



Re-organizing organized labour

The unions and technological change

by David McIntosh

The time has come to locate the discussion of technological change in the environment where it is having the most impact: the daily lives of production workers.

For the past 15 years, futurists, theoreticians and not a few techno-fetishists have monopolized consciousness with visions, models, projections and possibilities of how technology would change our lives: The Global Village, the Wired City, Future Shocks, the Third Wave of Industrialization... and other such speculations on the impact of new technology, loosely defined as automation, computerization and satellite communications. But as we have moved from contemplating new technology from a distance to facing technological change and major dislocation in almost every work situation, the idealists are strangely silent.

At the beginning of this decade, the North American auto industry regained its market position and profitability by introducing computers into the automobile design-process and by replacing humans on the assembly line with computer-controlled robots to perform repetitive mechanical jobs. The indus-

try may have recovered: the cost was permanent job-loss for thousands.

Technological change does not just affect manufacturing. During the recently settled strike of library workers (CUPE) in Metropolitan Toronto, the battle cry was "Technology Yes, Take-Aways No." Management plans to introduce a large-scale, off-the-shelf computer-system which threatens traditional skills, job-descriptions and job-security. The library workers understand the need to cut costs in a period of fiscal restraint and many see computer-assistance in their jobs as vital to providing the best possible information service. But the manner of introduction of technological change and the long-range implications of this particular system on working relationships became the major contentious issue.

And the contentiousness looks like it's spreading. The most recent discussion paper on employment trends presented by the new Minister of Employment and Immigration states: "Estimates of gross job-dislocations due to technological change over the next decade are very high. Estimates for the recent past suggest that there may be 100,000 job-dislocations a year due to technological change."

Where does the communications sector stand in relation to the technological changes sweeping through every part of our country, what are the factors promoting technological change and what is the technology we face?

To date, communications technology

has changed most significantly in the distribution system, as outlined in the Liberal government's Broadcast Strategy. Satellite-to-cable distribution now lies at the heart of our broadcast system, giving rise to pay-TV, for example. Direct satellite-to-dish broadcast is also proliferating since restrictions on dish ownership were lifted. Distribution is the least labour-intensive part of the communications chain (production-distribution-exhibition), so there was no job-loss to speak of. But the implications of this new distribution system for production are immense.

Today's distribution system is radically different technically from any other system: it can transmit and receive data, picture and sound in both traditional analogue and the newer digital forms. Up till now, the technical characteristics of the production system were matched to distribution, but production currently lags behind the distribution system technically. The pressure to move to digitally based forms of production is increasing.

At the same time, the new distribution system has massively expanded the number of channels available to viewers. It is now possible for Canadian viewers to select from a range of 50 Canadian and U.S. signals. Not only is the traditional production system subject to greatly heightened competition from foreign sources, but the demand for more programming is increasing rapidly. All of these channels have to be filled up somehow and, as CBC pre-

sident Pierre Juneau stated in an address to the European Broadcasting Union, this expanded distribution system "should create a demand for content which will tax the resources of even the video production industry of California." Though most theatrical film productions end up on broadcast television sooner or later, there still isn't enough Canadian work to fill up the channels or to compete with the ever-increasing U.S. presence.

This technical alteration and expansion of the distribution system is not the result of 'natural evolution' or an internal dynamic of technology itself. The new distribution system was actively promoted and put in place by federal governments. If the last Liberal government had survived, it may very well have addressed these problems that it had set up for the production system, beyond the notion of financial aid to production through Telefilm Canada. But governments change, as does technology, and the present Conservative government, in cutting traditional sources of funding for production (\$75 million from the CBC), is attempting to alter the balance between private and public interests in all sectors of the economy.

In addition, the production system is facing pressures for technological change coming from production itself. New equipment is appearing in all production areas. In sound production, we find digitalised (analogue systems with digital controls) and completely digital recorders, processors, signal generators

and microphones, as well as mixing boards with memory. In image production, there are cameras (video and film) with high-resolution lenses, high-speed film emulsions, low-power daylight lighting systems with memory, computer-controlled camera movement and stabilisation systems, also with memory, as well as computer-based image (graphics and animation) systems. In post-production, there is a range of computerised editing, storage and filing systems for both sound and picture, based on both videotape and computer disc transport mechanisms, to all of which is attached memory. For production co-ordination, there is a broad selection of micro-processor-based word processing, budget modelling and graphics generating office systems. Just about every piece of existing or imagined production equipment can now be controlled through the ubiquitous computer keyboard.

But there are some major differences between technology being introduced into program production and the automation of other industries. Not every piece of production equipment can be controlled by the same keyboard. As yet, there is no single, all-purpose, off-the-shelf system which management can buy and impose on production. Advanced equipment is still in a stage of development where its various components can be actively shaped and recombined. Even more important, however, is the fact that the technology being introduced is information-processing technology; for, at heart, film, television and radio production

are information-processing industries.

The technologies and operating techniques currently being used in most Canadian film, television and radio program production date from earlier periods of development. For film and radio, the technology and techniques were developed between the 1920's and the 1970's; for television, between the 1950's and the 1970's. Each technology has developed a representative organizational form (the CBC, the NFB, a range of private-sector production houses), each with its own management techniques and union contracts, each producing a distinct range of programs and connected to different parts of the distribution system. While this has led to great diversity, it also means that organizations, program forms and technical traditions tend to be isolated from each other.

In this fragmented state, the weakening of any one of these organizations puts entire traditions and unions on the line. As the CBC moves towards increased video production in information programming, and should film-based programming (drama especially) be turned over entirely to the private sector, CUPE, its membership and the skills it represents, could all be eliminated. Furthermore, would we really be any further ahead with a public-sector responsible for producing electronically and a private sector producing on film? In this sense, it's not new technology which threatens job security and maintenance of skills in program production, but technological defensiveness on the part of unions and conservative

managerial approaches to new technology and the means of its introduction.

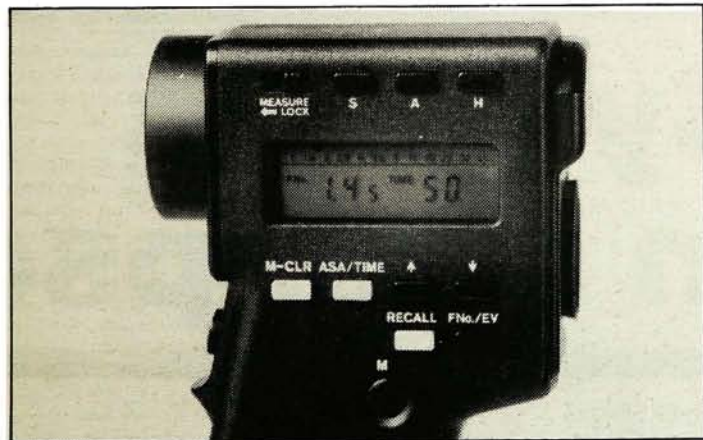
So in an environment of technological change, desirable or not, negotiated or not, all organizational aspects of production, from the composition of the production unit and the shape of the production process through to the role of unions and the shape of production organizations, must be reconsidered. And all of this flows from the fact that the very basis for collective bargaining, technology-based jurisdiction, is in question. The NABET-CBC agreement, the only contract that deals directly with computers, maintains exclusive NABET rights to "computer type equipment, data processing equipment, automatic and semi-automatic aids when used exclusively to control the operation of electronic equipment." Well, the keyboard that controls a video camera's movements will soon be the same keyboard that the script is written on. While it will be necessary to realign union contracts and the basis for collective bargaining with advanced production technology, some fundamental issues have to be addressed before any rational approach to technological change can be developed: first of all, unions and associations in both the public and private sectors will have to coordinate their activities to deal with the limitations of jurisdiction based on outdated technology, to work out the jurisdictional problems between public and private sector unions and between unions within each sector, and to assert the production workers' right of access to the new production equipment

which will allow them to respond successfully to the economic and creative challenges they face.

Secondly, the trade-union movement will have to negotiate access to the process of selecting and modifying new digital equipment, and set up a means of testing the new production system in order to work out new divisions of labour, production processes, production unit configurations and, ultimately, new union contracts.

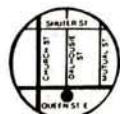
This is one possible approach for beginning to negotiate technological change in the particular circumstances of the Canadian film, television and radio program - production industries. Current tactics - negotiating technological change clauses based on advance notice of new technology and tightening up seniority, lay-off, retraining and jurisdictional clauses - will not succeed. If we begin to plan now, if organised labour can approach the modernization of the production system actively and positively, it will be possible to match the technology and innovative working conditions to produce new program forms, at the same time as producing more programming, more cost-effectively. The need for more programming world-wide is apparent and, if we can adapt to new technology, all skilled workers will be fully employed in much better working environments. Technological change does not have to mean major dislocation and suffering. In the final analysis, ensuring the future of the entire production system is the only way to ensure job-security and job-satisfaction. ●

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