The economic and social consequences of automation were discussed in September by communist union activists, and extracts from some of the speeches are published in this issue. The Australian Council of Trade Unions held a seminar on automation in October. The president of the Communist Party of Australia comments on some of the issues raised in these discussions.

The views expressed by trade unionists on the new problems arising from technological developments are a very useful beginning in the working out of an effective trade union strategy.

It must be said, however, that the line of approach, especially at the ACTU seminar, was to seek solutions within the present structure of trade union thinking, methods and organisation. Much more than this will be needed if the trade unions are to effectively defend their members' rights, and help shape the future lines of trade union influence and organisation in industry and the nation.

In Australia there has been considerable progress in the application of new scientific and technological methods to production. Automation, however, is only in its infancy. What are the prospects these changes hold for the people? The British marxist, Dr. Sam Lilley, writing in the August, 1965, issue of *Marxism Today* had this to say:

“Automation, in spite of its youth, has gone far enough to assure us that almost any productive task can be automated. Even now it offers enormous increases in the productivity of labor. Computers can plan a factory's production processes far more skilfully than any human production manager, giving maximum efficiency and minimum waste. Experimental work in the Soviet Union has gone far enough to show they will soon be able to make big improvements in the planning of an entire economy”.

On the basis of what he called “rough calculations” he suggested that “it would now be possible to *double* the output of wealth per head *every ten years*—and go on doubling it decade after decade. This means that the output of wealth per head could be
multiplied by four in 20 years, eight in 30 years, by sixteen in 40 years. With a two-fold improvement to follow every ten years, we can surely say that the World of Plenty and the World of Ample Leisure is in sight."

Dr. Lilley explained that capitalism is a barrier to the full use of the benefits of automation. The "World of Plenty" and of "Ample Leisure" will be realised only under socialism and more trade union attention to their final aims is necessary.

Automation, however, will certainly result in a big increase in the production of wealth under capitalism. Who is to benefit from this? At the ACTU seminar Mr. Bury, Minister for Labor and Industry, said that "technical change meant a better way of life for all the people". It all sounds so simple and automatic, but improved living standards will not be as easy to get as Mr. Bury would have the unions believe.

The employers do not have a "world of plenty" and "ample leisure" in their sights when they automate production. They are out to increase production and reduce costs by getting rid of large numbers of so-called redundant workers, with the single clear-cut aim of making bigger profits. Improvements in living standards will not be automatic, nor will they come as handouts from arbitration. They have to be won and that calls for more organisation, unity and struggle, the crucial weapons of trade unionism. The monopoly capitalists are using the new technology to further attack the working people and the rights of the trade unions.

In this situation the trade unions will get nowhere simply by taking up a defensive position. Their way of advance is to stake their claims for a big share of the increased wealth for the working people and to fight for the rights of the workers and the trade unions.

The demands of the trade unions for higher wages, shorter hours, more holidays and long service leave, and so on, are most important. So also is the fight against unemployment and the employers' offensive, for the rights of the workers—the right to work and to organisation and for such things as severance pay and retraining for new jobs, and so on.

The trade unions must think also of the rights and interests of future generations. Neglect of the youth, who, with the advent of automation suffer from unemployment, could turn them against the trade union movement. By defending the right of youth to work and by taking up the fight for their demands, the
trade unions will be in a strong position to rally the young people to the banner of trade unionism and unity.

Automation creates new and complex problems for the trade unions and to meet them successfully they will be compelled to examine their organisation, tactics and methods of struggle. The fact that a number of unions, conscious of the weakness and shortcomings of craft unionism, are urging union amalgamation, is a sign of the times. Unions based on the industry principle will bring a new outlook, improved organisation and greater unity to the working class struggle.

Another important matter is the rapid growth of white and blue collar workers and their organisations. The fact that ASCPA and the High Council CPS participated in the seminar on automation with the ACTU is indicative of their concern at the consequences of the new technology on their members. Collaboration and mutual support of industrial and white collar unions in the fight for the just demands of the working people is both possible and necessary in tackling this problem.

Finally, if the rights of the workers are to be effectively defended, then the role and rights of the trade unions must be increased. Abolition of the penal clauses and restrictions on the right to strike are essential. The trade unions should also strive for greater rights in industry as spokesmen for the workers.

It must be anticipated that the employers will take advantage of automation to make new attacks on the rights of trade unions and shop committees. If successful this would enable them to re-organise production to their own advantage and create conditions for large-scale dismissals of redundant workers. The trade unions should fight to extend their rights in industry and together with shop committees and other elected employees’ representatives, insist upon early consultation with managements on the effect of technical changes, with full consideration being given to the interests of the work force.

Tom Wright

Sheet Metal Workers Union

AUTOMATION has come to be understood as the application of new technology including new machines, electronic computers and other devices, drastically altering methods of work and the number of workers required.
The new revolutionary technological developments affect not only manufacturing, but all sections of the economy. The use of machinery, electrification and chemicals is transforming agriculture into large-scale and intensive agriculture. In transport mechanical equipment is replacing manual handling of goods with the use of large containers and other forms of bulk handling, and mechanical rail track laying, automatic signalling, diesel and electric power in place of steam have greatly reduced the number of workers required.

Modern technology is far in advance of its general application. For example, in the middle of 1963 the estimated number of complete process control systems operating in industry was only 400 for all capitalist countries. Of this number 250 were in operation in the United States, practically all of them in monopolised industries.

The initial cost of automation is so great that only the wealthiest business organisations can find the necessary funds. For this reason automation in the majority of cases is only partial, according to the means at the disposal of the various capitalist establishments.

As automation means large-scale production, a necessary condition is the existence of an adequate and reasonably stable market. The limitations of the Australian market restrict the advance of automation in many branches of production where export outlets would be required in competition with the United States, Japan and other advanced countries.

Automation increases productivity so that the cost per unit of production is greatly reduced, and competing establishments which have been unable to keep pace in automation are placed in a hopeless position. Mergers and take-overs are the order of the day; and even large scale capitalist establishments are swallowed by giant monopolies.

A further restricting factor in the progress of automation is that it may mean scrapping existing costly plant, so the establishment of completely new enterprises using advanced techniques is easier and more likely than the transformation of old establishments. In practice, it is usual for manufacturing enterprises adopting automation to open an entirely new factory in another locality. This also helps the employer to escape the established
trade union and workshop organisation, and the system of conditions and over-award payments.

The new technology greatly increases productivity without a corresponding increase in wages, and the decreased ratio of capital spent on wages compared with other expenditure intensifies the problems of markets, as the purchasing power of the workers lags more and more behind the gross value of the goods produced.

Structural changes in capitalism brought about by the scientific and technological revolution include a large increase in the number of white collar workers as compared with other workers, but this is offset by the rapid introduction of computer techniques into offices and banks. There are now 300 or more electronic computers being used in Australia and the number will greatly increase.

The new technological changes make clearer the obstacles to progress imposed by capitalist relations of production. The general introduction of the most advanced technology which could provide abundance for all requires social ownership of the means of production. Only in this way can there be the planned mobilisation of national resources required, and a systematic extension of automation in the broad sense, with rising living standards and full employment.

Automation therefore calls for the all-round strengthening of socialist thought and activity.

Pat Clancy

Building Workers Industrial Union

THE rapid technological changes in industry have brought about changes in the composition of the Australian work force. Changes in the organisation of the production process, such as the development of sub-contracting in various industries, have resulted in an increase in managerial personnel, foremen, various kinds of planners, co-ordinators and similar administrative workers.

One outcome of the change has been the campaign about the de-proletarianisation of capitalist society, the absorption of the proletariat into a new middle class. This theory distorts the
The concept of social classes; it is an attempt to represent the changes taking place in the social division of labor as class changes.

The definition of classes given by Lenin is an essential starting point when considering this question: "Classes are large groups of people which differ from each other by the place they occupy in a historically definite system of social production, by their relation (in most cases fixed and formulated in laws) to the means of production, by their role in the social organisation of labor, and, consequently, by the dimensions and method of acquiring the share of social wealth that they obtain. Classes are groups of people one of which may appropriate the labor of another owing to the different places they occupy in a definite system of social economy." *(A Great Beginning)*

Examination of the Australian scene reveals that, despite changes in occupation, the vast majority in the work force are wage and salary earners. The 1961 Census shows that the work force comprises 267,081 employers, 412,815 self-employed persons and 3,351,034 employees.

The figures of earnings also show that the majority are either members of, or close to, working class. Australian taxation returns for last year gave 4,153,798 persons as earning less than $4,000 a year, compared with 399,922 who earned over $4,000. The really big income earners were restricted to 5,410 who earned over $20,000 annually.

The majority of salary earners have interests close to those of the industrial working class, and should be seen as the natural allies of, and virtually a part of, the working class. The fact is that the mass of rank and file office employees and professional workers is drawing closer to the proletariat, losing its independence and relatively more secure position and becoming an object of increasing capitalist exploitation.

With the concentration of economic power into fewer and fewer hands, the objective base for unity of all sections of the working class for struggle against monopoly exploitation, extends still further.

It also seems clear that development of technology will tend to break down the division between blue collar and white collar workers. The *Australian Financial Review* in an editorial on August 22 referred to the status and salary differentials between
white and blue collar workers having declined from the golden
days of the late 19th and early 20th centuries. This is a com-
ment on the fact that companies are now beginning to introduce
work-measurement techniques in the clerical field. This is being
done in an effort to streamline their offices and to reduce staff
requirements; in short, to speed up clerical work.

These developments call for a much closer relationship between
the white collar organisations and the Australian Council of
Trade Unions. Within the ACTU there are already a number
of white collar organisations; in wages campaigns there has been
a good degree of co-operation between the ACTU, the Austra-
lian Council of Salaried and Professional Associations, and the
High Council of the Commonwealth Public Service Organ-
isations.

I do not share the view that with the development of automa-
tion and technological progress the importance of the industrial
workers will decline. While the proportion of workers directly
engaged in production is decreasing, at the same time there are
more and more job setters, maintenance workers, technicians
specialising in electrical and radio equipment, and technical
service personnel.

Different forms of automation have a different effect on the
pattern of skills. While comprehensive automation requires
highly skilled workers with broad qualifications, partial automa-
tion allows the use of relatively unskilled labor on certain
operations.

The decisive role of the industrial workers is reflected in the
present membership of the ACTU and ACSPA. The ACTU
embraces 97 unions with a membership of 1,250,000; ACSPA has
a membership of about 300,000.

While the membership of ACSPA is rising at a relatively
higher rate than that of the ACTU, it still has a long way to
go before it would replace the ACTU in importance and influ-
ence. The important thing is not to see the two organisations
in competition, but rather to seek ways in which united activity
can be undertaken and the prospect opened up of eventually
joining into the one organisation.

The initiative needs to come more from the industrial unions,
seeking joint action not only on matters such as the national
wage demands, but giving assistance to the white collar organisations in struggles concerning demands of those organisations. In this way a solid alliance of all wage and salary earners can be established.

Laurie Carmichael

Amalgamated Engineering Union

WITH the further development of automated techniques in Australia, the trend away from the concrete concepts of the basic wage and margins in arbitration will further increase. The total wage concept now adopted in principle, with its less tangible and more abstract concepts of “economic content” and “work value” will be carried further, compounding the already difficult processes of substantiating argument in the arbitration system.

This will aggravate the growing difficulties of arbitrationists within the trade union movement. The extreme right will base themselves upon the amorphous concepts as a means of more and more trying to head off into a dead end the workers’ complaints which will arise from the effects of automation. On the other hand, there will be an increasing section of the traditional reformists concerned with the lack of concrete procedures.

From the point of view of an alternative to this development in the form of mass campaigning, the needs concept (perhaps a better term should be found for it) plus a margin for skill (and perhaps a different term for this too) would still have the most attractive force. The needs concept, however, would certainly have to be associated with modern needs, in particular the capacity to absorb the great wealth of goods that can be produced and distributed. The difficulty with the word “needs” is that it carries a connotation of existence levels only, rather than the high standard of living possible from the great quantity of goods which can be produced from automated industry.

Problems arise in regard to wage claims of a general nature where automation penetrates only some industries at the one time. For example the relatively high degree of mechanisation at General Motors produces fantastic profits for that company and large scale redundancy for the workers in the industry. But the general wages approach of the whole trade union
movement at the present time fits in with the arbitration concept that the productivity of a highly mechanised industry is taken into account in a general claim, and that "efficient" industries are free to enjoy all the fruits of their automated processes.

Despite the impact of automation in the particular industries into which it is introduced, it does not penetrate all industries simultaneously, and wages problems associated with spasmodic introduction will occur over a protracted period. Even in the United States only a relatively small proportion of industry is yet automated.

If one thinks of automation as being fully introduced, it is possible to think of a wages policy which on a nation wide scale can take the whole situation into account. Where the whole of industry and commercial activity is not automated, special claims and special problems arise in those sections where it is introduced, because an overall wages policy does not apply. This is where the special claims arise, such as a three months termination allowance after 12 months employment, special payments available for people made redundant in industries whilst being retrained for others, etc.

A great deal more effort must be made to argue out the ideological problems of a mass wages policy with the onset of automation, as an alternative to the deliberately adopted "abstract" policies of arbitration.

A point regarding change of skills. Differences in skills for the performance of work will have to continue to be recognised, but a stronger stand should be taken with regard to the allegedly super skills which are often elevated to managerial and similar levels and so "bought off." There should be more striving for a higher common content and lower differentials as the possibility of higher living standards for all increases.

Jack Hutson
Amalgamated Engineering Union

WHEN talking of automation two errors should be avoided. One is the temptation to adopt a "gee whiz" attitude, that is to stand goggle-eyed at the wonders that automation can undoubtedly perform. The danger of this attitude is that it can
lead to an exaggeration of the concrete facts, which makes it
difficult to make an objective assessment of what is the actual
position of automation in Australia.

The second error is to overlook that automation need not
necessarily be associated only with large-scale production. Con­
siderable research and development has been applied to the
problems of small-scale production because there is also a profit­
able market in that field. This is an approach that has partic­
ular significance for Australia as the small domestic market
provides only limited opportunities for the application of full­
scale automation. So in some industries the main problems arise
from the application of partial automation and advanced
mechanisation.

Suppliers of equipment are continually developing equipment
that can be made available at an economic price for use on
short-run manufacturing work in various industries. For
example, the Digiturn attachment for standard centre lathe
enables an unskilled operator to turn out products up to the
same standard as those from a skilled turner.

Another effect of partial automation is the use of certain
equipment as a pace setter for the whole manufacturing process.
For example, a Melbourne firm manufacturing furniture hard­
ware installed a fully automatic plating plant. The result has
been that time study and incentive payments have been intro­
duced into the making and finishing sections, where no new
equipment has been introduced, to speed them up to keep pace
with the greater rate of production of the new plating plant.

P. R.

a public service union

No matter how conscious of new problems one tries to be, there
is always a tendency to graft onto tomorrow's conditions the
problems of yesterday, as though the future arrived with today's
problems and not its own. In no area do such attitudes persist
more strongly than in the trade union leaderships. This is
understandable because of the ever-present need to restore the
value of labor power and to resist the attempts to lengthen and
intensify the work-process. This tendency to hold to standards
of the past can become a starting point for conservatism and resistance to the new.

Today's great speed of technological change is, in itself, a new factor of importance for the unionist. The rate of change in all things has increased tremendously.

Today, the needs of modern industry and commerce in a new stage of technology have brought about a phase in automation which many specialists contend is new and distinct. This is the phase of the special purpose computer, which differs as radically from the former general purpose machine as does the specialised numerically controlled machine tool from the lathe of 1900.

Some bourgeois and socialist thinkers on these subjects seem in fairly general agreement that in this period of the special purpose computers extending into transport, mining, oil, gas, car and many other fields of production, we will be confronted also with the problems of "beyond automation"—the stage of the great link-up of the office computer systems and the automated factory assembly lines which are becoming increasingly lines of numerically controlled machine tools. By 1970, it is expected that at least 50 per cent of all machine-tools produced in the US will be numerically controlled. And such forecasts in the fields of automated change have been found to be conservative.

As then we move into another phase of automation, it might be argued that those who failed to adjust their thinking and tactics to the immediate problems of automation from the middle 1950's have now missed, in some respects, a full historical period of technological change and have not been conditioned by that experience for the more complex and wide-ranging problems of the next phase.

Should there be any validity in such a line of reasoning, there is only one reliable method of overcoming the lag: secure real information of the general trends and take full account of the "feed back of information" from workers at the points in production where technological change is making itself felt most strongly.

Outside the fields of technical and professional unionism, there appears to be a fairly general rejection of the concept that the
skills of the workers have continually increased since the onset of the mass-production phase of history.

These views on stationary or declining skills of the working class in Australia are reinforced by the kind of reasons advanced, and sometimes accepted by industrial tribunals, on what are known as the work-value factors of particular trades and callings. These sacred cows of the arbitration system appear to have been accepted by many.

Is there any real basis for the view that rising levels of technology, education and knowledge are proceeding in the opposite direction to the evolution of workers' skills? I think the answer is no if a full historical period is considered instead of a short phase of the history of work and skills, and if the relationship of man to his work is seen as part of the total historical process.

The increasing conflicts over the problems of job standards and skill ratings raised by the introduction of the special purpose computers are posing many new problems for the white collar unions. For example: The concept of the special purpose electronic computers as the great new electronic tools of the clerical and communications industries reinforces the conviction that white-collar skills are rapidly rising, and that special purpose computers are only powering the limits of one facet of white collar skills like the vise or the lathe powered the limits of the metal workers' skills, strength and endurance.

It follows from this concept, that the old view of skills being either manual or mental has been an over-simplification, even a distortion. That, in fact, what have been regarded as manual skills were always much more mental and perceptual skills than they were ever manual skills.

J. G.

A white collar union

The increased tempo of technological change and introduction of automated processes are beginning to have effects in the area of white collar employment.

Insurance clerks have been confronted with the introduction of computers leading to redundancy and a decline in the number
of positions; bank employees have waged a struggle on the introduction of shift work; airline navigators will cease to exist by 1973; power and marine engineers are being challenged by completely automated ships—and this is only the beginning.

On the other hand the technological changes are leading to the creation of more highly skilled occupations in the white collar area, occupations which open up job avenues for skilled tradesmen to enter the white collar arena.

These developments have underlined the increasing co-operation in recent years between the Australian Council of Trade Unions, the Australian Council of Salaried and Professional Associations, and the High Council of Commonwealth Public Service Organisations. For example in the Electricity Authority we find the Electrical Trades Union, Federated Engine Drivers and Firemen's Association, the Municipal Officers' Association, and the Association of Architects, Engineers, Surveyors and Draughtsmen covering identical classifications. When the ETU and the FEDFA decide to go on strike or apply a ban, the two white collar organisations have to face up to the problem: can their members remain at work while others of the same classification are on strike?

The colors of the collars are becoming blurred, and similar problems are being encountered. Oil company clerks in one Adelaide establishment have recently found that at the age of 40 to 45 the "career" they had been sold by the company suddenly disappeared because the Melbourne office had installed a computer and the Adelaide office was to be closed. They were confronted with an old blue collar situation—"a brassy smile, a handshake, and unemployment."

The co-operation between the two areas, white and blue, has so far been primarily at top executive level and only incidentally at the job level. If the labor movement is to extract the greatest possible gains from the increasing technological development, it is vital that there must be closer co-operation on the job. The initiative for this co-operation must emanate mainly from the blue collars. As disputes occur, thought must be given by leaders on the job as to how the clerks, administrators and technical staff in the front office can be informed of what action is being taken, why the action is being taken, and how the action can affect them.