THE EMPLOYMENT IMPLICATIONS OF ‘NEW PUBLIC MANAGEMENT’. CHANGING PUBLIC SECTOR INDUSTRIAL RELATIONS IN AUSTRALIA: AN OVERVIEW

THE UNIVERSITY OF NEW SOUTH WALES

SCHOOL OF INDUSTRIAL RELATIONS AND ORGANISATIONAL BEHAVIOUR

WORKING PAPER SERIES
ISSN 1325-8028

October 1999

127
THE EMPLOYMENT IMPLICATIONS OF ‘NEW PUBLIC MANAGEMENT’. CHANGING PUBLIC SECTOR INDUSTRIAL RELATIONS IN AUSTRALIA: AN OVERVIEW

John O’Brien

The context of this paper is the relationship between the roles of government as an employer, as a prime generator of policy and as financial controller. The overarching issue is the extent it is possible to match public sector industrial relations with the general policy directions of government, while the government maintains overall control of the nature and direction of state expenditure. It will be argued that there are significant limits if public sector industrial relations can be decentralised given the overall fiscal and employer responsibilities of government. The paper will review the public sector industrial relations systems before the 1980s and the emergence of new regulatory systems as a consequence to the general policy directions of smaller government and the marketisation of state sector employees within the framework of ‘new public management’. The paper will also consider the response of public sector unions to these developments.

INTRODUCTION

The context of this paper is the relationship between the roles of government as an employer, as a prime generator of policy and as financial controller. The overarching issue is the extent that it is possible to match the system regulating public sector industrial relations with the general policy directions of government, while the government maintains overall control of the nature and direction of state expenditure, particularly in a political environment that has encouraged the promotion and implementation of ‘small government’. It will be argued that there are significant limits insofar as public sector industrial relations can be decentralised given the overall fiscal and employer responsibilities of government, even if there is a strong policy to decentralise industrial relations processes generally. The paper will review the public sector industrial relations systems in Australia before the 1980s and the more recent emergence of new regulatory systems as a consequence to the general policy directions of smaller government and the marketisation of the remaining state sector employees within the framework of ‘new public management’. The paper will consider, in particular, how employees and their organisations have responded to the attempts by government to
decentralise the regulation of labour-management relations whilst retaining control over their employees. A general survey of all developments in the Commonwealth and the states will not be attempted. The discussion will be confined to the three largest jurisdictions, the Commonwealth and the two largest states of New South Wales and Victoria, but developments in those jurisdictions are representative of developments in the other states.

THE AUSTRALIAN FEDERAL STATE

Australia is a federal state. As a consequence there are separate industrial relations regulatory systems for each of the six states and the Commonwealth. Except for Victoria and Tasmania, where wages' boards were developed, the predominant form of regulation has been compulsory conciliation and arbitration. At the Commonwealth level the industrial relations power of the government was limited, although other powers have been mobilised more recently for industrial purposes. Both state and federal constitutions gave the various governments absolute control over the terms and conditions of their employees, although that power was usually exercised through intermediary bodies. Moreover, governments were reluctant to give their employees untrammelled access to the conciliation and arbitration system because the determination of arbitral bodies might compromise the sovereignty of the crown over its ‘servants’.¹

Who are the servants of the state?

There are various categories of state employees. First there are employees who provide the administrative services for and to the state. Second there are employees of state who provide services on behalf of government, but who may be employed under differing arrangements to core public servants. Public school teachers, police and public sector nurses are examples of this category. Third there are employees of statutory bodies that are established by the state, but may operate with greater autonomy from government than those agencies that provide the administrative services of the state. Until recently this category of employees included most public utility workers in areas such as electricity generation and distribution, water supply and telecommunications. In recent times these bodies have been corporatised and privatised, thus distancing their employees from a direct employment relationship with the state. The differences among these various categories are more related to the nature of the employment relationship rather than the degree of dependence on state funds. Much of the discussion in this paper will concentrate on the first two categories of state employees.
Public sector industrial relations systems before the 1980s

While governments are able to exercise power over its employees that exceeds that which can be exercised by private sector employees, there was a strong disposition to place the responsibility for employment relationships on intermediate bodies. In the Commonwealth and the states the prime responsibility was given to public service boards that generally acted as employer to the first and second categories of state employees, but could also exercise influence over the employment conditions of employees of statutory corporations. The rationale for this arrangement was that public employees had a role in governance that was not dependent on changes in the political complexion of government. Moreover, state employees were regarded as members of various services such as the teaching service, the police service and the public service that had their traditions, management and career structures and who provided continuity of the services in exchange for a high level of job security. In the core public service permanent (continuing) employment was linked with the idea of public servants holding as ‘office’ in a manner similar to statutory office holders.

Although ultimately subject to government, Public Service Boards became powerful instruments of governance both in the Commonwealth and the states. The Sydney Morning Herald suggested that it was not ‘an oversimplification’ to say that the New South Wales ‘Government does anything the Board tells it to’. Indeed the New South Wales Public Service Board saw itself as an executive arm of government with considerable operational autonomy from the government of the day in the organisation of the provision of state services. In a real sense the Board provided continuity of governance in the state. This was also the case in other states and the Commonwealth, although it is doubtful whether any of these bodies was quite as powerful as the New South Wales Public Service Board.

The power of the boards was only partly modified by the counter force of the conciliation and arbitration system. In the Commonwealth the institution of the Public Service Arbitrator provided Commonwealth public servants with access to arbitral functions, although the existence of such an office reflected a view that Commonwealth public servants were a special category of employee. Until 1970 teachers in New South Wales were denied access to state industrial jurisdiction on working conditions' matters, although from the 1960s the state Industrial Commission played an increasing role in the determination of teachers’ wages. In the 1940s Victorian teachers campaigned to gain access to wage's board structure in the form of a Teachers’ Tribunal. The State School Teachers’ decision of the (federal) High Court effectively denied public school teachers access to the federal arbitral jurisdiction.
of wholehearted integration of public employees into the mainstream of industrial regulation reflected the desire of governments and their employing authorities to maintain a considerable degree of sovereignty over the control and cost of state labour.

In the late 1970s the relative autonomy of public employment authorities came into question as governments began to wrestle with the emerging fiscal crisis of the state. In the mid-1970s the Coombs enquiry into Australian Government Administration argued for greater mainstreaming of employment relations as part of a general overhaul of the Commonwealth Public Service. In the 1977 and 1981, the federal government legislated to make it easier to retrain, redeploy, and make redundant Commonwealth employees. In 1980 the government amended the Public Service Act to make it more difficult for Commonwealth public servants to take industrial action. These measures were widely regarded as an attack on the concept of permanent employment in the public service as well as the industrial rights of public servants. It marked the beginning of the transformation of public service employee organisations from largely compliant staff associations to industrial unions prepared to use, albeit selectively, the full range of industrial tactics. This growth of public sector militancy mirrored trends among school teachers since the late 1960s and bank employees in the 1970s and foreshadowed the increasing industrial activity of nurses in the 1980s and within universities in the 1990s.

Changes in Public Sector Industrial Relations since the late 1970s

Four factors influenced the changes in the structure of public sector industrial relations in the late 1970s and the early 1980s. These were:

- the gradual decline of public service boards as regulators of public service employment;

- the placing of public administration more explicitly under Ministerial control;

- the rise of the ‘new public management’ model; and

- the convergence between public sector industrial relations processes and private sector industrial regulation.

These matters will be considered in turn.
‘Political management’: A more responsive or more compliant public service?

One of the first actions of the new federal Labor government in 1983 was to institute a major recasting of the Commonwealth Public Service Act. The direction of these reforms was made explicit in the White Paper on the Australian Public Service that stated that ‘the balance of power and influence has tipped too far in favour of permanent rather than elected office holders’. The changes made by the government emphasised cabinet priority setting, ministerial control and input from partisan as well as public service sources. In the period 1984 - 1987 the focus began to shift towards managerialist rather than administrative / bureaucratic modes of public service. Managerialism was principally manifested through extensive reforms of budgetary processes that would enable ‘Ministers to involve themselves in the allocation of resources’. The assertion of political control over the public service was manifested in the redesignation of permanent heads of government agencies as ‘secretaries’ and the creation of senior executive service designed to provide a more mobile, but a less secure, stratum of senior public servants. These initiatives simultaneously asserted more implicit political control while creating a senior management stratum more consciously separated from the rest of the public service. These trends have been variously characterised as ‘managerialism’; new public management; entrepreneurial government; ‘post-bureaucratic government’; ‘corporate management’; and ‘market based public administration’.

Peter Wilenski represented the changed relationship between Minister and senior public servants, as evidence of more explicitly social democratic model of public administration. When he conducted a review of the public service in New South Wales in the late 1970s, Wilenski argued that public administrative processes ought to be more directly responsive to Ministerial direction. Ministers should expect that the relative autonomy of the public service in matters of administrative processes should not hinder the exercise of overall policy responsibilities by government. While Public Service Boards and similar authorities should retain a general responsibility for personnel policies and for industrial relations processes, more immediate activities should be undertaken by individual agencies. This would enable agencies to respond more flexibly to Ministerial direction. In New South Wales the diminution of the power of the Public Service Board led to the strengthening of the coordination role of the Premier’s Department, rather than an empowerment of individual agencies. Indeed the NSW Premier’s Department under the leadership of Gerry Gleeson arguably became the strongest central agency in the nation. The Public Service Board in
Victoria, that had never possessed the power of its New South Wales counterpart, found itself relinquishing functions to the Treasury and Premier’s department as a part of changes wrought by the state Labor government in mid-1980s. By the mid-1990s all states had abandoned the public service board model of central coordination. In the Commonwealth, the distribution of power was shared among the Ministers, departments and the Board itself. Department secretaries assumed responsibility for the classification of public servants, while the Department of Finance was given the role of advising the government on staff establishments. These changes laid the groundwork for the eventual abolition of the Public Service Board in 1987 and the redistribution of its remaining functions among the Department of Finance, the Department of Industrial Relations and the (new) Public Service Commissioner.

A more representative and democratic public service?

There were two other important aspects of this new social democratic model of public administration. The first of these concerned the ‘representativeness’ of public service and the second to the involvement of public servants themselves in the workings of public service agencies. In New South Wales, Wilenski argued that the active recruitment, training and promotion of hitherto under-represented groups such as women, indigenous people and non-English speaking background people to and within the public service was not only a matter of social justice, but it was also ‘good management’ as it widened and deepened the pool of public sector managers. In the federal sphere the Public Service Reform Act 1984 required agencies to establish equal employment opportunity programs. The conception of social justice in this initiative was conceived to be a major contributor to efficiency and effectiveness in public administration, as well as being an instrument of greater equity in the workplace. The social democratic model was also enhanced through the promotion of industrial democracy in the workplace. Initiatives taken in this area had a direct impact on the construction of employment relations in the Commonwealth sector.

Industrial Democracy

There are definitional problems with the concept of industrial democracy. At one end of the spectrum there is the notion of employee participation whereby employees may become more involved in the organisation of work and are consulted as part of decision making processes. A much stronger version of the concept envisages that employees will have a guaranteed role in decision-making processes. The first approach is primarily concerned with more effective
management, while the second gives greater emphasis to employee rights as a means of enhancing organisational effectiveness. Complicating these issues is the role of unions in the process. In 1974 the Whitlam Labor government established joint management-union consultative councils in federal departments. While these councils had no decision-making powers, they became a means whereby public service unions could be consulted about proposed management-initiated changes. The Public Service Reform Act in 1984 required agencies to develop Industrial Democracy Plans. While public service unions were supportive of these initiatives, they insisted successfully that they remained the sole channels of formal communication between employees and agency managements. On the management side there was growing concern that public service unions were using the industrial democracy processes as a means of pursuing traditional industrial demands, rather than a means of facilitating a new style of participative management. On the other hand, unions suggested that some managements were seeking to isolate industrial democracy processes from the mainstream of decision making in agencies and thus maintain a high degree of managerial prerogative.

By the late 1980s, however, the federal government’s initial enthusiasm for industrial democracy had waned. Nevertheless in some agencies such as the Tax Office and the Department of Social Security, where there was a strong tradition of union organisation, industrial democracy processes were mobilised to facilitate major work restructuring processes. Indeed the more enthusiastic advocates of new accommodation between state, capital and labour saw these initiatives as harbingers of a broader conception of negotiated post-Fordist work organisation. For those with more direct experience of harsher models of state restructuring such as had occurred in the United Kingdom and New Zealand, the initiatives taken in Australia seemed to fit more easily into a social democratic rather than a managerialist model of change. It was, however, the industrial relations system itself that became the site of significant changes to the regulation of public sector labour in the Commonwealth sector, rather than the further extension of industrial democracy processes.

**Restructuring the public sector workplace: an industrial negotiation model**

Changes in personnel management tended to lag behind financial reforms and changes in general management and political coordination. 1986 carried out many of personnel functions previously exercised by the Public Service Board by departmental secretaries. Staff establishments and industrial relations, however, remained under the control of the Departments of Finance and Industrial Relations respectively. From 1983 to 1987 changes to
personnel arrangements were largely legislatively-based and encompassed alterations or additions to existing provisions for personnel policies and practices. In that sense the changes were management-driven and were located within a wide-ranging recasting of the Commonwealth sector. From 1987 changes to employment relations took place in a more explicitly industrial context. In 1984, the Public Service Board embarked on a major review of the public service classification system. This process involved an extensive broad banding and simplification of the complicated classification systems that had developed in the Commonwealth sector. The size of this task was beyond the capacity of any single agency. Such a process required the cooperation and active involvement of public service unions. It suited the government and the public service unions to negotiate centrally, although the new arrangements could be subsequently implemented to meet the specific requirements of individual agencies. The ‘managed decentralism’ of the industrial relations system generally after 1987 enabled the processes within the Commonwealth sector to be integrated into broader regulatory changes. The second tier and the structural efficiency wage principles required unions to negotiate with employers on issues of efficiency and productivity in exchange for access to arbitrated wage adjustments. By tying management-initiated organisational changes to the wages system it was possible to incorporate unions into management objectives while limiting the capacity of management to impose changes without negotiation. The industrial democracy model of consultative management, employee participation and limited codetermination gave way to a more traditional industrial relations model of negotiated change.

Managed decentralism and productivity bargaining

The model of managed decentralism of industrial relations favoured by the Labor government was increasingly challenged by counter discourses of labour market reform. Sources of challenge included the employment contract model with its overt hostility to unions and conciliation and arbitration, as well as a more human resource management-oriented approach that advocated the primacy of ‘employee relations’ over ‘industrial relations’. The Coalition parties developed an industrial relations policy that attempted to encompass both approaches by proposing the removal of unions’ bargaining monopoly and the reduction of the power of the conciliation and arbitration system, within the framework of a regulatory system that encouraged more direct relationships between employers and employees. In addition, the Australian Council of Trade Unions (ACTU) was demanding that the system of managed decentralism be replaced with a more comprehensive system of workplace level
overaward bargaining. The task for the federal Labor government was to develop an industrial relations model that accommodated the ACTU policy direction without adopting the more radical market-oriented agenda of the Opposition. The new regulatory model was formulated in Accord Mark 6 that envisaged the encouragement of workplace bargaining within the industrial award framework; with the Industrial Relations Commission retaining a diminished, but still significant, role in the regulation of industrial relations. Despite the initial rejection of the idea by the Industrial Relations Commission in April 1991, the Labor Government / ACTU model of workplace bargaining was in place by the end of 1991.

**Measuring productivity?**

The government needed to demonstrate that its approach of workplace bargaining was a fairer and more effective system than the Coalition model. The obvious place to conduct such an experiment was in the Australian Public Service. There was some doubt, however, that productivity based bargaining could work effectively in a budget-funded environment. To overcome this perception the government established two groups to consider the implementation of workplace bargaining in the APS. The first group consisted of a number of departmental secretaries. They tackled the issue of productivity measurement in the APS by arguing that it could be related to ‘performance management’ that they said had been a central feature of the public service reforms in the 1980s. They argued that the focus on outputs and outcomes that had characterised the reform process, meant that it was possible to identify productivity improvements even when ‘their precise measurement was difficult to achieve’.

Three academic consultants supplemented the work of the department secretaries: Professors John Niland, William Brown and Barry Hughes. They considered the utility of a number of methods used in the APS to measure productivity. The consultants opted for a system of productivity measurement that combined general performance indicators and quality-focussed approaches to their development and application at the agency level. They concluded, however, that ‘measures of APS wide of productivity growth of an acceptable standard (were)...not available and (were)...unlikely to be so in the future’. Productivity could only be regarded as a ‘sub-set’ of performance. They proposed that a Public Agency Board be established to assess each agency’s performance and its readiness for bargaining. This model was based the public sector bargaining agency in New South Wales that had been
established following Niland’s recommendations on changes to the New South Wales industrial relations system.\textsuperscript{50}

The creation of an additional central agency, however, would have interfered with the existing APS coordination arrangements as well as add an additional layer of centralised regulation when the government’s overall policy objective was to promote workplace bargaining. The government requested the secretaries to revisit the issue in the light of the consultants’ recommendations. They reaffirmed that the Departments of Finance and Industrial Relations and the Public Service Commission would jointly supervise agency-level bargaining. A core of service wide pay and conditions were to be maintained. Any additional productivity-based pay would be in the form of non-recurring bonuses if productivity gains proved to be enduring. Agencies unable to bargain would have access to a proportion of funds returned to government provided that they implemented efficiencies and developed productivity-improvement plans.\textsuperscript{51} This became known as the ‘foldback’ mechanism.

**The dilemmas of a negotiated model of decentralised wage bargaining**

The arguments about the productivity measurement in the APS were in part designed to convince the unions that there could be workable agency level-bargaining that would not compromise the regime of service wide wages and conditions. Achieving the policy objective of introducing workplace bargaining for its employees did not, however, sit comfortably with the desire of the unions to maintain a high degree of commonality of conditions. Moreover, the secretaries and the consultants agreed on one issue: that it was difficult to measure productivity in non-market environments. This tentativeness did not make it easy for the government to convince the unions that agency bargaining would have deleterious consequences for their members. The Public Sector Union conducted a survey of its members that revealed widespread concern about the loss of award conditions and job losses if agency bargaining proceeded. In September 1991 the union put three options to its members:

- reject bargaining altogether;
- negotiate bargaining on the union’s terms; or
- withdraw from negotiations given the government’s insistence that the wage claim made by the union could only be met through the adoption of agency bargaining.
14,969 members (of 17,753 who voted) opted for the second proposition, although it was not clear how this would be achieved. In fact the union had no real choice but to accept some model of decentralised bargaining given both the government and the ACTU wanted a shift in that direction. Of more immediate concern was the impending federal election. The government (and the unions) needed to demonstrate that its model of decentralised industrial relations could work more effectively and equitably than the one proposed by the Opposition parties.\(^5\) In December 1992 the government and 27 public service unions signed an agreement on the introduction of agency-level wage bargaining. The agreement provided for the development of ‘more flexible’ employment conditions at the agency level to be achieved in agency specific agreements provided that there was ‘no overall disadvantage to employees’\(^5\). The agreement said that agency level agreement should not achieve productivity gains through the application of a narrow ‘costs offsets’ approach or as a consequence of ‘arbitrary job reductions’. This left the door open for productivity gains to be made through negotiated downsizing and voluntary redundancies. These agency-level agreements would supplement a service- wide pay increase that was made in exchange for commitments to address a range of work organisation issues.\(^5\)

**Agency-level bargaining in the APS**

The difficulty in finding a balance between the competing agendas of the government, the ACTU and the public sector unions is illustrated when the outcomes of these bargaining arrangements are examined. One of the first agreements made was in the Department of Defence, reached in the dying days of the 1990-1993 Labor government. With the re-election of the government it became the template of subsequent agency bargaining. The department had undergone considerable downsizing since 1987. The civilian workforce had been reduced from 35818 to 22559 in that period, principally as a consequence of contracting out support functions such as maintenance.\(^5\) The agreement addressed issues such as work organisation, employment conditions, work environment and training and skill formation. It was also agreed that a Defence Total Quality Management program would be introduced.\(^6\) There was not, however, any explicit explanation of how the wage adjustment would be paid. The Department of Finance required that agencies be explicit on this issue.\(^5\) It seemed that the parties had agreed to little more than continuing the restructuring and downsizing processes that had been underway for some years. Indeed this was revealed to be the case by the principal negotiator for the agency in a statement before the Senate Committee on Finance and Public Administration in 1994.\(^5\) Moreover, one of the union officials involved in the
negotiations reported that there was an understanding between the department secretary and the unions that the program of redundancies would continue within the agency. Both past and prospective job losses would pay for this agreement whatever the rhetoric there was about avoiding negative cost cutting.

During 1993 and 1994 most APS agencies either managed to negotiate an agency agreement or gain access to the ‘foldback’ fund. Among the agencies that relied on this latter arrangement were the Department of Finance and the Treasury. This was a considerable source of angst amongst the agencies that had reached agreements. The regulatory agencies were regarded ‘free riders’ on the efforts of other agencies. An evaluation of the system conducted by the Department of Finance and the Department of Industrial Relations confirmed this view and indicated that small agencies had found particular difficulty in identifying productivity savings. On the other hand the system had been a continuing source of controversy within the Public Sector Union with the leadership proclaiming the gains that it had delivered to members, while dissident elements claimed that too many concessions had been made to achieve wage adjustments. It was no great surprise when the public sector unions agreed to return to a service-wide model of wage bargaining for the period 1995 - 1996. The only major concession made by the unions was to agree not oppose the major overhaul of the Public Service Act and that appeals relating to the termination of employment would be dealt with under the Industrial Relations Act rather than APS-specific procedures. The Secretary of the Department of Industrial Relations defended this reversal as merely mirroring ‘standard practice in large private employers that operate in multiple workplaces’.

This episode of agency bargaining followed by a return to a more centralised mode of bargaining illustrates the conflicting objectives that governments need to meet when regulating their own employees. The Labor government had a clear agenda to decentralise the bargaining system. The best way to do this was to demonstrate that it could work for its employees. In the short term there was an imperative to demonstrate its superiority over the more radical agenda of the opposition. On the other hand, the government needed to maintain control over the costs of such a system. Thus the central agencies acted as the regulators on behalf of the government. In that sense the system was not wholly decentralised. The government also needed to wrestle with the practical problems of productivity measurement and the expectation from the unions that all employees would receive a similar wage outcome. The solution to these problems through the foldback mechanism meant that some public service managers who had been able to bargain had to finance the non- bargaining...
‘free-riders’. Even for the bargaining agencies it was difficult to see how productivity gains could be made in without either continuing job losses and/or work intensification for the remaining employees. Nevertheless, the process facilitated further the incorporation of public sector unions into a recasting of the APS.

**Individualism vs collectivism: The Victorian market model**

While the Labor government was wrestling with the contradictions of its model a more radical market-oriented model of public sector industrial relations was being implemented in Victoria. The Coalition parties were swept to office in Victoria in October 1992. Two of the earliest pieces of legislation of the government led by Jeff Kennett were the Public Sector Management Act and the Employee Relations Act. The former was designed to subject all state employees to the same regulatory provisions as private sector employees covered by the state industrial relations system. Given that a significant majority of private sector employees in Victoria were regulated by federal legislation the impact of the changes fell disproportionately on public sector employees in Victoria. The Employee Relations Act ‘swept away all vestiges of compulsory conciliation and arbitration’. The legislation established an Employee Relations Commission that could only exercise conciliation and arbitration powers if the disputing parties agreed. Even then, the Commission’s award making powers were limited. The prime modes of regulation were to be individual and collective agreements with little or no involvement of external regulatory tribunals.

The Public Sector Management Act abolished the Public Service Board and established the position of Public Service Commissioner responsible for formulating employment policies in the Victorian public service. The legislation sought to introduce a regime based on individual contracts between public servants and agency heads or Ministers, appropriate to the employee’s level in the hierarchy. The government rebuffed an attempt by the State Public Services Federation of Victoria to negotiate a collective agreement for public servants. During 1993 all executive officers of the Victorian Public Service were required to sign individual agreements. At the same time draft employment contracts for non-executive employees were circulated throughout departments. Employees were told that there would be no review of salary and conditions until an individual agreement was signed. In some agencies positions were declared vacant and all employees were told that they must sign individual agreements as new employees. This radical agenda was threatened with the unexpected re-election of the federal Labor government in March 1993. The Labor government amended its industrial relations legislation to facilitate the movement of
Victorian regulated employees into the federal system. Throughout this period the state government refused to negotiate with the principal public service union, although over 50 per cent of state employees had nominated it as their bargaining agent. The government offered a non-negotiable 3 per cent wage increase to all state employees who signed an individual employment contract.\textsuperscript{74}

**Marketisation and downsizing: Education and Health sectors**

An even more determined approach was taken to employees in the public education and health sectors. The government embarked on a program of radical downsizing of the school system which by October 1996, resulting in a reduction of 11,000 teaching and non-teaching positions and widespread school closures. School principals were designated as chief executive officers whose contracts were contingent upon the regular provision of financial and educational audits set against specified benchmarks. A School Charter regulated the contractual rights of school ‘customers’ (students and parents), and School Councils were given greater responsibility for managing service delivery in the environment of severe resource reduction.\textsuperscript{75}

The health sector did not fare much better. The Audit Commission established by the government recommended the elimination of restrictive work practices, the commercialisation of hospital non-core services and the transfer of out-patient services to the private sector.\textsuperscript{76} The government applied a purchaser-provider model to the sector that involved contracting six Health Care Networks to provide hospital services for the Human Services Department. The contract provided that the Networks accept responsibility for the management of employees and the supervision of productivity measures. The government specified that public hospitals were required to deliver ‘productivity gains’ of 1.5 per cent each year. To meet this requirement hospitals reduced nurses by 3500. The contracting out of other services has also meant significant reductions of non-nursing staff. In 1997 the government refused to deal with the Australian Nurses’ Federation because the Health Care Networks were the employers, not the government. The nurses’ union undertook a campaign of industrial action. Negotiations with the Victorian Hospitals Industrial Association, acting on behalf of the hospitals, resulted in a 11 percent pay increase over 3 years and increases in staffing establishments. The government still had to bear the costs of this agreement while maintaining the fiction that it was not the employer.\textsuperscript{77}
There was a clear gap between the devolutionary rhetoric and the centralised practice of the Victorian government. The government defended its actions in reducing state employment because it had been left with a large budgetary debt by the previous government. The government’s industrial relations legislation was premised on notions of atomised choice that did not easily accommodate the collective choices made by state employees. It distanced itself from direct responsibility as an employer, while limiting the negotiating and regulatory choices to be exercised by its managerial agents and its employers. The Victorian government simultaneously depoliticised state employment relationships while increasing control over them through funding arrangements and the promotion of quasi-marketised contractual mechanisms. The actions of the Victorian government made the federal Labor government’s approach to the regulation of its employees seem complicated and clumsy. The difference was that there was clearer synergy between policy objectives and financial responsibilities. Both governments needed to maintain control over the labour costs. The federal Labor government had a policy agenda of gradual decentralised re-regulation of industrial relations that involved maintaining some role for unions and industrial tribunals. It needed to demonstrate that its policies could work for its employees. The Victorian government, on the other hand, wanted to sweep away the old regulatory regime that necessarily involved eliminating tribunals and marginalising unions and shifting the balance of power towards employers. The government as employer could operate more effectively in an environment where employers generally had more power. Its unwillingness to make explicit its employer function was a reflection of the residual tension between policy rhetoric of devolution and choice with the reality of control by an employer who was also the prime funding source. It is instructive then to compare the Victorian experience with that of New South Wales during the period of the Coalition government from 1988 to 1995.

**Competing systems: The ‘dual’ model in New South Wales**

One of the first initiatives of the Coalition government elected in 1988 was to establish an enquiry into the New South Wales Industrial Relations system led by John Niland, Professor of Industrial Relations at the University of New South Wales. Niland was one of the most persistent and consistent academic advocates of greater decentralised bargaining. He produced two reports in 1989 and 1990. He argued for a lowering of the centre of gravity of industrial relations. The first volume of his report gave considerable attention to enhancing the development of an institutional framework to support and guide decentralised industrial relations. He advocated the development of a stream of collective and enterprise
agreements to operate alongside the award stream. The government made several unsuccessful attempts to enact Niland’s recommendations in 1989 and 1990, but it lacked an overall majority in both Houses of the NSW Parliament. The Bill was finally passed on 31 October 1991.

One of the key provisions of the 1991 Act was the creation of a separate stream of enterprise agreements outside the control of the state Industrial Commission. Such agreements were to be under the general supervision of a new Commissioner for Enterprise Agreements. This provision permitted the negotiation of agreements between employees and employers without the necessary involvement of unions in the process. Such agreements needed to supported by 65 per cent of employees affected. These agreements could partly or completely override state awards. This dual system fell well short of the changes in Victoria. This alternative stream was never a serious threat of the stream of regulation that continued to be administered by the state Industrial Commission. Between 1992 and 1996, only 18.6 per cent of employees covered by the NSW award system had their wages and conditions covered by the alternative enterprise stream. On the other hand, it was estimated that 55.3 per cent of NSW employees working in ‘public administration’ and 33.2 per cent in ‘community services’ were covered by state enterprise agreements, although most of these only involved partial replacement of the relevant award. Except for Recreational, Personal and Other Services the percentage of private sector employees covered under these arrangements did not exceed 10 per cent. On the face of it this is evidence that the state government had pushed hard for its employees to be covered, at least in part, by alternative arrangements. Indeed all government agencies were instructed in 1993 that they were to negotiate enterprise agreements by 31 December 1994.

The NSW public sector industrial relations system

Until the 1980s the NSW Public Service Board was the employer of most state employees, although public school teachers were placed under the control of the Education Commission in 1978. The Board preferred to negotiate unregistered wage agreements with public sector unions, a practice that suited the two main public sector unions, the Public Service Association and the Teachers’ Federation, although both were prepared to use the state Industrial Commission when necessary. In 1988 the Greiner Coalition government abolished the Public Service Board. Many of the personnel functions were devolved to agency managers. The industrial responsibilities of the Board were given to a new agency: the Public Employment and Industrial Relations Authority (PEIRA). While this was
consistent with trends in other public jurisdictions, the creation of this new agency was hardly consistent with the general direction of the government’s industrial relations policy. Indeed the PEIRA seemed to retain considerable control of the bargaining process in the NSW public sector. Under the guidelines issued to Chief Executive Officers of government agencies, the PEIRA was to be responsible for promoting an ‘employee relations’ in agencies. It would advise whether proposals from agency managements were consistent with government policy. It would act as a clearinghouse of information for other departments and monitor developments in agency level agreement making. Each agency was required to ‘consult’ with the Authority before negotiating conditions that did not exist elsewhere within the public sector and keep the it informed of developments throughout the bargaining process. Despite the use of words such as ‘consult’ and ‘monitor’, it was clear that the PEIRA was to maintain considerable control over the shape and direction of enterprise bargaining in the NSW public sector.

This general view is confirmed by research done by Michael O’Donnell. He examined the restructuring of non-medical/nursing work in NSW public hospitals, of horticultural work in state parks and gardens and the adoption of Total Quality Management programs in the NSW public sector. In each case industrial bargaining was used to negotiate significant changes in work processes and practices. While managers had considerable autonomy in developing the particularities of work in each agency, the actual wage and other benefits for employees derived from these processes was kept firmly under the control of the PEIRA. In the parks and gardens case there was considerable conflict between the local management and the PEIRA, as well as between the management and employees, with the central authority prevailing over local management in the resolution of the dispute through direct negotiations with the Public Service Association, rather than with those more immediately affected. In that sense, the changes made in the NSW public sector could be hardly called decentralised in any fundamental way.

The difference between the NSW and Victorian models may not be all that significant as far as the role of central agencies are concerned. In New South Wales, a central authority stood between local managers and the government. In Victoria, there was a much more explicit attempt to make local managers agents of government without the presence of an intermediary body. The parameters in which Victorian managerial agents operated were, however, no less clear than those issued in New South Wales by the central authority. The more important differences were related to the overall industrial relations objectives of the
respective governments. In Victoria the state system had been swept away, in New South Wales there was a competing system of regulation. In Victoria the threat of individualisation of employment arrangements had been used to enforce compliance with the government’s overall wages policy for state employees. In New South Wales the emphasis was on encouraging enterprise-based, but centrally supervised, collectivism rather than individualisation in employment arrangements. In Victoria the government had attempted to marginalise the involvement of unions to such a degree that they sought refugee in the federal industrial jurisdiction. In New South Wales unions were involved in the process and more orthodox structural efficiency methods were used to incorporate unions in overall government objectives. Both Coalition governments were committed to implementation of a new public management model, but they differed considerably in the capacity to match contestable industrial processes to managerialist objectives.

The Commonwealth as ‘ultimate employer’: union response

When the Coalition parties were elected as the Commonwealth government in 1996 it was made clear that the Australian Public Service would be a testing ground for the implementation of its industrial relations policy. This policy was designed to reduce the role of ‘outside bodies’ such as industrial tribunals and unions in the regulation of workplace relationships. The Workplace Relations Act 1996 established a regime of individual and collective agreements that supplemented the traditional award and agreement system with unions. While unions were not excluded from representing employees as bargaining agents, employers were given the opportunity of pursuing agreements with employees directly. This new regime presented some difficulties for public sector unions generally and the Community and Public Sector Union in particular. This section of the paper will consider the response of the CPSU to this more contestable industrial environment.

The government was determined that all agencies would reach agreements and not be able to rely on a ‘foldback’ mechanism that some agencies had used during the Labor government’s flirtation with agency level bargaining. Nevertheless the government regarded itself as the ‘ultimate employer’ of public servants and therefore it was permissible for it to lay down parameters within which agency level agreements would be made. The parameters included the following:

- that agreements were to be funded within agency appropriations;
that agencies were to introduce a rationalised classification structure linked to service wide benchmarks;

- that flexible remuneration arrangements were to be permitted;

- that all certified agreements were to provide for the making of Australian Workplace Agreements (individual contracts);

- be subject to coordination arrangements, including consultation with the Department of Workplace Relations and Small Business;

- be subject to Ministerial clearance where significant policy issues are raised by agreement.\textsuperscript{91}

On the face of it the government was placing significant restrictions on the capacity of agency managements to negotiate specific arrangements with their employees. The senior official responsible for coordinating agency agreement-making in the APS likened these arrangements to those that operated within large private corporations. While a corporation might allow its constituents enterprises considerable operational autonomy in employment arrangements, they are formulated within a framework of overall corporate policy.\textsuperscript{92} If the government was to retain significant centralised control over its employees, this was not matched by the maintenance of service-wide arrangements that public sector unions had relied on in the past to maintain commonality of wages and conditions across the APS. The CPSU initially sought a service wide framework agreement, but eventually it was forced to accept that it had little option to negotiate agency by agency.

This fragmented bargaining environment was complicated further by the government’s determination to strengthen the notion of ‘freedom of association’ which it presented as the right to join or not to join a union. The new legislative regime of agreements with employees effectively removed the bargaining monopoly from unions. They now had to compete with non-unionised employees as the representatives of employees in the agreement making process. To test the strength of the unions the government required that all public servants reauthorise the deduction of their union subscriptions from their pay. The government claimed that direct deductions to the CPSU fell by 40 per cent.\textsuperscript{93} The CPSU had, however, embarked on an active campaign to persuade its members to pay their dues by alternative means.\textsuperscript{94}

Hitherto public sector unions had been able to use either awards or service-wide agreements to maintain a high level of consistency in employment arrangements. These arrangements had been overlaid with industrial democracy-style formal consultation arrangements. These
mechanisms were either no longer operative or were largely displaced with the new agreement-making arrangements. Thus the unions, and the CPSU in particular, faced an environment where its capacity to enforce service-wide arrangements were severely constrained, while the government as ‘ultimate employer’ could insist on the degree of uniformity consistent with its overall policy objectives. How did the CPSU fare in this fragmented environment?

The CPSU is somewhat reluctant to reveal overall union density in the APS, but it is clear that it is highly variable. In the large social benefit-providing agency Centrelink, the union claims a density level of about 75 per cent. In the former Department of Employment, Education, Training and Youth Affairs and in the Australian Bureau of Statistics the union claimed a density of 50 per cent. In central policy agencies such as Finance and Administration, Prime Minister and Cabinet and the Audit Office the union claims that density is around 35 per cent.95 These differing levels had a significant effect on the capacity of the union to influence bargaining processes and outcomes, without necessarily being the determining factor.

In the Department of Employment, Education Training and Youth Affairs the secretary refused to meet with the union. Instead he organised an election of staff representatives to undertake negotiations with management. The CPSU ran a ‘ticket’, that included the national industrial officer for the agency, in the staff ballot. It received 80 per cent of the primary votes and won all positions.96 In the Department of Social Security/Centrelink the CPSU bargaining team refused to meet the management negotiators in the company of staff elected representatives. In both cases the high level of union membership was instrumental in securing a union-negotiated agreement. In both these agencies the agreements largely conformed to the government’s parameters, but the union believed it would be able to play a significant and continuing role in the restructuring of the classification system and in the operation of the performance management schemes that were to be undertaken as a result of the agreement.97

In contrast, in the Department of Finance and Administration (DOFA), the union negotiators had to operate alongside non-union representatives in a process that was largely driven by management.98 The DOFA management initially adopted a confrontationist approach. Union delegates believed that on matters of substance the management was not really interested in negotiating either with union or staff representatives.99 Indeed the management was hostile to having a CPSU industrial officer as part of the staff team, although it eventually relented.100
Management came to the negotiating table with its agenda firmly outlined: performance management was not negotiable. It was only willing to accept minor amendments to its proposals for broadbanding classifications; the abolition of overtime altogether was non-negotiable. Union delegates perceived that management saw the role of staff representatives as one of convincing staff of the validity of the management’s agenda, rather than being active negotiators on behalf of staff.¹⁰¹

When it came to voting on the agreement, the CPSU campaigned for its rejection. Union delegates, however, were under considerable pressure, both from management and staff, to support the agreement, particularly as staff faced the threat of losing the initial payment to be paid on certification. Moreover, a number of staff, who had transferred from the former Department of Administrative Services when the two agencies had been amalgamated, was facing voluntary redundancy. They were concerned to leave the service with the best possible final payout. Despite all that pressure only 63 per cent of the 70 per cent of the staff that voted supported the agreement.¹⁰² Since the agreement was made the management has embarked on a concerted campaign to convince staff that they should accept individual contracts on the grounds that such arrangements fit better with the ‘corporate culture’ of the agency.

An indication of union influence can be gauged by the number of agencies that made agreements with unions compared with those whose agreements are with employees. By mid-September 1998 about half of the agreements were with employees and the other half with unions. Nevertheless most of the large service agencies were relatively highly unionised and so the union agreements represented about 73 per cent of employees in the APS. The non-union agreements tend to be in small and policy oriented agencies, although the Department of Health and Human Services has a non-union agreement.¹⁰³ On the other hand, the Workplace Relations Minister’s Department, with the overall responsibility of coordinating agency agreement making, has a union-negotiated agreement.¹⁰⁴ Indeed it has been suggested that this development encouraged a number of agency managements to seek the relative convenience of an agreement with the CPSU rather than establish more complicated consultation and negotiation arrangements with staff generally.¹⁰⁵

It seems that the CPSU adopted a ‘hot shops’ bargaining strategy. The union sought the best outcome within the government’s parameters in agencies where it has effective organisation and membership density. It then relied on attempting to emulate the conditions and wage outcomes in agencies where it is not so strong. In this it is aided, to some extent, by agency
managements who did not wish to have a wide disparity of outcomes across agencies that might occasion loss of staff to more favourable agencies. This was, for instance, the explicit intention of the management of the Aboriginal and Torres Strait Islands Commission.\textsuperscript{106} This coincidence of objectives between the union and managements did not, however, result in a uniformity of bargaining outcomes. This was dramatically illustrated after the 1998 federal election when there was a significant restructuring of government agencies. This had the effect of creating new agencies whose employees were working under different enterprise agreements. The government indicted that relocated public servants would have the same conditions but not the wages prevailing in their new agencies.\textsuperscript{107} The CPSU argued that employees doing the same work in the new agencies should have the same wages and conditions. This was a particular problem in the newly created Department of Employment, Workplace Relations and Small Business. Former employees of the Department of Employment, Education, Training and Youth Affairs had differing pay and working conditions to those operating in the former Department of Workplace Relations and Small Business. As an interim measure, it was decided that former DEETYA staff would retain the pay arrangements of that agency but be subject to the working conditions operative within the Workplace Relations agreement.\textsuperscript{108} If nothing else, this indicated that there are significant limitations to devolved bargaining where the government is both the source of funds and the prime initiator of policy and administrative reorganisation.

The experience of agreement making in an environment forced unions to reorient their work. When agency managements sought to negotiate with staff representatives and not solely with union representatives, CPSU delegates attempted to establish coalitions of union and staff delegates. Although it was not unusual for tensions to emerge, particularly over whether communications with staff would carry the union logo, a working relationship involving regular caucuses to establish a common position prior to negotiating with management and joint staff-union meetings took place in a number of agencies. This approach was viewed by delegates as portraying the union as willing to listen to and represent the views of all staff.\textsuperscript{109} In DOFA and DFAT, however, CPSU opposition was insufficient to persuade staff to reject the agreement. Nevertheless the loss of bargaining monopoly can present unions with an opportunity to incorporate non-union members into union strategies. It can also present recruiting opportunities if unions are seen as operating effectively, although there is no evidence, yet, that this has resulted in membership increases.\textsuperscript{110} On the other hand, it has been suggested that some staff representatives are former union members who had lost their confidence that the union would represent their interests effectively.\textsuperscript{111} Moreover, the
interests of relatively lowly-graded staff in large service agencies do not necessarily have the same interests as middle management staff in policy agencies. In DEETYA, for instance, it was one of the union delegate’s responsibilities to maintain close contact with middle level management staff. In Centrelink a group of middle level staff attempted to negotiate with the management separately, but without success. The union claimed that the management preferred the more ‘realistic’ stance taken by the union. Nevertheless the more contestable and decentralised regulatory regime provided opportunities for managements to divide and rule their staff. The extent to which unions are able to resist this management strategy will continue to depend on the level of union density and extent of union organisation in any given agency.

CONCLUSION

This overview of public sector industrial relations in Australia has argued that it is difficult to match the rhetoric of devolved public sector management with the practices of government in controlling and managing their own employees. This difficulty arises from the fundamental tensions that arise from reconciling the responsibilities of government as financial controller, as policy generator and as employer. As financial controller governments generally have sought to shift from a bureaucratic/administrative model of public governance to a more market oriented managerialist model. This shift has involved placing more direct responsibility for financial and personnel management on its managerial agents within the overall framework of government control. This process has become more problematical when attempts have been made to match the policy objective of decentralised industrial relations with the necessity for the maintenance of financial control. This paper has reviewed a number of varying attempts to resolve these dilemmas. It has compared the radical market/contractual models of industrial relations pursued the Coalition government in Victoria with the mixed model established by its counterpart in New South Wales. Despite the apparently different paths taken by the governments, there remained a considerable degree of centralised control of public sector industrial relations in both states. The paper has considered the issue of the measurement of productivity in a budget funded environments during the period of the federal Labor government and the ultimately abandoned attempt to establish a set of institutional arrangements to overcome the measurement problem. This period is compared with the more radical model pursued by the federal Coalition government. It was argued that considerable centralised control of industrial relations was maintained to ensure that the policy objectives of the government were achieved for the its employees. There is a
consideration of the problems presented to public sector unions in continuing to work effectively in an environment when many of the centralised institutions are rendered inoperative, while at the same time centralised control is maintained in a more unilateral way by government.

There is little doubt that there have been significant changes in the management of the public sector. There has been varying attempts to match industrial approaches to the ‘new public management’ model. The nature of the particular relationships between the industrial and the managerial have been contingent upon the extent to which it has been possible to match the process of decentralisation of industrial relations to managerial devolution, without compromising overall government control. In that sense the distancing of government from the provision of public services has been more apparent than real. The state has not ‘withered away’, although it has reduced its role as a direct provider of public services. The control of the remaining functions may have undergone a process of apparent ‘depolitisation’, but the reality of political control has not diminished. While ever governments have financial responsibilities, control of the cost of public employees will need to be maintained, although the methods of achieving that objective will vary. Public sector industrial relations in Australia may have been decentralised in an operational sense, but this has not diminished the control of government over its employees, Perhaps this is the function of the later application of ‘new public management’ principles to public sector employment relations in Australia compared to New Zealand and the United Kingdom, although the pattern in those countries is variable. Perhaps governments need to be rather more transparent about the limits of devolved employment relations where governments remain the ‘ultimate employer’ of public employees.

---

8 *ibid*, p 42.


P Wilenski, ‘The Left and State Bureaucracy’, *The Australian Quarterly*, 52 (4), 1980, pp 398 - 414. Wilenski had worked on the staff of the Coombs enquiry in 1974 - 5. He was appointed secretary of the federal Department of Labour by the new Labor government in 1983 after a serving a period as Professor of Public Administration at the University of South Wales.


R Alaba, *op cit*.

Halligan and Power, *op cit*, p 122; Alaba, *op cit*, p 42. In 1998, Gleeson was reported thus: ‘I suppose it is immodest to say so, but we certainly had more control: authority is more spread out today’, cited in E Wynhausen and B Woodley, ‘Laying Siege to City Hall’, *The Australian*, 20 October 1998.


Wilenski, ‘The Left and State Bureaucracy..., *op cit*’.

Wilenski, *Review...Interim Report...*, p 245.


*Industrial Democracy in the Australian Public Service: A Report to the Prime Minister from the Public Service Board July 1987*, Canberra, 1987. One of the signatories of this report was Wilenski who was by then the Commonwealth Public Service Commissioner.


*ibid*, p 61.


52 J O’Brien, ‘Workplace Productivity Bargaining in the Australian Public Service’ in J Stewart (ed), From
Hawke to Keating: Australian Commonwealth Administration 1990-1993, Centre for Public Sector
Management, University of Canberra and Royal Institute of Public Administration Australia, Canberra,
1995, 85-104.
53 Department of Industrial Relations, Improving Jobs, Productivity, Pay in the Australian Public Service,
Department of Industrial Relations, Canberra, 1992, p 4.
54 ibid, p 13 -21.
55 A Wrigley, Force Restriction Review: Report to the Minister for Defence, Department of Defence, Canberra,
56 Department of Defence, Section 134C Industrial Relations Act 1988, Defence Restructuring Agreement,
Canberra, 1994.
57 Department of Finance, Budgetary Arrangements for the Introduction of Workplace Bargaining in the
Australian Public Service, Memorandum to Commonwealth Agencies, Canberra, 1992.
58 P Gourlay, Statement to Public Service Reform Conference, Senate Standing Committee on Finance and
Public Administration, Public Service Reform: Report of the Senate Committee on Finance and Public
Administration, The Parliament of the Commonwealth of Australia, Canberra, 1992, Volume 2,
Conference Proceedings. Gourlay was the First Assistant Secretary responsible for wage bargaining in
the Department of Defence.
59 Interview with Des Heaney, ACT Secretary, The Australian Manufacturing Workers’ Union by author,
Canberra, 24 July 1996.
60 O’Brien, ‘Workplace Productivity Bargaining in the Australian Public Service’, op cit, pp 85-104; J O’Brien,
‘Employment Relations and Agency Bargaining in the Australian Public Service’ in G Singleton (ed),
The Second Keating Government: Australian Commonwealth Administration 1993-1996, Centre for
Research in Public Sector Management, University of Canberra, and the Institute of Public
Administration Australia, Canberra, 1997, 175-192.
61 ibid.
62 J Halligan, I McIntosh and H Watson, The Australian Public Service: The View From the Top, Coopers and
Lybrand and the Centre for Research in Public Sector Management, University of Canberra, 1996, p
46.
63 Department of Industrial Relations and the Department of Finance, Interim Evaluation of Agency Bargaining
in the Australian Public Service, Canberra, Department of Industrial Relations, 1994; Joint Council of
the APS, Joint Review of the APS Agreement “Improving Productivity. Pay and Jobs in the Australian
66 D Rosalky, ‘Starship Enterprise: The Next Generation’, address given to the ACT Industrial Relations
Society, Canberra, 10 August 1995.
67 J Alford and M Considine, ‘Public Sector Employment Contracts’ in J Alford and D O’Neill (eds), The
Contract State: Public Management and the Kennett Government, Centre for Applied Social Research,
Deakin University, 1994, pp 46-73.
68 R Barrett and J Backwell, ‘A Paradigm Shift? Employee Relations in the Victorian Public Service since
69 Victoria had operated a wages board system until the early 1980s. This set minimum wages, but did not
otherwise regulate working conditions. The federal industrial award system provided more
comprehensive industrial protection for employees. Unions in the private sector largely used the
federal system.
71 R Naughton, ‘The Institutions Established by the Employee Relations Act 1992,’ Australian Journal of
Labour Law, 6, 1993, pp 121 - 139.
72 R Mitchell and R Naught, ‘ Radical Labour Law Reform and the Demise of the Victorian Industrial Relations
73 Barrett and Backwell, op cit.
74 ibid.
75 J Teacher and B Van Garbag, ‘Industrial Relations and Public Service Reform: The Victorian Case’, The
77 Teicher and Van Gramberg, op cit.
78 Niland, op cit, Niland and Turner, op cit.
Interview with union delegates, Departments of Finance and Administration and Foreign Affairs and Trade, with Michael O’Donnell, 16 July 1998.

Colmer, op cit.

Interview with Heaney, op cit.


Gepp, op cit.

Fairbrother, Svenson and Teicher, op cit.
