets are not advised of the initial valuation or subsequently changed valuations. An important aspect of the financial information held on non-current asset values is that it is not focused on what some managers might want to know. Specifically, in the case of buildings, the replacement in current condition feature of the information held means its relevance to managers analysing future asset replacement is significantly reduced. As one central manager⁵⁵ explained:

⁵⁵ As explained in Chapter 3, interviews are shown with a code that allows anonymity whilst also categorising interviewees as either: Head Office interviewees with an accounting-related responsibility (HO-ACC); Head Office interviewees with a responsibility not related to accounting-related (HO); Regional Office interviewees with an accounting-related responsibility (HO-ACC); or, Regional Office interviewees with a responsibility not related to accounting (RO).

(we measure) the value to replace the current building. Of course you would not rebuild any to the past standard – if an old building burnt down you would build a new one to the current standards ... and our standards have changed over the years so that a new school now gets more square metres per student than an old school did when it was constructed (HO, Interview 4).

In addition to the available square metres per student, the building design standards also change in accord with curriculum and strategic developments. This alters the nature of the space dedicated per student. Thus as curriculum has changed, the replacement building fabric has also changed; a clear illustration of this is found in the ways by which today's buildings have changed to meet the demands of ICT studies and associated changed educational delivery technologies. For information on these aspects of buildings, managers now have access to the Asset Management System as discussed next.

7.2.1.1 Asset Management System

Compared to pre-accrual arrangements, the AMS represents a major improvement in the information acquisition in respect to buildings. The AMS is a Department-specific database designed to hold information to address strategic and operational requirements of property management⁵⁶. The features of the AMS include:

- sites Management details and spatial plans including classification of each building into a building function type⁵⁷; building age; room size; room usage; and, enrolment data;
- facilities management capabilities including comparison to specified standards;
- asset planning, both demographic and site specific;
- works program management and reporting;
- asset Maintenance contract management;
- demountables (non-permanent buildings) management; and,

⁵⁶ Within the AMS is a specialised module known as the Project Management Module (PMM) which allows Department project managers to control construction of new buildings and major refurbishments of buildings. The PMM is of most use in dealings with asset procurement agencies outside the Department but it is seen as an integral part of the AMS since it allows the Department to monitor progress of large projects that might span beyond a single year.

⁵⁷ There are 18 major building function types (eg. Art, Agricultural Science, Library, Music, Industrial Arts etc). Site management details also include for each building details of elemental groups of substructure, superstructure, finishes, fittings and services. When combined with building function types there are approximately 350 different building usage combinations included in AMS.

- financial processing, payment and reporting for procurement, improvement and maintenance

The importance of the AMS cannot be overstated in terms of essential information for the procurement, management, maintenance and refurbishment of buildings. As noted in Chapter 6, utilisation of the physical infrastructure of the Department is recognised as a key means of dealing with the Department's challenges. Consequentially, the AMS, as the Department's information base for its buildings, is the key to major strategic decisions as well as a tool for daily decision making to implement predetermined strategies. Whilst daily usage of the AMS is mostly constrained to Department staff with responsibility for buildings, its level of usage amongst those staff is intensive. Indicative of the AMS's importance to the Department is the annual payment in excess of \$1 million in licence and maintenance fees for the proprietary software required for operation of the AMS (HO, Interview 4). Thus interviewees with responsibility for matters associated with buildings made mention of their reliance on the AMS and noted that it provides "core information" (HO-ACC, Interview 3) for the management of buildings.

Association of the AMS and accrual accounting raises issues of causality in the creation of the AMS. Interviewees with Departmental experience of building management prior to 1993 do associate accrual accounting with the development of the AMS. They also frequently cited accrual accounting as the impetus for developing the AMS; for example:

without the need to actually report because of the accrual accounting requirements, we would not have been able to convince management of a need to invest the money in their systems. We had always needed them (building records) but without this imperative of being able to report under accrual accounting it would not have happened ... the impetus to actually get it (AMS) up and running I think - and the justification of the expenditure of millions of dollars - came along with accrual accounting. It was then that they realised that we could not report on our assets properly without such a system (HO, Interview 4).

The clear identification of the external impetus for development of AMS throws some light on the question of whether accrual accounting *as an end in itself* was the cause of change in the acquisition of asset management information. HO Interview 4 provides the recognition that the AMS was justified on the basis of an external need but was designed and operated to meet a longstanding internal need. The view that the AMS resulted from the move to accrual accounting is strengthened by the timing of the two changes. For example, “on the properties side ... the benefit of accrual accounting is that it has forced us to identify what we have got and it has been a long process to bring on board all the assets that we have got” (HO-ACC, Interview 5). Thus the comparison of asset information readily available before and after 1993 has generated a view within the Department that accrual accounting caused the change in information availability. As noted by one Head Office accountant:

[In terms of information on assets before accrual accounting] we had some idea of what we had basically in land holdings, but I mean you know, the rest was non-existent. So since then at least we have been able, through the accrual accounting development, to take stock of the assets that we own and know what they are through some valuations. You know, albeit that they not be totally individually known, at least we know what our asset base is now; that could then be useful in determining how much we should be spending on maintaining our assets (HO-ACC, Interview 1).

Regardless of the apparent association with change, application of a test of causality reveals that improved asset management information held in the AMS was not the direct result of accrual accounting system change. This finding is readily apparent from the fact that the AMS and the department’s accrual accounting system do not have automated information exchange. That is, where the accounting system requires asset information, it is manually extracted from the AMS and then input into the accounting system. As noted by an Asset Management Unit accountant: “What happens is everything seems to be done twice. So you make a payment and then someone goes into manually and enters it into AMS or PMM. So what we are saying we want to work out an interface

where they can swap and only enter data once” (HO-ACC, Interview 3). Given that the Department has operated without an interface between the AMS and its accounting system, it is apparent that an accounting purpose was not the driving force behind the design of the AMS. Equally where the accounting system is being used to source information for the AMS, all accrual items are extracted and adjustments are made to determine cash-based amounts. So frequent is this need that two ledgers are maintained within the Asset Management Unit: an accrual ledger (referred to as the ‘AA Ledger’) and a cash-basis ledger (the ‘AZ Ledger’). These two ledgers facilitate the different information needs within the Asset Management Unit: a cash-based need of expenditure monitoring and an accrual-based need of reporting to Finance and Administration Directorate. Again as noted by an Asset Management Unit accountant:

Our allocations that we get provided are cash, so we have to spend them in cash. So we need to monitor everything in cash. So we are not really that concerned with accruals and given that most of our business is with the Department of Commerce and that they will give us a statement or a invoice which is supposed to be work to the end of the next month or whatever, we’re in a position where there should be very few accruals in a properties area. ... So if we run a report in AA you get all these things like depreciation which is really annoying because you have to take them out anyway since they are of no use to us anyway (HO-ACC, Interview 3).

The clear picture emerging regarding asset management information is that the Department is in command of information that is more appropriate to its needs for management of its buildings than it possessed in the cash-based accounting days. However, that change was not a direct result of the move to accrual accounting techniques but was associated with the externally driven change in information systems that were justified on the basis of a need to comply with accrual accounting techniques and altered financial reporting requirements. As a result it is not argued here that accrual accounting as an end in itself has caused an improvement in the department’s asset information. Nevertheless, the changes in asset based information have allowed changes in cost information – both costs of

asset acquisition and expenses of asset operation and ownership. Thus the next section considers how the move to accrual accounting has impacted on availability of cost information within the Department.

7.2.2 Expense information

Maintaining asset information in AMS and other computer-based records of assets (with a recorded value exceeding \$5,000) has allowed the Department to record two expenses that were previously unknown: Depreciation and Amortisation and Loss (or as a revenue, Gain) on Disposal. In terms of quantum, only Depreciation at approximately 3.5% of total Department expenses⁵⁸ has some significance. Both Amortisation and Loss (or as a revenue, Gain) on Disposal are routinely less than 0.1% of total annual expenses. Depreciation is determined on a straight-line basis for all depreciable assets⁵⁹ so as to write off the asset's depreciable amount over its useful life to the Department. The resultant rates of depreciation applied by the Department reflect the expected useful life of the assets and are:

- Buildings and leasehold improvements 1.43% to 33.3%
- Plant and equipment 3.3% to 33.3%
- Computer equipment and software 6.66% to 33.3%

Information on these asset expiry expenses is determined centrally within Corporate Services units⁶⁰ and it is primarily determined in order to meet external financial reporting obligations of the Department. Calculation of depreciation and amortisation is a relatively routine matter that only requires input of specialised officers with responsibility for either assets and/or accounting. Each year the quantum of the expense is relatively stable unless the asset base values have changed as a result of revaluation as discussed above (Section 7.2.1) or unless the quantum of assets being depreciation has changed as a result of acquisition or disposal of assets or unless there has been a marked change in employment by the Department. However, calculation of Gain or Loss on Disposal has proven troublesome within the Department.

⁵⁸ Based on the Department's 2006 financial statements.

⁵⁹ Land is not a depreciable asset thus the depreciable assets of any significance to the Department are buildings and plant and equipment.

⁶⁰ Within Corporate Services, the Finance and Administration Directorate and the Asset Management Directorate are responsible for determining asset expiry expense information.

The operational difficulty experienced in calculation of Gain or Loss on Disposal illuminates the issue of whether the new data set regarding this expense (or revenue, in the case of gains) is important to the Department. The difficulty arises from the requirement to manually corroborate records held in different parts of the Department and not readily available within the Department's accounting system. As noted by an Asset Management Unit accountant (HO-ACC, Interview 3), it had not been anticipated that there would be a need to keep information on prior valuations and/or initial cost after a revaluation. As a result, the Department's accounting system was not designed to retain such data for individual assets. Although that does not present any problems in terms of management and reporting requirements, it becomes problematic when an asset is disposed and the resultant gain or loss needs to be reported. In such cases, the amount by which the Department's summative asset revaluation reserve needs to be written back by the amount relevant to the disposal of the individual asset. This is merely an accounting transaction and its implementation has been the source of some frustration within the Department. That frustration was noted and put into context during interviews:

You have got to remember that it is probably only been in the last sort of 12 to 15 years that this whole accrual accounting thing has come into play. Until then there would have been little or no interest in it and the Department as such probably would never have reported a gain or a loss on a sale of a building. They would have sold it, the money would have gone wherever and there would have been none of this, you know. ... But now to correct this it will be expensive from our perspective but for no real net return. We are not getting anything for it, it is just an expense which could run into tens or hundreds of thousands of dollars if it comes to software changes and stuff like that and not to mention the monitoring of it and keeping it upto date ... to us it is just a net loss of effort. It is just effort for no return (HO-ACC, Interview 3).

The sense of frustration in calculating Gain or Loss on Disposal is heightened by its very minor importance compared to relevant items in the Department's

Balance Sheet and in its Operating Statement. As a percentage of the Department's total expenses in 2006, the Gain on Disposal was about 0.06% and was approximately 0.11% of the Department's Revaluation Reserve. However, whilst this item is not material, it remains that as a result of recording asset expiry expenses it is now possible for the Department to provide financial data on expenses that result from changes to its base of infrastructure. That information can now be provided on an aggregated or disaggregated basis and that will be discussed below (Section 7.3 Information Distribution). Additionally, the categorisation of some expenses has changed as a result of accrual accounting and the resultant interpretation of associated accrual accounting standards. For example, the expense of moving a demountable building from one site to another was previously recorded as a recurrent expense whereas since the introduction of accrual accounting that has been capitalised as part of the asset in its new location. Thus when a demountable is moved, the removal and installation costs are added to the value of the building (HO-ACC, Interview 2) and so depreciation expense increases accordingly⁶¹. The Department's commitment to demountable buildings is relatively large given its ownership of about 5,000 buildings valued at around \$500 million but as with other asset records, the records relating to demountables are maintained centrally and apparently of little interest to managers with responsibilities outside the relevant asset management units.

In addition to asset expiry expenses, the Department now recognises the expense of increments to employee benefits and other provisions. Under cash accounting prior to 1993, the Department did not recognise that increases in future payments in the form of employee benefits (such as recreation or long service leave) represented expenses for the period in which those increased liabilities were incurred. Although accrued salary and wages expense was previously recognised under the cash-based accounting system, the significant expenses newly recognised under accrual accounting are superannuation (about 8.3% of employee related expenses) and long service leave (3.3%). Superannuation expense is determined using various formulae set by Treasury and advised in Treasurer's Directions according to the relevant superannuation scheme applying to categories

⁶¹ The changed valuation of a demountable building may however be decreased as a result of revaluation following the move if that is considered necessary as a result of damage or similar

of employees. The long service leave expense is calculated as a present value applying AASB119 Employee Benefits. Calculation of both superannuation and long service leave expenses is undertaken by the Finance and Administration Directorate without further consideration by other functional parts of the Department (this is discussed further in Chapter 8).

Other than the expenses noted above, interviewees and the archive did not indicate change to other expense records as a result of the change to accrual accounting.

7.2.3 Liability information

The third category of accounting information that has changed as a result of accrual accounting is liabilities. Prior to the introduction of accrual accounting in 1993, accrued wages and salaries had been recognised as though they were a cash outlay whereas since the 1993 the Department has routinely recorded the following additional liabilities:

- creditors;
- income received in advance;
- group, payroll and fringe benefits tax;
- other current liabilities;
- repayable Treasury Advances;
- Privately Funded Projects advances;
- lease liability for surplus accommodation; and,
- provisions for employee benefits and related on-costs

In total these liabilities amount to about 4.1% of total net assets whilst provisions for employee benefits and related on-costs are the largest item at about 1.3% of total net assets. Thus the liability side of the Department's Balance Sheet is not material to the Department's financial statements. However, an annual accounting transaction between the Department and the Crown Entity ensures that a liability incurred as a result of the Department's employment of staff is not recognised in the Department's accounting records at year end. That transaction is an offset of the recorded liability and funding associated with superannuation and long service leave. That is, like other Budget dependent General Government Sector agencies, the Department does not recognise a superannuation liability or asset in its Balance Sheet since they are recognised by the Crown Entity and annually the

caused by its relocation.

Department needs to advise the Treasury of the amount of liability to be assumed by the Crown Entity and that amount is then reported as an expense (matching the revenue provided by Treasury) in the Department's Operating Statement.

The discussion above has noted that three sets of accounting information show differences of some note compared to the available information collected and reported in the Department's prior cash-based accounting system. Two of those sets, asset and expense information, are significant in terms of their quantum and potential strategic impact whilst the third set, liabilities, are not material and thus only of minor quantum relative to the Department's total net assets. In the following section, the discussion turns to the routine distribution and availability of these information sets within the Department. These issues of distribution are an integral part of assessing the impact of the adoption of accrual accounting.

7.3 INFORMATION DISTRIBUTION

The ways in which information is distributed within an organisation have been associated with both the occurrence and breadth of organisational learning thus the interest of this section is twofold:

- first, as discussed in Sections 7.3.1 to 7.3.3, in the processes of sharing the information sets discussed above in Section 7.2; and,
- second, as discussed in Section 7.3.4, the organisational factors that have affected distribution of accrual accounting information.

7.3.1 Asset information distribution

The Department has expended significant effort in its internal distribution of information on its assets. A focus on information regarding buildings is understandable given that, as noted in Chapter 6, the Department recognises that improved utilisation of its building assets is a potent response to its external challenges. The main system used for this purpose is the Asset Management System (AMS; refer Section 7.2.1.1) made accessible to all levels of management using a network of computers and easily understood software. As a Head Office properties manager noted:

We have devolved the Asset Management System down to schools. Although (at a school level) they can only really look up their own school ...: a school principal can sit at his or her desk and look at

AMS and certainly within the regions it would be possible that the Principals could go into further detail. ... We will give information at a regional level to Regional Directors for their region and we will also give them state wide data (HO, Interview 4).

Thus the AMS represents a wide distribution of information on the Department's assets. That width of distribution and the AMS focus of providing information that is relevant to specific users' responsibilities, both provide the prerequisites that would be expected if organisational learning is to be maximised (Huber, 1991). One of the powerful features of the AMS is its inclusion of non-financial information and it is apparent that this is the reason why the AMS is frequently accessed by Departmental staff with an interest in buildings. In contrast, the financial information such as cost and depreciation does not hold as much interest as the non-financial information. This finding is not a result of automated and embedded processes obscuring information need as suggested by Robey, et al., (2000) but instead results from the lower relevance of the financial information items to most Department managers⁶². Thus a senior regional manager observed:

Our thinking is more driven by the educational imperative. This has a higher value than the financial (RO, Interview 6).

The lower relevance of the financial information items to most managers in the Department arises from the nature of decisions being made by these managers and this will be discussed in terms of information interpretation in Chapter 8. However the nature of financial information on assets is mostly determined by the characteristics of fixed costs. Clearly one of the features of asset management is that decisions of the past often cannot be revisited and so not all managers will be able to exercise decision making in respect to these matters. This is a natural outcome of the strategic nature of investment in large non-current assets such as buildings. However, that is not as prevalent for expenses in that most managers are making decisions that impact on the use of resources which in an accrual framework will necessarily look beyond cash expenses. Thus the next section considers the distribution of information on expenses.

7.3.2 Expense information distribution

An interesting contrast is found when the distribution of information on accrual-related expenses is compared to the distribution of asset-related information as discussed above in Section 7.3.1. That contrast arises from the fact that information on accrual-related expenses is highly centralised within the Department and therefore has a relatively narrow distribution compared to the wide distribution of asset-related information. As noted above, determination of accrual expenses such as depreciation and employee related benefits, is the responsibility of specialist staff within the Finance and Administration Directorate. A result of that centralisation is that the information on these items is not distributed to operational nor strategic levels of management. The only routine reporting of accrual-related expenses found in regular reports was at the highest level of reporting to executive managers in the monthly report “Financial Management Report to the Board of Management”. In that report there is a single line noting depreciation. It also shows the cost of staff as being inclusive of non-cash expenses within the “Recurrent Position” statement and these items are then dissected for each of the Department’s five cost centres. However, neither of these items attract any commentary and their inclusion appears to be a matter of routine about which there is virtually no interest or concern. An understandable reason for this lack of interest is that fluctuations in these accrual-related expenses are largely uncontrollable and for most fluctuations Treasury would make adjustments to the Department’s budget such that the net budgetary impact would remain zero.

At the regional reporting level and below, all routine reports are prepared on a cash basis and so do not include the accrual-related expenses calculated within Finance and Administration Directorate. As a result of the narrow distribution of accrual-related expense information, there is little interest in these expenses at a regional level. For example, one director with responsibility for professional learning across the region was unaware of whether the costs struck in recording of casual employees were based on a cash expense or an accrual expense when accounted for against his budget (RO, Interview 20). He noted that he is given a

⁶² Whilst the discussion here is focused on information distribution, an important factor influencing distribution is the ability of managers to meaningfully interpret the information.

mean cost of casual staff and that his usage of casual staff is simply the product of that cost and the number of days employed. He monitors that usage against his budget and controls the resultant usage but is unaware as to whether the accrual-related cost is included in his budget or not. As he observed, he did not feel the need to be concerned about such matters but instead left them to the ‘accountants’ since “to be quite honest it really isn’t of much relevance to me” (RO, Interview 20).

Whilst distribution of accrual-related expense information is narrow, the Department has installed a sophisticated and user-friendly Executive Information System (EIS) that is capable of wide distribution of information. The EIS uses a range of visual aids such as thermostats, speed dials and pie charts to display information relevant to the management of individual functional areas within the department. Mostly the financial information shown in the EIS relates to monitoring expenditures against a cash based budget. However the EIS also reports a ‘bottom line’ showing the ‘Accounting Net Cost of Services’ (NCS) as prescribed by Treasury. This is defined as Expenses (excluding losses) less Revenue plus Gain/Loss on Disposal of Non-current Assets plus Other Gains. As a result the Accounting NCS is an accrual based measure which includes accrual-related expenses of Depreciation and non-cash Employee Related Expenses such as superannuation and Long Service Leave. Thus it is possible for each Cost Centre head and their subordinates to monitor their relevant Accounting NCS using the EIS. However the Accounting NCS has little relevance to controls utilised in the Department and thus is not a measure of interest to Departmental managers. Therefore the inclusion of Accounting NCS in the Department’s EIS is not considered to be distribution of accrual-related expense information.

Given the finding that accrual-related expense information is not widely distributed in the Department, the next section considers the distribution of the third set of newly gathered information resulting from adoption of accrual accounting: information on liabilities.

Information interpretation is discussed in Chapter 8.

7.3.3 Liability information distribution

As noted above in Section 7.2.3, liabilities reported in the Department's Balance Sheet are not of material significance in terms of their quantum. Perhaps because of this, it is unsurprising that information on liabilities is not widely distributed within the Department. That information is determined centrally and held in the accounting system without advice to other parts of the Department. Besides the immaterial quantum of these items, the other principal reason for this is that the largest liabilities incurred as a result of Departmental activity, superannuation and Long Service Leave, are transferred to the Crown Entity and so are of little interest to Departmental managers. Thus these items do not receive mention in the Financial Management Report to the Board of Management nor is there a monthly Balance Sheet reported to the Executive. "Like the Holmesian dog that did not bark, the absence of accounting may tell researchers a lot about the nature of accounting" (Choudhury, 1988, p. 550) thus these absences are indicative of a more profound finding: the Department has not taken the move to accrual accounting as a key towards balance sheet management where the quantum and character of assets and liabilities would be matters receiving managerial attention. Instead it maintains its interest in cash expenditure monitoring. This is a point to which we shall return in Chapter 8 since it is germane to the matter of information interpretation.

Although the discussion above has focussed on the three sets of additional data available as a result of accrual accounting, it is useful in our understanding of information distribution in the Department, to consider how aspects of the Department's organisation might also be impacting on the distribution of accrual-related information. This is done in the following section.

7.3.4 Organisational factors affecting accrual accounting distribution

As noted in Chapters 2 and 5, the introduction of public sector accrual accounting held the promise of revolutionary change that would change more than just accounting outputs. The revolution promised a change in managerial attitudes that would in turn improve efficiency and effectiveness in profound ways. Thus this section examines what organisational factors have impacted on the distribution of accrual accounting information within the Department and in so doing it links

back to the Chapter 6 discussion of organisational changes that have taken place over the years in which accrual accounting has operated in the Department.

The most notable organisational factor impacting distribution of accrual information is that the determination of many accrual data sets has been centralised and thus are not in the hands of local managers. This was a deliberate decision that aimed to minimise the cost of implementing accrual accounting and thus was sympathetic with the overall push towards greater efficiency which surrounded the rhetoric associated with accrual accounting. As noted by a Head Office accountant:

It is only in the big (head office) areas where accrual accounting becomes important: in Finance (section) we do all the salary accruals like super and Long Service Leave; Properties (section) does the asset bits; IT (section) will calculate costs of owning big technology items – including depreciation – versus the costs of leasing; and we (in Finance) have to apply the accounting standards. So the main accruals are kept only in certain areas you will find (HO-ACC, Interview 2).

The other side of the same coin of course is that the Department's operational managers do not need to take conscious actions regarding the largest accrual items. Thus the structural decision to centralise responsibility for accrual accounting calculations was consistent with the larger decisions to centralise administrative functions in the Department as discussed in Chapter 6. Even with the re-creation of Regions in 2004 and the subsequent sharing of corporate services within regions, the overall emphasis has been on centralised functions such as asset management and financial reporting across the Department. In the case of financial reporting and associated technical application of accounting standards, operational managers are clearly relieved to be spared the odium of needing to divert precious time and resources on such tasks that are not core to the Department's educational objectives. This has impacted on the distribution of the resultant information since it has meant that operational managers have either not had access to accrual information or have not been inclined to take interest therein. As explained by a Head Office accountant:

When we centralised in '96, the depreciation accounts came into a central GL account. Depreciation was then kept centrally, so it never flowed through to the regions or the individual cost centre. So we do it from a whole-of-department aspect. But it comes from the individual assets which were in the districts. In terms of depreciation flowing through into any kind of budget at cost centre level: basically it didn't happen because they were only interested in cash. And one could even argue about whether they need to know anyway (HO-ACC, Interview 5).

The recognition that access to accrual-related information is not important to operational managers was noted by a Regional Manager who noted with due genuflection to the Department's approach to accrual accounting data:

We were put through quite extensive training when it (accrual accounting) was introduced and so I mean it is certainly familiar to me although I must say in terms of my day-to-day work it does not have a whole deal of relevance except in the way you think about things. The way, you know, you manage those concepts underpins what you do. But certainly they are not relevant to the day-to-day operations of my particular role (RO, Interview 6).

Another organisational factor that could impact on distribution of accrual accounting information is the transfer of staff between functions. A prime candidate for this might be where an accountant transfers to an operational area and brings his/her knowledge of accounting to their new area's operations. Similarly, information distribution would be widened by operational staff moving into and out of accounting or asset management units. However, little evidence was found of staff transfers of these types. The centralisation of most accrual accounting related functions has resulted in a quantum of positions that provide a career path which neither requires – or rewards – experience in non-accounting related areas of the Department. Similarly, a career path through most of the non-administrative parts of the Department does not seem to reward experience in specialised accounting roles. In part this is a result of the more highly specialised aspect of a number of accounting roles such as those that apply technical

accounting standards to emerging situations within the Department (the examples of Privately Funded Projects and leases were provided in interviews). Although interviewees and searches of archival records could not establish the precise change in the number of staff employed with accounting responsibilities, a number of interviewees noted that in their opinion there are now more accountants and more technical expertise is expected of them, compared to the days of cash accounting. The Director in charge of the accounting function noted:

There is more people with accounting qualifications and I mean we obviously promote that too to make sure that they do ... but this is not necessarily the case in the operational areas. It is just that Treasury's accounting codes - the financial accounting code and the reporting code – have brought significant changes there. They are much more onerous in terms of our reporting and that has resulted in a need for greater skill in terms of producing those reports (HO-ACC, Interview 1).

The conclusion arising from this section is that distribution of accrual accounting-related information has been narrowed as a result of organisational factors. Those organisational factors have been determined by considerations unrelated to accrual accounting or the purposes of that reform. Instead they have resulted from efforts to maximise efficiencies in the operation of necessary functions within the Department, organisational structure decisions, and pressures brought to bear on the Department by the nature of Treasury's implementation of the reform.

7.4 CONCLUSIONS

This chapter set out to discuss the ways in which information gathering and information distribution have changed in the Department as a result of the change from cash to accrual accounting. Its findings are mixed in that change consistent with improved organisational learning is not uniformly observed. Instead a differential pattern of change is found wherein information gathering has changed most whilst information distribution related to the new sets of available data is relatively narrow and thus unlikely to be conducive to significantly enhanced organisational learning.

Principally, two main conclusions emerge: first that the Department does now hold additional sets of information compared to its pre-accrual accounting sets of information; second, that the distribution of accrual-related information sets is relatively narrow as a result of the means by which it is calculated and the Department's centralised organisational structure. These conclusions are further discussed in this section with a mind towards the analysis provided in Chapter 8 regarding the other process (information interpretation) and construct (organisational memory) of the organisational learning model.

7.4.1 Increased data sets acquired from accrual accounting

The most significant information now acquired within the Department is that which relates to assets. In particular, information on buildings is now more comprehensive and held in a manner that facilitates retrieval and usage. Additional information is also available on non-cash expenses and liabilities although both of these sets of information seem to be of only marginal relevance to Departmental managers. Thus information acquisition changes of some importance to the Department are limited to assets.

Whilst interviewees clearly credited accrual accounting as the source for improved information acquisition regarding assets, this association needs to be critically appraised. In such an appraisal it is apparent that even if accrual accounting is associated with changed information in that the two events occurred simultaneously, accrual accounting per se has not caused the observed changes in asset related information. The possibility of that finding is triggered, albeit not proven, by the fact that the creation of the distributed database holding information on buildings (the Asset Management System: AMS) could have been developed independently of the change to accrual accounting. More conclusively, the evidence for the finding that accrual accounting has not caused changes in asset related information is that the AMS and the accounting system operate as separate systems without automated data transfer between either system and the AMS does not hold data on the archetypical accrual item of depreciation. Additional supportive evidence is that the accrual-related data is not accessed by users of the AMS and project managers. To meet their needs these staff must combine data in both the accounting system and the AMS using a ledger that

excludes accrual-related transactions. The capital cost of developing the AMS was significant and arguments in support of that expenditure were assisted by the impending requirements of accrual accounting. Thus whilst the Department seized an opportunity to install the AMS when it was afforded by the implementation of accrual accounting, this association is more a matter of administrative history within the Department than a matter of cause and effect.

A notable feature of the acquisition of these information sets is the manner in which the Department's operational managers are generally spared the effort of gathering or verifying data. For example, employee-related liabilities are determined centrally without operational manager involvement. Whilst this approach minimises costs of gathering the information and it does not imply any diminution of accuracy, it does have implications on the use of the resultant information as will be discussed below regarding information interpretation. It also means that the acquisition of accrual-related information has had little impact on the social processes that take place outside the specialist accounting parts of the Department. Coupled with the realisation that the Department's accrual accounting implementation resulted from a government-wide directive, this is also indicative that the information acquisition associated with accrual accounting in the Department is a form of vicarious learning (Huber, 1991) derived externally as a result of coercive isomorphism. However, conclusions as to the extent of that learning need consideration of the remaining parts of the organisational learning model considered in the remainder of this chapter and Chapter 8.

7.4.2 Narrow information distribution

Information distribution within the Department has changed substantially over the period in which accrual accounting has been in operation. The essential vehicle for this change has been various distributed databases with quite powerful query abilities. The distribution of management accounting information now available to regional managers has thus significantly improved over that which existed prior to implementation of accrual accounting. Whilst major changes in organisation structure have also necessitated altered management accounting information systems, the Department's distribution of information has been driven by a desire to integrate its external reporting with its management of resources. Thus an

Executive Information System (EIS) is now available at regional and operational levels as well as in head office. The EIS is also used for monthly analysis of key indicators as well as forming the base for an aggregated report (Accounting Net Cost of Services) that is one of two essential reports provided to Treasury. Similarly, the Asset Management System also facilitates distribution of asset-related information since operational managers are able to extract reports on buildings under their operational control.

Whilst the Department's distribution of information has taken advantage of computerised systems noted above, neither of these systems produces routine reports that analyse movement in accrual items and managerial attention is not drawn towards changes in these items. Instead that information is held primarily in the parts of the Department where it originates. These organisational units employ experts with the professional skills required to calculate the accrual-related information according to increasingly complex accounting standards. Thus the distribution of information that specifically relates to accrual items is remarkably narrow and found almost exclusively in the non-operational parts of head office without routine distribution to senior executive (with the exception of one line noting depreciation without comment).

During interviews for this research, a number of interviewees associated Departmental changes in information distribution with accrual accounting. However, when asked if information distribution changes would have eventuated in the absence of an accounting system change they offered views indicating that the changes are an outcome of the computerised information systems *per se* rather than accrual accounting. Thus the findings in respect to information distribution are similar to those for information acquisition: changes that appear at face value to be associated with accrual accounting are related more closely to the computerised manner in which accrual accounting was delivered.

7.4.3 Summary of information acquisition and distribution changes

At the commencement of this research, as reflected in Chapter 5, the brave world of accrual accounting promised major reform and substantive change in the operation of GGS departments. Thus an understandable expectation was that significant differences between the pre- and post-accrual days would be observed.

Initial interviews within the Department and efforts to interrogate the archive reinforced this expectation in that large quanta of data were readily available. Most interviewees also seemed to have a deference towards accrual accounting as though it was something of substance that was worthy of research. Perhaps because of these “atmospherics” the theme that interviewees presented was that information acquisition and distribution had changed *as a result of accrual accounting*. Indeed, change is patently observable: more information is gathered; access to information has changed; employment of staff skilled to do this work has increased; processes involving specific actions such as completing forms and providing information by some staff are now routinely in place; and, metres of shelving now house files related to accrual accounting. Yet, despite the observation of change, in many respects the information acquisition and distribution changes have made a relatively narrow impact on the Department’s managers. Where those managers with experience in the two worlds of accounting (cash vs accrual) have felt that the change to accrual accounting had heralded other change, they seem to be confusing association with causality. That confusion is understandable given the relatively long period of time that has passed and the reliance on recollection of events that may be mostly out of the direct consciousness of most Departmental managers.

To better appreciate the mixed findings of this chapter it is necessary to understand if the additional information and the altered, albeit narrow, distribution of information have impacted on the Department’s information interpretation associated with accrual accounting. This is discussed in the next chapter which then progresses to consider how the Department’s organisational memory has altered as a result of the change to accrual accounting.

CHAPTER 8: Impact on Information Interpretation and Organisational Memory



8.1 INTRODUCTION

Chapter 7 has shown that although the move to accrual accounting did revolutionise the Department's accounting system, it had minimal direct impact on the distribution of accrual-related accounting information. The mixed findings that emerged in Chapter 7 regarding information acquisition and information distribution are paradoxical in that it would seem increased information acquisition in the face of narrow information distribution would not be likely to maximise resultant value addition within an organisation. One possible explanation for this paradox is that the accounting change has been implemented as a variation to the Department's Chart of Accounts, and thus its financial statements, but with little or no impact on managers. To test this explanation or to identify alternatives, it is necessary to consider what interpretation is put on accrual-related information in the Department and then to consider how the Department's organisational memory has changed as a result of the move to accrual accounting. These are broadly the aims of this chapter and so it can be seen as an extension of the analysis begun in Chapter 7. Thus, this chapter presents the second half of findings regarding the managerial impact of accrual accounting within a single GGS organisation.

Within the organisational learning framework, information interpretation is a significant process by which information is given meaning and so converted into knowledge that will have usefulness in shaping theory-in-use. Typically information is capable of multiple interpretations and enhanced organisational learning is associated with an increased number of interpretations since this reflects a wider range of alternative potential behaviours (Argyris and Schön, 1978; Sinkula, 2002). Equally, a higher level of organisational learning is reached when units within the organisation develop shared understandings of the multiple

information interpretations (Huber, 1991). These shared interpretations facilitate successful decision making regarding current day alternatives but it also accumulates to build stores of information that can be called upon in the future. It is these stores of information that are collectively known as organisational memory which is the second main focus of this chapter.

Analysis of organisational memory requires identification of the repositories in which information is stored. Those repositories can be either human or non-human physical information systems involving technologies such as computers, filing systems, paper and so on. Whilst the non-human repositories are amenable to analysis the accounting researcher is challenged to analyse the inner workings of the minds of the Department's staff. As a result, the treatment of organisational memory in this chapter combines analysis of tangible sources (documents, reports, databases and similar) and of Departmental staffs' recollections, perceptions and opinions.

The remainder of this chapter is organised as follows: first, an analysis of changes in information interpretation arising from accrual accounting is provided. That analysis is conducted at three levels within the Department: the operational level; the regional coordination level and the Head Office level. Second, in Section 8.3, the chapter proceeds to consider organisational memory changes arising from accrual accounting. That section is structured around a classification of organisational memory repositories into human and non-human categories. Finally, the chapter concludes with some comments: first, collaborating the findings in respect to information interpretation and organisational memory with the findings presented in Chapter 7; and second, explaining how the Department has managed to accede to accrual accounting without allowing that change to alter its core values. Those conclusions thus capstone findings presented in Chapter 7 and provide an analysis, using an organisational learning lens, of the impact of the move to accrual accounting within the Department. Although that impact has been less dramatic and extensive than was forecast when public sector accrual accounting was being promoted (refer Chapter 5), the final section of this chapter presents an overview of the impact in order that Chapter 9 may provide concluding comments to make sense of the Department's move from cash to

accrual accounting within the historical context of the reform as a whole-of-government phenomena.

8.2 INFORMATION INTERPRETATION

In an organisation with the size and multi-level structure of the Department (refer Chapter 6), it is important to recognise that there may not be a unitary view of information interpretation across all of its parts. Thus, it is necessary to consider information interpretation at three levels reflecting the delegation of responsibilities within the Department: an operational level, a regional coordination level and a central or head office level. The differences between these levels arise from structural decisions that have apportioned responsibility across various organisational units that are found within the Department's three strata. For example, some functions such as external reporting are centralised whereas other functions are distributed to an operational level and then, for control purposes, they are aggregated and controlled at either or both a regional or head office level. Information interpretation is of course dependent in part on the types of decisions that managers need to make and that in turn is shaped by those managers' responsibilities. Thus the explication of information interpretation in this section is divided across the three areas reflecting the Department's "layers" of decision-making. At each of these levels, the key for this research was to identify items of accrual accounting information being used by managers in the execution of their managerial tasks.

8.2.1 Operational level information interpretation

The operational level of the Department is defined as those organisational units reporting to either a Regional or Head Office level of management. Predominately, this organisational level is made up of educational units providing services directly to students enrolled with the Department. Whilst the operational level of the Department is ultimately the cause for the vast majority of its expenditures, as noted in Chapter 7, cash accounting is maintained at this level. That is, the operational units are provided with a cash-based budget and are required to report expenditures on a cash-basis. External reporting to stakeholders, such as parents of students and the local community, is thus also restricted to a cash-based statement of income and expenditure. As a result, interpretation of

accrual accounting information at the operational level is absent. Evidence of the dominance of cash accounting over accrual accounting at the operational level is found in the following:

- Accounting transactions are recorded in each relevant school in a simple single entry relational database rather than a double entry accounting system and transactions are only recognised when cash is moved in or out of the schools' bank accounts; that is, accrual accounting transactions are not recognised.
- In terms of both internal and external reporting, the schools' financial report is a statement of receipts and payments that schools have operated on a cash accounting basis.
- The level of discretionary funding over which Principals have some expenditure control, is extremely small when expressed as a proportion of the cost of operating schools. Given that the largest expenditure items such as salaries, superannuation, depreciation, capital expenditure, etc are controlled centrally and not accounted for in the relevant schools' accounting systems, less than 5% of the cost of operating schools is directed by school Principals. As a result, school Principals consider financial management to be a commensurately minor part of their responsibilities.
- New Principals and clerical staff are not given training on accrual accounting; instead, their routine financial training covers cash reporting, budgeting, Business Accounting Statements, Goods and Services Tax and the Department's funding principles as reflected in its budgetary cycle (HO-ACC, Interview 12)
- Whilst school Principals can access information on the written-down value of their school's buildings, they are not provided with training on the calculations behind those figures within the Asset Management System nor do they have use for such financial data.

It is not surprising that operational level interpretation of accrual accounting is absent. As noted by a Head Office accountant:

Schools don't have anything whatsoever to do with accrual accounting. (They) Never have and it will be at least quite some time before they might. They get their funding partly from us according to a formula. We give them the cash twice a year which they then bank into their own individual bank accounts. And we also have money coming in from the Commonwealth Government to schools, once again all recorded on a cash basis. And they also raise money in their own right including school fees, although they are entirely voluntary. Their whole management and financial reporting is done really to see

just exactly where this cash has been allocated and where it was spent (HO-ACC, Interview 23).

Given the absence of accrual accounting interpretation at an operational level, the middle organisational level – regional coordination – is considered next.

8.2.2 Regional coordination level information interpretation

The domination of cash accounting over accrual accounting at an operational level is also observed at the regional level of the Department. The key for this finding was to identify items of accrual accounting information being used by managers. However, by examining report usage and by seeking explanation from a number of these managers, it is apparent that the predominant accounting information used is cash-based. As noted in Chapter 7 in respect to distribution of accrual accounting information at a regional Director's level: "certainly (accrual accounting information sets) are not relevant to the day-to-day operations of my particular role" (RO, Interview 6). In explanation of the irrelevance of accrual information sets, a regional Director pointed to the overall structure of financial relationships established by head office:

the only relationship between the region and the (operational units) financially is really through accountability. We have no other financial relationship - the (operational units) are allocated their global budgets directly from (head office) ... the Director has ... to sign off on this, so that is where the link comes in terms of the region, but we have no direct contact between the actual financial management process ... and accrual is more a system phenomena ... (whereas at the operational level) it is cash that matters (RO, Interview 6).

With no direct control over financial matters other than expenditure against budget, the regional managers, like their operational managers, focus their financial management attention on two important goals: first, to manage cash flow against budget so as to ensure expenditure matches budget, and second, to ensure efficient delivery of expenditure. However, a background caveat was also expressed by a regional Director when noting the risks of excessive concentration on financial matters:

if you start letting the finance perspective overtake everything else, before too long you have got the Minister on the phone saying ... ‘why are these disasters taking place?’ – [answer:] ‘well, because we saved a few pennies over the year’ (RO, Interview 7).

The perceived irrelevance of accrual information to regional managers means that interpretation of accrual accounting information within a regional office was not observed. Evidencing the absence of interpretation of accrual accounting were the following:

- Accounting reports produced routinely within regional offices focus on cash expenditure against budget line items. Those line items are determined by the budget handed down from Head Office and accrual items are not included. Against each line item, the data reported is limited to: budgeted allocation, expenditure to date and expenditure in the immediately past month. The simplified nature of those reports results from the observation that “managers tend to get confused with complicated reports” (RO-ACC, Interview 21) and the fact that centralisation of accrual aspects in Head Office has meant that simple, easily understood cash accounting can be managed at a regional level.
- Where projects are managed at a regional level, responsible staff formulate expenditure budgets by applying predetermined rates against expected resource usage but it is unclear to those staff if those rates include imputed amounts for non-cash expenses. For example, a Regional Director with responsibility for formulating professional learning projects noted that he did not know, nor care, if the cost he applied for casual staff included an imputed amount for non-cash costs associated with employment of staff (RO, Interview 20). From the regional point of view, their task was to budget for expenditure to achieve certain outcomes within the parameters of available funds as set by Head Office.
- Regions are not advised by Head Office of the aggregate expenses (for their region) relating to accrual items such as depreciation and employment-related costs (RO-ACC, Interview 21). The absence of this advice is not problematic to the regions since they are not able to vary discretionary actions to alter performance in regard to those expenses.
- As noted in Chapter 7, the Asset Management System does allow regions to extract data on asset values and condition; however, that data is not used within regions because their managers do not have power to make decisions based on that data (RO, Interview 20; RO-ACC, Interview 21).

Of the evidence supporting the apparent irrelevance of accrual-based accounting information in regions, the most telling is the last mentioned: the absence of use of asset-related information. Asset-related information was a foundation argument advanced for the adoption of public sector accrual accounting (refer Chapter 5)

since it was expected that managers would swap assets in order to better achieve organisational objectives. However, in the Department, it is extremely difficult for real property assets to be sold. The sale of land zoned for educational land use purposes is described by one regional director as “very long-term and arduous (even though it is recognised that) you could build more and more because the building costs are going down because of kit buildings and a whole range of things (whilst) the land value is rising ... (but selling a site and changing its land use) is virtually – absolutely – impossible” (RO, Interview 6). Complex political, social and educational factors contribute to the reality that closing a school is a very rare event⁶³. The reality of this is recognised within the Department and Treasury, so interpretation of data that could establish the financial advantage of selling real property is not expected of regional managers.

A clear picture has emerged here: at both operational and regional levels of the Department, accrual accounting information is not subject to interpretation. That is, it has not increased the range of organisational responses to its environment because it is not considered relevant to the responsibilities of managers at those levels. Balance sheet management is not considered to be a task of these managers. Further, whilst delivery of cost effective services is the major concern of these managers, it is not influenced by accrual-related information as a result of the nature of the information and decisions by the Department to isolate the managers from accrual information. These findings naturally turn our attention towards information interpretation at the Head Office level and this is considered in the following section.

8.2.3 Head office level information interpretation

Whilst accrual accounting has not altered information interpretation at operational or regional levels, the picture is not so clear at the Head Office level. Here there are functions that have utilised accrual accounting for specific purposes although the picture is mixed. The structural decision to centralise responsibility for accrual accounting calculations (refer Chapter 7) partly makes this difference

⁶³ Even if a school is to be moved (as opposed to outright closure and discontinuation of its educational services), the movement from one site to another under current legislation is treated as a closure and a subsequent opening (RO, Interview 6). Experience shows that local communities vigorously oppose both the closure and the opening.

understandable; however, in order to describe Head Office interpretation of accrual accounting, it is useful to focus on the two sets of material information identified in Chapter 7:

- expense information; and,
- asset information

8.2.3.1 Head office level interpretation of expense information

Primarily, it is in the Head Office functions responsible for asset-related expenses where some interpretation of accrual accounting information is observed. Since the Department's expenditure budgets – both capital and recurrent – are determined by Treasury, the important link here is that accrual accounting information is of use in discussions with Treasury.

One head office director with responsibility for asset management argued that knowledge of current replacement value⁶⁴ “has impacted on the way we report to Treasury and how we argue with Treasury” (HO, Interview 4). The essence of this argument is that maintenance funds should be a percentage of replacement value. However this is not an easy formulaic solution to resource allocation because there are arguments about the measurement of replacement value and the appropriate percentage to apply. The same director explains:

What we have been arguing with them [Treasury] is that maintenance should be a given percentage of the replacement value ... and the age of the building. ... So we say – you know – our average building age is 32 years so we should be spending about 1.5 % of the replacement value. But they [Treasury] say ‘Stop! No, no, no! Your bloody replacement value is too high! Replacement [value] in Victoria is only \$1,300 per square metre, yours is \$1,800 a square metre and you have 7 million square metres and you want 1.5% of it – that is a bit high’ (HO, Interview 4).

Thus even though the discussions with Treasury are inherently argumentative, recourse to accounting data on values is part of those discussions and so accrual

⁶⁴ As noted in Chapter 7, buildings are recorded at cost for their 1st five years and thereafter are recorded at fair value which is essentially a replacement value updated every five years and determined on a square metre basis.

accounting has had an impact on information interpretation. Whether this impact has been the type anticipated by accrual accounting advocates as would be evidenced by improved resource management (refer Chapter 5) is however, highly questionable.

Even within the Department's accounting function it has been recognised that the recourse to data on values has its limitations in terms of interpretation. As noted by one Departmental accountant:

What value do we get at the end of the day? It is that someone can say 'oh your buildings are now worth \$250,000 Mil' or whatever the figure is. But just as easily someone could have said, 'oh no, I don't think it is [best valued at] \$2,000 a square metre, it should be \$2010 a square metre'. [I think this] is just a complete waste of money and for no return. I am still not sure what benefit it provides to anybody. There may be a small benefit to government - I am not sure, but at any given stage, if they said 'what is the value of your buildings?' You know, we have got the data of the buildings, I understand that but ... why does it matter? (HO-ACC, Interview 3).

The recognition of the inherently subjective nature of the accrual accounting 'values' for assets leads to the second area where a change in information interpretation arising from accrual accounting is observed: asset information.

8.2.3.2 Head office level interpretation of asset information

An asset is simply an unexpired expense and in that sense the discussion above regarding expense interpretation was naturally drawn into discussion of asset information. However, additional light can be shone on the impact of accrual accounting on the Department's information interpretation at its Head Office level by considering how asset information influences the procurement of assets. There are two matters of relevance here: the procurement of assets involving private ownership (and operation) and the management of assets as they are being built.

In addition to negotiation over maintenance funding discussed above, the Department has also made use of accrual accounting information for decisions

regarding Privately Financed Project (PFP)⁶⁵ building procurement. The relevance here is that depreciation expense is explicitly recognised in the calculation of a Whole of Life cost for a building that is at the concept planning stage. That recognition was not made prior to the introduction of accrual accounting and so it marks a change in information interpretation. However, a caveat needs registration here: depreciation cost in these calculations refers only to expected depreciation rather than the expense to be reported in subsequent financial statements and regardless of the accounting system in place, there is no technical reason precluding calculation of the expected expiry of an asset's capital cost over its life⁶⁶. Thus the conclusion must be reached that use of accrual-related costs in PFP discussions is more reflective of the nature of PFP reforms than the accounting system reform *per se*.

The second issue influencing the conclusion regarding accrual asset information interpretation is found in the management of asset procurement. Indicative of the somewhat selective use of accrual information is the operation of two separate systems of ledgers within the property management division, as discussed in Chapter 7. These ledgers follow two charts of account where one, the AZ Ledger, is a subset of the other, the AA Ledger⁶⁷. The AA ledger is operated on an accrual basis whilst the AZ ledger excludes accrual transactions and accounts. Essentially the AA Ledger supports reporting that is to be provided to Treasury whereas the AZ Ledger is used for internal management reports within the asset management division. These reports are squarely focused on cash expenditure monitoring and only extract data from the AZ Ledger. As explained by one accountant in the asset management division:

We are only looking at the AZ Ledger. ... If you run a report in AA you get all these things like depreciation which is really annoying

⁶⁵ PFP procurement of schools was introduced in 2000 leading to 4 new schools being completed in 2004 and five in 2005. These nine schools were financed, designed and constructed to Department specifications and will be serviced (provision of buildings and grounds maintenance, cleaning, security, furniture, utilities and safety services) by private sector entities until 31 December 2032 when the buildings will become publicly owned.

⁶⁶ The relevant accounting standard (AASB 116.6) distinguishes between useful life of the entity and useful life of the asset but the point there is that from a managerial information point of view, estimation of the depreciation cost of using the asset can be made regardless of the entity's nature – either PFP or Department.

because you have to take them out anyway since they are of no use to us anyway. Well, you are looking at yearly expenses (but depreciation is not really an expense for us – I understand it *is* an expense, but being not-for-profit it makes no difference to us, you know. The whole issue of asset revaluation and depreciation is really obviously only for some sort of comparison between departments and whatever. It does not serve any real [Departmental] purpose. At the end of the day does it really matter if our asset base is \$2 billion or \$2.5 billion? And the whole process of valuing buildings is so arbitrary in terms of the measurement (HO-ACC, Interview 3).

An additional piece of evidence demonstrating the absence of accrual accounting information interpretation in the management of asset procurement is the absence of accrued liabilities reflecting an obligation for work completed but not yet paid. Typically accrued liabilities of some magnitude are expected where large assets such as buildings are being procured across multiple accounting periods. However, in the Department's case these do not appear in its accounting records because the asset procurement is managed on the Department's behalf by the Department of Commerce (hereafter referred to as 'Commerce'). Thus work completed but not yet paid for is billed by Commerce and paid by the Department at period end and in this way the liability is acquitted by the Department and effectively transferred to Commerce.

The evidence then, regarding information interpretation change resulting from accrual accounting is mixed but it would disappoint advocates who had predicted vastly improved managerial decisions regarding resource allocation. Partly, this has resulted from the implementation approach where an explicit strategy was that accrual accounting should produce "minimum impact" (HO-ACC, Interview 1) on the Department's operational management. That is, overhead management has been centrally located (HO-ACC, Interview 1) and accruals are determined centrally as an accounting transaction without most operational areas being aware or interested (HO-ACC, Interview 2). The lack of interest arises not from

⁶⁷ Although the codes AA and AZ apparently have no intentional meaning, one Departmental accountant noted that AA could, coincidentally, stand for Accrual Accounting.

ignorance or indifference; instead, it arises from the operational constraints on the Department that elevate service delivery above financial considerations.

A senior accounting manager related the lack of interpretation of accrual accounting information to the task of balance sheet management and reflected:

I think probably a lot of service organisations, like this one in the human resources area, are probably not too good at (balance sheet management) because it is not their driver, whereas for many others for example a state owned corporation, enterprise balance sheet management is everything. I mean going so far as to look at employee provisions, your liabilities, in that particular area we probably don't manage the financial exposure in that area either all that well. We assess it and we know what it is and we account for it. But do we manage it? No. We don't. You know, I mean do we manage our assets because of the balance sheet reasons? I don't think we do. We do it more for service delivery reasons (HO-ACC, Interview 1).

The important conclusion for an analysis of information interpretation in respect to accrual accounting information is that specific managerial decisions that are significantly influenced by accrual information were not identified. The uses of accrual information were either related to parties external to the Department (for example, Treasury in funding negotiations) or were based on information that, in the absence of accrual accounting, could have been extracted from non-accounting sources (for example, asset registers). The ability of accrual accounting information to assist with the types of decisions being forced upon the Department by the pressures described in Chapter 6 appears to be very limited. Even though this finding of low relevance will disappoint accrual accounting advocates, the final element of organisational learning – organisational memory – remains to be considered and so findings regarding the impact of accrual accounting on the Department's organisational memory are provided in the next section.

8.3 ORGANISATIONAL MEMORY

Although the concept of organisational memory is difficult to operationalise in a research sense, Walsh and Ungson's (1991) concept of stored information that acts as decisional stimuli and responses is helpful. Arising from its findings in respect to the organisational learning processes discussed to this point, one difficulty confronting this research is that accrual accounting information is not at the fore of the Department's decision-making armoury. Thus it is unlikely that accrual accounting's changes to the Department's organisational memory are conspicuous other than in the form of altered 'storage bins' in which information is stored. The essence of the task here then is to identify Departmental repositories of accrual accounting information so as to assess the change in organisational memory attributable to accrual accounting⁶⁸. Those repositories include non-human ones such as computer records and paper-based files as well as human repositories such as the knowledge and awareness of staff.

8.3.1 Human forms of accrual accounting organisational memory

A conspicuous change in organisational memory is found in the increased number of staff with accounting qualifications and duties. Whilst the number of additional accountants was not available from Departmental records, experience in other jurisdictions indicates substantial growth. For example, Chow et al., (2005, p. 302) note a 268% increase in UK central government employment of accountants following its introduction of accrual accounting. Whilst the non-human repositories are relatively easy to identify, the human repositories present measurement and assessment challenges. In response this research attempted to gauge the level of interest and awareness of accrual accounting amongst its interviewees and concluded that:

- All interviewees indicated at least a basic knowledge of the causes of differences between cash and accrual based accounting and they could identify the Department's quantum-significant accrual accounts.
- All interviewees appeared to understand the concept of a non-cash expense although one accounting manager felt that there is a need to "constantly remind managers of the non-cash costs in programmes" (HO-ACC, Interview 8).

⁶⁸ It is acknowledged that this will deal only with a subset of the Department's organisational memory.

- Some interviewees were sufficiently knowledgeable of the workings of accrual accounting in the Department to challenge its relevance to the Department's core objectives and to surmise that it had a negative cost-benefit. For example, a head Office accountant with experience dating back to implementation working parties confided in a hushed voice: "The cost of actually implementing accrual accounting is nothing compared with the ongoing cost of transferring it all back into cash for reporting to Treasury! [laughing]. Oops, I didn't say a word mate, I didn't say a word!! (HO-ACC, Interview 5). Another accountant with a similarly long experience of accrual accounting in the Department reflected: "The ol' accrual accounting? I think from the public service point of view it is like the stalker's defence: 'it seemed like a good idea at the time!' - but it would be interesting to find agencies that are actually using accrual accounting information at all" (HO-ACC, Interview 23).
- Most non-accounting interviewees were aware that accrual accounting was a government-wide reform and seemed to treat it as another reform imposed externally with which the Department needed to conform.
- The accounting interviewees were of the opinion that their work was now more complex, requiring a higher level of skill and more complex interpretation of accounting standards. As a result the Department now employs more staff with accounting qualifications and experience than in its pre-accrual days.
- All interviewees showed a high level of interest in efficiency matters and thus they had a concern that expenses be measured in the most accurate and useful manner although some did question that this was being done in the Department's accounting system.

The main image emerging in respect to the human forms of organisational memory is one of growth in specialists who are skilled in the nuances of accrual accounting but are centralised in Head Office functions. These specialists are mostly concerned with reporting between the Department and Treasury as well as relations with the Auditor-General Office. That is, they are specialist accountants rather than managers with strategic control of the Department. Thus whilst the human forms of organisational memory related to accrual accounting have grown, they remain mostly isolated from the remaining organisational memory which is used by the Department to generate its reactions to environmental change. The non-human repositories of organisational memory are briefly considered next since it is apparent that, with only specialist human organisational memory and information interpretation limited to Head Office, these remaining forms of organisational memory are likely to be of only limited impact on the Department's managerial decision making.

8.3.2 Non-human forms of accrual accounting organisational memory

As would be expected, the most significant non-human organisational memory is the accounting system. This was a heavily modified commercial accounting system installed for the Department in 1993 and subsequently amended to incorporate changes such as cash reporting to Treasury and changes in indirect taxation. In addition to this main system, the department maintains a number of other accounting systems (previously described in Chapter 7) that retain accrual accounting information and so meet Walsh and Ungson's (1991) concept of organisational memory. These systems are not described here in further detail but the following summative comments are offered:

- The various systems do not have accrual-related linkages between each (for example, where the AMS updates building values, manual adjustments are made in the Department's accounting system).
- Whilst accrual-related information is stored, in none of the systems is that information treated as being paramount to managerial reactions to the environment.
- In some instances, insufficient information has been retained in the non-human repositories for subsequent purposes (for example, initial values of re-valued assets were not retained such that if they were subsequently disposed, it was difficult to determine the resultant gain or loss on disposal).
- Some information that would be useful to assess the cost-benefit of accrual accounting in the Department has not been retained in its organisational memory (for example, this research could not determine an implementation cost for the department's conversion to accrual accounting).
- Outside the Department's routine accounting systems, the non-human repositories of organisational memory involving accrual accounting are limited. For example, Departmental files related specifically to accrual accounting are limited to the implementation period covering 1988 to 1993. Since that period, accrual accounting as an issue has been subsumed below other issues such as Treasury Directives and changes in accounting standards. Similarly, the Department does not maintain newsletters or email lists dedicated to accrual accounting issues.

In summary of the non-human forms of organisational memory related to accrual accounting, it is observed that the routine accounting system dominates and that other forms of organisational memory are quite limited. In the following section the overall impact of accrual accounting on the Department's organisational memory is discussed.

8.3.3 Accrual accounting and organisational memory: water off a duck's back?

Considering the combined impact of human and non-human forms of organisational memory as influenced by accrual accounting, it is apparent that for the most part, accrual accounting is a second-order issue. Whilst it is easy to identify individuals who are competent in the techniques of accrual accounting within the Department, the singular characteristic of these individuals is that they are specialists with a limited scope of responsibility. As such they are isolated repositories of organisational memory rather than being a resource that is integrated into the Department's routine or strategic decision-making processes. Similarly, the Department's non-human forms of organisational memory influenced by accrual accounting are limited. The limitation in this regard is that the organisational memory is available to only centralised functions in Head Office and the chief concern of those functions is communication with bodies that are external to the Department.

A concluding image of the impact of accrual accounting on the Department's organisational memory is comparable to the action of water off a duck's back. Relatively small droplets of accrual accounting can be identified in the Department's organisational memory but largely the impact of accrual accounting has been allowed to flow over the surface without penetrating into the layers of organisational memory that are called upon whenever the Department faces a strategic alternative. Seeking an explanation for this observation is the goal of the following section.

8.4 CONCLUSIONS

This chapter set out to discuss the ways in which information interpretation and organisational memory in the Department have been influenced by the change from cash to accrual accounting. Its findings are mixed in that change consistent with improved organisational learning is not uniformly observed. Instead a differential pattern of change is found wherein information interpretation has changed in relatively modest ways only at the Head Office level whilst organisational memory has not changed in ways that influence the Department's reactions to its significant external pressures. The most notable change in the

Department's organisational memory is the increased number of staff with accounting qualifications and duties yet these staff do not play an active role in strategic decision-making nor are they providing information to decision-makers who shape the Department's strategic formulations. The purpose then of these concluding comments is two-fold: first, to discuss the absence of change where it had been expected; and, second, to provide a theoretically based explanation for this observation.

8.4.1 Absence of change where change was trumpeted

The highest order process within the management science school of organisational learning is information interpretation and the epitome of potential organisational learning is organisational memory. Thus, for a fundamental reform such as accrual accounting to be causally associated with increased organisational learning it is a prerequisite that changes in information interpretation and organisational memory be of some significance. In the evidence presented from the Department's experience of the move from cash to accrual accounting, this prerequisite is not met although variable levels of change have been observed. Accrual accounting has changed the Department's organisational memory to the extent that accounting records and asset records now contain additional data sets (as described in Chapter 7). Additionally, there is now a higher level of technical accounting skill within the Department and this is a further sign of altered organisational memory. These changes are a direct result of the investment in accrual accounting *per se* but there is a disconnection between the altered organisational memory and changed organisational learning.

The disconnection between accrual accounting and altered organisational learning appears to be related to the fact that much of the accrual information is not relevant to the Department's core objectives. In none of the Department's strategic objectives statements, nor in any of the Senior Executive Service performance statements, is accrual accounting information noted or used. At the most important level, the strategic level, it is difficult to imagine that the Department's objectives could change so greatly that financial factors would exceed in importance the non-financial measures of success. It is thus likely that the Department's measures of success will remain as stable as they have been

over the past many decades and that financial factors will not dominate over other measures of success. This is suitably illustrated in the matter of asset management where non-financial goals prevent liquidation of Departmental facilities. Yet, the argument advancing accrual accounting was substantially based on an expectation that better asset usage would result from the move away from cash accounting. Can this disconnect be entirely attributed to the dominance of the Department's (non-financial) goals over matters of relevance to accrual accounting?

In addition to the irrelevance of accrual accounting measures to the Department's key performance measures, another factor reinforces the disconnection that has been identified: the manner in which accrual accounting was centralised as a 'specialist' responsibility. That is, the centralisation of accrual accounting calculation and reporting meant that accrual accounting did not need to be in the consciousness of the Department's managers but instead could become functions of accounting boffins. There were solid grounds for this implementation strategy as was explained by a senior accounting manager regarding financial expertise:

part of this is making sure that, you know, we are trying to reduce overheads all the time. Once you're happy that you have removed overheads at a cost centre head level there is no need to do a whole lot of interpretation, and have a great deal of financial management expertise at that cost centre head level. Basically we have pulled a lot of those overheads out and we made a conscious decision too that we can financially manage a lot of this centrally and still probably achieve what we want to achieve (HO-ACC, Interview 1).

Thus, the finding that accrual accounting has not impacted on the Department's organisational learning as predicted before the change results from its low level of relevance and the centralisation of its implementation in the Department. In light of these findings, it is important to identify the process which explains the outcome of the Department's experience with accrual accounting. This is the purpose of the following section: how did the Department survive intact without opposing the revolutionary change of public sector accounting?

8.4.2 Surviving the revolution: an organisational values and institutional theory perspective

Chapter 5 shows that for the NSW public sector in general, the resistance to accrual accounting was so minor as to be imperceptible after 1988, notwithstanding an earlier pedigree. The same is true of the Department and so reviews of archived documentation on the Department's reaction to the need to implement accrual accounting did not reveal any reluctance to meet the externally imposed requirement to move to accrual accounting. Similarly, currently employed staff who had been working in the Department at the time of the change noted during interviews that the Department's reaction was positive and absent of resistance. The need to move to accrual accounting was clearly seen as an imperative of government and central agencies (Treasury and Premier's Department) about which the Department had no discretion. Thus any explanation for the finding that the Department has implemented accrual accounting without significant change to its organisational learning must engage the mechanics of organisational response to external factors whilst protecting the world of most importance to organisational members: the inner workings of the organisation in question. This section does this by viewing the change with two theoretical lenses: first, how (internal) organisational values have impacted on the Department's response to accrual accounting; and second, how (external) mechanisms of change as explained by institutional theory influenced the Department.

8.4.2.1 Organisational values and accrual accounting

An important aspect of organisational responses to external pressures is the value set of organisational members. Richard Laughlin has devoted significant energy to understanding the ways in which organisations deal with accounting to serve their needs and values. Central to his various studies (Laughlin, 1987; 1988; 1990; 1991; Laughlin et al., 1994; Broadbent and Laughlin, 1998) mostly related to public sector contexts – including schools - is the view that organisational responses to accounting changes are largely a function of how those changes are perceived by the relevant organisations as impacting on their values. Some values are core to organisational identity. Laughlin initially referred to these as the 'sacred' although later noted that this somewhat emotive and apparently religious term could be changed (refer Laughlin, 2007). Laughlin's early (1991) work was

sympathetic to a series of public sector investigations by Bourn and Ezzamel (1986a, 1986b and 1987) in which they observed that core and central values were what organisations would protect in the face of unwanted economic intrusions. Thus Laughlin can, with the benefit of some 24 years of research on organisational change in the face of accounting developments, conclude:

what is key is the understanding some values and concerns are much more important than others – in all organisations – and if the former are perceived to be under threat either from the less important values or by intrusions from outside the organisation, they will be resisted (Laughlin, 2007, p. 283).

Beyond this fundamental observation and notwithstanding the controversy created by his use of the phrase ‘sacred-secular divide’⁶⁹, Laughlin theorises on four pathways for change. One such pathway adequately describes the observations of the Department’s reaction to accrual accounting: where the change is allowed to pass across the organisational boundary but is done in such a way as to ensure that the core and most important values of the organisation are not affected. Laughlin calls this pathway ‘reorientation’ since the change is reoriented in order that the organisation’s fundamental interpretative schemes remain in tact⁷⁰. As he notes, this pathway allows the organisation to be “seen to be doing what is required” (Laughlin, 2007, p. 285) whilst leaving the heart of the organisation (the interpretive schemes) basically unaffected (Laughlin, 1991, pp. 217-218). This is achieved by using additional ‘design archetypes’ (such as organisation structures, decision processes and communication systems) thus resulting in multiple organisational features some of which are principally purposeful in allowing the organisation to live with an external shock that could not be rebutted but had to be accepted and internalised into the workings of the organisation.

There is a strong resonance between Laughlin’s description of reorientation and the Department’s ways of implementing accrual accounting so as to emerge without significant impact on its organisational learning. Being such a large

⁶⁹ Refer to the 2005 Special Issue of the *Accounting, Auditing & Accountability Journal* titled ‘Critiquing the Sacred and Secular Divide’ (Volume 18, No. 2).

⁷⁰ Laughlin’s choice of ‘reorientation’ as a label for this pathway derives from Greenwood and Hinings (1988).

organisation, it was possible for the Department to centralise accrual accounting functions and isolate its potential impacts on the crucial educational objectives of the Department. Indeed, whilst accrual accounting could have been a threat to those educational objectives (for example, allowing non-cash expenses such as depreciation to determine capacity to offer educational services in areas of large capital assets with declining demographics), the Department has implemented the change in a manner that has avoided such threats to its core interpretative schemes. This explanation is also consistent with the findings of Laughlin et al., (1994) in 24 UK schools where changes in financial management were made by each of the schools but were done in ways in which the schools' interpretative schemes were protected to "allow the 'real (authentic) work' to go on unhindered" (p. 79). Although this research does not share the focus of Laughlin et al., (1994) on the stances adopted by individual managers in each school researched, it has been exceedingly clear that the Department has protected individual managers at both operational and regional levels from the potential impacts of accrual accounting. In essence and without risk of hyperbole, these managers have been allowed to survive the revolution of accrual accounting in order that they can focus on what really matters within the Department. However, whilst Laughlin's analysis helps to explain the internal pathway taken by the Department in reacting to accrual accounting, an additional theoretical lens –institutional theory – provides an external focus and so completes the explanation of how the Department has achieved the appearance of change whilst maintaining the status quo.

8.4.2.2 Institutional theory and accrual accounting

Institutional theory has an interest in explaining the development, diffusion and gradual institutionalisation of structural features of organisations in an on-going and continuous process (DiMaggio and Powell, 1983). The relationship between institutional theory and organisational learning was briefly canvassed in Chapter 3 thus this section considers its contribution as a theoretical frame to understand this instance of accounting change. Typically in the accounting literature the structural features of organisations have related to ways that accounting information is used to legitimate the organisation in its controlling environment (Meyer and Scott, 1983) and as such institutional theory has been shown as effective in

understanding public sector change (Lapsley and Pallot, 2000). Three principal contributions emerging from institutional theory are that: first, organisations use accounting techniques, amongst others, as an impersonal means to pursue organisational aims in a ‘rationale’ manner; second, organisations experience a decoupling of technical procedures from their formal structures and institutional rules; and third, organisations experience isomorphic change. Three significant forces leading to isomorphic change have been identified as being mimetic, normative and coercive:

- Mimetic isomorphism occurs in periods of uncertainty in which organisations thus tend to mimic a ‘successful’ peer.
- Normative isomorphic forces result from professionalization because members of a profession have similar world-views and their associations become conduits for the diffusion of ideas.
- Coercive isomorphic forces are driven by resource dependency relationships extending beyond the organisation under study.

Although institutional theory has been used extensively in accounting research [refer to Gomes et al., (2008) for a useful overview of that body of research], it has been criticised for the unavoidable difficulty of making sharp distinctions between the three forms of isomorphism (Czarniawska and Joerges, 1996; Modell, 2002). Additionally it has been shown that mimetic isomorphism seems to have emerged in the literature with an overbearing emphasis at the expense of other causes of isomorphic change (Mizruchi and Fein, 1999). In consequence of these difficulties with institutional theory, Modell (2002) has proposed a useful duality of coercive and voluntary isomorphism drawing on Oliver’s (1991) conceptual schema of a range of organisational responses from passivity at one extreme to active resistance at the other extreme.

In turning to institutional theory as an explanatory tool for understanding how the Department has adopted accrual accounting without significantly altering its organisational learning, it is notable that the Department was under coercive forces. These forces were exerted over the Department by Treasury and the Premier’s Department. In essence, the Department was a small cog in the large machine that had set itself upon the accrual course of action. Although the Department (and other GGS organisations within the NSW Government) could have conceivably resisted this course of action, it would have been dangerous to do so since resources would have been reduced and other, more personal,

penalties would have emerged against the managers who were charged with implementing Government policy. Further, whilst coercive forces presented obvious negatives resulting from resistance, there were equally obvious rewards resulting from cooperation. Perhaps most notably was the resourcing of computer developments that the Department had sought for some time such as the Asset Management System and a computerised accounting system. In addition to these major projects, the Department was also rewarded with increased funding and additional staff to implement and operate accrual accounting.

Institutional theory concepts of decoupling can be useful here. Decoupling refers to gaps that appear as organisational structures and practices differ from institutional pressures and such a label is apt for the findings in this case. The decoupling identified in the separation of accrual accounting data from regional and operational parts of the Department was not an anticipated feature of the adoption of accrual accounting. Yet that decoupling has meant the Department could avoid the odium of opposing Treasury and whole-of-government reform whilst not implementing change that may have damaged long-standing and respected relationships and values within the Department.

Thus, a clear picture emerges of how the Department negotiated the change to accrual accounting. On the one hand it acceded to the external coercive forces demanding change but on the other it was able to implement that change in a manner that protected its core (educational service delivery) values. The strategy of centralising the change within a Head Office functions resulted in a buffer that prevented accrual accounting from damaging the Department's core values whilst at the same time appeasing the external forces demanding action. However, as a consequence of this strategy the Department's range of reactions to its environment – that is, its organisational learning – has not been expanded by the accounting change.

The findings of this chapter bring us back to the other half of this research project beyond the managerial impact of accrual accounting: the historical narrative of why accrual accounting was implemented in NSW as an early adopter of this change. A sharp contradiction between the arguments advanced in the late 1980s for accrual accounting and the experiences of the Department in its micro-

implementation have been presented here. In the final, and concluding, chapter a summary of that contradiction is presented together with discussion of its implications.

CHAPTER 9: Conclusions – The Origins and Impact of Accrual Accounting in NSW



9.1 OVERVIEW: A CONTEXTUAL PERSPECTIVE

Preamble:

“All history should, I think, have some practical aim. Some moral, some lesson or guidance, should be afforded by it. Even if this is not true of all history, it is surely true with regard to economic history. It would be absurd to study a subject so dry, not to say so odious, as local rates except with a view to practical aims. We do not study subjects from a love of truth in the abstract or to while away a wet Sunday afternoon, but because there are practical controversies about them, and we hope that we may learn something which may be of assistance in these controversies” (Cannan, 1912, p. 1).

This chapter concludes a research project that has combined an historical study of the origins and development of accrual accounting and a case study of its impact on managerial decision making. The main import of this chapter is to answer the question “what have we got here?” that can be of assistance in the controversy that now surrounds public sector accrual accounting. This project’s historical study, like Cannan’s 1912 effort to understand a history of local rates in England, is not an end in itself. Notwithstanding the inherent benefits of historical research (refer Chapter 4), this project has not been a pursuit of knowledge for its own sake. Instead it is an attempt to unpack the greatest single controversy of GGS management in the last century in order to use the past to illuminate the present and the future. Whilst Cannan’s view of history is overly utilitarian and implies that there are singular histories, the aim here has been to use an historical view of an instance of public sector accrual accounting to throw light upon its managerial impact. This responds to Carnegie and Napier’s (1996) and Funnell’s (1998b)

calls to look beyond the technical so as to better understand the contextual, political and managerial aspects of historical developments. Thus, it is not claimed that this project presents the only singular narrative of these events but the research has an intentional benefit directed at the future by extending its conclusions into implications for future policy and practice.

Although precise cost data are not available, the implementation of accrual accounting has consumed substantial sums of money. In Australia alone the cost has certainly exceeded millions of dollars. The magnitude of this resource shift and the epoch-defining nature of the change that had been sporadically contemplated – but not implemented – for over 150 years, combine to create an issue of significance that extends beyond extant researchers’ efforts to consider isolated histories of public sector accounting change and limited studies of how accounting change impacts on managerial decision making. Thus, the implementation of accrual accounting in NSW was a “moment of eruption” (Hobsbawm, 1998, p.118) which calls for historical perspective in order to better understand the implications of that eruption.

The remainder of this chapter is arranged into six sections. Next is a summary of the project’s overall contribution in which a broad overview of the contribution is claimed. In Section 9.3 a summary of the interpretational history of NSW’s adoption of accrual accounting is provided. That history explicates the intended managerial impact and public policy settings of the change thus it assists in an appreciation of the findings of the case study which are subsequently discussed in Section 9.4. Following that discussion it is useful to recognise the limitations of the project as a whole and that is provided in Section 9.5. Then, in Section 9.6 some specific areas of future research are noted whilst Section 9.7 identifies a number of implications for public policy and practice arising from this project. Those implications are reinforcements to a growing call for action related to public sector accounting and management in jurisdictions that have now had a sufficient period of experience of accrual accounting in their GGS organisations.

9.2 CONTRIBUTIONS

This section provides a broad summary with three aims: first, to describe how the project’s overall objectives have been addressed; second, to summarise the most

significant conclusions reached in the empirical findings of Chapters 5, 7 and 8; and third, to identify the contributions of this project to the extant literature.

9.2.1 Addressing the project's overall research objectives

The core motivation of this project was to provide a historically grounded assessment of the management impact of public sector accrual accounting in a General Government Sector organisation. To fulfil this, documentation of an interpretational history of the evidence that characterised the decision to adopt accrual accounting was required. The resultant historical narrative was provided in Chapter 5 and the intention of the overall project was that the historical narrative would, in part, contextualise the subsequent assessment (Chapters 7 and 8) of the managerial changes caused by the move to accrual accounting. The most significant part of that context is identification of the objectives and expectations of the move to accrual accounting however to fully appreciate the 'why' of accrual accounting, it is necessary to go beyond the stated (and readily apparent) goals that were enunciated by its proponents at the time. In addition, it is important to examine the identities, values and objectives of the various actors who were active in the promotion and implementation of accrual accounting. Thus, addressing the first research question ('why did NSW adopt accrual accounting for its General Government Sector organisations?') this project has gathered oral and archival data related to the events that occurred in the period 1976 to 1996. Although all histories are necessarily partial and incomplete, it was argued in Chapter 5 that sufficient evidence had been gathered and analysed in order to support assertions derived thereupon.

Addressing the managerial impact of accrual accounting, this project selected a theoretical frame of organisational learning and applied it to a single-site case study. In-depth data gathering involved extensive interviews of staff within the organisation being studied, together with comprehensive review of archival sources in both the organisation itself and central agencies with some oversight of accounting and management systems within the relevant jurisdiction. From that data analysis, conclusions have been reached as to the impact of accrual accounting on the organisation's information acquisition, information distribution, information interpretation and organisational memory. Collectively those

conclusions, as understood within the specific context of the case-site, facilitate arguments as to the extent and nature of the impact of accrual accounting on managerial decision making. Those arguments are presented as a means of addressing the second research question (‘what has been the impact of accrual accounting on managerial decision making within a General Government Sector organisation?’).

9.2.2 Summary of most significant findings

As has been articulated in Chapters 5, 7 and 8 and will be summarised in the following two sections of this chapter, the most significant findings of this project are: first, that the public sector’s most radical accounting change in the last century occurred with little preparation and contemplation; and second, that the impact of the change on managerial decision making has been mostly cosmetic. Although Section 9.2 and Chapter 5 expand on the historical findings, the observations that the change to accrual accounting was characterised by speed and high expectation place the findings emerging from the managerial impact aspect of this project in stark relief: the absence of significant and revolutionary impact from accrual accounting is a sharp contrast to the claims made on behalf of accrual accounting that formed the foundational expectations justifying the expense and effort of implementing and maintaining accrual accounting systems in the public sector. In turn, these findings hold profound implications for public policy and practice: should the growth of accrual accounting be reversed or should accrual accounting concepts be changed? In the absence of such reversal or change, the logical (even if somewhat satirical) question arises as to whether the nature of the GGS should be altered in order for accrual accounting to be accorded greater meaning to managers.

9.2.3 Contributions to extant literature

One decade ago, Guthrie (1998) set a research agenda regarding public sector accrual accounting encapsulated in his question as to whether the reform was ‘rhetoric or reality’. Both practitioners and researchers have recognised the importance of better understanding the origins and impacts of accrual accounting but in many jurisdictions, like the famous Roy Orbison song, it might be ‘too soon to know’ its impacts, in that the period of experience of the reform has been less

than a decade. In that regard, the attention of researchers should naturally fall on the early adopters such as NSW, New Zealand and Sweden where experience of the reform is longest and is now of sufficient length to allow meaningful conclusions to be reached⁷¹. Efforts to identify the managerial impact of accrual accounting, as reviewed in Chapter 2, have been characterised by a small number of contributions that have been limited to questionnaire-based methodologies (Jones and Puglisi, 1997; Pilcher, 2000; CPA Australia, 2000; Thompson, 2001; Carlin and Guthrie, 2001). Sometimes these efforts have been limited to specific aspects of accrual accounting such as depreciation (Pilcher, 2000) or have been confined to the views of accountants (Connolly and Hyndman, 2006; Paulsson, 2006). Without exception, an in-depth case study analysis has not been employed to identify the ways in which accrual accounting has influenced managerial decision making. That contribution is the most important outcome of this project.

The other main contribution of this project is to complement the emerging literature on histories of early adopters of accrual accounting (Ryan, 1995, 1998; Christensen, 2002, 2005). This project has produced historical evidence that identifies an epistemic community that was active in the promotion and implementation of accrual accounting and so can be characterised as being the most influential shaper of the particular variant of accrual accounting currently in place. Additional histories of other adoptions of accrual accounting may confirm or reject such findings but they will necessarily need to address this project's evidence and contribution in order to assist the overall project of understanding the phenomenon of public sector accrual accounting. As such histories continue to emerge, a richer and more informative picture regarding the conditions, motivations, expectations and prominent actors associated with public sector accrual accounting can be gleaned. Such histories will amount to contributions that fulfil the historian's faith in "accumulations of knowledge, importance of evidence, and the ability to uncover truths about the past" (Tyson 2000, p. 168).

⁷¹ In making this assertion, it is not intended to assert that future experience of the accrual accounting reform might not change subsequent evaluative conclusions of its impact.

9.3 AN INTERPRETATIONAL ACCOUNT OF NSW'S ADOPTION OF ACCRUAL ACCOUNTING

This section summarises the major findings of this project's historical endeavour. It presents first the main findings; second, it draws out the implications from the history of the change to accrual accounting for the managerial change that was expected in the early phases of the change; third, it identifies the policy implications that arise from specific aspects of the change as documented in NSW.

9.3.1 Main historical findings

Chapter 5 presented an interpretational account of the NSW adoption of accrual accounting. Five aspects of that account are most notable and serve to focus the discussion of this section. Those aspects were the speed of the change to accrual accounting; the involvement of an epistemic community; an asserted and thereby expected improvement in management arising from a central reform; an absence of critical discussion prior to and during the change; and, a coalition of mimetic isomorphic forces with phantom images. The sense of significance underlying these aspects of the history is the purpose of this sub-section.

Considering the long reign of cash-based accounting, it seems remarkable that the period of serious discussion regarding a move to accrual accounting was so brief. Although some ineffectual lobbying for change had been emerging from the Auditors-General (Ryan, 1995), in a period of only months between November 1987 and July 1988, NSW (as an early adopter) committed itself to accrual accounting in stark contrast to the many decades over which it had shunned accrual accounting other than for its business enterprises or quasi-enterprises (Scott et al., 2003). That contrast naturally raises questions of the ease and relative seriousness of the decision; such questions have been dealt with in the literature as 'implementation barriers' (Lüder, 1992, 1994) that might be usually considered as reasons why reform would be impeded. However, in the history of NSW's adoption of accrual accounting, the typical barriers (such as insufficient skill, poor asset records and inadequate information technology) were advanced not as barriers but as reasons for change. That is, decision makers wanted to redress these issues and felt that accrual accounting would be a weapon with which they

could increase the NSW public sector's accounting expertise, improve its knowledge of its asset-base and modernise its IT systems. Thus the implementation of accrual accounting can be characterised as being a project where immediate progress was an important objective: the barriers to change needed to be explosively removed with dramatic change – in the form of accrual accounting that would simultaneously eradicate any reluctance and compel change.

As noted in Chapter 5, the new Greiner Government assumed power with a clear objective of running NSW like a corporation with a goal of maximising efficiency and effectiveness. The clarity of this objective led to a consequential imperative for quick change (Halligan and Power, 1992). Given the high priority accorded to speed of change, it is understandable that both the users and the producers of information looked to enlist support in the implementation of accrual accounting. Thus, the second main finding of the history is that an epistemic community was significant in the story. That story covers not simply implementation but also promotion or advocacy of change. The epistemic community was cemented by a philosophical support for introduction of private sector practice into public sector accounting and management. Amongst its members, private sector consultants were most active but they were reinforced by central agencies in which professional accountants were resident such as the Auditor-General Offices, the Public Accounts Committees and the accounting sections within Treasuries. Later (around 1990) this epistemic community was joined by the accounting professional bodies and an activism from the previously passive Public Sector Accounting Standards Board. However, the epistemic community did not stop at claims that accrual accounting would break down the barriers to change; it also advanced arguments that a central reform would improve the operational performance of the public sector and these arguments clearly link to the expectation that positive improvements in decision-making would be observed in individual GGS organisations.

The argument that accrual accounting, implemented as a whole-of-government reform, would 'trickle down' in its impact on operational areas was pervasive in the discourse promoting change. Although early advocates such as the Andersen

consultants spoke also of keeping politicians honest, they mostly spoke of how accrual accounting would empower local managers who in turn would then make more informed decisions and thus improve efficiency and effectiveness of service delivery at a local level. Oral evidence gathered in this project confirms the decision-makers' expectations that accrual accounting was more than an accountability improvement but was also a means to achieve managerial improvements.

The expectation of managerial improvements to be delivered at an operational level was helpful in turning public sector resistance to change into a supportive stance in which the potential benefits of accrual accounting were recognised by senior public servants who had previously advised against the change. However, the relatively sudden reversal of positions meant that controversy was removed and an absence of critical discussion characterised the dominant discourse (Guthrie, 1998; Potter, 1999). In such an atmosphere it is understandable that solution-finding to immediate implementation difficulties became more important than systemic design matters that might have avoided longer-term problems. In most part, these longer-term problems were either ignored or down-played because of the strength of forces that made short-term implementation such an overwhelming objective.

The strength of support for accrual accounting can be explained by mimetic forces that initially coalesced around phantom images, presented by consultants, regarding an alleged successful implementation of accrual accounting in the USA. These forces subsequently recognised self-interest as an integral part of the change to accrual accounting. The strength of the alliance thus formed is evidenced by the fact that NSW Treasury accountants soon discovered the absence of substance behind the phantom images of successful implementation of accrual accounting in USA GGS organisations, and yet did not use that fact as a means of supporting their previous resistance to accrual accounting. Instead, they had by that time been persuaded by the new government's pervading political support for accrual accounting and the opportunities for professional advancement afforded by accrual accounting. Thus self-interest on the part of both the

consultants and the public sector professional accountants can be seen to be part, albeit not the only part, of the synergy that emerged.

Collectively these findings are of interest in two ways: first, they provide a view of the specifics of the NSW accrual accounting adoption; second, they point towards factors that were important in what have become significant trends that have emerged in western public sectors since the 1980s (Broadbent and Guthrie, 2008). The latter is beyond the scope of this research but the growing list of issues related to these findings includes: identifying epistemic communities and private sector consultants in public sector change; examining the character of public sector accrual financial accounting⁷²; exploring the interconnection of accrual accounting with other changes, notably accountability changes, that have had detrimental impacts; and, addressing how isomorphic institutional forces have made public sector accounting change more likely. This list of issues, associated with the historical findings of this project, is attracting increased research effort and it demonstrates a vibrant and growing interest amongst researchers seeking an interdisciplinary view of change in the world's public sectors.

9.3.2 Historical study implications for assessing the managerial impact

Given the main findings noted above, what might be the likely implications of the NSW accrual accounting history for the ways in which NSW GGS managers would make decisions? History documents an expectation that a whole-of-government reform, such as accrual accounting, could result in substantial change in the ways in which managers behave. That expectation seems to have been an article of faith rather than the result of prior research establishing the relative influences on managerial behaviour arising from central agencies and internal forces. Thus the advocates of accrual accounting spoke in macro terms relating to the 'big picture' without fine grained differentiation between individual agencies. Such dialogue generated a strategy of implementation that was focused on moving from department to department in a wave of implementation that was completed in less time than was initially planned. However, the departmental implementations were completed with an emphasis on external reporting rather

⁷² There is also a need to provide public sector accrual financial accounting with a more rigorous conceptual structure rather than the approach that has emerged from the initial discourse as documented in this research.

than on the internal accounting needs of each department. Consequently, one implication is that the change to accrual accounting constructed a patina aimed more at the outside world without developing a strategy aimed at an impact on managerial considerations. If the ‘trickle down’ from whole-of-government reform to changed managerial decision making was to eventuate, there does not appear to have been any explicit strategies put in place to achieve that impact.

A second implication arising from the history of accrual accounting is that the uniqueness of the public sector – and in particular the GGS within the public sector – had little impact on the manner of its implementation. Thus, instead of devising new accrual concepts to address technical issues (such as the absence of causality between expense and revenue and the unique nature of public sector assets) efforts were directed towards implementation of an accrual accounting model that was familiar to its advocates. Those advocates were led by professional accountants mostly with private sector experience, but with relatively low levels of public sector experience. Under their leadership, and as soon as the Treasury accounting experts were added to the team, the implementation was quick but resulted in a model of accrual accounting with a poor fit to the unique and complex characteristics of the public sector.

Although it is not the objective of this research to critique the model of accrual accounting implemented in NSW, it is pertinent to note that difficulty in providing a coherent model that suited the public sector, meant that the NSW Treasury and professional accountants therein were forced to advance ahead of the accounting profession in dealing with the issues created by accrual accounting in a public sector environment. Seen in the historical perspective provided in Chapter 5, it is understandable that the central agencies of Treasury and Premier’s Department were more intent on forcing change than on constructing new accounting concepts. Thus, for example, efforts to identify and value the vast asset base of the NSW public sector overwhelmed issues of what might be appropriate concepts of various (often unique) public sector assets. Since the identification and valuation of that asset base was seen as a priority to the newly elected NSW Government, it was given greater importance than issues pertaining to a conceptual framework that might have been seen as nebulous and philosophical. At a departmental level

within the GGS, such an emphasis was clearly recognised; equally so, managers associated the accounting reform with whole-of-government imperatives and so this implicitly diminished the need for departmental change. That is, as long as the departments could produce financial statements that complied with accrual accounting concepts as then existed (private sector concepts), other changes were not required. In part, this is an explanatory factor relevant to the findings of Chapters 7 and 8 where the managerial impact of accrual accounting has been shown to be rather limited. Thus a third implication arises from the history: an imperative to be seen to be at the forefront of reform – apparently for the sake of being seen to be advanced – is a poor substitute for organisational change that is built upon rational decision making.

9.3.3 Policy implications

The historical account of the NSW adoption of accrual accounting can be used to provide a number of implications for public sector accounting and management. The most notable aspect of that account was that the change to accrual accounting was capable of improvement; identifying that capacity for improvement provides the basis upon which the following policy implications are grounded.

9.3.3.1 Recognising differences between the public and private sectors

At the core of the philosophy behind advocacy of public sector accrual accounting lay a belief that goal-seeking organisations in both the public and private sectors are fundamentally the same. When abstracted to a managerial view of tasks such as “Plan-Do-Review”, it was argued that both public and private sector organisations can be managed in essentially the same ways. However, when the level of analysis is narrowed to the accounting information systems required to meet managerial information needs, numerous conversion difficulties arise in order to facilitate differences between a profit-seeking private sector and a not-for-profit public sector. Those differences result from the unique rationale for public sector activities wherein public goods are provided for the well-being of society (Mautz, 1988; Pallot, 1990) and the necessary funds for such goods derive from the taxation powers of a suitably accountable government (Funnel and Cooper, 1998). At a theoretical level this has been identified (Barton 1999a and 2005a) as proof that accounting systems should naturally reflect the differences

found across the two sectors⁷³. The implication arising from this project is confirmation of that theoretically based point and thus demonstrates the need to explicitly recognise the rationale for public sector activities and to identify ideological argument that might take a stance on whether the public sector and private sector should be same or different. Public sector accounting is not neutral (Guthrie, 1999) and whilst such ideology may provide succour to its advocates, it provides a poor substitute for empirical evidence relevant to the question of what change to accounting systems should be implemented in GGS organisations. Although this seems unsurprising (perhaps as unsurprising as the dearth of advocates arguing that private sector accounting should have converted to systems derived in the public sector) it does add strength to the literature that has questioned the single conceptual framework that aims to satisfy both private and public sectors' financial accounting needs (a large literature now exists on this debate; an overview of the debate is captured in: Newberry, 2001; Barton 2002; Carnegie and Wolnizer, 2002; and, Newberry, 2002a).

9.3.3.2 Including public sector managers in accounting change

If the history presented here demonstrates the need to recognise differences between the public and private sectors, it equally demonstrates that accounting change within the public sector needs to be inclusive of public sector managers as change is being debated and subsequently as it is being implemented. In the NSW case, the debate prior to political commitment to change was very short and largely without input from public sector managers. The role of these managers and their professional accounting staff only came to the fore at the time of implementation (still when the accounting profession was largely absent). In the void created by the profession, the public sector and the management consultants laboured to progress the reform. The implication arising from this observation is that these implementation efforts might have been more efficacious if public

⁷³ This point is recognised by the International Public Sector Accounting Standards Board in its decision to accord priority to a project to determine a conceptual framework for public sector accounting. However, the tendency to seek dominance of the private sector standards is reflected in an action to fulfil one of the IPSASB's strategies requiring its to "work collaboratively on the public sector conceptual framework project to ensure divergence between the ASB framework and the IPSASB framework only occurs where it is necessary to reflect the differences between the private and public sector" (IPSASB, 2007, p. 35).

sector managers and professional accountants were brought into the change processes more early than was shown in this history.

9.3.3.3 Recognising the epistemic community supporting public sector reform

A significant feature of the history presented here was that an epistemic community materially contributed towards the goal of reforming public sector accounting. This was a marked change to the long periods of disinterest in such matters and there is no evidence of preparation by the public sector for this change. Given the substantial and international resource base of the epistemic community, it is important for makers of public policy to be aware of vested interests and interconnections of consultants, professional public servants and supra-national coordination bodies (such as IFAC, World Bank, OECD, IMF and INTOSAI). Awareness of these various elements of the epistemic community and their involvement with prior reforms might assist policy makers in better analysing and testing arguments and data presented during the advocacy of future change. Such awareness could be built upon an empirical analysis of individual and organisational members of the epistemic community interchanges although such analysis is apparently an outstanding project (refer below, Section 9.6).

9.3.3.4 Providing technical competency to GGS organisations prior to significant reform

The history presented here demonstrates a government that used reform as a means of redressing a competency gap in its public sector. However, that reform process was dependent upon technical skills and so the competency gap was filled by consulting firms. That process was problematic in that the issues noted above (Sections 9.3.3.1 and 9.3.3.2) deflected the impact of the whole-of-government reform. The policy implication arising from this observation is that GGS organisations require technical competencies before embarking on accounting reform processes rather than relying on the reform *per se* to generate those competencies. This is a human capital issue that may not be solved through the widespread importation of staff from outside the GGS since such new staff are unlikely to possess the cultural values of various GGS organisations. Other, non-accounting reforms based on whole-of-government change but necessitating new skill sets are equally exposed to this implication. Such reforms may be based on

technological change, altered client-department relations, jurisdictional change, legislative change and similar.

9.3.3.5 Expecting the unpredicted in accounting reform

A significant implication arising from the accrual accounting history is that the outcome of accounting reform may differ from the predicted change. Where isomorphic change is sought across disparate GGS organisations, typically because it is some form of whole-of-government reform, there should be recognition that mimetic, normative and coercive forces may each have some distortional impact on that change. Although change in some form may be achieved, it is probable that the exact dimension of that change will be somewhat different than the expected alteration. This implication is consistent with a large body of literature dwelling on accounting change and thus is not surprising. Nevertheless, it should serve to remind policy makers that constant supervision and adjustment to change processes is required. A ‘set and forget’ strategy that embarks upon accounting reform in large organisations such as GGS departments seems to characterise approaches taken in a number of public sectors around the world in reforms now commonly grouped as ‘New Public Management’. Sometimes those reforms are recognised as having been deflected from their intended purpose and are curtailed (notably performance reporting reforms are in this category; see for example: Carlin and Guthrie, 2001; Christensen, 2008). More commonly the reforms appear to be privileged against subsequent assessment and cost-benefit scrutiny (Humphrey, 2005). As noted by Humphrey, this message carries “significance not just to accounting researchers but also to researchers from other disciplines, where perceived or actual gaps in technical knowledge and experience can cause people to be overly accepting of accounting-based management reforms” (2005, p. 476).

Some of the policy implications outlined here have resonance in respect to the managerial impact of accrual accounting at an individual organisational level as shown in the experience of the single case examined. Those experiences were detailed in Chapters 7 and 8. They, and their implications, are discussed next.

9.4 A CASE STUDY ON THE MANAGERIAL IMPACT OF ACCRUAL ACCOUNTING

Arising from the case study and within an organisational learning framework, a number of conclusions regarding the effect of accrual accounting have been identified. The picture that emerges is mixed: on the one hand accrual accounting has had very little impact on decision making other than in respect to physical assets but it has significantly altered the accounting systems and external reporting. In this section the overall picture is summarised and the implications arising are discussed.

9.4.1 Main findings

As noted in Chapter 3, the management science school of organisational learning presents a framework consisting of four parts in order to understand changes that might impact on managerial decision making. Those four parts are three processes (information gathering, information distribution and information interpretation) and one construct (organisational memory). Within those four aspects of organisational learning, this sub-section summarises the main findings regarding the impact of accrual accounting as detailed in Chapters 7 and 8.

Information acquisition: accrual accounting has impacted on information acquisition in that it requires additional data sets to be gathered. For example, under a cash accounting regime, information as to assets' identity, value and condition can be easily lost or difficult to collate from records that are held outside the formalised accounting system. The case study demonstrates that with the move to accrual accounting, this information was systematically gathered and held in a manner that makes it reasonably available to senior managers and external stakeholders such as politicians and central government agencies.

Information distribution: The case study shows that although an increased set of information is gathered as a result of accrual accounting, the distribution of that additional information is remarkably narrow. This finding is even more notable because concurrent with the accrual accounting developments, the opportunity was taken to significantly improve distributed databases and an Executive Information System such that many managers have access to wide ranges of information. Rather than those improved information distribution systems being

used to promulgate changes in accrual-based accounting information items, the observation from this research was that most such information resided in specialist areas. Those specialist areas are within Head Office and are staffed by experts who focus on specific issues such as assets or compliance with accounting standards and are responsible for reporting that information to external stakeholders. Reports produced on either a routine or an exception basis and that contain accrual-based information are not in use. Whilst that information is known to the accountants, it is not deemed to be significant enough to warrant regular or exception-based reporting to managers⁷⁴. Thus the information distribution changes caused by accrual accounting are very narrow and not in line with the expectations created by its advocates at the time when accrual accounting was being debated.

Information interpretation: At the lowest levels of management, accrual accounting has made no difference to information interpretation. This is largely a result of the fact that discretionary expenditure controlled at that level of management is only about 15-20% of total expenditure occurring in their cost centres and that the accounting system used at that level of management has remained cash-based. Allocations are made on a cash basis and monitoring of expenditure against allocations is also conducted on a cash-basis from a ledger which is adjusted by eliminating accrual items. At both the middle and highest levels of management, similar conclusions are reached: accrual information is largely ignored since it does not address organisational core objectives or relate to adverse environmental changes impacting on organisational performance. Compelling evidence of the absence of accrual accounting information interpretation in the case study is that loss of market share has continued unabated and, in the various organisational responses to that challenge, accrual-based accounting information has not been of relevance. However, accrual-based building asset information is an exception in that it has been put to some use. In the case of buildings, imputed depreciation expenses are used in the whole of life costing for buildings being procured under Privately Financed Project (PFP) arrangements. Additionally, a second impact is that periodic revaluations (done

⁷⁴ The singular exception to this observation is that depreciation is reported to the Department's Executive as one line in a financial statement but without commentary or explanation.

using a category-based valuation system in which classes of buildings are valued as groups on a square metre basis) are used by senior managers when negotiating with Treasury and inter-governmental agencies on asset maintenance and renewal strategies. These building valuations are given meaning in such negotiations but that meaning is disputed and the expected use of the information⁷⁵ did not take place because of restrictions in the disposal of assets. Thus access to information on the value of assets has not resulted in different asset *use* decisions.

Organisational memory: Despite the vastly improved managerial accounting database now available on a distributed basis, there has not been significant change to organisational memory arising from accrual accounting. Primarily this is because the essential elements of accrual information are not important to the achievement of core organisational objectives. Information such as depreciation expense, accumulated depreciation, written down value, gain or loss on sale, total liabilities or net equity do not carry any decision-relevant value and so it is not retained nor reported other than in annually used systems to generate external financial reports. Thus whilst organisational memory has changed through the creation of an additional information (for example in respect to property developments there are now two general ledgers maintained) that information is not being brought to bear on decisions. In addition, accounting skills have increased because of the employment of an increased number of accountants and so organisational memory has altered as a consequence of that change of personnel.

The managerial impact, as viewed from an organisational learning perspective, is mixed but underwhelming. In brief, accrual accounting has been found to have altered information gathering in that it has increased the range of information acquired. However, information distribution and interpretation have both only been marginally touched by accrual accounting whilst organisational memory has altered but mostly only in the shape of an increased number of accountants being on staff. Thus, the overall conclusion from this research project is that accrual accounting has had a mixed impact but it has been markedly less revolutionary

⁷⁵ Advocates of accrual accounting argued that it would provide information to allow resource allocation decisions that would maximise resources applied to tasks by taking advantage of over-valued and/or under-utilised assets.

than was promised by its advocates. On the operational level, it has had little impact on the decisions and considerations made by line managers. However, at a more strategic level dealing with asset procurement, it has had some impact on managerial considerations: they are now aware of data sets dealing with future non-cash impacts on operating expenses arising from asset-related decisions. Since accrual accounting is shown to have failed to achieve significant improvement to public sector management, questions arise as to whether the reform advocates' expected improvements in efficiency and accountability could have been achieved in other (non-accounting) ways. Further, such possibilities may have avoided the complications and increased costs that have resulted from the introduction of accrual accounting. Descriptive explanations of those possibilities are beyond this research project but the implications for policy practice and future research are next described.

9.4.2 Policy implications

The findings of this research provide a stark contrast to the normative expectations of the advocates of accrual accounting in the GGS. The expected quantum improvement in management of scarce public sector resources is absent notwithstanding the strong pressures on public sector managers (and their desire) to deliver improvements in efficiency and effectiveness. Given the large discrepancy between promise and delivery, a number of observations with implications for future policy can be made.

9.4.2.1 An alternative model of accrual accounting

At the core of a commercial model of accrual accounting stands the matching principle which asserts a causal connection between expenses and revenues. Whilst the matching principle is essential for the calculation of an accrual-based profit or loss it can erroneously impact on accounting measures in organisations where there is not a causal relationship between expenses and funds received to pay for those expenses (Monsen, 2002; Carnegie and West, 2005). Such is the case in most GGS organisations where services are provided without a direct charge to the recipient of those services. Additionally, these organisations typically manage, on behalf of the government, substantial facilities that are required in the delivery of those services. In a commercial model of accrual

accounting, those facilities are recorded as assets of the business that controls them. Control is a feature of ownership which in turn depends on whoever possesses (a) usage rights; (b) benefits derived from the asset; and, (c) rights to dispose the asset (Pallot,1990). GGS organisations typically do not possess the last two of those rights or they are mostly curtailed for materially significant facilities (although those rights do reside with the government). Thus, a very significant literature⁷⁶ argues that when applied to the public sector, the commercial model of accrual accounting is consequentially flawed (in particular, authors such as Barton, Carnegie, Funnell, Pallot, West and Wolnizer have been vocal on this point). At the very least this implies that an alternative model of accrual accounting needs to be applied to the GGS⁷⁷. Whilst a critique of particular models of public sector accrual accounting was not the aim of this project, it is nevertheless important to note that one implication arising from it is that an alternative model of accrual accounting is needed in order to improve associated managerial decision making.

9.4.2.2 Non-accounting reform alternatives

The findings of this project suggest that alternative reforms of a non-accounting nature might have achieved asset management improvements in a least cost and more direct manner than has been delivered by accrual accounting. In essence, this contention was in the minds of senior managers who seized on the funding opportunity afforded by accrual accounting so as to develop the Asset Management System under the guise of accrual accounting. Thus, the significant investments in system development and data gathering, as required for creation of the Asset Management System, could have produced the same benefits without necessitating accrual accounting. The resultant comprehensive asset registers and computer-distributed management information systems would have provided a more direct route to managerial improvements focussed on asset management. Those improvements would have been achieved within the constraints of typical GGS asset use (the prime constraint being that disposal of land and buildings is

⁷⁶ For a broad survey of the literature between 1981 and 2005, refer to Chapter 2 and Christensen (2007).

⁷⁷ Perhaps sympathetic to this perspective, in September 2008 the International Public Sector Accounting Standards Board issued a discussion paper as its first stage of developing a public sector accounting conceptual framework.

substantially limited) and they could have been achieved without the recurring effort of arriving at valuation estimates for each asset. Such valuation estimates have consumed significant resources, yet they are of little utility to GGS managers who do not have decision choices dependent upon asset valuation information. The strong implication arising from this observation is that the periodic asset (re)valuation exercises can be discontinued without damaging the usefulness of asset registers and their contributions to strategic and operational decision making. Such a move would at least in part redress the added cost of operating GGS accounting systems that has resulted from the implementation of accrual accounting although it would also mean discontinuing compliance with the current model of accrual accounting. In turn however, NSW would be unable to participate in comparative data analysis with other State Governments – unless those Governments also recognise that their GGS organisations are also not being well served by the current model of accrual accounting.

9.4.2.3 Matching accounting change to organisational characteristics

One of the factors contributing to GGS managers' disappointment in accrual accounting is the organisational characteristic whereby a GGS organisation is severely constrained in its ability to swap assets. As an example in the case study, the educational land use zoning of land and buildings means that these assets cannot be easily sold and converted into other means to achieve strategic objectives. Such a characteristic is familiar to many public sector managers such as those charged with delivering defence, cultural and even transport services – to mention just a few. Indeed, this issue is central to the controversy about the applicability of accrual accounting to the public sector (refer contributions by Carnegie and Wolnizer, 1995; 1997; and, 1999; and Carnegie and West, 1997). Thus, unique GGS characteristics (such as the educational nature of the Department's *raison d'etre*), also necessitate adjustments to any accounting system that can provide meaningful information to managers – especially accounting systems that have been derived from organisations without a comparable core purpose. Thus a significant implication arising from this research is that the transfer of unmodified accounting systems from organisations with substantially different organisational characteristics is likely to cause dysfunctional outcomes. Instead, it is important to match accounting change to the

dominant organisational characteristics including its values, structure and objectives.

9.4.2.4 A ‘trickle down’ managerial change strategy may fail

The advocates for accrual accounting argued that managerial change would result from changes imposed from the centre of government. Explicit in their views were the expectations that managers of GGS organisations would respond by altering the ways in which they make decisions. However, it has been shown that significant factors may intervene with the effect of isolating managers from the ‘outside’ change. Hence a GGS organisation may succeed in implementing accrual accounting by centralising its operation in Head Office functions so insulating the vast majority of managers from any consequential impact. The significant implication arising from this observation is that to expect whole-of-government change to cause equivalent and predictable change at a GGS organisational level without mediation or deflection by organisational characteristics (such as values, structure and objectives) is unrealistic. Instead, it would be more realistic to expect a range of outcomes that should unavoidably include the possibilities that either no change would ‘trickle down’ or some unpredictable change may eventuate.

9.4.2.5 Little prospect for managerial improvement from accrual accounting

Four factors mean that accrual accounting in GGS agencies is unlikely to be able to result in improved organisational learning. First, non-cash expenses are not controllable by most GGS managers and so they hold little relevance to them. Second, where Treasury gives priority in its control over GGS agencies to cash rather than accrual measures, cash flows will always take precedence in managers’ considerations of internal accounting reports. Third, restrictions on asset deployment mean that most GGS agencies are unable to take advantage of asset value fluctuations in order to maximise their achievement of primary goals, thus accrual-based measures such as written-down value or total net assets (organisational equity) are artificial constructions of no interest to managers. Fourth, whilst separate GGS agencies are managed as goal-seeking organisations, they are in reality merely convenient administrative functionaries of the relevant government and are not separate entities meeting the entity concept (Challen and

Jeffery, 2005). Unless the GGS as a sector undergoes radical change that alters these four factors, it is difficult to envisage how accrual accounting can offer information of significant added-value to GGS managers. Such radical change would challenge the fundamental principles that have long been the rationale for GGS agencies around the world. Radical reforms that take democratic controls from elected parliaments and transfer them to unelected bureaucrats are now meeting scathing critiques (see for example Funnell, 2001a) and so would seem unlikely although not entirely without prospect.

Appreciation of the significance of the implications noted in this section requires assessment of the inherent limitations of the research and those limitations are discussed next.

9.5 LIMITATIONS

As a body of work, this project has reported its findings in two parts: a history and a case study. By adopting different methodologies in each part, the course was set to accept limitations arising in each and this section canvasses these limitations.

9.5.1 Historical study qualifications

As an historical study, this work has had to make choices regarding at least three matters: boundary of the topic in time and scope; data sources; and, interpretative frame. Each of these unavoidable choices implies qualifications that need acknowledgement in order to better appreciate the credence of the project's findings. The time aspect of first choice has placed this project chronologically close to the events being studied in that only 12 years have passed since the end of the period studied. This may later be seen to harm the history in that data sources and perspectives may be missing. With a longer perspective afforded by the passage of time, it may be that alternative perspectives and additional data sources will become available to future historians. However, the project's time choice (and its scope limitation to a single jurisdiction) perhaps increases its practical relevance to present times.

Partly as a means of dealing with the boundary qualification, this history has made use of oral sources to complement known and available archival sources. Thus the second choice (data selection) has also generated limitations to the project. Whilst

oral histories provide rich sources of data they are not entirely free of associated risks arising from interviewees' inadequate recollection of events and/or their altered current-day perceptions of those events. An associated but additional limitation that needs to be acknowledged is that some of the oral history data may have been self-serving to the interviewees. Equally, there may be archival data that is unknown to this project. However, a potentially more significant limitation compared to the acknowledged data limitation arises from the third choice: a credible interpretative frame. The concepts of institutional theory, the contingency model of accounting change and epistemic communities have proven useful armoury with which to interpret the data in this project but they are not the exclusive means available now, or in the future, to better understand the public sector accrual accounting phenomena. As a result of these limitations, the recognition needs to be made that there is no single history of any selected set of events – including those presented in Chapter 5. Future historians will most likely use different or similar data (in response perhaps to the limitations noted above) and may well choose alternative interpretative schema.

In addition to the generic historiographic limitations acknowledged above, mention need be made regarding specific limitations to the study. First, the selection of NSW as a boundary definer may be myopic in that NSW is a State within a Federation and so its ability to be independent of events in other Australian jurisdictions is somewhat circumspect. Second, as an early adopter, NSW may reflect different factors than will be relevant in other jurisdictions. Third, the analysis offered in this project covers the period 1976 to 1996. Further and differing conclusions may result from future studies that address later periods.

Notwithstanding the limitations noted here, the project has heeded Cannan's (1912) warning to pay attention to relevance towards practical controversies. Although a single history of NSW accrual accounting adoption should not be expected, the benchmark to apply is whether the particular history presented here has assisted in enlightening an understanding of the second part of the project: an analysis of the impact of accrual accounting on managerial decision making. To help assess performance against that objective, it is important to recognise limitations to that part of the study as next discussed.

9.5.2 Managerial impact study qualifications

The driving issue behind this research project, as noted in Chapter 1, was the interest in whether accrual accounting as applied increasingly by public sectors around the world, has impacted on managerial decision making. As noted in Chapter 4, a single site field study was selected as a suitable methodology since the research represents an exploratory study of a relatively recent phenomenon within its real-life context. A theoretical framework was provided by the management science school of organisational learning. Chapter 4 has already acknowledged limitations arising from those methodological and theoretical choices but additional idiosyncratic limitations of the NSW case study also need recognition.

First, the nature of a department's reaction to accrual accounting may not be uniform in other GGS organisations – that is, the core values (Laughlin's (1988; 2007) 'sacred' values) will differ across other GGS organisations and so their impact on accrual accounting and other accounting reforms may also be observed to be different. For example, a GGS organisation with a purpose more amenable to purchaser-provider arrangements may experience accrual accounting differently than did this particular case. Thus the ability to generalise from this research to other NSW GGS organisations may be impeded and to generalise to other jurisdictions may be even less appropriate. However, notwithstanding that limitation, a reasonable inference (consistent with a wealth of management accounting literature) is that accrual accounting is likely to cause an unanticipated outcome when applied to a GGS organisation. Second, given that a threatening external environment dominated in this case (refer Chapter 6), it is possible that the findings of this research may not be applicable to organisations with more stable environments. Third, it has been shown that the public sector application of accrual accounting is challenged when dealing with assets, and since the particular case studied has a large stock of buildings and land, it is possible that this deficiency of accrual accounting has provoked a reaction in ways that may not be so prominent in other GGS organisations. Primarily, this may be reflected in the strongly centrist implementation and operation modes adopted. A more decentralised approach to accrual accounting may be characterised by different managerial impacts.

A number of the limitations noted here point naturally towards an agenda of future research opportunities. These opportunities are discussed next.

9.6 AN AGENDA FOR FUTURE RESEARCH

As noted in Chapter 2, the topic of public sector accrual accounting has been subject of increasing levels of interest amongst accounting and management academics. Several opportunities for fruitful research stem from this research.

First, comparative and historically informed studies of educationally-focused GGS organisations' accrual accounting adoptions in other jurisdictions could be undertaken. These studies would throw light on whether the central findings here were unique or were attached to the nature of accrual accounting in a GGS educational context. However, crucially important in such studies is the need to specifically address the question of how accrual accounting has impacted on managerial decision making in other organisations with an educational purpose.

Second, further studies in other Australian GGS organisations – both in and out of NSW – would assist in moving this research from being an exploratory study to a body of work with more to say about public sector accrual accounting *per se*. By examining the impact of accrual accounting in a wide range of GGS organisations, a broader understanding about public sector accrual accounting at an organisational level will be possible.

Third, internationally comparative studies across jurisdictions where different models of accrual accounting have been applied would be worthwhile. In particular, studies structured so as to compare an early-adopter with a late-adopter could develop our body of knowledge not just about accrual accounting but also about processes of change in governmental accounting.

Fourth, there is merit in analysing how the move to public sector accrual accounting has affected the accounting profession and its efforts to defend and grow its influence in society. In analysing this question, further studies in different jurisdictions would provide broader understandings of what has become an international phenomenon. Similarly, additional studies focused on that issue in conjunction with analysis of how epistemic communities have been influential in

promotion and adoption of accrual accounting would improve knowledge as to how accrual accounting has been constituted as an enabling technology that has been associated with subsequent public sector reform. Depending on researchers' interest and the historical data, a useful focus of such enquiries might be on the influence of the international consulting companies across national borders.

Although the agenda of research on the managerial impact of public sector accrual accounting is clearly unfinished, it would be misleading to dismiss it as being completely an empty void. The literature is rapidly changing and a number of studies within the abovementioned four themes are either in progress or are now emerging. However, as urged by Humphrey (2005, p. 483), "it is time that public sector accounting reform attracted more substantial attention" and at the forefront of that effort should be empirically rich assessments of the impact of accrual accounting in those parts of the public sector in which the 'fit' of accrual accounting seems most problematic: the GGS.

9.7 IMPLICATIONS: REINFORCING TWO CALLS TO ACTION

This research set out to provide a historically-based and organisationally contextual account of two issues: why public sector accrual accounting was adopted within the NSW GGS and how it has impacted on managerial decision making. Since the project began with intellectual curiosity and without preconception, its approach has been to avoid polemics and doctrinaire argument. However, at its stage of completion, the project lends its weight to reinforce two calls for action. These calls are first, to rectify the impact of recent reforms to the public sector; and second, to combine historical study with case study analyses of the present in order to deal with the future.

The first call to action reinforced by this project emerges from researchers who are convinced that New Public Financial Management reforms are not meeting the needs of the public sector, government or citizens. Thus there is a need to change public sector accounting systems where that change can reduce the disappointments of the NPFM (Olson et al., 1998) reform suite in which accrual accounting holds a prominent position.

Before the accrual accounting adoptions increased in the early 1990s, the late June Pallot had the prescience to warn that “we need to look seriously at the nature of non-profit organisations, and accounting for them, before applying concepts developed in the commercial sector where they do not fit” (1990, p. 80). Although Pallot’s words of warning have still not been heeded by policy makers, her early work can now be seen as a foundation to the necessary way forward for successful change in public sector accounting systems. Development of new public sector accounting solutions with greater success than the prior reforms appears to require three elements. First, following from Pallot’s (1992) early work and subsequently elaborated by others, it is important to recognise that many public sector assets are unique and so differ in nature to private sector assets, in particular where non-exclusive property rights are present. Second, it will be necessary to reject the assumption that differences between public and private sector objectives and processes are immaterial to the accounting standards and systems deployed in the public sector. Third, public sector accounting systems need to recognise a distinction between management accounting and financial accounting; that is, different data sets and conceptual frameworks are needed in order to meet the demands of managers and external stakeholders.

With those three elements, the call to action for reformed public sector accounting may at last achieve progress. If it were able to do so, at least two significant advantages would result. First, solutions may emerge to “perhaps the biggest technical debacle in Australian standard setting” (Carnegie and West, 2005, p. 921). Second, instead of public sector accounting systems being an overhead with only marginal relevance, they could (in conjunction with non-accounting technologies) become cost-effective tools for managers in their decision-making roles and for citizens and stakeholders with accountability needs that are currently unsatisfied.

These are clearly the ‘big issues’ that public sector accounting must address if it is to respond to the evidence that accrual accounting has not achieved the strong claims of improved managerial information that underpinned the expensive effort to achieve its implementation.

The second call to action reinforced by this project is that historical research should, where required, be combined with in-depth analysis of the present in order to maximise the potential benefit of both types of research. This call emerges from the justifications presented by historians in reflecting upon the state of their craft but receives scant attention from researchers who do not possess an attuned sympathy towards historical research. Whilst not arguing that case study analysis in the absence of historical perspectives is fruitless, the strong claim here is that combining historical research with case study analysis of ‘the now’ can produce the richest understandings that best equip us for the future.



APPENDIX 1: Definitions

<i>Accrual accounting</i>	“A basis of accounting under which transactions and other events are recognized when they occur (and not only when cash or its equivalent is received or paid). Therefore, the transactions and events are recorded in the accounting records and recognized in the financial statements of the periods to which they relate. The elements recognized under accrual accounting are assets, liabilities, net assets/equity, revenue and expenses.” (IPSAS 1, 2000, Para 6): International Public Sector Accounting Standard IPSAS 1 <i>Presentation of Financial Statements</i> (2000)
<i>Asset</i>	Instruments or entities over which ownership rights are enforced by institutional units and from which economic benefits may be derived by holding them, or using them, over a period of time. Two types of assets are distinguished: financial and non-financial. (ABS GFS, 2000, p. 44)
<i>Big Eight</i>	The eight largest accounting firms during the early 1980s; then being: Arthur Andersen & Co.; Arthur Young & Company; Coopers & Lybrand; Ernst & Whinney; Deloitte Haskins & Sells; Peat Marwick Mitchell; Price Waterhouse; and, Touche Ross.
<i>Big Six</i>	The six largest accounting firms during the 1980s; then being: Arthur Andersen & Co.; Coopers & Lybrand; Deloitte Ross Tohmatsu; Ernst & Young; KPMG Peat Marwick; and, Price Waterhouse.
<i>Cameral accounting (also known as Fund Accounting)</i>	A system of bookkeeping, registering and controlling in which budgetary appropriations from Parliament are recorded and expenditures of those appropriations are authorised and recorded. Receipt of the appropriations and occurrence of the expenditures are recorded when cash changes hands.
<i>Double entry bookkeeping</i>	A system of recording accounting transactions with corresponding debit entries and credit entries of equal value against accounts that can be classified as sources and uses of funds. The mathematical integrity of the dualistic aspects of double entry bookkeeping can be established, through preparation of a trail balance, by reference to the accuracy of the accounting equation. (O'Regan, 2004, p. 97))
<i>Fund accounting</i>	Refer Cameral Accounting.

Appendix 1

<i>General Government Sector (GGS)</i>	The “sector comprising resident public institutional units which are mainly engaged in the production of goods and services outside the normal market mechanism for consumption by governments and the general public. Costs of production are mainly financed from public tax revenues. Goods and services are provided free of charge or at nominal charges well below costs of production.” (ABS, 2000, p. 45). In this thesis, the GGS is taken to exclude Government Business Enterprises.
<i>Government Business Enterprise</i>	An entity that has all the following characteristics: (a) Is an entity with the power to contract in its own name; (b) Has been assigned the financial and operational authority to carry on a business; (c) Sells goods and services, in the normal course of its business, to other entities at a profit or full cost recovery; (d) Is not reliant on continuing government funding to be a going concern (other than purchases of outputs at arm’s length); and (e) Is controlled by a public sector entity. (IPSAS 22, 2006, pp.7-8)
<i>Government Finance Statistics (GFS)</i>	“Statistics that are compiled by summarising the individual stocks and flows of governments and organising them into meaningful categories appropriate for analysis, planning and policy determination.” (ABS, 2000, p. 45) GFS are prepared in Australia in accordance with 5514.0 Government Finance Statistics: Concepts, Sources and Methods (ABS 2005) as derived in part from the IMF Manual on GFS, 1986.
<i>Information acquisition</i>	The first process of organisational learning whereby an organisation obtains new information allowing it to form an increased range of options from which to select in its reactions to its environment.
<i>Information distribution</i>	The second process of organisational learning in which information is shared within the organisation.
<i>Information interpretation</i>	The third process of organisational learning in which information is given one or two commonly understood meanings.
<i>Management consultant</i>	a professionally qualified and recognised entity, offering advice that is focussed on problem solving and is commissioned on a project basis (Corcoran and McLean, 1998, pp.38-39)
<i>Net Cost of Services</i>	Total expenses less user charges revenue and other revenues retained by agencies, measured on an accrual basis
<i>Organisational learning</i>	The means by which an organisation is able to change its range of potential behaviours.
<i>Organisational memory</i>	Stored information held in human or non-human repositories that can be used in current decision-making and is an important construct that emerges from the three processes of organisational learning.

A2

APPENDIX 2: Public Sector Accrual**Accounting Literature**

<u>Source</u> ¹ = historical source document for the NSW case	<u>Type:</u> O (official); A (academic); I (industry); H (history)	<u>Advocacy:</u> F (for); A (against); C (change); Q (question)	<u>Assets</u>	<u>Standards:</u> N (neutral) S (specific)	<u>Impact prediction:</u> I (internal) E (external)	<u>Thematic</u>
Pre-NSW Implementation:						
Mautz (1981)	A	A	✓	S	E	
Shand (1983)	O	F		S	I, E	
Sutcliffe (1985)	O	F	✓		I, E	
Carpenter (1986) ¹	O	F	✓		I, E	
Hopper (1986)	A	A		S		✓
Egol (1987a) ¹	I	F		N	E	
Regan (1987a) ¹	I	F		N	E	
Carpenter (1987a) ¹	O	F	✓	S	I, E	
Carpenter (1987b) ¹	O	F	✓	S	I, E	
Humphry (1987) ¹	O	F		N	E	
Robson (1987) ¹	O	F		N	E	
Walker (1987) ¹	I	F	✓	N	E	
Auditor-General's Office of NSW (1988) ¹	O	F	✓	N		
New South Wales Commission of Audit (1988) ¹	O	F		N	I, E	
NSW Public Accounts Committee (1988) ¹	O	F		N	I, E	
Mautz (1988)	A	A	✓	S	E	
Humphry (1989) ¹	O	F	✓	N	E	
Prosser (1989)	I	F		N	E	
Walker (1989)	A	Q		S	E	
Groom (1990)	O	F			E	
Pallot (1990)	A		✓	S		
Ryan (1990)	I	F		N	E	
Shand (1990)	I	F		S	E	
Allan (1991) ¹	O	F	✓			
Balding (1991) ¹	I	F	✓		I	
Scullion (1991)	O	F			I, E	
Barrett (1992)	O	F		N	I, E	
Churchill (1992a)	I	Q		N	E	
Churchill (1992b)	I		✓			
DioGuardi (1992)	I	F		N	E	
Lambert (1992)	O	F			I, E	
Ma (1992)	A	A	✓			

Appendix 2

<u>Source</u> ¹ = historical source document for the NSW case	<u>Type:</u> O (official); A (academic); I (industry); H (history)	<u>Advocacy:</u> F (for); A (against); C (change); Q (question)	<u>Assets</u>	<u>Standards:</u> N (neutral) S (specific)	<u>Impact prediction:</u> I (internal) E (external)	<u>Thematic</u>
Micallef (1992)	O	F		N	I, E	
NSW Public Accounts Committee (1992) ¹	O	F		N	I, E	
Pallot (1992)	A	A	✓	S	E	
Rutherford (1992)	A	Q		S		
Sharpe (1992)	I	F		N	I, E	
Working Party on Accrual Accounting (1992)	O	Q	✓		E	
Carpenter (1993)	O	F	✓	N	E	
Ma and Matthews (1993)	A	A	✓	S	I, E	
Mackintosh (1993)	I	F		S	E, I	
Redburn (1993)	O	F		N	I, E	
Roberts (1993)	I	F		N	E	
OECD (1993)	O	F		S	E	
Post-NSW Implementation:						
1994						
Aiken (1994)	A	C	✓	S	I, E	
International Federation of Accountants (1994)	I	F	✓	N	E	
Ball (1994)	O	F		N	I, E	
McCrae and Aiken (1994)	A	C	✓	S		
Micallef et al., (1994)	O	F	✓	N	E	
Pallot (1994)	A	F		S		
1995						
Carnegie and Wolnizer (1995)	A	A	✓			
Walker (1995c)	A	Q		S	E	
Ryan (1995)	H (Aust)					
1996						
Burritt et al., (1996)	A	A	✓	S		
Clark-Lewis (1996)	O	A		N	E	
Conn (1996)	I	Q		N		✓
Mellet and Williams (1996)	A	A		S		✓
Mellor (1996)	O	F		N		
NSW Public Accounts Committee (1996)	O	F		N	I, E	
1997						
Boorrsma and Mol (1997)	A	Q			E	
Bradbury (1997)	O	F		N		
Carnegie and Wolnizer (1997)	A	C	✓			
Coplet et al., (1997)	A	F		S	E	
Jones and Puglisi (1997)	A	A			I, E	
Micallef (1997)	O	F		N		

<u>Source</u> ¹ = historical source document for the NSW case	<u>Type:</u> O (official); A (academic); I (industry); H (history)	<u>Advocacy:</u> F (for); A (against); C (change); Q (question)	<u>Assets</u>	<u>Standards:</u> N (neutral) S (specific)	<u>Impact prediction:</u> I (internal) E (external)	<u>Thematic</u>
Micallef and Peirson (1997)	A	F	✓			
Pallot (1997)	A	Q	✓	S	I	
1998						
Barton (1998)	A	C	✓	S	I	
Brorstrom (1998)	H (Sweden)					
Funnell and Cooper (1998)	A	C	✓		I, E	
Guthrie (1998)	A/H (Aust)	A		S	I, E	✓
Jones (1998)	A	Q		N	E	
McSweeney and Duncan (1998)	A					✓
Perrin (1998)	H (UK)					
Robinson (1998a)	A	C		S	I, E	
Robinson (1998b)		C		S	E	
Ryan (1998)	H (Aust)					
Stanton and Stanton (1998)	A	A	✓	S	E	
1999						
Ball et al., (1999)	I	F			I, E	
Barton (1999a)	A	C		S		
Barton (1999b)	A	C	✓			
Carnegie and Wolnizer (1999)	A	C	✓			
Guthrie (1999)	A/H (Aust)	A		S	I, E	✓
Johnstone (1999)	A	C	✓	S	I	
McGregor (1999)	I	F	✓	N		
Miley (1999)	I	F		N	E	
Ng and Shead (1999)	A	C	✓		E	
Parker and Gould (1999)	A	C		S	E	
Potter (1999)	H (Aust)					
Ryan et al., (1999)	H (Aust)					
2000						
Barton (2000)	A	C	✓	S		
Bartos (2000)	O	F				
CPA Australia (2000)	I	F		N	E	
Likierman (2000)	O	F			I	
Mignot and Dolley (2000)	A	F			E	
Pilcher (2000)	A	C	✓		E	
2001						
Carlin and Guthrie (2001)	A	C	✓		I, E	
Ellwood (2001)	H (UK)					
Karan (2001)	A	A		S	E	
Monsen and Nasi (2001)	A	A		S	E	
Newberry (2001)	A	C	✓	S		
Thompson (2001)	A	Q	✓		I	
2002						
Ball (2002)	O	F		N	E	
Barton (2002)	A			S		

Appendix 2

<u>Source</u> ¹ = historical source document for the NSW case	<u>Type:</u> O (official); A (academic); I (industry); H (history)	<u>Advocacy:</u> F (for); A (against); C (change); Q (question)	<u>Assets</u>	<u>Standards:</u> N (neutral) S (specific)	<u>Impact prediction:</u> I (internal) E (external)	<u>Thematic</u>
Carnegie and Wolnizer (2002)	A	Q	✓			
Christensen (2002)	H (NSW)					
Edwards et al., (2002)	H (1820s; England)					
Mellett (2002)	A	A		S		✓
Monsen (2002)	A	A		S		
Newberry (2002a)	A			S	E	✓
Newberry (2002b)	A					✓
Potter (2002)	A	A	✓	S	E	✓
Robinson (2002a)	A	Q		S	E	
Robinson (2002b)	A	C		S	E	
Rowles (2002)	A	F		N	E	
Salinas (2002)	A	F		N	E	✓
2003						
Barton (2003)	A	C	✓	S		
Carlin (2003)	A				I	
Carlin and Guthrie (2003)	A	A	✓	S	I	
Chan (2003)	A	F		S	E	
Ellwood (2003)	A	Q		S	E	
Guthrie et al., (2003)	A	Q		S		✓
International Federation of Accountants (2003)	O	F		N	I, E	
Lüder and Jones (2003)	H (EU)					
Pollitt (2003)	A	A		S	E	✓
Potter (2003)	H (Aust)					
Scott et al., (2003)	H (NSW)					
Stalebrink and Sacco (2003)	A	C		S	E	✓
Wynne (2003)	I	C			E	
2004						
Barton (2004)	A	C	✓	S	✓	✓
Kelly and Wanna (2004)	A	A		S		✓
Newberry and Ellwood (2004)	A	A		S	I, E	✓
Robinson and Harun (2004)	H (Indon.)					
West and Carnegie (2004)	A	C	✓	S	E	
2005						
Barton (2005a)	A	C	✓	S	E	✓
Barton (2005b)	A	C	✓	S		
Carlin (2005)	A	C			E	✓
Carnegie and West (2005)	A	C	✓	S	E	✓
Christensen (2005)	H (NSW)					
Heald (2005)	H (UK)					
Hodges and Mellett (2004)						
Hooper et al., (2005)	A	C	✓	S		

<u>Source</u> ¹ = historical source document for the NSW case	<u>Type:</u> O (official); A (academic); I (industry); H (history)	<u>Advocacy:</u> F (for); A (against); C (change); Q (question)	<u>Assets</u>	<u>Standards:</u> N (neutral) S (specific)	<u>Impact prediction:</u> I (internal) E (external)	<u>Thematic</u>
Humphrey (2005)	A	A				✓
Newberry and Pallot (2005a)	H (NZ)					
Newberry and Pallot (2005b)	A	A				✓
Sheehan (2005)	A	C		S		

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APPENDIX 3: History Timeline

Date	Event
1976	<ul style="list-style-type: none"> Report of the Royal Commission on Australian Government Administration
1977	<ul style="list-style-type: none"> First report of the Review of NSW Government Administration conducted by Professor Wilenski
1983	<ul style="list-style-type: none"> March: Nick Greiner becomes Leader of Opposition
1985	<ul style="list-style-type: none"> Public Sector Accounting Standards Board publishes Research Monograph (no.5) raising, amongst other matters, whether accrual or cash accounting is best for the public sector
1986	<ul style="list-style-type: none"> Victorian A-G (Richard Humphry) argues for AA SA PAC recommends AA for agencies with operating expenses greater than \$5m. Tony Harris (later to become NSW A-G) supports AA for all government in his commentary on ASA Annual Research in Government Accounting Lecture
1987	<ul style="list-style-type: none"> The NSW and Victorian As-G present papers to the PACs Biennial Conference 'Government – A Big Business' advocating AA SA PAC repeats recommendation of AA for 'major asset holding agencies' November: ASA/Andersen Sydney seminar on AA with New York Comptroller (Edward Regan) and Arthur Andersen US Partner & Director of Government Services Industry Program (Morton Egol) as keynote speakers
1988	<ul style="list-style-type: none"> February: NSW PAC convenes 'Accrual Accounting Seminar' (200 attendees) A few days after the PAC Seminar (Moore 1988, p.166), Opposition Leader Greiner outlines his 'management strategy' including AA and a week later Labor Treasurer Booth indicates he is thinking about AA March: Greiner Government elected July: 'Curran Report' published. One term of reference was to advise on "the impact of, and procedures involved in, applying full AA" (New South Wales Commission of Audit 1988). Arthur Andersen commissioned to prepare an appendix on AA for the final report. September: NSW Treasury prepares discussion paper "Recording of Fixed Assets by Departments" in preparation for asset recognition and measurement December: NSW Treasury advises Departments of 3-5 year timeframe to implement AA
1989	<ul style="list-style-type: none"> SA PAC recommends AA for all government agencies in its 1988 Annual Report February: NSW Treasurer writes to NSW Auditor-General noting that "the areas that need resolution are the accounting treatments of non-current assets, particularly community assets and non-income earning assets" (Treasurer, 16 February 1989) May: NSW Treasury send two staff to study NZ progress with accrual accounting May: NSW Treasury Circular (G1989/6) informs Departments of a pilot introduction of accrual accounting in two Departments PSASB issues <i>Exposure Draft ED50 'Financial Reporting by Local Government</i> October: NSW Government formally commits to AA in the Inner Budget sector

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1990	<ul style="list-style-type: none"> • May: Premiers' Conference: NSWG requests a Working party on financial information harmonisation; Premiers establish the Working Party on Government Financial Information (WPonGFI) • September: NSW Treasury releases 'Policy Guidelines for Valuation of Physical Non-Current Assets in NSW Public Sector' • September: NSW Treasury send two staff to study NZ progress with accrual accounting • November: NSW Treasury expresses concern that "departments are not giving this issue (accrual accounting conversion) the importance or urgency that would seem to be warranted in order to ensure success by 1991/92" (Treasury memo, 30 November 1990) • December: NSW Premier meets with Big Six partners seeking assistance • December: PSASB issues AAS27 <i>'Financial Reporting by Local Government'</i>
1991	<ul style="list-style-type: none"> • January: Australian Accounting Research Foundation seeks NSW Treasury comment on the draft discussion paper authored by Sutcliffe, Parker and Micallef "Financial Reporting by Government Departments" • February: NSW Premier announces formation of Treasurer's Accounting Advisory Panel • February: State Treasury Heads set up the Working Party on AA • NSW Treasury issues "Financial Reporting Code Under Accrual Accounting for Inner Budget Entities" • May: Premiers' Conference: receives WPonGFI report recommending an AA Working Party • July: 33 departments produce accrual based financial statements • July: Special Premiers' Conference: sets up Steering Committee for National Performance Monitoring of GTEs and asks it to refine national accounting standards including asset valuation • 1991/92 NSW Budget Paper No. 2 notes 3 year strategy to adopt AA • AARF, PSASB issues <i>Discussion Paper No. 16, Financial Reporting by Government Departments</i> • Special Premiers Conference agrees that the States will move towards uniformity in budget presentation and show a reconciliation of budget results and data on a Government Finance Statistics (GFS) basis (Walker 1995a, p.4) • October: Victorian Government commits to implementing AA
1992	<ul style="list-style-type: none"> • January: All Treasuries decide to fund the PSASB to produce a standard on Departments (Ryan, 1999, p.176) • May: Heads of Treasuries Working Party on Accrual Accounting produce unpublished Commonwealth report 'Accounting and Financial Reporting in the Public Sector'; recommendations appear lukewarm and allow adoption or not; NSW Treasury Secretary Percy Allan later says "its recommendations were not as averse to AA as most of its members were at the outset of the exercise" (Ryan 1995, p.208) • June: AARF issues Exposure Draft ED55 'Financial Reporting by Government Departments' • July: 21 departments produce accrual based financial statements • 1992/93 NSW Budget Papers present 1st 'whole of government' financial report on an accrual basis called 'comprehensive accounting' • September: NSW Treasury establishes Financial Management Reform Consultative Council for the Budget Sector • November: Commonwealth Government commits to implementing AA



APPENDIX 4: NSW Treasury Accrual

Accounting Files Reviewed

File Number	Part Reviewed
T86/2020	1
T87/1303	1
T87/1909	1
T87/2427	1
T88/2026	1
T89/1472	1
T88/1850	1
T88/2026	1
T89/1718	1
T89/1472	1
T89/1675	1
T89/1718	1
T90/1066	1
T90/1247	1
T90/1387	1
T90/1457	1
T90/1524	1
T90/1605	1
T90/1682	1
T90/1697	1
T90/1698	1
T90/1699	1
T90/1815	1
T90/1822	1
T90/1823	1
T90/1824	1
T90/1830	1
T90/1853	1
T90/1857	1
T90/1858	1
T90/1859	1
T90/1860	1
T91/1405	1
T91/1407	1
T91/1529	1
T91/1617	1
T91/1621	1
T91/1625	1
T91/2121	1

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File Number	Part Reviewed
T92/1505	1
T92/1748	1
T92/2004	1
T92/2004	2
T92/2004	3
T92/2004	4
T92/2004	5
T92/2004	6
T92/2004	7
T92/2004	8
T92/2004	9
T92/2004	10
T92/2004	11
T94/1431	1
T95/1872	1
T95/2194	1
T95/2194	2
T96/2228	1

A5

APPENDIX 5: Informed Consent Form

Lismore Campus
PO Box 157
Lismore NSW 2480
Telephone (02) 66 20 3000
Internat. 61+2+66 20 3000
Fax (02) 66 22 1300

Coffs Harbour Education Campus
Hogbin Drive
Coffs Harbour NSW 2457
Telephone (02) 66 59 3000
Fax (02) 66 59 3051

Port Macquarie Campus
140 Horton St
Port Macquarie NSW 2444
Telephone (02) 65 83 7597
Fax (02) 65 84 1627

**University Centres
in**
Brisbane
Clarence Valley
Gold Coast
Sydney
Tweed

AUSTRALIA
<http://www.scu.edu.au>

SOUTHERN CROSS UNIVERSITY**INFORMED CONSENT FORM****Name of Project:**

Identification of causal factors in the implementation of accrual based financial reporting by the NSW Government during the period 1988 to 1996.

You are invited to participate in a study of the NSW Government's adoption of accrual based financial reporting. This research has been approved by the University's Ethics Committee and this note complies with that Committee's requirements. You will be given a copy of this note to keep.

Procedures to be Followed:

A number of individuals who could be said to have been prime agents for change have been identified in the categories of politician, bureaucrat and advocate for change (such as consultants and academics). Each of these individuals is asked to contribute to the research by participating in an interview with the researcher. The interviews are structured around a series of questions that are designed to allow each participant to explain their perceptions of what caused the NSW Government (NSWG) to adopt accrual accounting.

Each interview will be recorded on audio tape to facilitate later analysis and to reduce the length of each interview. Your identity will not be recorded on the audio tape and your privacy will be completely protected.

I estimate the total time required by your participation will be in the order of an hour.

The following information is provided in accordance with Southern Cross University Ethics Committee policy.

Possible Discomforts and Risks

You should not experience any discomfort, inconvenience or risk associated with this research.

Responsibilities of the Researcher

Any information that is obtained in connection with this study and that can be identified with participants in the research will remain confidential and will be disclosed only with their permission.

Responsibilities of the Participants

For this research to be successful it is important that you participate in a natural and purely voluntary manner. Participants are expected to honour the confidentiality of other participants.

Freedom of Consent

If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time. However, I would appreciate you letting me know of your decision.

Inquiries

If you have any questions, you are expected to ask them of me. If you have any additional questions at any time please ask me:

Mark Christensen
Southern Cross University
PO Box 157
Lismore NSW 2480.
Tel. (02) 66203787
Fax (02) 6621 3428

Email: mchriste@scu.edu.au



I have read the information above, or contained in a separate information sheet entitled, and agree to participate in this study.

Name of Subject:

Signature of Subject: Date:

Name of Witness (who shall be independent of the project)

Signature of the Witness: Date:

I certify that the terms of the form have been verbally explained to the subject, that the subject appears to understand the terms prior to signing the form, and that proper arrangements have been made for an interpreter where English is not the subject's first language. I asked the subject if she/he needed to discuss the project with an independent person before signing and she/he declined (or has done so).

Signature of the researcher: Date:



APPENDIX 6: Oral History Sources

Prior relevant role/s of interviewee	Cohort ^a	Date	Method ^b	Mins.
Premier and Treasurer	UoI	13.6.00	F	62
Treasurer and Deputy Premier	UoI	14.6.00	F	48
Assistant Auditor-General	UoI	26.5.04	F	65
Under-Secretary, Treasury	PoI	27.4.00	F	137
Director-General, Premier's Department; Victorian Auditor-General; Chairman, Public Sector Accounting Standards Board	PoI	14.6.00	F	57
Deputy Secretary, Treasury; Executive Director, NSW Commission of Audit; Executive Member of Tasmanian and South Australian Commissions of Audit; Secretary, Victorian Treasury and author of "An Independent Review of Victoria's Finances"	PoI	13.6.00	F	149
Chief Accountant and Assistant Secretary, NSW Treasury; Convenor, Government Accountants Group	PoI	3.3.04	F	67
Chief Budget Officer; Member, Accrual Accounting Implementation Committee	PoI	10.2.04		51
Secretary, Treasurer's Accounting Advisory Panel	PoI	27.5.03	F *	43
First Assistant Secretary (Financial Management and Accounting Policy) Commonwealth Department of Finance; Member and later Chairman of the Australian Public Sector Accounting Standards Board	PoI	Jan. 04	E	n/a
Professor of Accounting and author of a weekly commentary on public sector administration and finance. (Note: an expert in this field and was informed of accounting firms' actions in the case)	PoC	13.6.00	F	66
Senior Partner, Coopers & Lybrand; President, Institute of Chartered Accountants in Australia; member of the Treasurer's Accounting Advisory Panel.	PoC	21.6.00	T	54
Partner, KPMG; member of the Treasurer's Accounting Advisory Panel.	PoC	1.11.02	F	35

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Prior relevant role/s of interviewee	Cohort ^a	Date	Method ^b	Min
Partner, Government Services Division, Price Waterhouse; member of the Treasurer's Accounting Advisory Panel; NSW President, Australian Society of Accountants.	PoC	1.11.02	F	67
Partner, Arthur Andersen & Co.; member of the Treasurer's Accounting Advisory Panel.	PoC	11.2.04	F	39
State of New York Comptroller (Note: whilst not a full-time consultant, he was an invitee of Andersen to promote the cause of public sector accrual accounting)	PoC	24.10.03	T	49
Senior Partner, Arthur Andersen & Co., New York	PoC	22.1.04	T	63
Professor, Harvard Business School	PoC	Feb. 01	E	n/a

Notes:

(a) UoI = User of Information; PoI = Producer of Information; PoC = Promoter of Change

(b) F = face to face interview; T = telephone interview; E = email interview;

* = interview not recorded at interviewee's request



APPENDIX 7: Case Study Interviewees

#	INT. DATE	NOTES	ABREVN.
1	10/3/04 and later	General Manager, Finance and Administration	HO-ACC
2	10/3/04 and later	Director, Management Accounting	HO-ACC
3	8/12/04	Finance Leader, North (Asset Management Unit)	HO-ACC
4	27/5/04 and later	Director, Asset Management Unit	HO
5	2/3/04 and later	Manager, Financial Services	HO-ACC
6	27/5/04	Director, North Coast Region	RO
7	27/5/04	Education Director	RO
8	24/5/04 and later	Director, Financial Accounting	HO-ACC
9	9/3/04	Acting Director, Management Accounting	HO-ACC
10	1/3/04	Project Officer, Finance and Administration Not recorded – notes taken	HO
11	8/3/04 and later	Manager, Financial Reporting	HO-ACC
12	9/3/04	Acting Director, School Support Financial Services	HO-ACC
13	10/3/04	OIC, Records	HO
14	27/5/04	Librarian Not recorded – notes taken	HO
15	25/6/04	Director, Strategy, Planning & Policy	HO
16	25/6/04	Planning and Strat Officer	HO
17	11/11/04	Records Manager	HO
18	8/12/04	Director, Properties Not recorded – notes taken	HO
19	8/12/04	Accounting Officer, Properties	RO-ACC
20	20/10/05	School Education Director, North Coast	RO
21	2/9/05	Senior Finance Officer, North Coast Region	RO-ACC
22	10/11/05	Admin & Finance Manager, North Coast Not recorded – notes taken	RO-ACC
23	5/3/04 and later	Manager, Reporting & Ledgers	HO-ACC
24	21/6/05 and later	School Principal	RO
25	1/7/05	School Administrative Officer	RO

Abbreviations:

HO-ACC = Head Office Accounting staff

HO = Head Office staff

RO = Regional Office

RO-ACC = Regional Office Accounting staff



APPENDIX 8: Newspaper Coverage of Public Sector Accrual Accounting – 1987-8

The following newspaper articles were published in 1987 to 1988 in Australian capital city newspapers:

Newspaper headline	Source and date
“Use accrual method: ASA”	<i>The Advertiser</i> : 19 September 1987
“The extraordinary Keating method”	<i>Herald Business</i> : 5 October 1987
“US expert tells govt accrual is superior”	<i>Sydney Morning Herald</i> : 2 December 1987
“NSW govt a saboteur of federal policy, says Greiner”	<i>Australian Financial Review</i> : 3 December 1987
“Great sales pitch for accrual accounting”	<i>Herald Business</i> : 4 December 1987
“Greiner plans bare cupboard”	<i>Sydney Morning Herald</i> : 14 January 1988
“Greiner’s little time bomb” (Editorial)	<i>Sydney Morning Herald</i> : 16 January 1988
“Populism v accountability”	<i>Australian Financial Review</i> : 10 February 1988
“At last, an MD for NSW incorp”	<i>Sydney Morning Herald</i> : 11 April 1988
“Making the States pay”	<i>Australian Financial Review</i> : 23 March 1988
“Businessmen oversee NSW audit”	<i>Australian Financial Review</i> : 5 April 1988
“Just a too-clever exercise in alchemy”	<i>Sydney Morning Herald</i> : 16 May 1988
“NSW sorts out its debt”	<i>Australian Business</i> : 4 May 1988

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- Australian Financial Review, 'NSW finances in a 'healthy state'', 21 September 1984.
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- Ken Booth (NSW Treasurer), letter to PAC, 6 January 1987.
- David Hunter (Partner-in-Charge, Governments Services, Arthur Andersen & Co.), letter to Chairman, NSW Public Accounts Committee, 17 November, 1987.
- Padraic McGuinness, email communication, 18 May, 2000.
- John Murray, Chairman, NSW Public Accounts Committee, letter to J. Burrows, Arthur Andersen & Co., 7 December, 1987.
- NSW Treasurer letter to Auditor-General, 'Modified Accrual Accounting', 16 February 1989.
- NSW Treasurer Media Release, 22 December 1987.
- NSW Treasurer's Budget Speech, 1988-89, NSW Legislative Assembly Hansard or Budget Paper No. 1, 20 September 1988: 1469-1479.
- NSW Treasurer's speech opening the Sydney seminar 'Can accrual accounting work in Government?', 30 November 1987.
- NSW Treasury Internal Memo, 'Accrual accounting – USA Study Tour', (File T87/2427), 4 December 1987
- NSW Treasury Briefing Note to Premier, 'Briefing note for meeting of Premier and partners of six large accounting firms', 6 December 1990.
- NSW Treasury Circular (No. G1988/15), 'Accrual accounting', 9 December 1988.
- NSW Treasury Circular (No. G1989/6), 'Accrual accounting', 22 May 1989.
- NSW Treasury Circular No. G1990-19, 'Guidelines for submission of enhancement proposals, 17 September 1990.
- NSW Treasury memo, 'Implementation of accrual accounting', 30 November 1990.

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- Premier's News Release, 'Accrual accounting', 30 October, 1989.
- Premier's News Release, 'Private sector helps with accrual accounting', 28 February 1991.
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PUBLICATIONS FROM THIS RESEARCH

Five refereed journal articles were published from the thesis data in the course of researching and preparing this thesis. Those articles are:

Christensen, M. (2002). Accrual accounting in the public sector: the case of the New South Wales Government, *Accounting History*. **NS7** (2): 93-124.

Christensen, M. (2003). Without re-inventing the wheel: business accounting applied to the public sector, *Australian Accounting Review*. **13** (2): 22-27.

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