

Bell Canada and its subsidiaries now lead the world in designing, developing and manufacturing the electronic telephone, the first radical change in design since the inventor completed his experiments 100 years ago. These telephones of the future have already been introduced into some Canadian homes and offices. Their integrated circuitry means that they have fewer parts, are cheaper to repair, use less energy and are cheaper to produce than the traditional electromechanical phone. The new phone will also offer sound of the same quality as a hi-fi radio-television console. In the future, it may contain a computer memory bank capable of listing frequently called or emergency numbers, and a custom display capacity which looks and acts like a pocket calculator and can tell in advance the cost of long-distance calls. And perhaps by the end of the 1980s, Canadians will be able to dial their home number and their electronic telephone will automatically turn off their lights or turn on their microwave oven.

The new communications satellite technology has meant that about 99 per cent of the people in this country can now be reached by both radio and television programming. The demand for such programming is strong: 97 per cent of Canadians have radios, 86 per cent have FM radio, 97 per cent have at least one television set and 74 per cent have a color TV. The publicly owned Canadian Broadcasting Corporation (CBC) meets this demand every year with 18,000 hours of original TV programming and 150,000 hours of radio programming.

Canadians want more than the CBC or Canada's private stations deliver. More than 51 per cent of Canadians are hooked into cable TV systems and the figure approaches 80 and 95 per cent in such major cities as metropolitan Toronto and Vancouver. One government task force recently suggested that the era of off-air broadcasting, which is subject to interference from high buildings and power lines in urban areas, may soon be over. Canadian broadcasters may soon hook up directly with urban cable systems and provide a closed-circuit service to Canadian homes.

The Canadian government may also license a pay-TV system which would use satellites to broadcast signals directly into cable systems serving subscribers' homes across Canada. With the direct broadcast satellite just over the horizon, government officials are anticipating a whole new constellation of television services in Canada. Such satellites, capable of carrying up to 100 television channels, could transform Canadian television. Canadians may eventually be able to choose among 100 channels, each devoted wholly to serving some special group — children, the elderly, opera fans and sports buffs. Some, like the Science Council, even go so far as to say that the transformation of such a powerful medium as television could inaugurate a new cultural revolution, one which strengthens the diversity which is the central fact of the Canadian cultural experience.



*The CN (Canadian National) telecommunications tower in Toronto, at 1,800 feet, is the tallest free-standing structure in the world. It has broadcast facilities for television (UHF, VHF and cable), FM radio and microwave transmission.*

