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**By Chance or Choice: The Regulation of the
Apprenticeship System in Australia, 1900-1930**

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ABSTRACT

This paper traces the process whereby the apprenticeship system came to be regulated by industrial tribunals during the period 1900 to 1930. It describes how the regulation emerged, the motives that underpinned it, and the wider political debate about the apprenticeship system at the time. It then goes on to assess the effect of this regulation. This assessment is informed by an underlying theoretical perspective and draws on the contemporary debate and the outcomes that can be observed. While the question of primary interest is the efficiency of the regulatory regime that emerged, broader considerations are invoked. What was set in place in the early part of the 20th century has continued to shape the how the apprenticeship system has developed since then. For that reason, the future development of the apprenticeship system may be a more relevant indicator of outcomes than the contemporary facts.

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Introduction

Early in the twentieth century, many of the Australian States as well as the Commonwealth introduced a system for the compulsory arbitration to settle industrial disputes. The courts and other bodies to set up to effect this had no power to deal with matters concerning apprentices. Notwithstanding, they proceeded to make determinations about the pay and conditions for the employment of apprentices. Eventually they were granted this power and during the period 1900 -1930 proceed to progressively regulate the apprenticeship system in all States.

There was an element of chance in all this. A system of compulsory arbitration, set up to resolve industrial disputes, became a vehicle for regulating apprentice training. That a system of compulsory arbitration would play this role was not even contemplated. Having adopted this mode for regulating apprentice training conditioned the form that the regulation took. The courts, as agents of the state, inevitably had to invoke a public interest perspective and in that sense there was also an element of choice in what emerged.

Looking backwards in time, one can characterise what emerged as a return to the medieval past. Effectively, the Elizabethan Statue of Artificers of 1562 was restored after a hiatus of 100 years. Looking forward, a more redeeming view can be construed. The steps taken in the period 1900-1930, ensured the continued viability of apprenticeships as a method for the training of young persons in practical skills.

Beginning with a description of the apprenticeship system at the close of the 19th century, the paper traces the process whereby the apprenticeship system came to be regulated by industrial tribunals, the views of the parties, the motives for the determinations made and the wider political debate about the apprenticeship system at the time. It then goes on to assess the effect of this regulation. This assessment is informed by an underlying theoretical perspective and draws on the outcomes that can be observed. While the question of ultimate interest is the efficiency of the regulatory regime that emerged, broader considerations may need to be invoked. What was set in place in the early part of the 20th century has continued to shape the how the apprenticeship system has developed since then. For that reason, the future development of the apprenticeship system may be a more relevant indicator of outcomes than the contemporary facts.

Apprenticeships, being a private contract between two parties, do not require any special regulatory framework. Like any exchange, it is facilitated by a legal system with coercive powers that can enforce the terms of the contract, but that is not essential. Still, for most of the known history the training of apprentices has been regulated or at least embedded in well-developed institutional framework. Presently, the arguments that apprenticeship system must be regulated derives mainly from an institutionalised view of markets. In the English language literature much of the detail has been developed through a comparative analysis of apprenticeship training in Germany and the United Kingdom (Marsden and Ryan 1991, Soskice 1994). At a broad level it is argued that the viability of apprenticeship system, at least on a large scale, is “dependent on an institutionalised social partnership and neo-corporatism involving the public use of private interests in a structure of enormous institutional complexity” (Streeck 1989). This grand framework is supposed to provide solutions to the myriad of problems that besets apprentice training mediated by private contracts in a competitive market. These include free-riding, the low quality of work-based training and low educational content. According to this view, apprenticeships can only prosper in contexts like the German one (Crouch 1997), and explains why apprentice training has languished in Britain. In some cases proponents find the arguments so compelling that it is claimed that the apprenticeship system must have languished in Australia as well (Soskice 2002). Others, having examined the facts, are more particular. Thus Gospel (1994) has argued that the institutional arrangements that developed during the 20th century ensured the survival of the apprenticeship system in Australia. At a more concrete level, Soskice (1994) sees the requirements as being strong institutions that allow the collective interests to dominate - employer organisations, trade unions and a labour market regulated by these organisations.

Generally speaking, the economic literature takes a more sanguine view about the merits of regulation, but there is also some common ground. The main theme in the theoretical literature is that externalities, of one form or another, drive a wedge between the private and public benefit and results in underinvestment in human capital. The poaching externality (Pigou 1912), has been seen as the most compelling reason for Government intervention in the training market. Proposals for a training levy and other arrangements to deal with this problem have a lot in common with the institutional perspective. Apart from the poaching externality, theorists have provided a long list of other reasons for why too little training might be provided in a free market (Booth and Snower 1996). However, they have been less keen to suggest that the problem can be remedied by Government regulation.

The Apprenticeship System at the close of the 19th Century

The practice of masters apprenticing young persons and instruct them in the art and mysteries of their trade has a long and illustrious history. In medieval Europe the practice was regulated by the city-based trade guilds that enforced a compulsory apprenticeship by the requirement that only persons having served an apprenticeship could be admitted to the guild. They also prescribed the duration of apprenticeships, limited the number of apprentices a master could have, supervised the training of apprentices, regulated the transfer of apprentices between masters and played a role in enforcing all the rules and regulations. In England, the state lent a helping hand through the Statute of Artificers of 1562 that prescribed compulsory apprenticeships.

During the 18th century the position of the trade guilds were undermined by the combined weight of industrialisation and political and economic liberalism. As a consequence, the apprenticeship system lost some of its dominant role in the employment and training of youth. Still, many of the norms persisted and combinations of journeymen, and later trade unions, sought to preserve the restrictive regulations of the guilds.

As the industrialisation of the colonial economies took off during the second half of the 19th century, the apprenticeship system in Australia underwent many of the changes that had previously taken place in England. The underlying causes were technical change and the increased scale in the production of goods. Both had the effect of an increased division of labour. The craft workshop was replaced by the factory in which machines did some of the work that had previously been done by hand tools. The introduction of machines in turn was accompanied by an increased division of labour as the production was divided up into a large number of discrete tasks. Quite independently of mechanisation, the increased scale of production also led to an increased division of labour as Adam Smith explained a long time ago. The consequence of all this was that the craftsman, competent in all aspects of his trade, was replaced by the factory operative who needed to exercise little judgement.¹

¹ The facts about apprenticeships during the colonial period can be found in Shields (1995a) for New South Wales, and Schofield (2000), Fromin (1991) and Francis (2001) for Victoria.

This deskilling process was, however, uneven and incomplete, and compensating factors were at work.² Some industries, notably the building industry, remained largely untouched by mechanisation. In other industries, like the boot trade and printing, the trade unions fought hard to preserve the skilled status of their trades. In this they were helped by the fact that mechanisation was not wholly destructive to the traditional skills. In addition, industrialisation gave rise to new trades such as engineering and the increasing prosperity generated a demand for high class products produced by traditional craft methods.

Naturally, the changing skill requirements had a significant effect on the arrangements for the training of youth to take their place in industry. Apprenticeships did not become the usual arrangement for the employment and training of boys who went into industry. Instead a variety of alternative arrangements developed. Contemporary commentators tended to deplore the situation. Statements of the type “The apprenticeship system is nearly extinct in the colony (New South Wales)”³ or “It is well known that in most trades, the apprenticeship system is dead”⁴. It was also common to talk about the ‘state of decay’ of the apprenticeship system. Many such comments compared the present situation with a nostalgic past - a past when masters not only taught apprentices the whole trade but also its mysteries, and cared for their moral and spiritual welfare. But this past never existed in Australia to any significant extent. During the early settlement period the practice of indentured apprenticeships was certainly in evidence. Numerically, however, apprenticeship was not an important institution. Rather as industrial development proceeded during the second half the 19th century, forms for employing boys that were different from the traditional apprenticeship evolved.

Trade unions and exclusionary practices

Compulsory apprenticeship and limits on the number of apprentices were two fundamental aspects of the apprenticeship system during medieval trade guilds in Europe. Compulsion was enforced in two ways. Directly by a clause of the type that ‘no one shall set any child or woman to work in the same trade, if such person be not first bound apprentice’

² The deskilling of manual work during the 19th century is one of the most extensively studied phenomenon in labour history. The nexus of deskilling and apprenticeships in Australia is discussed in Shields (1995a) and Francis (2001).

³ Shields (1995a) p 9.

⁴ Schofield (2000) p 77.

(Leathersellers' rules of 1398)⁵, and, indirectly, by the requirement that only those having served an apprenticeship were admitted to the guild. Limits on the number of apprentices were just as common. One of the first rules of that type stated that “no fishmonger be allowed more than two or three apprentices at a time” (Fishmongers’ rules of 1279).⁶ In England, the guild rules were given greater force through the Statute of Artificers of 1562. Until repealed in 1814, this statute prescribed that apprentices should be indentured for a period of at least seven years, that masters could have no more than three apprentices for every journeyman and that only persons who had served an apprenticeship could practice a trade. However, there was no explicit requirement that children should be bound.

As the position of the trade guilds were undermined by political and economic changes during the 18th century, the emerging journeymen combinations sought to preserve some of the restrictive practices⁷. As the combinations became craft unions their rules usually incorporated the same restrictive features, and as the trade union movement developed in the Australian colonies they adopted the same rules. Many of the early trade unions were simply branches of the corresponding British union so their rules had already been laid down for them. Even if that were not the case, it was natural for the Australian unions to follow the traditions of unionism as it had developed in England.

By the force of history then, the Australian trade unions became the carriers of norms that can be traced back to at least the early medieval period and had been an integral part of social and economic life for centuries. The rules of the Boot Trade Employees Federation in 1857 stated that “all boys working in factories at putting-up or finishing, be apprenticed to the employer” and “that the maximum number of apprentices be in the proportion of one boy to five men”.⁸ These rules, and those of most of the Australian unions’, were to all intents and purpose the rules of the Leathersellers' and Fishmongers' guilds. Like the guilds, some unions also restricted membership to those having served an apprenticeship.

Of course, the Australian unions were not just following a script written in England or by guilds of the distant past. Which rules they fought for, and when and how, were decided by the conditions of the colonial labour markets. On the face of it, the conditions were not favourable to the pursuit restrictive practices. During the second half of the 19th centuries, as

⁵ Dunlop 1912 p 38

⁶ Dunlop 1912 p 45

⁷ Webb and Webb (1912)

⁸ Handbook of Trade Unions p 158.

industrialisation proceeded, the colonies were open to a large and steady inflow of immigrants. Even during the early 1900, most the rapidly growing need for skilled labour was met by immigration. To control the supply of skilled workers by restricting the entry of young persons through a regulated apprenticeship system was never a realistic possibility. The control over apprenticeships sought by unions was more about preserving the status of the skilled worker, a status that was under real threat from industrialisation. Prior to compulsory arbitration and wage regulation the unions had to rely on their own efforts to impose their rules onto employers. In that they enjoyed only limited success. Only a few unions managed to secure a significant closure, as it was called, over their trade⁹.

The state of apprenticeships

To describe the situation as it stood at the close of the 19th century it is helpful to distinguish two aspects of apprenticeships, the form it took and the content of the training. The form refers to the contractual arrangement while the content refers to the nature of the training that boys received. Apart from proper apprenticeships, supported by an indenture and providing training in all aspects of a trade, three additional cases can be distinguished.

In the first case the traditional form, apprenticeship by indenture, was retained but the content had been altered so boys were trained only in a limited number of industrial processes. This might be described as apprenticeships in name only. The second case is where the traditional form had been abandoned in favour of simpler written or even verbal agreement, but the training followed the traditional format. The training had some kind of structure to it and apprentices were trained in all, or at least most, branches of the trade. Finally there was a third case where both form and content had changed. Boys were not employed as apprentices but simply as boys, and left to their own devices pick up of whatever skills they could. Initially they were just boys, who at some later stage might be referred to as improvers.

With so many modes of employing boys it is not surprising that the terms in use was a source of confusion. Generally speaking, two terms were in common usage, apprentices and improvers. The term improver originated from the English practice of apprentices on completion of their term serving a year or two as improvers on reduced wages before

⁹ Shields (1995a) pp 18-22.

attaining full journeyman status. In Australia it also came to be used to denote unapprenticed boys who worked in a trade, but its precise meaning changed over time and varied between States. Boys who only did boys work, the type of work not done by adults and requiring no particular skill, were generally referred to as just boys.

There are few hard figures from the colonial period but one can take data from New South Wales in 1906 as being indicative of the pre-regulation situation. At that time the statistical collections under the Factories Act reveal that there were 2130 male apprentices and improvers.¹⁰ Almost a quarter of these were in the engineering trades. Other trades with a large number of apprentices were boot making, printing and baking. Apprentices and improvers comprised only 20 per cent of all boys employed in factories. Thus, the vast majority of boys who went into industry did so as boys rather than as apprentices. Overall, 31 per cent of the male workforce was under 21 years. The relative insignificance of apprenticeship as a pathway into work is further illustrated by noting that the figure of 2130 apprentices and improvers represents only 4 per cent of all boys in the relevant age group. Looking at the figures from the perspective of the needs of industry, 24,000 adult males were employed in factories. An informed guess is that half of these adults could be regarded as skilled. Thus there was one apprentice for every six skilled adults, a ratio well below the replacement rate. Considering some individual trades in which most adults were regarded as skilled, we find that in some trades the number of apprentices were roughly in line with the future need for skilled workers. In engineering there was one apprentice for every three adults, in baking the ratio was 1:2 and in jewellery 1:5. In some other trades, including boots, joinery and coach building, the numbers fell well short of the likely future needs.

Regulation by arbitration

At the turn of the 20th century four of the mainland States as well as the Commonwealth introduced a system of compulsory conciliation and arbitration – state tribunals with the power to settle industrial disputes and the power to enforce the decisions they made. At about the same time Victoria and Tasmania set up wages boards to regulate wages and conditions. While different from compulsory arbitration the wages board had essentially the same power as industrial tribunals.

¹⁰ New South Wales Statistical Register 1906.

At the time these systems of industrial arbitration were introduced they represented a major departure from the methods of industrial regulation. New Zealand was the only country that previously had done so. The proximate causes usually put forward to explain this departure include the high degree of industrial conflict and a severe depression. At a deeper level the precise reason why arbitration was introduced in Australia is still debated by historians.¹¹ In a narrow sense, arbitration was simply seen as a way to avoid the great inconvenience of industrial disputes to the community, but there was much more to it than that. What is clear is that compulsory arbitration was not introduced to regulate apprenticeship training, and it was never contemplated that it should play this role. Yet, almost as soon as the industrial tribunals were put to work, this they proceeded to do. Beginning with the first determination of a Wages Board in 1897, their coverage and influence over apprenticeships was gradually extended and by 1913 it might be said that a distinct system for the control of apprenticeship training was in place in New South Wales and Western Australia. At that stage, however, this system was not firmly established and it would take until the late 1920's until regulation by arbitration had a secure position in Australia.

How this regulation was accomplished can be told with reference to the contrasting but similar developments in three states, Western Australia, New South Wales and Victoria.

Western Australia

The introduction of compulsory arbitration in Australia was a major industrial and political issue. It was the subject of intensive debate over a long period of time both prior to and after it was introduced. In that, however, Western Australia was different. Little debate and conflict preceded its introduction and, apart from the details, it became readily accepted as a process for dealing with industrial matters.

Still, even in Western Australia, the first attempt at introducing a conciliation and arbitration bill in 1899 never progressed to a vote. In 1900 the bill was re-introduced as part of a deal between the labour movement and the Premier John Forrest. With labour support Forrest survived a motion of no confidence and in return saw to it that the bill was passed. Thus, the Conciliation and Arbitration Act of 1900 became the first such act in Australia.

Complementary legislation then cleared the way for this act to become operative. Conspiracy legislation that had made trade unions illegal was reformed, and a trade union act resolved

¹¹ See for example Macintyre and Mitchell (eds) 1989.

any remaining doubts as to the status of unions. The speed of these developments is remarkable. Only a year and a half had passed between the first Western Australian Trades and Labour Congress resolving to support compulsory conciliation and arbitration and an act giving effect to this was on the statute books. Only a decade earlier a trade union movement barely existed as united force in Western Australia.¹²

The intention of the act was that disputes should in the first instance be settled by conciliation while compulsory arbitration should be a last resort. Thus the act had established Conciliation Boards that were expected to handle most of the disputes. But with the right of appeal to an Arbitration Court, the Boards soon ceased to serve any useful purpose and the Court became the sole arbiter of industrial disputes.

The Court of Arbitration began its work in 1902. Already during its first years of operation it made a number of awards that included references to apprenticeship. In no case, however, was apprenticeship a central question. Matters concerning apprentices were incidental to the central issues, the wages and conditions of journeymen. What triggered the Courts intervention in apprenticeship matter were union requests for provisions that reaffirmed the existing situation or further limitations on the employment of apprentices. Most of these early deliberations involved inserting a limit on the ratio of apprentice to journeymen in the awards it made and rulings about the finer points of these limits. The ratio of apprentices to journeymen was an issue that all Australian arbitration courts were to spend a considerable amount of time on. By and large, the Court simply reaffirmed the existing situation by prescribing what had been the norm in the trade. Typically, this involved limiting the number of apprentices to one apprentice to every three journeymen. But the Court also felt compelled to try to enunciate some principles on which the ratio was to be fixed. In its first attempt to do so it said that the ratio was fixed “with a careful regard to the apprentices welfare in the matter of tuition”.¹³ While this simple principle was never discarded, in the long run it was to prove insufficient.

As regards other matters the Court opted to preserve the status quo. When the case of the Typographical Union came before the Court, a new institution had to face up to matters with a long and illustrious history. The Western Australian union was a recent creation but with a distinguished pedigree. Its New South Wales equivalent was formed in 1880 and since that

¹² See van den Driesen (2003), Ch 1 for an account of the process that led to the passing of the Conciliation and Arbitration Act.

¹³ Western Australian Industrial Gazette Vol 5 p 206.

time had secured one of the most closed trades in that State by the aggressive pursuit of exclusionary practices¹⁴. In that, the Australian printing unions were following in the footsteps of the English printing unions. In this case the Court refused to accept any further restrictions on apprentices' employment and simply reaffirmed the usual rule of limiting apprentice numbers¹⁵. In another case the Court rejected an attempt to make apprenticeship compulsory in carpentry by a clause that all boys in the trade should be apprenticed. It was thought that boys did not care to be bound for a long period of time at a low rate of pay. Preventing boys that were not bound from working in the industry would have the effect that no boys would be employed at all. This was held to be detrimental, and the court should not do anything that would 'debar the employer from making use of boy labour where boy labour is useful to him'¹⁶. A few years later, however, the Court took the opposite view in the case of the coachbuilders. Now it was thought that in order to have a succession of good skilled tradesmen in this industry compulsory apprenticeship were required¹⁷. The tension, between acting in accord with some general principles, and the industrial and economic realities were evident at a very early stage in the work of the Court

Over time the Court developed a more consistent approach to matters concerning apprentices, but it was the Tailors Case in 1907 that became the turning point¹⁸. The matter of primary concern was the complex matter of piece rates, but it became apparent that the underlying conditions in the industry left a lot to be desired. Much of the work was done under the squad or team system in which the work was divided into a large number of separate tasks each done by a single person. Given this high degree of division of labour, the labour force consisted of a small number of skilled tradesmen together with 'an astonishing proportion of 'apprentices'¹⁹, juveniles working under the false impression that they were being taught a trade'. The member of the Court spent a lot of time visiting tailoring establishment and came away with dismal view of the situation. They came to the view that parents were making sacrifices to enable their children to work at wages that were but a fraction of what a skilled tailor could command only to find that at the conclusion of their apprenticeship what they had learnt was of no use whatsoever. Instead, on reaching maturity they were turned adrift to earn what little they could as improvers, doing the easiest part of an artisans work as a member of a squad.

¹⁴ Shields (1995a) p 20.

¹⁵ WAIG Vol 1 p 38.

¹⁶ WAIG Vol 2 p 38

¹⁷ WAIG Vol 5 p 15

¹⁸ WAIG Vol 6 pp 97-110

¹⁹ *ibid.* p 101

Up to this point the Court had only issued brief judgements to explain their reasons for an award. As a radical departure was now contemplated, it was thought prudent to set out a more comprehensive rationale and draw on external authorities. One authority was the 1907 Apprentice Conference in Victoria that had resolved that the industry in Victoria was seriously threatened by the defective system of industrial training and deemed it essential that apprenticeships be placed on a sound footing. Further authority was drawn from Mr. Justice Higgins in his Harvester judgment that had been brought down earlier that year. In commenting on the role of improvers in the industry Higgins saw this class of workers a “menace to industrial order as well as a hindrance to industrial efficiency”²⁰. In the same vein, he deplored the unbound apprentices from which most improvers were drawn, and voiced his opinion that the method of training apprentices must be improved. These views were cited with approval. Other reasons were invoked as well. Mr. Somerville, the workers’ representative on the Court, noting that the few highly competent journeymen in the trade had received their training in foreign countries, painted a picture of native-born Australians becoming a “hewers of wood and drawers of water”²¹, while the highly skilled positions were filled by foreigners from countries where the training and education of the young workmen are the responsibility of the state.

The Court then proceeded to set out an award that provided the terms and conditions under which all apprentices in the tailoring trade were to work. The departure with the past was the comprehensive nature of the apprenticeship provisions and several new ones. As regard the first point the award included provisions for registration of indentures, limits on the ratio of apprentices to journeymen, the duration of apprenticeship, the minimum wage at each stage, and a detailed specification of the conditions for transferring an apprentice to another employer. Comprehensive as it was, it still omitted matters that might have been included. The employers obligation to teach, usually stated in very general terms in the indenture, was not specified in the award beyond saying that the employer should keep his apprentice constantly at work.

As regards new provisions, apprenticeship in tailoring was made compulsory by, in the words of his Honour, abolishing ‘the improver entirely from the face of the tailoring trade’²², an expression first coined by Mr Justice Higgins. From now on, a worker in this trade “must

²⁰ *ibid.* p 104

²¹ *ibid.* p 107

²² *ibid.* p 103.

either be either an apprentice or be qualified to take his position in the ranks of the skilled tradesmen”²³. But the most radical provision was for the regular examination of apprentices every six months and the detailed supervision of this process by the Court. Furthermore, to mark the importance that the Court attached to this aspect, there was a provision for withholding the six-monthly increment to wages if an apprentice did not pass an examination.

The employers’ representative on the Court may have been less committed to the new arrangements than the others. Still, he believed that considerable progress had been made in setting up a system that would ensure that apprentices were properly trained and that employers will do their part to their very best. Anticipating further events, he also made the point that if both parties exercise a little forbearance ‘we have arrived at the spirit of the Act of Conciliation and Arbitration’²⁴. But while the award may well have been within the spirit of the Act, it was not according to the letter of the law. The Act provided for the compulsory resolution of industrial dispute and gave the Court the power to fix and enforce terms and conditions of employment on the parties to a dispute. But there was no dispute about apprentices, and the act made no mention of apprentices. It was the Court itself that had deemed that terms and conditions of apprentices were an “industrial matter”. This may have been so, but even the Court itself later acknowledged that it did not have the jurisdiction to deal with the registration and examination of apprentices.

In response to legal challenges to the award the members of the Court lobbied the Parliament to recognize the beneficial effects of regulating apprenticeships along the line set out in the tailor’s award. A special act was passed in 1909 which clarified and extended the jurisdiction of the Arbitration Court by amending the meaning of the term “industrial matters” to include all matters affecting or relating to apprentices. This provision was later incorporated in the Industrial Arbitration Act 1912 and again in 1925²⁵.

The emerging regulatory system of apprenticeship also came under pressure within the Arbitration Court itself. Following shortly on the tailors’ case the building employers had serious reservations about the merits of compulsory apprenticeship and sought a partial restoration of improvers²⁶. A number of arguments were put forward. Making

²³ *ibid.* p 103.

²⁴ *ibid.* p 108.

²⁵ Wolff Royal Commission 1937, p lxxxi.

²⁶ WAIG Vol 11 p 123-131.

apprenticeship compulsory in the trade had not exactly led to a revival of apprenticeships. In fact, there were only eleven apprentices in the carpentry trade, a number far below any reasonable estimate of future requirements. Apart from the need for more competent workers, employers also pointed to an obvious problem, a boy who had not embarked on an apprenticeship by the age of 15 or 16 was effectively debarred from ever becoming a journeyman. Even if willing to work for an apprentice wage, employers would be very reluctant to take him on. At the time, the common law rule that an indenture could be rescinded once a boy reached maturity was the principal reason. In other words, the employer could not be confident that the boy would keep his promise to complete the apprenticeship. The union's arguments for sticking to compulsory apprenticeships were not helped by two of the carpenters who appeared as union witnesses. They roundly condemned the improvers notwithstanding that they had themselves acquired their skills through this route. They readily admitted that large numbers, if not the majority, of journeymen carpenters working in Perth had thus acquired their skills. The employer witnesses also included former journeymen who had not enjoyed the advantage of apprenticeship in learning their trade but had nevertheless moved on to greater things.

While the employers' may well have won the argument, the new President of the Court, relying on the force of precedence, was prepared to give compulsory apprenticeship another chance. Having escaped this challenge, the provisions of the tailoring award continued to be inserted in one award after another. Usually, this was at the request of the unions concerned. The attitude of the employers were more ambivalent but there was no strong objection and no concerted effort to prevent the extension of compulsory apprenticeship

One more innovation to the apprenticeship system, first introduced in the painters and paperhangers' trade in 1911, was the requirement to for apprentices to attend technical college²⁷. Initially, and following the New South Wales lead, this was set at two nights per week during two years of an apprenticeship with the employer paying the fees. More contentious was a later attempt of the printers to have apprentices attends classes for three hours per week in the employer's time²⁸. Initially this claim was stood over. According to the norms apprentices were 'bound' to the master, meaning that the master had exclusive right to an apprentice's services for the whole duration of the apprenticeship. For how long,

²⁷ WAIG Vol 9 p 110.

²⁸ WAIG Vol 13 p 81.

and in whose time, apprentices were to attend for technical education would continue to be argued between employers and unions for the next fifty years.

By the early 1920, the apprenticeship system had taken on a new lease of life in Western Australia. Some thirty different trades had been brought under the scheme, most incorporating the tailors' standard and some also the requirement to attend technical classes. Mr. Somerville, the workers' representative on the Arbitration Court, who had been one of the principal instigators, was proud of what had been achieved. While 'other communities', meaning the Eastern States, "are investigating and appointing Commissions, and printing reports by the ton...we in Western Australia have done, and are doing, something very practical indeed to secure the proper training of future tradesmen and tradeswomen"²⁹. He also derived considerable satisfaction from parents telling him, who knew it all, about their pleasure and satisfaction that their children who were apprenticed were examined, advised and watched over during their apprenticeship. When regular reports and statistics began to be published in the Industrial Gazette, the Court had more than 1000 apprentices on its books and the number of new registrations in 1921 numbered 346³⁰. Some 700 apprentices were examined during the year and the examiners reported "with few exceptions, the apprentices are making satisfactory progress in the various trades". Less than a year later, however, the examiners are much more critical. In the case of apprentices to the printing trade they now found that "students were deficient in Printer's English, spelling, punctuation, proof reader's remarks, breaking of words etc"³¹. A universal complaint levied against youth, but critical remarks were made about other trades as well.

New South Wales

While the charge that other communities, the Eastern States, were producing reports by the ton had some validity, that they were doing nothing practical was a bit off the mark. In fact, an almost identical system of regulating apprenticeships had developed in New South Wales during the same period. As in Western Australia the legal underpinnings was an Industrial Arbitration Act that gave wide powers to an Arbitration Court to regulate industrial matters. This act also omitted any reference to apprenticeship, but as in WA the court proceeded as if that were not the case. In the case of NSW, this presumed power was more vigorously

²⁹ WAIG Vol 17 pp 144-45.

³⁰ WAIG Vol 16 p 137.

³¹ WAIG Vol 17 p 184.

contested and ultimately denied by the High Court in 1908. By that time, however, the act had already expired. This was just one of the many legal wrangles that held up the work of the court. It also had to deal with government obstruction and deliberate delaying tactics by employers (Shields 1995b p 247)

One of the first cases eventually heard by the court was the dispute between the Amalgamated Society of Carpenters and Joiners and the Master Builders Association. This dispute had a long history before it eventually made it to the court in 1905. The log of claims by the union was first made in 1902 and involved many of the issues that had been traversed during previous decades. This case may also be seen as a test case, although compulsory apprenticeships had been introduced by consent awards in the plastering and painting trades the year before. In respect of apprentices the union asked for a compulsory five-year apprenticeship, a 1:5 ratio of apprentices to journeymen, minimum apprentice wages and the prohibition on improver labour. While there were many reservations about some or all of these claims among the employers, the Master Builders Association was not adverse to the principle of compulsory apprenticeship. Their primary concern was to make allowance for the particular characteristic of the building industry. Then, as now, the building industry was subject to much greater fluctuations in activity than other industries. Thus the Association favoured a system of transferable apprenticeships that allowed an employer who could not provide continuous work to permanently transfer an apprentice to another employer. Much was made of this need for transferability even though new principle was involved. Apprenticeships supported by an indenture had always been transferable with the consent of all the parties concerned in the same way as any deed or contract can be reassigned. Still, they obviously felt that this principle should be given explicit recognition to facilitate the development of procedures for transferring apprentices.

The award that was handed down in 1905, provided for a compulsory but transferable apprenticeship with minimum wages. The union decided not to press the claim for limiting the number of apprentices during the hearing. Presumably they saw no point in pressing what to any disinterested person was a vexatious claim – to limit the number of apprentices in a trade that hardly had any apprentices. Regarding other matters, the Court adopted a compromise solution by providing a two-year time limit on improver status. Apprentices were also required to attend trade classes for a minimum of two evenings a week for at least two years. This was the personal innovation of the President of the Court, Mr Justice Heydon, for which neither the union nor the employers had asked.

When the turn came to another large trade, engineering, the employers were not as accommodating. While the Court agreed to compulsory apprenticeship, it provided for the existing practice of verbal or written agreements to continue rather than the more formal method of apprenticeship by indenture. As in most other cases, the union had also asked for a limit on the number of apprentices, although they had not sought such a limit in the past. This claim was rejected by the court. In this case, the reason turned on the transferability of apprentice training. Mort's Dock, one of the largest employers in Sydney, was also the firm that trained a substantial number of engineering apprentices. On completing their time, most apprentices left Mort's to become seagoing engineers. This being the case, the Court did not think it should interfere with an arrangement whereby Mort's trained the workers in another industry. Additionally, the usual union argument at the time, that restrictions on apprentice numbers was essential to their proper training, did not impress the court. Judge Heydon, the second president of the Court, found the argument spurious, and accused the union of having no interest in apprentices beyond limiting their numbers. Judge Heydon also included the requirement to attend trade classes from the Carpenter's Case for, as he put it, "the benefit of the trade". As regards other matters, the union had not made a claim for apprentice minimum wage so the award has nothing to say about that³².

By the time the Act expired in 1908, the Court of Arbitration had established precedence for the regulation of apprenticeships. But its impact was limited by the few cases it had the opportunity to hear during its short life. What followed, an Industrial Disputes Act of 1908, was also to have a rather short life. By this act the Arbitration Court was replaced by a system of occupationally based boards that, borrowing the term from Victoria, became known as wages boards. These boards were to settle dispute by conciliation rather than arbitration. The original court, now renamed the Industrial Court, was relegated to hearing appeals and to oversee the system of individual boards. The new boards did not have to assume that they could deal with apprentice matters but were given the expressed power to 'fix the number or proportionate number of apprentices and improvers and the lowest prices and rates applicable to them'. This very same expression was used to define the powers of the Victorian Wages Boards. The Government's motivation was that since these matters could be a reason for an industrial dispute the wages board should have the power to deal with the underlying cause of that dispute. In other words, apprenticeships might be regulated to resolve industrial disputes.

³² New South Wales Arbitration Reports, 1908, pp 263-277.

Initially the unions were suspicious of the new boards, established as they were under the umbrella of anti-union legislation. However, they soon embraced the new system and came to set the agenda by pursuing their traditional claims for compulsory apprenticeship and other restrictions to protect their status. On the whole, employer organisations simply responded to these demands rather than developing their own distinct position. Doing this was in any case difficult because of the very different circumstances in different industries and even within industries. Generally speaking, employers had no strong objection to compulsory apprenticeship and were often in favour, but argued against restricting the employment of apprentices. Thus, the only conflict that the wages boards were left to resolve was the ratio of apprentices to journeymen. In most cases, the unions' arguments for limitations did not impress the boards. The very restrictive, not to say unrealistic, limits sought by some unions did not help their case. Eventually, in the engineering industry, a ratio of 4:5 was fixed in 1912. This was far more generous than other awards, but then this was the first time the unions had succeeded in limiting apprentice numbers in the New South Wales' engineering industry. In carpentry, the relevant board refused to impose a limit altogether. In the printing industry the limits on apprentices became the subject of a protracted struggle. As soon as the relevant board imposed, or refused to impose, a ratio, one or the other party appealed to the Industrial Court. Thus the decision fell to Judge Heydon who remained unsympathetic to idea that apprentice employment should be restricted. By 1915-16 there were some modest restrictions on the use of apprentices in the printing industry, but these limitations were far more generous than those sought by the unions.

During the four year of the Act the 275 boards issued a total of 441 awards. Thus, by mid-1913, award conditions relating to apprentices applied to 56 recognised trades.

Apprenticeships were now regulated in the majority of the skilled trades in New South Wales. These conditions were modelled on the first awards made by the Arbitration Court. The three principal conditions were: compulsory apprenticeship by means of an indenture for a period of three or to seven years (41 trades), minimum wages (56 trades) and a maximum ratio of apprentices to journeymen (53 trades). In addition, apprentices in ten trades were required to attend technical college for two days a week for a period of two years³³.

This very rapid development was possible by the decentralising the award making power to a large number of boards. The old three-person court had been hopelessly overloaded and the

³³ NSW Industrial Gazette, October 1913, p 203.

delays in hearing cases had been a source of great frustration. Another factor was the rapid growth of employment with increasingly acute shortages in many of the urban trades. Concomitant with this there was a dramatic surge in union membership that encouraged unions to use the Wages Boards. Between 1909 and 1914 overall union membership in New South Wales almost doubled. This surge was just as strong among the craft unions. Apart from the strong employment growth in the trades, the traditionally restrictive criteria for membership were relaxed and improvers, other unapprenticed workers and semi-skilled workers with a claim to skilled status were admitted.

The number of awards tends to overstate the extent to which apprenticeship had come to be regulated. The awards had limited coverage. In most cases they were common rule awards applying to a trade as a whole but in a defined area. In other cases they applied only to the parties to a dispute. There was also a fair degree of ambiguity as to how compulsory apprenticeships were even if this is how they were described. Most commonly, compulsory apprenticeship was imposed by a clause that precluded the employment of boys unless they were apprentices such as “journeymen and apprentices only shall be employed in the following branches...”³⁴ or “boys entering the trade shall be apprenticed...”³⁵. In other cases this clarity was lacking. Compulsion was only implied by a clause stating that “all apprentices shall be legally indentured”³⁶. On the face of it, this simply states that an apprentice shall not be employed under any form of contract other than an indenture. It has nothing to say about the employment of boys that are not apprentices. Of course, if all boys working in a trade were regarded to be apprentices, the clause would indeed imply compulsory apprenticeship. Still, one wonders why this crucial aspect was not given an explicit formulation.

The debate about apprenticeships in the industrial tribunals was driven by narrow concerns. This was a period with very strong growth in employment and acute shortages in many trades. Yet, in the deliberations of the industrial tribunals it was never contemplated that shortages of skilled labour might be alleviated by training young people and that the conditions they imposed by a might influence the numbers being trained. Industrial tribunals only dealt with industrial matter, the conditions under which apprentices were employed. That these awards might have some bearing on the shortage of skilled labour was not their business, but an issue to be referred to a Royal Commission.

³⁴ Process Engravers Award, NSW Industrial Gazette May 1915, p 951.

³⁵ Carpenters and Joiners Award, NSW Industrial Gazette May 1920, p 1295.

³⁶ Butcher’s Award, NSW Industrial Gazette May 1918, p 524.

The anomaly of having industrial tribunals with wide powers making decisions about the education and training of young people was belatedly recognised. When the Industrial Arbitration Act was amended in 1918 it was also proposed to set up a Board of Trade which, among many other things, should take over the “control of the whole question of apprenticeships”³⁷. How future generations of artisans were to be trained, it was said, was not a legitimate matter of industrial disputes, but a matter of social duty that should be under the supervision of the State. To lend effect to this principle, a separate board was required to “make possible the organisation of the system of apprenticeship on considered principles”³⁸.

In the parliamentary debate on this bill, some speakers questioned the extensive powers to be given to a board effectively controlled by the Government. However, an apparently minor issue, that the period of apprenticeship could be varied, became the major issue in the debate. The motivation for this proposal seems eminently sensible. Recent reforms to schooling in the NSW had led to boys staying on longer at school. Many were staying on until 16 and even 17 years. This effectively bared them from doing a five year apprenticeship. Raising the prospect of shorter apprenticeships, however, was a threat to a long held union position. Unions had always resisted shorter apprenticeships in the belief that a long duration was important to maintain the skilled status of a trade.

The Board of Trade began its work with a wide ranging assessment of the apprenticeship system ‘on considered principles’. The report that published in 1920, after considering the question for almost two years, was a model of detached and fundamental analysis of the nature of apprentice training³⁹. Most practical people, like employers and union secretaries who had so far been the principal parties in the regulation of apprentices, probably found it unreadable. More to the point, the industrial parties found it a threat to their dominant influence over the apprenticeship system. At a later time more complementary remarks were made. According to the 1968 Apprenticeship Inquiry it displayed a ‘breath of vision’ and “still makes most interesting reading”.

³⁷ Beeby G. S., 2nd reading of the Industrial Arbitration (Amendment) Bill, 6 February 1918, NSW Parliamentary Papers.

³⁸ The Role of the Board of Trade, NSWIG, December 1919, p 166.

³⁹ Apprenticeship in New South Wales: being a report of the determinations and directions of the New South Wales Board of Trade upon the subject of apprenticeship. See also NSW Industrial Gazette, October 1913, pp 201-4.

Three aspects of the Boards proposal, the specification of the training obligation, the ratio of apprentices to journeymen and the extension of the apprenticeship beyond 21 years, are of particular interest.

Many of the ambiguities that existed in the awards were to be removed by more detailed and uniform regulations. Compulsion was to be effected by a clause stating that “no minor shall....be employed or engaged in any industries, crafts, occupations, or callingsunless subject to the conditions of apprenticeship”. The commonly used formulation to “teach such apprentice or cause him to be taught the craft, occupation, or calling” was retained, but instead of this being qualified by words like ‘insofar it is carried out’ it was now augmented. The instruction was to be “in a gradual and complete manner”, and the apprentice should have “reasonable opportunity to learn” and receive “such technical, trade, and general education and training as...may be prescribed”. For the time being the Board proposed five hours per week for a period of three years, of which three hours should be in the master’s time, but indicated that they were in favour of more extensive training.

As regards the apprentice to journeymen ratio, the Board took the view that limiting the ratio could be justified by reference to the absorptive capacity of the trade. In an Appendix, the statistical aspects of this was analysed in detail. Implicitly they rejected the other rationale for a maximum ratio, to ensure the quality of the training. The logical implication of this was that the ratio should apply to a trade as a whole, not to an individual employer. Thus the Board reserved the right to allow an individual employer to have any number of apprentices. To further challenge the norms the Board also proposed that “The skilled trades will no longer be closed to youth who have failed to enter them before a certain early age”.

These were radical proposals that departed from the norms and challenged the hegemony of employers and unions. The proposals also went much further than had been envisaged when the legislation had been introduced to the parliament. The employers training obligation was extended rather than qualified as in the past. Attending technical college in the master’s time was also a significant departure from the norm. The time honoured principle was that, by being bound, apprentices’ time belonged to the master. The second aspect, limits on apprenticeship numbers, had always been expressed with reference to, and deemed to apply to, an individual master, illogical as that may have been. Thirdly, the notion of adult apprenticeship had nowhere been contemplated in the past. While a minor, with the consent

of his guardian, could bind himself until 21 at least, enforcing a contract beyond that age was more problematic.

Notwithstanding the lack of interest in its deliberations, the Board of Trade proceeded to issue ‘determinations’ for apprenticeship for a number of trades during the 1923-24 period. The first set was for twelve separate building trades followed by a number of engineering, metal and other trades. These determinations were worked out in conferences with employer organisations and unions. These conferences were not much different from the proceedings of industrial tribunals, tribunals that the Board was meant to replace. In these conferences the Board was confronted with the industrial realities and most of the radical proposals were dropped or modified beyond recognition. The expanded obligation to train did not find its way into any of the determinations or into the recommended form of indenture. In most trades the requirement to attend technical college was left open by “apprentices ...shall if the Board of Trade directs”⁴⁰, and if they did it would be in their own time and not the master’s. An exception was the plumbing trade where apprentices were required to attend technical college over a period of four year, but this requirement was driven by plumbers having to be licensed. Apprentices to electrical fitting, however, did not have to attend if they could satisfy their employer that there was no need for them to do so. In only one trade (plastering), was there an unspecified provision for apprenticeship to extend beyond the age of 21. Finally, as regards the proportionate ratio, the industrial realities saw to it that the principle the Board had advanced was applied to only one trade (carpentry and joinery). In this trade there was to be no limit on the number of apprentices an employer could take, “but a limit might be fixed if an employer has an undue employment of junior labour”⁴¹. In most other trades, a limit on the number an individual employer could take was imposed. In engineering this limit was even more restrictive than had been the case before.

Altogether the Board issued determinations for 24 trades that replaced the corresponding award conditions⁴². Even before that task had been completed it was announced that Board was to be abolished, but it took until 1926 to formally do so. With that, the experiment of the State taking control of apprenticeship training came to an end. Apprenticeships again became an industrial matter and subject to awards made by industrial tribunals. As was later observed, if a body such as the Board of Trade had been allowed to continue its operation, the

⁴⁰ NSW Industrial Gazette XXIV, December 1923, p 729.

⁴¹ *ibid.* p 737.

⁴² *ibid.* p 721.

apprenticeship system in New South Wales, or for that matter in Australia as a whole, may well have turned out very different.

Victoria

The conflict between capital and labour can manifest itself in several ways. In New South Wales, the high incidence of industrial dispute was of foremost public concern. In Victoria, it was the weak position of marginal workers that triggered State intervention in the labour market. Thus, instead of intervening to settle industrial disputes, the Victorian regulation emerged to protect the weak from the vagaries of an unregulated labour market. 'Sweating', the practice of giving out work to be done in the homes of the workers, came to represent the worst of these effects. This work was done at piece rates, driven down to very low levels by competition, resulting in long hours of work and carried out in highly unsatisfactory conditions. After a long and highly charged political debate, the 1896 Factories Act set up Wages Boards and gave them the power to set minimum wages and hours of work of employment in the six most 'sweaty' trades. Additionally, since sweating often involved boys and girls, the Boards were given the power to fix the maximum proportionate number of apprentices and improvers that could be employed. By that route, the Wages Boards came to have a large influence on the apprenticeship system in Victoria.

The determinations of these six Boards were issued during the 1897-99 period (Fomin 1991 Ch 2). As regards the maximum proportionate number of apprentices and improvers a wide range of figures emerged. Little is known about the considerations that influenced the Boards. The presumption is that current situation had a large influence as well as the need to ensure that the minimum wages were not undone by the substitution of adults by children. With the Wages Boards claiming some success in reducing the incidence of sweating the operation of the Act was extended for another three years in 1900. During the following years a large number of additional Boards were set up so that by the end of 1902 the original six Boards had become a total of 38⁴³. By and large, these Boards treated apprentices and improvers the same. In practice what was an apprentice and improver remained a confused issue for a long time, mixed up as it became with the powers given to the Wages Boards. The confusion must have extended to the members of the Wages Boards themselves. As a result, all young persons working in the regulated industries were deemed to be either an

⁴³ Report of the Chief Inspector of Factories and Shops, 1904, VPP 1905, Vol 2.

apprentice or an improver. But not even the Chief Inspector of Factories, whose inspectors closely monitored the observance of the wage regulation, could distinguish between the two categories. From this monitoring statistical summaries were produced set out the wages and employment of young persons in great detail, but only under the combined ‘apprentices and improvers’ heading⁴⁴.

Although a mass of regulations had been issued by the Wages Board by the end of 1902, it would be misplaced to suggest that regulated apprenticeship system was in place in Victoria. The distinction between apprentices and improvers was tenuous and the trades covered were mainly the low skilled trades; for example, the making of cigars, confectionary, and jams, pickles and sauces. Apprentices to such trades, if there were any, would have been apprentices in name only. The only large trades with a strong apprenticeship tradition was boot making. Still missing, however, were the building and engineering trades that contained the bulk of skilled artisans. What was in place was a system of wage regulation in low skilled trades that included restrictions on the employment of youth.

Instead of regulating apprenticeships, Victorians ended up discussing it as the political debate about the Wages Boards spilled over into a debate about the apprenticeship question (Schofield 2000 Ch 2, Fomin Ch 5, Brereton 1970 Ch 2)⁴⁵. This debate revolved around three main issues; the proportionate number of apprentices and improvers, whether the wages boards or some separate boards should control apprenticeships and the extent to which apprenticeships should be regulated beyond fixing the proportionate number of apprentices and improvers.

One Royal Commission and two Conferences all recommended significant reforms to the apprenticeship system in Victoria. The Royal Commission endorsed a system of compulsory indentured apprenticeship in all the principal trades and manufacturing complemented by attendance at technical school⁴⁶. This endorsement was motivated by “marked decadence of industrial efficiency owing to the increasing number of poorly trained workmen”. The Conference in 1907 likewise concluded “that the progress of industry in this State is

⁴⁴ See Report of the Chief Inspector of Factories and Shops (various).

⁴⁵ The Wages Boards also attracted the attention of many economists and a large number of papers analysing the effects of the operation of the Wages Boards were published in academic journals. Some of the contributors were Collett (1901), Gough (1905) and Hammond (1914). None of these papers make any mention of apprentices.

⁴⁶ Report of the Royal Commission appointed to investigate and report on the operation of the Factories and Shops Law of Victoria, 1900-03, p xx, Victoria Parliamentary Papers (VPP), 1902-03, Vol 2.

seriously threatened by the defective system of industrial training”⁴⁷. To remedy this, the apprenticeship system had to be “placed on a sound basis”. Six years later, another conference echoed the same message although on this occasion they gave as their first reason for a proper system of apprenticeship “the paramount claim of youth to efficient training”⁴⁸. Sentiments such as these were also frequently expressed in the parliamentary debates about the many changes to the Factories and Shops Act. But the mainly conservative Legislative Council did not share these sentiments. Thus, what actually happened had little to do with the general tone of the debate, but was the outcome of a political battle between the two Houses of Parliament (Schofield 2000 Ch 3, Fomin 1991, Ch 6).

In the Factories and Shops Act of 1903, the power to fix the proportionate numbers of apprentices, but not improvers, was taken away from the Wages Boards. Then, in 1910, this power was returned, albeit in a limited form. Reflecting the politically finely balanced situation, one of the arguments for change was the same in both cases – the Bill in question should be seen as a stop-gap measure until the apprenticeship question could be properly dealt with. Specific factors were also at work. When the power of fixing the proportionate number of apprentices was taken away from the Wages Boards, the logic of seeking to revive apprenticeship by limiting the number of apprentices had recently been questioned by a Royal Commission (Fomin 1991, p 196). When the power was restored, the boot industry had just obtained a federal award that regulated apprentice employment in that industry. With the boot industry being the largest industry in Victoria, it was thought desirable that the Victorian laws should be in line with the emerging federal system of arbitration (Schofield 2000, p 155).

Notwithstanding the many good arguments for why the apprenticeship question would be better dealt with by a separate board or commission it remained in the hands of the Wages Boards. When the limited power to fix the proportionate numbers of apprentices was returned to the Boards the situation did not change much. Most Boards adopted, by default it seems, the minimum ratio of 1:3. Strict restrictions on improvers, i.e. compulsory apprenticeship, were imposed in only a few industries. Thus apprenticeships training did not become regulated in any meaningful sense. In industry as a whole, the male youth-adult ratio was 1:3. Thus, in practical terms, the restriction on the employment apprentices and improvers meant that employers who wished to employ an above average proportion of boys had to

⁴⁷ Report of the Apprenticeship Conference, 1907 .

⁴⁸ Report of the Apprenticeship Conference 1913 p 2, VPP Vol 2.

apprentice the boys that were in excess of the average. It was almost as if employers, for being allowed an above average proportion of boys, had to return the favour by apprenticing the excess. But the employment of boys was not really subject to a binding restriction since a total of two boys could be employed for every three adults in most industries.

The vacuum left by the Wages Boards was partially filled by the Federal Court of Arbitration. Beginning with the boot trade in 1910, a number of cases in the Federal Arbitration Court gradually extended the Court's influence over the apprenticeship system in Victoria⁴⁹. The key case was the Engineers Award of 1921 that later became the Federal Metal Trades Award and the standard for most skilled trades⁵⁰. In part, this award followed the principles that had developed in the State industrial tribunals by making indentured apprenticeship compulsory, fixing the proportion of apprentices to journeymen and requiring apprentices to attendance at a technical school. An innovation introduced by the Federal Court was that apprentices were to attend, not only in their own, but also in the employers' time⁵¹. Over the next few years several more Federal awards with essentially the same provisions came into effect. This meant that in the majority of trades suited to apprenticeships became regulated by Federal awards that took precedence over the Wages Boards determinations (Schofield 2000, p 137).

The encroachment of Federal Awards was one of the factors that led Victoria to eventually adopt a more complete regulation of apprentice training. Yet another apprenticeship conference was convened in 1921 with the brief of 'placing industrial apprenticeship upon a satisfactory basis'⁵². The conference resurrected much of the analysis and recommendations of the 1907 conference and proposed that an Apprenticeship Commission assisted by individual trade committees should administer all aspects of the apprenticeship system. The Bill that the Government introduced to give effect to the Conference's recommendations embodied the emerging form of apprenticeship training. Improvers were to be eliminated and apprenticeship should become the principal mean of entry to skilled trades. Apprentices had to be bound by indentures that specified the term of apprenticeship and many other conditions in greater detail than had been the case in the past, and attendance at technical college was to be compulsory. The Bill encountered strong opposition from the employer organisations when it was first introduced in Parliament but was eventually passed at the

⁴⁹ Commonwealth Arbitration Report (CAG), Vol. 4, pp 30-1.

⁵⁰ *ibid.* Vol. 15, pp 334-5.

⁵¹ *ibid.* pp 334.

⁵² Report of the Apprenticeship Conference, 1922, p 2.

second attempt in 1927 (Brereton 1970, 215-27, Schofield 2000, pp 135-40). With that, an era that began with the first recommendation for reforming the apprenticeship system by The Royal Commission on Employees in Shops in 1884 had come to an end.

Contemporary assessments of the effect of regulation

In an ideal world, policies are developed from recognised principles, implemented, and then evaluated with the aim of modifying the policies to secure improved outcomes. This description of the policy making process is admittedly idealistic, but one might expect to see some elements of this process at work even in the real world.

Of course, in the case of Victoria the apprenticeship question was never settled. There was no policy to evaluate and Victorians could only debate what to do. In the other states, the apprentice question had been delegated to industrial tribunals and subsumed within the larger question of the direction of the arbitration system. In Western Australia, some reference to how the Arbitration Court itself looked upon its achievements has already been made. Outside the court there was little interest in what was happening to the apprenticeship system and a comprehensive evaluation would have to await a 1937 Royal Commission. It is only in New South Wales that some contemporary assessments were made, but there was no interest in a more comprehensive evaluation.

In the New South Wales Parliament the bill to establish a Board of Trade was, as one member pertinently observed, ‘the first time that the House has applied itself to the question of apprenticeship’⁵³. Although the debate was dominated by sectional interests, a few ordinary members also contributed. Many of these contributions reflected a lack of knowledge of the system as it had evolved during the past decade and was informed by mainly by their own youthful experience or anecdotal evidence. Totally absent were comments expressing satisfaction with the present arrangements. In moving the Bill, the Minister for Labour said that ‘the whole system of apprenticeship today is utterly disorganised’⁵⁴. The opposition was likewise framed entirely in negative terms – the great harm it would do - rather as a defence of the existing situation.

⁵³ New South Wales Parliamentary Debates (Hansard), 6 February 1918.

⁵⁴ New South Wales Parliamentary Debates (Hansard), 6 February 1918.

Union secretaries were more satisfied with the situation. They had achieved many of the goals they had fought for, but still had many reservations about employers' abuse of the apprenticeships. Thus, their satisfaction was with the achievement of union goals, not with the system as such. The Industrial Registrar commenting on the situation at about the same time claimed that the Industrial Courts and Boards had exercised a "benignant influence" on the apprenticeship system even though its powers had been of the most limited character⁵⁵. Many would question that the Courts and Boards lacked powers as such, but what they did lack was guidance and political support from the Government and the Parliament. Had they received such support they may well have been able to rise above the vested interests of employers and unions.

The most informed assessment was perhaps undertaken by one of the principal architects himself in the 1915 issue of the *Economic Journal* (Beeby 1915). In that assessment G. S. Beeby expressed some regret how the arbitration system has allowed unions to limit the number of apprentices. While that alone has not had serious effects, the higher apprentice wages and the interference with employer prerogatives had, he claimed, led to a 'distinct falling away in apprenticeship' and employers 'looked to immigration to keep of the supply of skilled artisans' (ibid. p 327). But it was not all the fault of the employers. 'The Australian boy, at his best, does not take kindly to apprenticeship' (ibid. p 326), he said echoing the common view expressed by employers.

A more comprehensive report of what had been accomplished might have been provided by a Royal Commission in 1911-12. This commission was initially convened to inquire into the 'alleged shortage of labour'. Subsequently it given the two additional but related tasks: the conditions of employment of women and children in factories, and the causes of the decline in the apprenticeship and the practicability of using technical education as an aid to or substitute for apprenticeship. This was a very extensive task and one can appreciate if some issues were treated in a somewhat cursory manner⁵⁶.

The close to two hundred witnesses for the labour shortage part provided ample evidence for the Commission to conclude that there was indeed a shortage of labour. In the process, and in response to direct questions, they also provided a vast amount of information about the

⁵⁵ NSWIG October 1913, p 203.

⁵⁶ The reports and the evidence given to the Commission are printed in *New South Wales Parliamentary Papers*, 1911/12, Vol. 2, pp 665,1135, 1137-1256, 1257-99.

employment of apprentices. Why they did that is unclear because there was not the slightest attempt to link this with the question of primary interest, the alleged shortage of labour. Turning then to the causes of the decline in apprenticeships, the Commission simply resorted to call its own members, the employer and union representative, as witnesses. This was a rather inconsequential limitation since they could draw on the evidence already given for the labour shortage part. Since, at least in everybody's mind, the decline in apprenticeship had been a perennial issues for decades, the Commission had no problem in declaring that 'there is a decline in the number of apprentices.....and in the practice of having apprentices in almost all skilled trades carried on in this State'⁵⁷. The causes were, however, various and 'difficult to grade in their order of importance'⁵⁸.

It does not follow that the decline in apprenticeship was a significant cause of the shortage of labour, but one would have expected the possibility to be canvassed at the very least. For some reason that was not done. The omission of any reference to the regulation of apprenticeship system by awards that had taken place during the past seven years is just as inexplicable. It is true that the commission had no brief to evaluate the effects of award regulation, but being the most significant change to apprenticeship training in that had ever taken place in the State, it was not easily avoided.

An example of the issues that the Commission might have considered is provided by the building trades. At the end of 1910, the members of the Master Builders association employed fewer than two apprentices each⁵⁹. In the building trades as a whole, there were only 457 apprentices were registered with the Industrial Registrar at the end of 1916⁶⁰. Most of these apprentices were in two trades, carpentry and joinery and plastering. At that time the building industry employed about 40,000 persons. Of these, about 30,000 worked in the skilled trades and 7000 were under the age of 21⁶¹. From these figures one can calculate that the ratio of apprentices to journeymen was 1:65, and that seven per cent of the boys employed in the industry were apprenticed. With a former President of the Master Builders Federation (and, at the time, of the Employers Federation) being a member of the Commission, and also one of the only three witnesses for apprentice part, one might have expected an informed assessment of the situation. As it was, he put it all down to the combined effect of having to carry apprentices through slack times at award wages that were

⁵⁷ *ibid* p 1261.

⁵⁸ *ibid.* p 1263.

⁵⁹ *ibid.* p 1262.

⁶⁰ New South Wales Industrial Gazette, February 1917, p 693.

⁶¹ Figures interpolated from the 1911 and 1921 Censuses.

set too high. Having said that, he remained strongly in favour of compulsory apprenticeship and argued that it should have been introduced years ago⁶². It may be that these two positions can be reconciled but it is far from obvious how to do so. Collectively, Master Builders may have been in favour of compulsory apprenticeship, but, acting individually they were reluctant to take on apprentices. In mill joineries, however, the extensive use of machinery lent itself to the employment of large number of apprentices. One apprentice to one journeyman was a typical ratio. But with few jobs for apprentices coming out of their time there was a steady drift from joinery to general carpentry in the building industry. In effect, with builders not taking apprentices, the joineries became the training ground for the building industry.

As regards the number of apprentices in general, the Industrial Registrar reported a total of 3115 indentures on the books at the end of 1916⁶³. The number of new indentures had been running at yearly rate of 600-700 during the previous years. Ten years earlier we know there had been 2115 male 'apprentices and improvers' in NSW. This latter figure refers to factories only and thus excludes the building trades. Still, it might be claimed that by 1916 there were more apprentices than a decade earlier. These 1916 apprentices were properly indentured while that might not have been the case with many of their 1906 counterparts. During this ten year period, manufacturing had continued to experience strong growth, and the employment of males had increased by about 40 per cent. Thus, in proportionate terms, the practice of apprenticing boys in industry was about as common in 1916 as it was in 1906. During the Board of Trade period the number of indentures registered was not reported leaving a large gap in our knowledge. When reporting resumed in 1926, the number of apprentices appeared to have increased markedly with the number of new indentures running at 2000 per year until the 1930 depression set in earnest.

Theoretical models of apprentice training and the effects of regulation

To understand what the emerging regulation tried to achieve, we have to go back to the reason for why the apprenticeship system existed in the first place. Starting with the proposition that apprentice training is mainly general, the problem revolves around the fact

⁶² New South Wales Parliamentary Papers, 1911/12, Vol. 2, pp 1283-4.

⁶³ NSW Industrial Gazette, February 1917, p 693.

that while the training is provided by firms, it must be paid for by apprentices (Becker 1962). The payment could take the form of an up-front fee. Alternatively, the apprentice could undertake to work for a wage lower than their contribution to production during the training period. In the real world, however, credit markets are imperfect. Therefore, an apprentice might not be able to work for a low wage for an extended period of time. He may have been subject to a subsistence or credit constraint. If this were the case, the level of training that the apprentice could afford to undertake would be inefficiently low. A long-term contract, binding on the apprentice, resolves this problem (Elbaum and Singh 1995, Smith and Stromback 2001). The apprentice receives a wage higher than his productivity during the training period in exchange for a commitment to remain with the training firm at this wage for a period long enough for the firm to recover the initial cost.

A credit constraint may have been a factor in sustaining apprenticeship in colonial Australia. Contemporary opinion recognised that some parents may not have been able to support even an apprenticed boy during his first years of his apprenticeship. But the more common view was that it was the lure of the higher pay of unskilled work, rather than necessity, which kept boys from pursuing an apprenticeship.

If a credit constraint was not an important factor, the rationale for apprenticeships turns on the other major reason for a long-term contract; the non-contractible nature of training. The level of training is not observable by the apprentice, or verifiable by a third party like a court. Thus a contract contingent on the level of training is not possible (Schlicht 1996, Smith 1997, Malcomson et al. 1997). This is reflected in the obtuse specification of the master's obligation to train commonly used in apprentice contracts – 'to teach the trade as he himself knew it'. In the extreme case the argument runs as follows. Suppose an apprentice were to undertake to work for a low wage during the training period in return for a certain level of training. The training firm could then decrease its costs by lowering the level of training. Doing so would have no effect on future profits since the firm's return to general training is zero. In fact, with the usual assumption about the nature of the training cost function, the firm's optimal action would be to provide no training at all. It would simply use the apprentice as cheap labour. Of course, the apprentice can work all this out himself. Therefore he would never accept a wage lower than his market wage. Whatever the case, no training would take place.

A partial solution to this dilemma is a long-term contract binding on the training firm (Smits and Stromback 2001, Malcomson et al. 1997). If the term of the contract exceeds the time it takes to train the apprentice, and is binding on the firm, the above scenario is transformed. As above, during the training period the apprentice pays for his training. But now the firm is bound to employ the apprentice for some time after the training is completed and it is therefore in its own interest to provide some training. The longer is the duration of the contract, the more training the firm will provide. For the socially optimal level of training to be attained the firm should be required to employ the apprentice for ever. However, as famously pointed out by Adam Smith, the attendant moral hazard problem rules this out. The longer is the contract duration, the less is the apprentice's incentive to learn and to serve. Thus, the contract duration that emerges can be seen as a compromise between providing incentives to the firm to train and to the apprentice to serve.

A long term contract is not essential to sustain general training even if the level of training is non-contractible. Even if the training is private information to the firm, trainees may have some idea about the level of training they can expect to receive. One way to capture this idea is to suggest that trainees can only observe the level of training with an error. They might for example combine information about the level of training in the trade generally with what they observe in their own firm to form an estimate of what they are getting (Smits 2005). Given this set up, trainees would be willing to pay for general training. The trainees use their estimate of training to estimate their post-training wage that they would earn and thus what training wage they would be willing to accept. Firms would find it profitable to train to the level the trainees are willing to pay for in terms of a training wage. However, the socially optimal level of training would not be attained. As a firm increased the level of training by one unit, the trainees would only accept a reduction in the training wage of less than one unit. This is because trainees base their estimate of the level of training both on the general level of training in the trade and what its own firm does. Private information decreases the marginal benefit to the firm at all levels of training and therefore the level of training would be below the socially optimal level.

These two models provide a stylised representation of the two main modes of training that had emerged prior to the regulatory reforms. The first model provides the rationale for apprenticeships, and the second how boys would have received training as improvers. The prediction in both cases is that the level of training would be below the socially optimal level but which mode would result in more training is cannot be determined. After all, the two

modes coexisted for a long time suggesting that no one mode was distinctly superior to the other. Alternative constructions are of course possible, but the many models that account for why firm pay for general training by the post-training wage being less than the market wage do not seem relevant. The employers that appeared before the many conferences and commissions may have expressed concerns about many aspects of apprenticeships, but complaints about apprentices leaving when they had served their time were never heard. What concerned them was the effect of being bound by an indenture.

According to the theoretical models the choice between the two modes of training has to do with the information available to potential trainees. According to the improver model, the easier it is for trainees to assess what they get, the higher is the marginal benefit of training to the firm, the wage reduction that trainees would accept, and thus the higher is level of training relative to the socially optimal level. Thus, in trades where the training was easily observed by the trainees, a relatively high level of training, relative to the socially optimal level, could be attained by employing boys as improvers. Conversely, in trades where it was more difficult for trainees to judge what they got, an apprenticeship may have resulted in a relatively more efficient level of training.

There is, of course, nothing to suggest that the industrial tribunals applied this type of reasoning in their deliberations. When considering whether apprenticeship should be compulsory, the skill level in the trade was the primary consideration. Trades in which the relevant skills could be acquired in a short period of time were seen as not appropriate for compulsory apprenticeship. In the Victorian apprentice conferences it was held that a trade should be an apprenticeship trade if a 'definite and systematic course of training'⁶⁴ was called for. This is not necessarily inconsistent with the theoretical perspective if the level of skill and the observability of the training are related. Boys who were taught to operate a machine could more easily assess what they were getting, and the value thereof, than a carpenter's apprentice who had only the most rudimentary understanding of range of skills that were part of the trade. In addition, more pragmatic reasons obscure the correspondence between the theory and the tribunals' motives. By and large, the tribunals took the other parameters of the apprentice contract, the minimum wage and duration, as given. Imposing the usual five year term on a trade that took a few months to learn did not make sense even

⁶⁴ Report by the Apprenticeship Conference, 1907, p 4. An almost identical expression was used in the 1922 Apprenticeship Conference, p 10.

though a short duration apprenticeship may have led to a better outcome than improver training.

Although explicit reasons were seldom forthcoming, two considerations that seems to a driven the preference for apprenticeships. Put most succinctly by Justice Higgins, an employer who indentures a boy is 'bound by his covenants and induced by his own interest to teach the lad'⁶⁵. More generally, the first reason was the belief that the promise itself, 'to teach the trade as he himself knew it', would ensure that the training would indeed be forthcoming. In theory, such a promise is not credible. In practise, however, it is not completely empty. Honour, the formal form in which it was made, and the small, but positive, probability that a court would find him in breach of contract, all lend some credence to the promise. The second reason was that if a boy could be reckoned to be around for some time, employers would take greater interest in his training. As usually stated, the presumption was that because the boy is bound he will be trained. Higgins, as the above quote indicates, was one of the few to see the more subtle reason. It is not because the boy is bound, but because the employer is, it is in his own interest to train him.

Against these advantages they had to balance the advantages of improver training. In general, the tribunals took a rather dim view of improvers and did not accept that a relatively efficient level of training could be achieved. The major reason that favoured improvers were the economic realities, the fact that the majority of boys were employed, and received some training, under an arrangement that entailed no explicit commitments. Compulsory apprenticeships, or just restrictions on the employment of improvers, implied depriving industry of a useful source of labour and boys of opportunities for employment that they currently enjoyed. Of this, the tribunals were highly conscious and, of course, employers never tired of telling them. Compulsory apprenticeships could only work if employers were willing to take boys as apprentices. That there was a fine balance to be struck is more evident from the Victorian experience. Even after having debated the issue for twenty years, the intent of 1922 Apprenticeship Conference (or at least the majority) was to make apprenticeship compulsory in the skilled trades. However, lacking a convincing reason, and accepting the political realities, they fudged the issue. Thus, they recommended that it be left to the Apprenticeship Commission to determine the conditions under which improvers could be employed. The matter continued to be contested in the debate that followed. In the end,

⁶⁵ CAR IV, p 16.

the 1927 Act made the employment of improvers illegal in the 'proclaimed' trades, but the Apprenticeship Commission had to consult with interested parties and justify its decision.

In practice then, as in theory, there was a fine balance to be struck. There were two modes of training. In theory, neither mode resulted in a socially efficient outcome but no mode was necessarily superior to the other. When the parties, in practice the employers, could have chosen apprenticeship but selected to train boys as improvers, they must have done so because they believed that this was the most efficient arrangement. If these private choices were efficient, i.e. if there were no external effects of individual choices, the tribunals, by prescribing that one mode should be used in preference to the other, could not improve the situation but only make it worse.

The external effect of primary concern to the tribunals was that decision by individual employers to use improvers was a source of industrial conflict. The cost of such a conflict was only partly borne by the individual employers. That the community at large carried the larger share of this cost was the primary motive for arbitration in the first place, and the tribunals operated under the premise that their decisions could indeed decrease conflict. Given this presumption, imposing compulsory apprenticeship can be seen as taking this external effect into account.

In addition to this clearly identifiable external effect broader considerations drove the quest for compulsory apprenticeship. Like compulsory arbitration, the regulation of apprenticeships was a rejection of the notion that the individual actions would lead to socially optimal outcomes. It was not just nostalgia for a past that had never existed, but a belief that the norms that had governed apprentice training had fallen into disuse, that these norms contributed to efficiency and that the State by restoring these norms could improve social outcomes. The arguments by educators took such sentiments a step further. Youth have a right to training that develop all their faculties and allow them to become both independent workers and useful citizens. Of course, it does not follow that making apprenticeship compulsory was the best way of achieving such noble aims. Still, the needs of youth, as distinct from the needs of industry, were clearly a factor that led the tribunals to make apprenticeship compulsory.

Notionally, the industrial tribunals made apprenticeship compulsory in most of the skilled trades in New South Wales and Western Australia. The Commonwealth Arbitration Court

also prescribed compulsory apprenticeship in most of the cases that came before it involving skilled workers. However, in reality, apprenticeship was made compulsory to a degree only. The tribunals' decisions had limited coverage, the employment of improvers was often restricted rather than prohibited, the clause that was supposed to make apprenticeship compulsory was often given an ambiguous formulation, and the resources to enforce decisions were limited. During the period in question, indentured apprenticeships at best became a significant, but not the only, route for entry into the skilled trades.

The proportionate ratio of apprentices to journeymen

By making apprenticeship compulsory the tribunals sought to induce employer to take boys as apprentices. At the same time, they fixed a maximum proportionate ratio of apprentices to journeymen, thereby limiting the number of apprentices they could employ. These two elements of regulation did not sit well together. As far as unions were concerned, however, there was no contradiction. Compulsion and a maximum ratio were two complementary features. Combined they maintained the illusion of skill and limited competition from boy labour.

When confronted with union claims for a maximum ratio, the tribunals could not simply endorse exclusionary practices. While settling the dispute in question was their primary task, they were also concerned with the wider issues of industrial peace. Thus they felt it important to establish principles that would gain widespread acceptance and lessen dispute in the future. As far as apprentices were concerned they also recognised that their decisions had to consider the wider public interest even though the parliaments had not spelled these out.

In support of their claims for a maximum ration the unions put forward two reasons that the tribunals recognised. The first reason was that the quality of training was dependent on the number of apprentices. Most of the training apprentices received was obtained from working with, or in proximity to, experienced journeymen who in the course of work passed on some of their skills. For this transfer to take place there the number of apprentices per journeymen must not be too large. If it were, the opportunities for apprentices to observe and learn would clearly be diminished. This argument has a strong common sense appeal and, up to a point, was accepted by the industrial tribunals and in the community at large. It was also underpinned by a commonly held view of employer exploiting apprentices as cheap labour,

taking on boys as apprentices but failing to provide the expected training. Of course, if indeed an employer did exploit apprentices in this sense, limiting the number of apprentices he could employ would not eliminate this exploitation. All it could do was to limit the number of apprentices that might be exploited.

The second reason was absorptive capacity of the trade. The number of apprentices trained should not be larger than the skilled journeymen the trade could absorb in the future. This argument was expressed in several different ways. Some looked to the training of apprentices to simply meet the needs of the industry. Others, putting the needs of youth before the needs of industry, thought that apprentices should have a reasonable prospect to earn the future living in the trade in which they had been trained. The extreme version of this argument was that to 'permit a youth to spending the best five years of his life in learning a trade which he will have to abandon on reaching maturity is to do him serious injury'⁶⁶.

Needless to say, economic theory can provide no rationale for limiting the ratio of apprentices to journeymen. According to the theoretical model in the previous section, the firm's self-interest should ensure that the implied level of training will indeed be provided. The tribunals, by fixing a ratio, evidently lacked confidence that this mechanism was sufficient and, after some initial reluctance to limit apprentice numbers, came to accept one or both of the arguments. In Victoria, a ratio was initially introduced for another reason, to prevent employers to negate the effect of minimum wages by substituting youths for adults. In the wider debates the rationale for a ratio was often questioned. But whatever the original rationale and reservations, by the 1920s it had become almost self-evident that a limit on the number of apprentices was an integral part of an apprenticeship system.

The limits fixed by tribunals were generous in the sense that they were binding on only a few employers. As the figures given elsewhere indicate, during the period in question and up to the present time, an excessive number of apprentices has never a problem. Rather, one of the most significant drawbacks of the apprentice system has been its failure to provide sufficient training opportunities for young people and to meet the industry's need for skilled workers. But even if the limits had no effect on the number of apprentices taken on, they were a significant distraction that hampered the development of the apprenticeship system. Much of employers' aversion to compulsory apprenticeship was not an aversion to apprenticeships as

⁶⁶ W. Somerville, *The Apprenticeship System, Instituted by the Court of Arbitration of Western Australia*, WAIG, Noveember 1922, pp 144-5.

such, but to the limitation that compulsion might have on the employment of boys. Absent the threat of binding limitations, employers would no doubt have displayed a more positive and constructive role in the development of the apprentice system. At a more concrete level two distractions might be singled out. A system of training that with one hand limited the numbers could not, with the other hand, develop measures to encourage employers to take on more apprentices. Then, as now, a reason for the low number of apprentices was that most employers that might have taken apprentices did not do so. The union answer to this was that sufficient apprentices would be taken on if only employers took the numbers they were allowed. True as this might be, it was not a very constructive position. Absolving themselves for any responsibility did not create a climate in which measures to encourage employers to take on apprentices could emerge. Another consequence was that alternative methods for ensuring the quality of apprentice training were not considered. Having fixed a ratio for the purpose of safeguarding the training of apprentices, the introduction of other measures to improve the training would have negated the rationale for fixing a ratio in the first place.

Comparative facts about the number of apprentices

Employment statistics usually distinguish between person's employment status, i.e. employer, self-employed, employee, etc. In the Census of 1933 this question about employment status included apprentice as a distinct category. This is only occasion when apprentices have been counted in a Census and first comprehensive figures for the whole of Australia. At the time there were 20,674 male and 5,693 female apprentices in Australia⁶⁷. Most of the male apprentices could be found in a handful of manufacturing industries, most notably Founding, Engineering and Metal, and in the Building industry. Apprentices comprised 10 per cent of all boys (males aged 15-20) in the labour market, a proportion that did not differ much between the States. This suggests that the different regulatory regimes that had developed had not had much of an impact on the number of apprentices. However, comparisons between States should allow for the different industrial structure. Taking only the seven largest apprenticeship industries we find that the apprentices-boys proportion was largest in Western Australia followed by New South Wales and then Victoria. There is some evidence then that the State that had had the least regulated apprenticeship system experienced the worst outcome in terms of number of apprentices.

⁶⁷ Census of the Commonwealth of Australia, 30 June 1933.

The changes over time are more difficult to track in the absence of consistent figures. In New South Wales manufacturing industries, 19 per cent of boys were ‘apprentices and improvers’ in 1906. In 1933, 30 per cent of boys were apprentices. The two figures are not precisely comparable. The aggregate figures are affected by structural changes and the 1933 Census was held at a time when the economy had not yet recovered from the depression. Still, the regulation of the apprenticeship system appears to have been associated with an increased proportion of boys taking up apprenticeships in industry. Taking the largest apprentice industry as an example, in engineering and metals the 1933 figure was 45 per cent compared to 26 per cent in 1906. To say that apprenticeship system was revived by regulation, implying that the practice of apprentice training had been discontinued and then resumed may be going too far. A more modest claim is that a pre-industrial system of training had been resurrected to suit modern industrial conditions.

To identify the role that the regulation might have played one can compare the Australian figures with the situation on Great Britain (and Northern Ireland) in 1925. In the ‘principal apprenticeship industries’, 28 per cent of male workpeople under 21 were apprentices or learners⁶⁸. The New South Wales figure given above, for manufacturing only, was 30 per cent. Adjusting the figures to make them more comparable does not change the main point. The situation in New South Wales, or for that matter in Australia as a whole, was not materially different from that in Great Britain. Adding more detail to the comparison does not change the picture either. One of the few differences was the much higher proportion of apprentices that were indentured in Australia; more than 60 per cent in New South Wales compared to only 28 per cent in Great Britain^{69, 70}. Thus, much the same outcome emerged from two apparently different regimes. In Great Britain the apprenticeship system had become ‘regulated’ by collective agreements. In Australia, the system was regulated by industrial tribunals created by the State whose decisions became the law of the land. But the industrial tribunals were largely a vehicle for collective bargaining and the awards agreements that the parties might have arrived at if left to their own devices. Not surprisingly, the apprenticeship conditions prescribed by Australian tribunals mirrored closely the collective agreements in Britain.

⁶⁸ Ministry of Labour, Report of an Inquiry into Apprenticeship and Training for the Skilled Occupations in Great Britain and Northern Ireland, 1925-26, HMSO, 1928, p 25.

⁶⁹ *ibid.* p 28.

⁷⁰ The figure for New South Wales is the ratio of apprentices registered with the Industrial Registrar to the number of apprentices in the 1933 Census.

Conclusions

As suggested in the introduction, the regulation of apprenticeships by awards emerged by chance rather than choice. Even so, as it developed this system had some redeeming features. At that time in Australia's history, the States lacked developed machinery for developing and implementing public policy. Given this context, the use of the emerging arbitration system to accomplish more than one objective made a lot of sense. The regulation by awards was closely attuned to the economic and industrial realities and the piecemeal approach muted ideological conflicts. Most decisions made by courts and boards were confined to a section of a trade in a limited area. There were no great principles at stake, or issues with far-reaching implications, that might have led to sharp conflicts between the parties. Once instituted, the system of arbitration had its own internal dynamics. Unions and employer organisations were not creations of the arbitration system, but the system required both parties to develop an effective collective voice. Thus unions and employers alike had to consider the issues at stake and form a collective view that embraced a wider perspective. Finally, whatever the merits of the pseudo-legal processes used, both the processes and outcomes enjoyed a high degree of respect in the community.

Foremost among the drawbacks of the system was the prominence given to sectional interests to the exclusion of the wider public interest. This was an inevitable consequence of making apprenticeships an industrial matter. Some sectional interests were elevated. Unions were deemed to represent the interests of apprentices even though unions were not a party to an apprenticeship, apprentices were not members of unions, and unions had no real interest in apprentices beyond limiting their number. Other sectional interests were excluded. The voice of the technical educators was barely heard as the requirements of industry took precedence over the needs of young persons for education and training. In addition, the development of the apprenticeship system was not driven by a coherent policy. The parliaments had simply transferred a complex issue to industrial tribunal with little guidance. But industrial tribunals could only respond to what came before them. They had no capacity for policy development and precedence became the most important principle that informed their decisions. At the political level, the apprenticeship question was lost in the maze that arbitration created. Bills came and went, acts were promulgated, amended, further amended, consolidated, and eventually repealed. In all this, the apprentice question was but a minor

detail overshadowed by the fundamental problem, how the state should manage the conflict between capital and labour.

The public debate about apprenticeship system was largely confined to Victoria. With the relative merits of apprentices and improver finely balanced, the debate remained inconclusive and it was not until 1927 that a regulated apprenticeship system was set up. In the meantime the Wages Boards limited their involvement to restricting the employment of youth in industry and Federal awards filled the gaps. In New South Wales and Western Australia, action rather than debate was the order of things. The industrial tribunals regulated the apprentice system along similar lines but without much reference to the wider public interest.

The disparate developments in Victoria on the one hand, and New South Wales and Western Australia on the other, are difficult to account for. A common history, united in a Commonwealth of Australia, and encountering similar economic conditions all suggest that similar arrangements should have evolved in all States. The difference, if any, was that Victoria had not followed the compulsory arbitration route of the other States. Yet it is difficult to see how the different powers and processes of wages boards and arbitration tribunals gave rise to the different outcomes. The Wages Boards could have chosen to regulate apprentice training in much the same way as the other States did. By the same token, their industrial tribunals could have chosen to leave apprentices alone. Thus, there is a case for saying that what emerged was a matter of chance rather than choice.

The two essential features of the regulation, compulsory apprenticeship for a long period and limits on the proportionate number of the apprenticeship, have ancient origins. Both were the principal features of the Statue of Artificers of 1562⁷¹. Thus, there is a sense in which the Australian tribunals restored this statue, but one difference should be borne in mind. The Statue of Artificers required adults carrying out or working in a trade to have served a seven year apprenticeship. In contrast, the awards by industrial tribunals prohibited youth from working in a designated trade unless they were apprenticed for a period of five years. Both

⁷¹ V Elisabeth, Chapter IX, Sections XXXI-XXXII. The first part of the clause that made apprenticeship compulsory states that '...it shall not be lawful to any person or persons ...to set up occupy, use or exercise any Craft, Mystery of Occupation ...except he shall have been brought up therein seven years at the least as an Apprentice'. The second part of the same clause prohibits the employment of persons who have not been apprenticed. Persons practising a Craft etc. are 'not to set any person to work in such Craft, Mystery or Occupation ...except he shall have been Apprenticed as above foresaid...'. The passage that limits the number of apprentices states that '...all and every person and persons that shall have three Apprentices in any of the said Crafts, Mysteries and Occupations ... shall retain and keep one Journeyman, and for every other Apprentice above the number of the said three Apprentices, one other Journeyman..

can be said to result in apprenticeship being compulsory, but there is still a difference. The 20th century equivalent of the 1562 law would have been tribunals prescribing a closed shop and the union only admitting those who had served an apprenticeship as members. This route to compulsion was not followed. At most tribunals conceded claims for union preferences, but this was conditional on membership being relatively open. In any case, adhering to strict union rules about having served an apprenticeship was unrealistic when so few had been trained as apprentices. Instead, a compulsory apprenticeship was achieved by the less restrictive and more acceptable method of restricting the employment of youths rather than adults. The effect of this difference was that apprenticeship never became the only way of entering the skilled trades. There is still a certain irony that an Elizabethan statue should be restored in Australia one hundred years after it was abolished in England. The comparison may be seen as unflattering. The tribunals no doubt preferred to see themselves reshaping apprentice training to suit modern industrial conditions. But such comparisons were made at the time. In moving the Bill for introducing the Wages Boards in Victoria, Alfred Deakin said that ‘the establishment of such boards meant something like the restoration of the old medieval guild system’⁷².

Whatever might be said about restoring a pre-industrial system for the employment and training of young people, apprenticeships have remained the dominant mode for industrial training in Australia. Successive generations have chosen to retain and develop it rather than to adopt alternative arrangements. Although the details of the regulation may be queried, the arrangements put in place in the beginning of the 20th century ensured the development of a viable system of training on which others could build.

⁷² Victorian Parliamentary Debates (Hansard), Vol 79, 1895, p 3402.

References

- Beeby, G. S. (1915), The Artificial Regulation of Wages in Australia, *The Economic Journal* 25, 321-28.
- Becker, G. (1962), 'Investment in human capital: a theoretical analysis', *Journal of Political Economy*, 70 (Supplement), 9-49.
- Booth, A. and Snower, D.J. (eds) (1996), *Acquiring Skills: Market Failures, their Symptoms and Policy Responses*, Cambridge: Cambridge University Press.
- Brereton, P. D. (1970), *Origins of the Victorian Apprenticeship Commission: a history of apprenticeship regulation in Victoria 1896-1927*, Ph.D. Thesis, University of Melbourne.
- Chang, C. and Wang, Y. (1996), 'Human capital investments under asymmetric information: the Pigovian conjecture revisited', *Journal of Labour Economics*, 14 (3), 505-19.
- Collett, C. E. (1901), Wages Boards in Victoria, *The Economic Journal* 11, 557-65.
- Crouch, C. (1993), Cooperation and competition in an institutionalist economy: the case of Germany, in C. Crouch and D Marquand (eds), *Ethics and Markets: Cooperation and Competition within Capitalist Economies*, Oxford: Basil Blackwell.
- Dunlop, O.J. (1912), *English Apprenticeship and Child Labour: A History*, London: Unwin.
- Fomin, F. (1991), *Apprenticeship and the wages boards in Victoria 1896-1914*, Ph.D. Thesis, University of Melbourne.
- Frances, R. (2001), *The Politics of Work: Gender and Labour in Victoria 1880-1939*, Oxford: Oxford University Press.
- Gospel, Howard F. (1994b), 'The survival of apprenticeship training: a British, American, Australian comparison', *British Journal of Industrial Relations*, 32 (4), December, 505-22.
- Gough, G. W. (1905), The Wages Boards of Victoria, *The Economic Journal* 15, 361-73.
- Hamond, M. B. (1914), Wages Boards in Australia: I. Victoria, *Quarterly Journal of Economics* 29, 98-114.
- Malcomson, J.M., Maw, J.W. and McCormick, B. (1997), *General Training by Firms, Contract Enforceability and Public Policy*, Discussion Paper, University of Southampton.
- Ministry of Labour (1927), *Report of an Enquiry into Apprenticeship Training for the Skilled Occupations in Great Britain and Northern Ireland, 1925-26*, London: H.M. Stationery Office.
- Marsden, D. W. and Ryan, P. (1991), Initial training, labour market structure and public policy: intermediate skills in British and German industry, in Ryan, P. (ed)
- Pigou, A. (1912), *Wealth and Welfare*, London: Macmillan.
- Roebuck, W. N. (1987), *Apprenticeship in Victoria sixty years 1925-85*, Ph.D. Thesis, University of Melbourne.
- Ryan, P. (ed.) (1991), *International Comparisons of Vocational Education and Training for Intermediate Skills*, London: Falmer Press.
- Scofield, P. M. (2000), *The development and reform of apprenticeship training in Victoria between 1884 and 1987*, Ph.D. Thesis, University of Melbourne.
- Shields, J. (1995), 'A matter of skill: the revival of apprenticeship in early twentieth century NSW', *Journal of Industrial Relations*, 37 (2), June, 236-62.
- Shields, J. (1990), *Skill reclaimed: craft work, craft unions and the survival of apprenticeship in New South Wales, 1860-1914*, PhD Thesis, University of Sydney.
- Shields, J (1995a), *Deskilling revisited: continuity and change in craft work and apprenticeship in late nineteenth century New South Wales*, *Labour History* 68, 1-29.
- Shields, J. (1995b), *A matter of skill: the revival of apprenticeship in early twentieth-century NSW*, *Journal of Industrial Relations* 236-262.
- Smith, A. (1776), *The Wealth of Nations*, Harmondsworth: Penguin 1970 edition.
- Smits, W. (1997), *Apprenticeship Training under Imperfect Information*, paper presented to the 1997 EALE Conference, Århus.
- Smits, W. and Stromback, T. (2001), *The Economics of the Apprenticeship System*, Cheltenham and Northampton: Edward Elgar

- Smits, W. (2005), *The Quality of Apprenticeship Training: Conflicting Interests of Firms and Apprentices*, Proefschrift, Maastricht University.
- Soskice, David (1994), 'Reconciling Markets and Institutions: The German Apprenticeship System', in Lynch, Lisa M. (ed.), *Training and the Private Sector: International Comparisons*, National Bureau of Economic Research, Comparative Labor Markets Series, Chicago and London: University of Chicago Press, 25–60.
- Soskice, D. (2002), The role of industry and economic institutions in shaping industrial training, Ch 12 in Burke, G. and Reuling, J. (eds.) *Vocational training and lifelong learning in Australia and Germany*, Adelaide: NCVET.
- Steedman, H. (1993), 'The economics of youth training in Germany', *Economic Journal*, 103, September, 1279–91.
- Stern, D. and Ritzen, J. (1991), *Market Failure in Training*, Berlin and Heidelberg: Springer Verlag.
- Streeck, W. (1989), Skills and the limits of neo-liberalism: the enterprise as the future place of learning, *Work, Employment and Society* 3(1), 89-104.
- Wolff, A.A. (1938), *The Report of the Royal Commissioner on Youth Employment and the Apprenticeship System*, Perth: Government Printer.