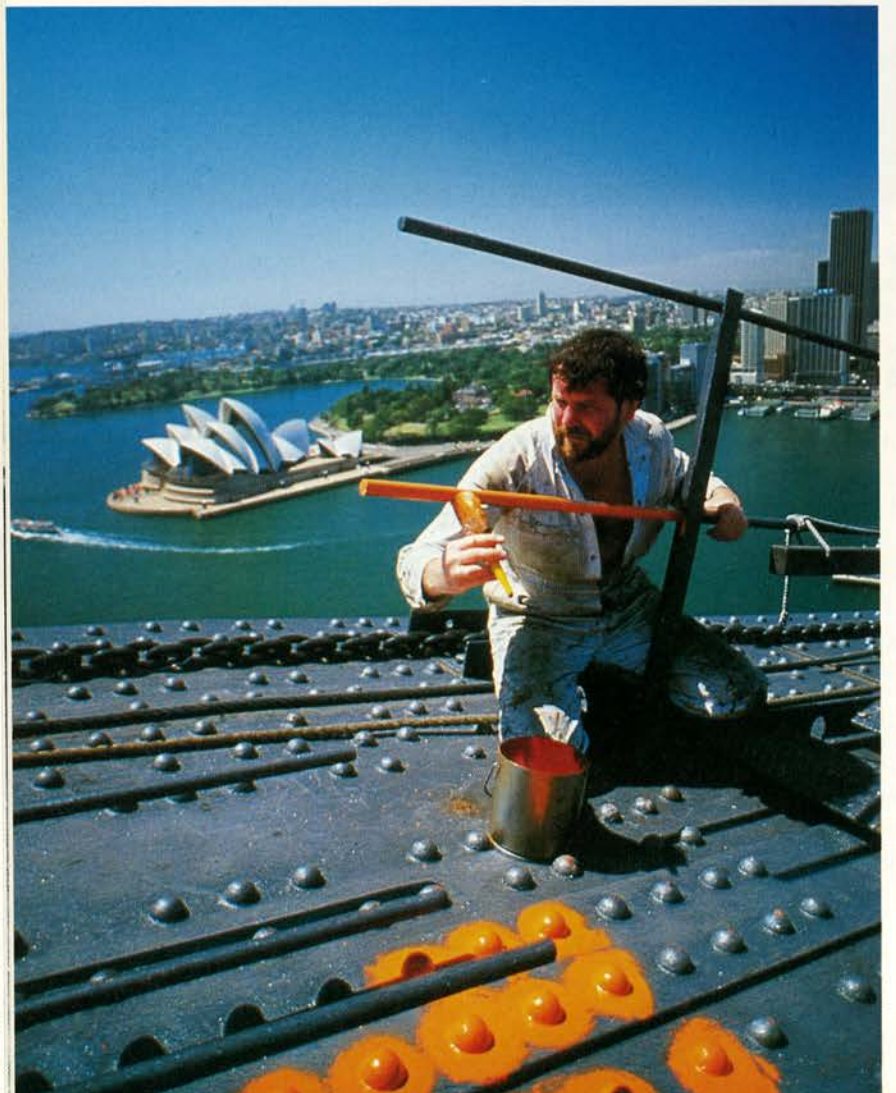
CHAPTER 15

WORK

G.F.R. SPENCELEY

IN 1970, an experienced student of industrial relations, G.W. Ford, remarked how little people really knew about and understood one another's work-lives. Although Australians lived in an increasingly industrialised society, few had ever seen inside a factory. Although rural enterprise was the backbone of exports, fewer still had seen a sheep shorn. To find out about the social environment of work, one had to go to novels: scholarly studies scarcely existed. He did not exaggerate, though there were chinks of light. The psychologist P. Laffitte had studied in 1958 the problem of job satisfaction in seven Melbourne factories, and the book that resulted, *Social structure and personality in the factory*, has been described as 'a seminal point in the history of knowledge on the worker in his Australian world of work'. In 1963 the historian Robin Gollan opened up for outsiders another domain, in his *Coalminers of New South Wales*. Though Gollan's purpose was to tell the story of a union, that story could not be understood unless one learned how the organisation of work in coalmines had evolved and who the 'miners' were. So readers met grooms, trappers and trolleymen, bratticers, chockbuilders and banksmen. Gollan's account of how these and others carried out specialised tasks and formed the mosaic of effort that both brought coal to the surface and shaped relations between workers and their employers may have been elementary to any miners or mine managers who happened to read it. But for others it was a revelation.

A decade after Ford's 1970 observation, Australians had begun to learn a great deal more about each others' work. Ford himself had directed eye-opening research. The immediate impetus was an inquiry which the Whitlam government set up in 1974 under the company director Gordon Jackson, to advise on policies for manufacturing industry in Australia. This committee's discovery that 'the basic facts on industry have been gathered only to a limited extent' led it to commission studies of seven sample industries: meat and abattoir byproducts; footwear; petroleum refining; smelting of non-ferrous metals; springs and wire products; motor vehicles; agricultural machinery and equipment. A group under Ford studied 'the human side of manufacturing'. They visited 32 factories to find out the



Above.
Heavy machinery, Mt Newman, WA.
BHP ARCHIVES

Top.
Charging an open-hearth furnace with molten pig-iron at BHP, Newcastle.
AUSTRALIAN INFORMATION SERVICE

Left.
A job famously never finished: painting the Sydney Harbour Bridge, 1984.
AUSTRALIAN INFORMATION SERVICE

attitudes and ideas of 'people at the plant'. They met with a warm response: 'at last', those interviewees said, 'we are being consulted by a government committee'.

The report that Ford and his colleagues wrote gives vivid glimpses of the diversity which even their small sample of manufacturing industries revealed. Noise was often the overwhelming feature. In the barbed wire and nail sections of one plant it built up to a crushing level, and in car factories it was continuous and grinding, punctuated by the thump of metal presses. Other vignettes included a shop for galvanising wire netting, where acid rotted all but woollen garments, and an abattoir where the morning's fresh clothes were soon splattered with flesh and bone and the beef hall fogged up with humidity rising from the sterilisers. There were workers who spent their day in factories that might 'fit happily into the pages of a novel by Dickens': places 'where scientific management has not yet penetrated, and employees go on quietly making almost complete products'. Then there were the oil refineries, where in control rooms operators wearing overalls sit on desks, watch consoles and press buttons: placid scenes which could, however, 'blow apart'. A failure in a pump, a malfunction in the process and a highly volatile product hangs in the balance. Other people 'work their guts out to keep producing from clapped-out old machinery, some of which is driven from lines of belts similar to those pictured in children's schoolbooks on the Industrial Revolution'.

Ironically, technological advance can prolong the life of such machinery through what is quaintly known as 'destructive maintenance'. New technologies may produce even complicated mechanical or electrical components so economically that old plant can be saved simply by throwing away and replacing parts of it. Destructive maintenance also implies simplifying repair work, so that tradesmen's expertise is called on less and less and may fade away.

Ford's group saw their report as simply beginning the uncovering of work's texture: an initial attempt to relay 'the smells, noise, sweat, pollution, blood, tears and stress of the people who keep the machines of manufacturing industry grinding on'. Others followed. In 1977 Richard Trahair reported on lengthy interviews with 110 Broken Hill miners. He described the organisation of the miners' tasks, explained what tacit rules governed their working days and brought individual men to life with vivid glimpses of what their work meant to them:

> Timbermen said they had interesting, varied tasks, with constant changes and no monotonous routine. Three mine workers found time dragged in their dull tasks ... One young blacksmith said, 'It's marvellous what you can do with steel'. Three tradesmen found their tasks routine, tedious, and boring ... a winder-driver who sat alone in a glass cabin and operated the winder which raised and lowered men in the shaft ... wanted a fellow worker with whom he could share the responsibility and anxiety he felt when he thought about a fatal mistake. 'You know you could kill a bloke in five minutes if you lose concentration', he said.

In a 1980 book Roy Kriegler similarly described work in BHP's shipyards at Whyalla, where some workmen could be found 'labouring on top of the coke ovens with wooden clogs strapped to their safety boots to protect their feet from the searing heat', and others, protected only by helmet, face visor and gloves, working under giant ladles of molten steel,

> aware that one error of judgment on the part of the crane driver could mean instantaneous death. 'When molten steel spills from these ladles', explained the Superintendent, 'it gives all the appearance of defying the laws of gravity: like the gates of hell, it consumes everything in its path'.

In a different setting, Claire Williams told in 1981 of work routines and the accompanying social organisation in company towns created by open-cut mining in central Queensland. The emphasis here is on coal extraction in strip mines using heavy machinery—draglines, Euclid trucks and mechanical shovels—from which the employing company seeks the greatest return through round-the-clock shifts financed by unlimited overtime. Servicing the machinery employs more people than operating it; and while operating the machinery is not physically demanding (most drivers are often in air-conditioned cabins), it can be very dangerous. Two men were killed while Williams was making her study. The few unskilled jobs available on these sites are described as 'boring, tedious and dirty'.

Such concrete explication of the work experience can be at its most vivid in individual case studies collected and published by oral historians: presentations of raw material of which a reader can make his or her own sense. In Kriegler and Stendal's *At work: Australian experiences*, 45 people, ranging from tram driver to oil executive, bouncer to funeral director, talk of the work they do and their attitudes to it. Some common expectations are confirmed: a commercial artist and a geologist ('my hobby and my job are the same things') love their work; a spot welder ('my job is foul. I have to do the same thing again and again and again') and an upholstery cutter hate theirs. Others voice much less predictable sentiments. A policeman, despite the 'major stress' of coping with superiors and working with colleagues who prove sometimes to have 'hearts as big as a caraway seed', finds his work exciting—a real 'buzz'; a spray painter likes his work because he doesn't find it monotonous; a mobile library driver experiences 'extreme frustration at the narrowness of people's minds'; the bouncer is in his job not because he is aggressive or 'power-hungry', but for the money—'to finance other things such as my studies'.

Samples like these call to mind the truism that, as individuals, people see and understand their work-lives in many different ways. Great human variety, then, lies behind the aggregates of census and employment statistics. These show that in 1947 Australia had 2.2 million people in paid work and in 1980 6.6 million. So while in a little over 30 years the country's total population doubled, its workforce trebled, and this when children were staying longer at school and old people had begun to retire earlier. There are two major reasons for this: many women, and particularly married women, entered the workforce; and as migrants tended to be younger than the rest of the population a higher proportion of them became workers.

A grinder at the British Motor Corporation's plant in Sydney, 1966. Photograph by David Moore.

The kinds of work done changed significantly. The traditional division of the workforce has been into three groups: the primary sector (agricultural, fishing and mining); the secondary (manufacture of transportable goods); and the tertiary (services). But the edges of these definitions are woolly and they do not satisfactorily express the increasing diversity of occupations that technological and other changes generate. Nor do these three sectors include unpaid work: so they ignore and, by implication, deny the economic value of most home-based work, particularly that of women.

In his *Sleepers, wake!* (1982) Barry Jones, soon to be a minister in the Hawke government, offered an ingenious alternative by dividing the workforce into five sectors. Jones set out to establish 'more precisely what people are doing and to understand the significance of the historical trends and shifts in employment'. He accepted the categories of primary and secondary, though in the secondary group he counted people engaged in building and construction—people thought of in the old scheme as tertiary workers, who provided services. Then he added three new sectors: tertiary, quaternary and quinary. The tertiary sector, Jones explained, provides 'hard' or tangible economic services. Examples are 'transport, storage, buying and selling goods, water and energy supply, maintenance, waste disposal,

Domestic labour: this photograph illustrates an article in Pix, *1949, which asks 'Is Australia a man's country?'*
MAGAZINE PROMOTIONS

cleaning, beauty care, heating and cooling, supply of food and drink, sports and recreation, and many services performed by armed services, police, doctors and dentists'. The quaternary, or information, sector provides 'soft' or symbolic objects. Examples are teaching, office work, public service, theatre, banking, architecture, data processing, law, social work, advertising. Its tools of trade, Jones observes, are 'voices, pens, pencils, chalk, telephones, typewriters, computer keyboards, word processors, duplicators, visual display units, adding machines, microphones, cameras, microscopes and tape recorders'. In his quinary sector Jones put all domestic services (many of them unpaid), professional services similar to domestic work (for example, care of children and the aged, cleaning, catering and accommodation), charitable work and hobby-based occupations.

Secondary industry employed more and more people until the 1970s: the figures show a rise in absolute numbers of 83 per cent between 1947 and 1976, which was from 20 to 23 per cent of the total labour force. Indeed, World War II might well be thought of as marking the industrialisation of Australia. For although mass production of food, textiles, clothing and footwear was well established before 1939, the war gave great impetus to heavy industry, chemicals and specialised engineering. Then in the 1970s the numbers employed in secondary industry stopped growing. The aggregate figures understate what was happening in particular instances: the textile and clothing industries, for example, reached their peak employment in 1965 and 1971 respectively, and then fell sharply. The

electronic and footwear industries were also in decline by the end of the 1970s, and in 1982 crisis in heavy industry was signalled when Australian Iron and Steel announced the impending loss of 2500 jobs in the Port Kembla steelworks. By then unemployment in Wollongong and Port Kembla, at 13 per cent, was almost double the national average. Redundant workers and their unions were not mollified by BHP executives' prediction that of every three workers who lost their jobs only one would be taken back. The company had for some time had under way a modernisation and rationalisation program which itself partly explained the job losses. Meanwhile, at Whyalla in South Australia BHP had closed its shipbuilding works in 1978 (also at a cost of 2500 jobs), forced out of business, it said, by foreign—especially Korean—competition.

While competition and the adoption of labour-saving technologies steadied and sometimes reduced employment in the secondary sector, tertiary or service callings continued to climb, as they had since the war, both in absolute numbers and in the share of the workforce they represented. It is evident that this growth was the most notable general change of the period. The combined numbers in the tertiary and quaternary sectors grew in the three decades after 1947 from just under one and a half million to just over three and a half million, a rise from 29.2 per cent of the workforce to 44.4 per cent. Australia was already in the 1980s a 'post-industrial' society: a society in which manufacturing had come to account for a declining proportion of employment, and most net growth in employment took place in service industries. The revolution in large sections of these industries—most notably the rapid development of computer technology—which had begun to reduce labour requirements, was already leading concerned observers to wonder what would happen to work in a now-dawning 'post-service' era. Barry Jones found the beginnings of an answer in some words of André Malraux: 'Leisure creates its own demand and to meet it we must build factories for ideas just as there exist factories for machinery'.

The clothing industry is a traditional employer of women. A factory in Perth, 1946.
BATTYE LIBRARY

There was also a steady decline after 1947 in the quinary sector. Many women decided to take jobs in place of, or as well as, unpaid domestic duties. Women's share of paid work grew from 25 per cent in 1961 to 44 per cent in 1983. The sharpest rise took place in the 1960s, a time of economic boom and labour shortage, though the proportion of women in the labour force continued to grow even during the recession of the 1970s. As in Britain and the United States the most remarkable thing was the entry, or re-entry, of married women into the workforce. Changed social attitudes, economic necessity and growth in the number of part-time jobs available combined to wear away the old barriers against married women, especially those with young children, taking work outside the home. In 1967 37 per cent of all Australian married women were in paid jobs. By 1981 this figure had risen to 42 per cent. In that year, too, 78 per cent of all known part-time jobs were filled by women.

Getting an increased share of work has not, however, led to great changes in the pattern of women's employment. Women workers have in fact become more heavily concentrated in their traditional occupations: clerical, sales, service, sport and recreational groups, where they work as stenographers, typists, secretaries, sales assistants, waitresses and cleaners. And although the proportion of professional and technical workers who were women grew from 41 to 46 per cent between 1961 and 1981, about three-quarters of them were nurses or teachers. Women's numbers did increase significantly in law and medicine. There were 400 women lawyers in 1966 and 2000 in 1981. Many of these professional women were married. Wives with appropriate credentials were tempted by a favourable job market; to stay at home meant forgoing a relatively high income.

The idea that some kinds of work are for men and others for women has been deeply ingrained in Australia. It had an economic rationale and union support in the days of unequal pay, but its enduring basis is tradition. By the 1980s, however, some changes in conventional expectations had been made. Uniformed police-women, integrated into the force rather than assigned to special duties such as dealing with female offenders, were accepted everywhere. Women had won the

In World War II women moved into many occupations, such as tram conductor, reserved until now for men. As uniformed heroines releasing men to fight, they are readily idealised. Australian women's weekly, *5 Feb 1944.*

In the war, tram conductors; by the 1980s, bus drivers. Photograph by Ponch Hawkes.

ANU ARCHIVES OF BUSINESS AND LABOUR

right to drive buses in Sydney and trams in Melbourne, and in 1984 the first woman airline pilot to be employed by a major company, Deborah Wardley, was in training with Ansett. In 1985 34 would-be iron workers successfully lodged before the New South Wales Equal Opportunity Tribunal 55 complaints of discrimination, directed against Australian Iron and Steel Pty Ltd. But these and other successes were not easily achieved, and women in 'men's' trades and professions had often to endure being treated as oddities.

Of married women in the workforce migrants have the highest participation rate: in 1981 it was 46 per cent, compared with 41 per cent for Australian-born women. Studies of migrants' circumstances suggest that married women work principally to help purchase homes or, when husbands have low incomes, simply to make ends meet. One such study, aptly titled (after the remark of an employer) *But I wouldn't want my wife to work here*, found that only 3 per cent of migrant women questioned in 30 Melbourne factories would have been there if they had a choice. Most were southern Europeans, and this response was hardly surprising, given the discomfort in which many worked and the boring, repetitive nature of their jobs: packing food, sewing clothes and operating machines.

These women fit the commonplace generalisation that, as Ford put it in his 1976 report, migrants 'are concentrated in those sectors of manufacturing with the worst physical conditions, the worst pay and the jobs which are physically hard and contain the most menial tasks'. This was not true of the largest group of migrants, the British, a high proportion of whom were chosen and given government assistance because they had skills or professional qualifications needed for and readily acceptable to Australian industry and commerce. Most of the dirty work has been done by non-English-speaking, unskilled migrants from southern and eastern Europe, the Middle East and Asia, some refugees, others voluntary immigrants paying their own way, still others under government sponsorship. In the three decades of labour shortage after the war these people helped fill the gap in the workforce caused by the low birthrate of the 1930s, providing labour in often unpleasant construction, factory and service work which could not attract enough Australian-born workers.

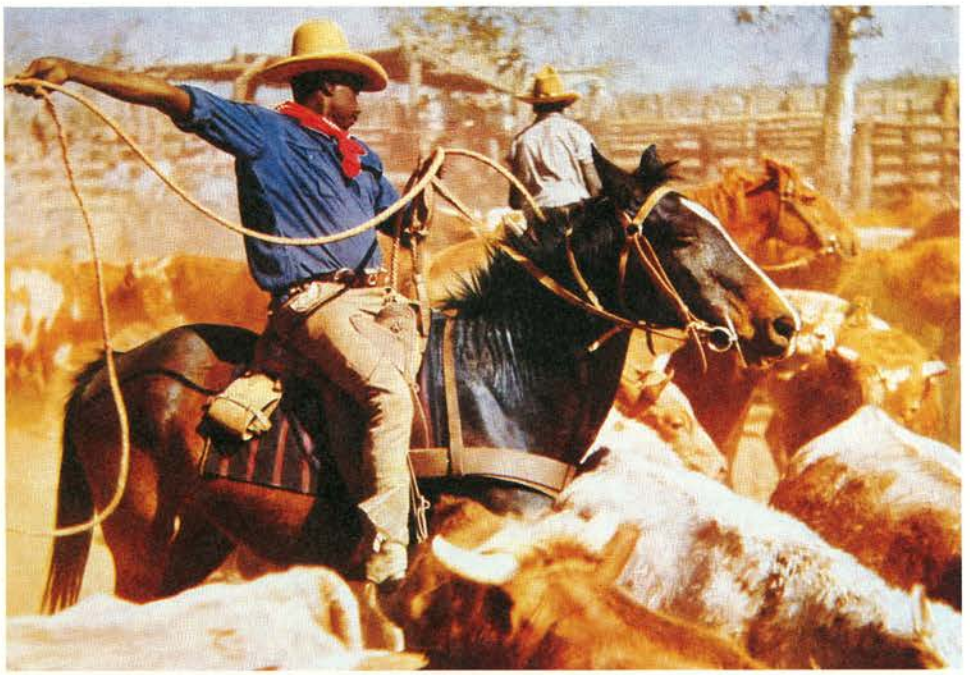
An English class for migrant workers in a Melbourne factory, 1975.
AUSTRALIAN INFORMATION SERVICE

Old Australian ignorance, insensitivity and prejudice made the work-lives of many of these migrants especially painful. Postwar assimilationist policies bred the assumption that migrants, not Australians, must adjust to the practical difficulties that the migrant program brought. Neither employers nor unions were usually concerned or able to distinguish between national groups or to communicate with workers in their own languages. The explosive possibilities of such oversight were revealed in the strike at the Ford plant in 1973 at Broadmeadows, on the edge of Melbourne. Led by rebel rank-and-file migrants, the strike showed management and union officials that migrants had special needs and aspirations. By the late 1970s governments, union officials and management were more likely to agree that it was a good thing to preserve and to understand migrants' cultures. Greater efforts were being made to improve communications in some branches of industry. But G.W. Ford could still write of one factory in 1976:

> when our research began ... we were told by the personnel manager of an Italian delegate in the production department ... The delegate in question was in fact Greek, not Italian, and had resigned the job eight months previously.

In the same factory the relevant union had never in 25 years of facing migrant members produced information in a language other than English.

In general, the common assertion that in the Australian world of work many women and migrants have been disadvantaged seems correct enough. It is certainly



Aboriginal stockman. Photograph by Frank H. Johnston.
SPEARRITT COLLECTION

true also of Aborigines. Since 1939 work has occupied Aborigines in various settings: in the remoter areas, on missions, reservations, cattle stations and mine-sites; on more settled rural lands and in country towns; and in metropolitan areas. Aborigines working in the pastoral industry were generally better paid after 1965, when the Arbitration Commission ruled that they should be paid award rates. Work outside the pastoral industry included seasonal employment in farming areas. In the south of the continent Aboriginal people, in search of work, migrated from farm jobs and fringe settlements in country towns to the metropolitan centres. Contact with kin remained strong, and movement between country and town frequent. Metropolitan Aborigines worked primarily in labouring and other unskilled jobs, often living in ghetto-like circumstances, still isolated, as they had been in country towns, from non-Aboriginal society. As the 1975 Poverty Commission found, low educational qualifications and poor health confined most to unskilled and many to casual jobs and explained why, in the recession of the 1970s, Aborigines were more likely to be 'last hired and first fired'.

Aboriginal unemployment has long been many times higher than that of other Australians. Through prolonged unemployment Aborigines have lacked the social experience to make the most of employment assistance agencies and to join trade unions. Employer prejudice, though outlawed by the Racial Discrimination Act of 1975, still often made it difficult for Aborigines to get work. In the 1970s more than 50 per cent of the whites interviewed voiced negative views of Aborigines as wasteful, unambitious, lazy, and above all unreliable—people likely to go 'walkabout', as if that were a racially inherited characteristic. Prejudice was stronger among those who had grown up in country towns than in the cities. One of the most careful studies made so far, in Adelaide in 1966 by Fay Gale and I. Lewis, found ambiguous but encouraging signs: 14 per cent of employers interviewed would not employ Aborigines because they believed them to be unreliable, but another 14 per cent said they would like to employ Aborigines if only some would apply. Of those who were currently employing Aborigines, 90 per cent found them as satisfactory as other employees.

Shifts in the nature of work and the structure of the workforce have been due largely to technological change. It may have varying effects: to ease manual tasks, to rob special skills of their economic worth and satisfaction, and to reduce jobs. For wharfies, bulk handling of grain and containerisation of other goods may have made some expertise redundant (dexterity with sling and hook; 'arsing and necking') and cut down the numbers of workers required, but it also made the work easier. The pick and shovel work in mines and on building sites yielded to mechanised extraction, loading and lifting. New skills became valued: big cranes, for example, required specialist drivers, and from the late 1960s those who worked on the scaffoldings of high buildings, where problems caused by wind demanded extreme care, had to have certificates of competence.

Motor car production has undergone great advances in technology and organisation. Spraying the first coat on a Holden sedan at General Motors-Holden's plant at Woodville, Adelaide.
AUSTRALIAN ARCHIVES

Most manufacturing industries, especially in larger-scale enterprises, were adopting by the 1980s various forms of automation. Robots were beginning to be used for 'pick and place' tasks such as the loading and unloading of die-casting machines, spot-welding, molten metal pouring and forging, while less spectacular forms of automation were pervasive. The committee appointed under Professor Rupert Myers to examine technological change in Australia told in 1980 of manufacturing like that of the clay-brick industry, 80 per cent of whose production, it said, was 'state of the art', with automatic materials handling and continuous tunnel kilnfiring permitting the boast that 'the bricklayer is the first person to touch the brick'. In the glass container industry, computer controls provided automatic weighing and mixing of raw materials, furnace management and monitoring of the glass-forming process. 'Numerical control', the use of computer technology for improving the capability of machine tools, used in Australia since the 1960s for the production of parts with complex shapes and tight tolerance limits, was being applied by 1980 to simpler machinery tasks. It was welcomed by manufacturers pressed by rising labour costs and vigorous home and import competition.

An assembly line at the Ford Motor Company's factory at Broadmeadows, Melbourne, 1984.
AUSTRALIAN INFORMATION SERVICE

The whitegoods industry (manufacturing refrigerators and washing machines) mushroomed after World War II (in 1946 only 13 per cent of Australian homes had a refrigerator and 2 per cent a washing machine) but was in difficulty by the later 1970s when recession added to the flatness of a now saturated market. Restructuring included reduction of the number of firms, an increasing use of common components, and a switch to numerically controlled machines. As Ann Game and Rosemary Pringle pointed out in the early 1980s, the predetermined programs of such machines made operators machine minders or monitors: 'the semiskilled functions of feeding in the work and inspecting that the job has been done properly are substantially reduced by inbuilt mechanisms for self-control and self-regulation'. Programmers replace skilled machinists: 'there is a 'double-sided process of deskilling and hyperskilling'.

The Myers committee found that the manufacturing activity most profoundly affected by technological change was printing, an industry which found itself the victim of converging developments in computer use, electronics and communications technology. 'In addition', the committee wrote, 'printing is affected by the emergence of the information-based society, which is now the hallmark of "post industrialisation"—and for these reasons is experiencing a greater degree of structural change than other manufacturing industries'. The technologies that affected printing most directly were photocomposition (photographically preparing images for reproduction by printing) and computer electronics. Technically there was no barrier to the industry becoming almost completely automated, with material for printing being prepared on computer and visual display unit and then transmitted electronically to a non-impact printer. In Australia newspaper com-

panies have been the leading innovators. The *Dubbo Liberal*, a New South Wales country daily newspaper, was the first to adopt, in 1978, direct system access by journalists using video display units. In the same year the Italian language newspapers *Il Globo* and *La Fiamma* established an international link with Rome through which copy was directly transmitted into the local computer, on whose video display unit it could be called up for subediting. The metropolitan dailies moved more slowly, but their development of computerised typesetting and printing was well under way by 1980.

These and other changes, while requiring new skills, made others redundant. For older craftsmen adjustment was painful. In a submission to the Myers committee the Printing and Kindred Industries Union noted the disappearance of old skills like the handmaking of 'flong' moulds for stereotyping, and the great reduction in letterpress skills: in proposals then being made for restructuring the industry's main

Bottom.
Compositors at work, Sydney, 1961.
FAIRFAX PHOTO LIBRARY

Below left.
The 'paperless office' is far away from public servants during World War II. Photograph 1942.
MAGAZINE PROMOTIONS

Below.
Journalists using visual display units, Adelaide Advertiser, *1981.*
AUSTRALIAN INFORMATION SERVICE

commercial award, eighteen trade classifications were to be compacted into four. At the same time a steady decline of jobs in the industry reflected both the effects of automation and the fact that the new technology enabled some operations once carried out exclusively by printers to be done by their customers. Thanks to photo-offset techniques in printing offices, composing could be done by people such as the office typists of advertising agencies, or word-processor operators working for public authorities, newspapers, universities or private authors.

Word processing itself, though a fairly recent innovation in 1980, was rapidly adopted everywhere: the Australian market for word processors, it was confidently estimated, would grow at about 35 per cent a year until the later 1980s. The Myers committee called the coming of the word processor 'the first step towards the electronic, or "paperless" office', but underestimated the speed with which the next steps would be taken. Other uses of computers in offices and the retail and wholesale trades meantime raised disturbing questions about job losses. The committee, anxious to come favourably to terms with technological change, stressed its 'employment-generating' effect, but others took a different view.

Already, two years before, computer professionals Barry Thornton and Philip Stanley had estimated that 11 000 computers had been installed in Australia and that these had eliminated 150 000 low-grade clerical jobs, creating only 24 000 compensatory new jobs in systems and programming. In 1980 the Foundation for Australian Resources upgraded these figures: it found that, though considerable scope for their extension remained, computers had over the previous twenty years eliminated 244 000 jobs and created only 77 000. Barry Jones, quoting these figures, reminds us that 'computers are *intended* to displace labour'.

In offices as well as elsewhere, labour-saving technology may alter the character of work. If asked to distinguish the salient characteristic of change, most Australian theorists would look for evidence of 'deskilling'. The American marxist, Harry Braverman, argued in *Labour and monopoly capitalism* (1974) that workers in western societies have experienced in the twentieth century a progressive deskilling: a steady trend for jobs to become more fragmented, routinised, mechanical and devoid of intrinsic interest. Braverman's point of departure is a romanticised past in which craftsmen deploy esoteric skills, working at rhythms they choose themselves, to manufacture articles as wholes. The demon of his piece is the American mechanical engineer Frederick W. Taylor, who took Henry Ford's mass production methods a step further by devising the technique of 'scientific management'. Taylor broke each job into its constituent motions and analysed and timed them to find any that were inessential, so that the most efficient, machine-like routines could be devised for the worker. Sometimes known as Taylorism, the method spread in and beyond the United States after 1910 (in Australia hostility to its application in New South Wales railway workshops was the immediate cause of the great strike of 1917). Braverman argued that in capitalism production is geared to creating profit, not satisfying human needs; so there is a fundamental conflict of interest between capitalist and worker. Taylorism is the prime expression of the deskilling thrust: management becomes totally responsible for planning and designing work tasks, and the simpler the manual operation it gives to workers the greater its power to control and profit from them. Work thus degraded becomes dull and repetitive; workers are alienated—victims of modern technology and the minority who control it. More than that, work's degradation increasingly homogenises the working class. So, for example, the distinction between white collar and blue collar fades as clerical work is increasingly routinised—'mechanically paced paper-processing, in many ways analogous to the other forms of routinised manual labour within manufacturing'.

The profounder issues here—those to do with the rationale, ravages and fate of capitalism—inevitably stir vigorous debate. Less controversial is the focus Braverman's central concept gives for thinking about the organisation of work itself. In office work, for example, what is the deskilling effect when first calculating machines and then computers remove laborious mathematical tasks hitherto carried out by clerks? A strict Bravermanite would declare the clerk has been robbed of his 'craft' control over his own work. One Australian clerk is indeed on record as having made this complaint, with a sexist twist to boot: 'what the male clerk used to do when he totted up endless columns of figures to strike balances, the girl can now do with the aid of an adding machine.' That was in 1966. But worse was to be anticipated:

> and then look who will be likely to operate the computer—the girls—women —punching keys, feeding tapes, watching control boards, filing memory reels. Women's work. No muscular effort required, no years of experience, just necessary patience and nimble fingers with which girls are usually endowed.

By contrast the Myers committee noted that machines' removal of tedious tasks was welcomed, and a 1978 survey of over 1000 members of banking and insurance unions revealed a remarkably positive response to technological innovation: 77 per cent welcomed the new technology, 78 per cent felt that it got rid of boring tasks, and 63 per cent disagreed with the statement that changes in technology reduced job interest.

Specific innovations approved in this way included word processing, which called for initiative and new skills. A study made for the Myers committee (in the days before the havoc of repetition strain injury began) found operators in Melbourne who enjoyed the challenge of exploring the machines' potential, especially as the machines were constantly being improved: 'it does make you think more than just sitting at an ordinary typewriter', said one. '[It] keeps you more alert.' But the new skills were mechanical: unlike the varied and quasi-social skills that the secretary-typist traditionally acquired, they did not fit operators for other tasks. Career paths were limited, and in large offices word processors were increasingly clustered in pools which, like old-fashioned typing pools, threatened dehumanisation through the separation of operator from the people who originated the material to be typed. In Canberra in 1979 a feminist study group, the Red Fems, observed how in the public service typists attached to individual work sections were being replaced by pools of word processors with a supervisor, bringing less job satisfaction because there was less responsibility for the output. The Red Fems, who read and discussed Braverman, thought his theories well exemplified here, and also in a story they plucked from the *Financial Review*, of an employer who said:

> We have seven word processing operators, a supervisor and three administrative assistants. The assistants do the sort of secretarial work we would have interrupted typists to do once, such as photocopying and phone calls.

A sad addendum to this common kind of reorganisation was the modification so often forced in subsequent years by illness when, to counter repetition strain injury (RSI), operators had to take breaks from machines and occupy these gaps with varied tasks, such as photocopying and filing—the work of administrative assistants. Human contact at least was increased, but the deskilling of secretaries and their attrition at middle-management level was not to be reversed.

As the bicentenary approaches, Australians face few questions more perplexing than the future of work. We are of course not unique in this. Most other 'advanced' societies in the world capitalist system to which we are tied encounter, in varying degrees, the difficulties of post-industrialism, strains associated with rapid technological change, unpredictable shifts of economic emphasis determined by transnational corporations, and nagging unemployment. That is why broad analyses of what seems to be going on, like Braverman's, stir such widespread attention. The question 'what is to be done?' is worldwide.

Activists in Canberra respond to the fact that in the 1980s, unlike the 1930s, it is easy for the unemployed not to be noticed.

MEGALO WAGE PAUSE PROJECT, CANBERRA

Unemployment was a political issue in the 1970s and 1980s. ALP button for the 1977 federal election.

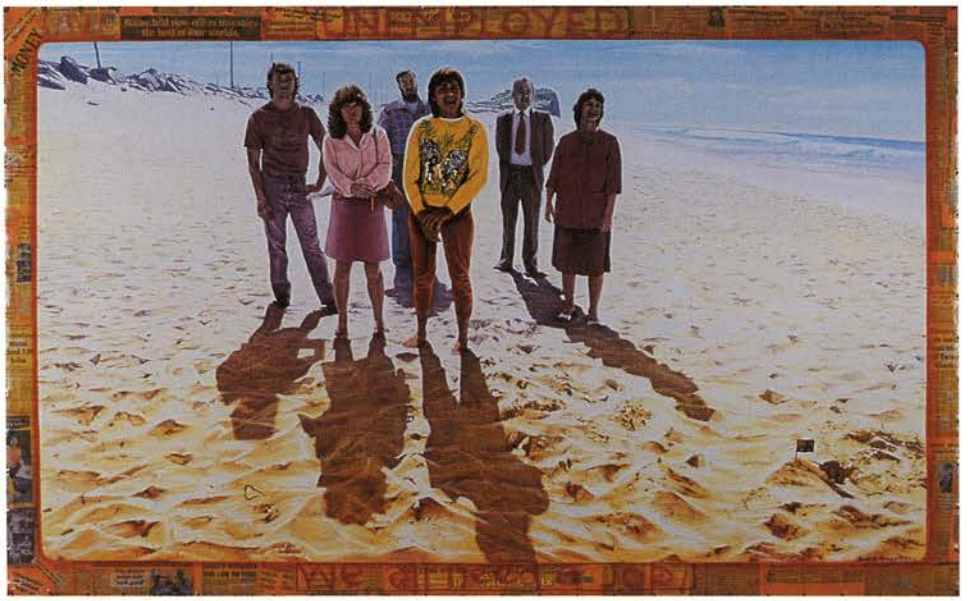
Australians in the 1980s seemed less concerned about the future of work than many other people. Barry Jones called his book *Sleepers, wake!*. When published in 1982, this book attracted limited attention in Australia but was hailed abroad and translated into a number of foreign languages, prompting Jones ruefully to describe himself as a prophet without honour in his own country.

If anything, Australians had been more aware of the effects of new technology —particularly microelectronics—when Telecom technicians mounted a protracted strike in 1978 to protest against the threat to jobs implicit in a management decision to install centralised maintenance exchanges in the nationwide telephone network. The strikes won much public support and prompted the Fraser government to appoint the Myers committee which, as we have seen, reported in 1980 on the likely effects of technological change. But the government rejected the committee's main recommendations for consultation with workers when innovations were contemplated and for a support scheme to assist people adversely affected by technological change.

Students of unemployment now became the most arresting analysts of technology's effects on work-lives. Keith Windschuttle, like Barry Jones drew on the Foundation for Australian Resources' 1980 study to stress the extent of job loss through computerisation. Current technological innovation, he argued, was meant to reduce labour needs and in Australian circumstances could never create as many new jobs in compensation. To resist its effects was not to oppose progress, but to contest the conventional belief that the economy is naturally self-regulating and that by increasing productivity new technology creates wealth and through it, new jobs. 'Technology', he wrote,

> is not something that is put to use whenever it springs forth from the genius of scientists or engineers. Under capitalism, the technology that is taken up is that which best solves the immediate problems faced by the company that buys it.

That admitted, how can society cope with the shortage of work likely to be created by technological innovation and the drive for economy? A fundamental difficulty is that, as Windschuttle puts it, work is 'the activity by which most of us are defined as human beings'. In Braverman's analysis the same idea is fundamental: the degradation of work is as much a moral as an economic affront. Many studies demonstrate the importance of paid work in maintaining the individual's sense of identity and self-respect. Claire Williams asked almost a thousand Queensland Telecom workers in 1980 whether they would go on working for wages if by some chance they inherited enough money to live on comfortably. Over 70 per cent said they would, so confirming, Williams observed, the continuing power of the work ethic. For her that ethic was something imposed by the system. It worked, she wrote, as an instrument 'useful to the ruling class to socially control both the employed and the unemployed'. From this perspective, as from Braverman's, liberation from the tyranny of work seems to require the destruction of capitalism itself. Windschuttle might agree, though for him technology is not altogether sinister, and work is not a mere instrument of capitalist control and exploitation.



Unemployed people's banner. The artist, Birgitte Hansen, writes: 'I tried to create a sense of alienation, isolation and futility for the unemployed people painted on this banner.'
WORKERS CULTURAL ACTION COMMITTEE

What matters is that work should acquire its own value and be shaped to achieve creativity and job satisfaction rather than be directed solely to making profit. Technology, by making work less boring, routine and arduous, can be liberating rather than enslaving. But to achieve this the system has to be changed:

> There is no 'invisible hand' that will make the problems go away. They will only disappear and allow technology to benefit humanity in an unequivocal way if we, as a community, take control of our future and decide to plan our economy and the changes we want to make to it. This means abandoning the free market system and restricting the rights of capitalists to make all the big decisions for us. It means setting out to create a socialist society.

Barry Jones equally believes that the future can and must be controlled, though his approach is not as programatic as Windschuttle's nor as steely as Braverman's. He would modify, not eliminate, capitalism, taking political action to ensure that technology is used to meet social rather than economic goals. His state, enlarging on Scandinavian precedents, would intervene to enforce sharing of the economic benefits which technological change brings, to fund a range of choices of working hours and the length of formal working lives, to develop a variety of small, specialised, labour-intensive firms hived off from existing large-scale companies, to reorganise education and to greatly expand library and information services. The fundamental aim is to 'Re-define *work* as 'any form of activity or time use that is or may be beneficial to society and/or to the person performing it'.

Jones's five-sector method of looking at the labour force—to describe how people are actually occupied, and to give proper recognition to work performed in the home—is an essential part of this assault on the traditional work ethic. Jones sees the greatest hope for full employment in the 'post-service' era in work which is time-absorbing, uses few resources and seeks to fulfil human needs on a continuing basis. So he favours work in restaurants and theatres, sport, gardening, research, music and all activities that have the purpose of improving human welfare.

The Newcastle Metal Workers' Union registers its commitment to the craft. The banner is designed by the artist Birgitte Hansen, reviving an old tradition. This and others like it are hung in union offices and used in May Day marches, demonstrations and conferences.

NEWCASTLE TRADES HALL