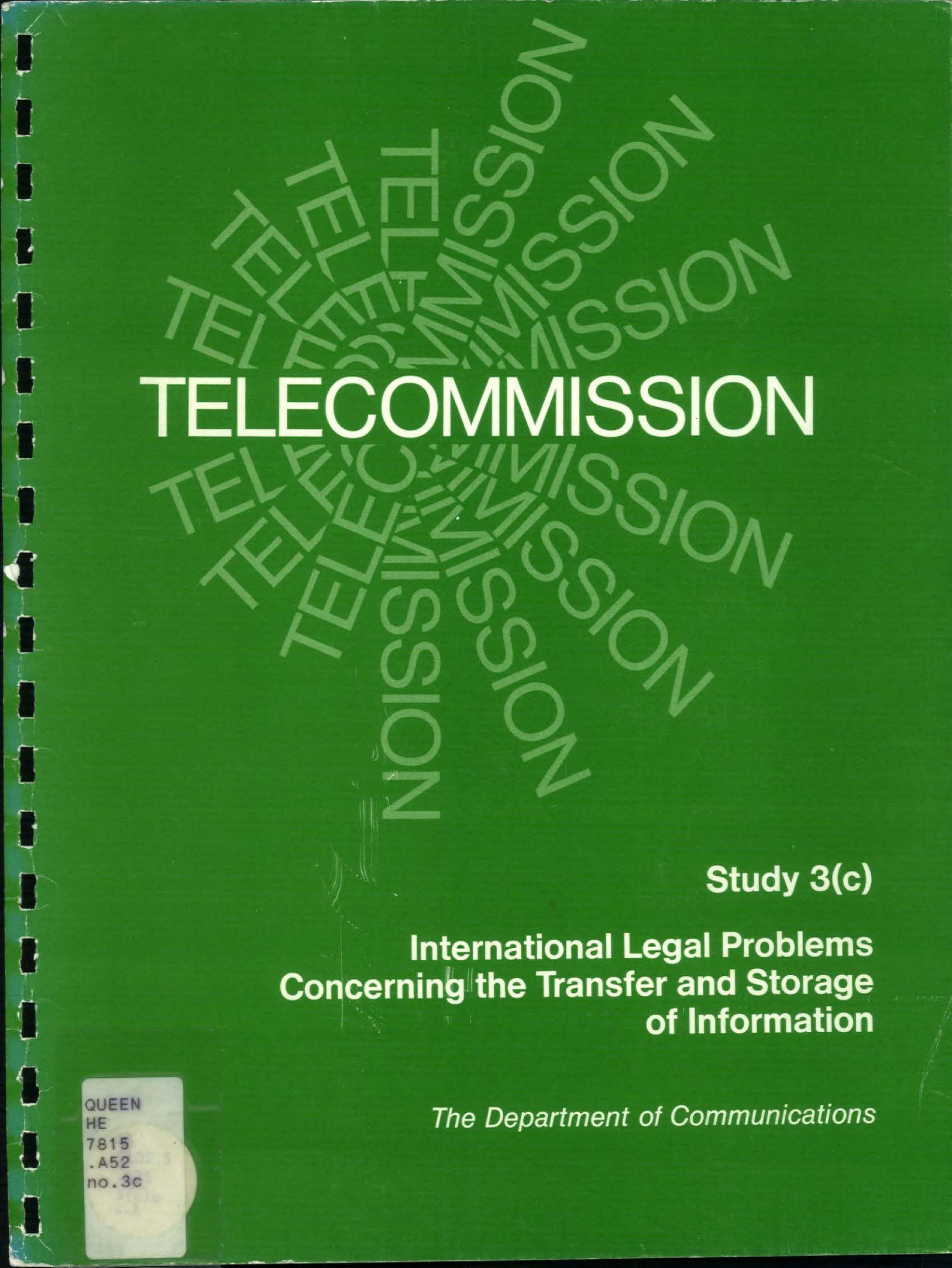

TELECOMMISSION

Study 3(c)

International Legal Problems Concerning the Transfer and Storage of Information

The Department of Communications

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This Report was prepared for the Department of Communications by a project team made up of representatives from various organizations and does not necessarily represent the views of the Department or of the federal Government, and no commitment for future action should be inferred from the recommendations of the participants.

This Report is to be considered as a background working paper and no effort has been made to edit it for uniformity of terminology with other studies.

PREFACE

The report of study team 3(c) addresses itself to the possible legal problems that could emerge from the trans-border flow and the foreign storage of data. On the basis of the rather limited information available, it attempts first to depict the typical situation, a system whereby data is transferred to and from, and is stored in, a foreign data bank.

It then attempts to examine what the study team considered to be the main legal problems that could arise. These it divides into two main categories. The first consists of those problems which, while they can be considered essentially as political, require legal enactments - either domestic or international - for their solution. The main problem in this category is that of access to foreign-stored data.

The second includes questions and issues which are more classically legal, and which arise from existing laws - both domestic and foreign - and international conventions. Primary emphasis in this section is placed on the question of proprietary interests in data and computer programs. Conclusions, often by way of recommendation, are suggested at the various stages in the presentation.

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I. INTRODUCTION

The typical situation envisaged in this report is one of a computer in the U.S.A. with connecting terminals in Canada. Information, capable of being processed, transformed, transferred and stored, is sent from and recalled through the Canadian terminals. It is stored in the American computer on discs, tapes, punched paper tapes and similar modes. The information could be on such matters as police statistics, medical data, credit information, court cases, etc. There is not necessarily a one-way flow from Canada to the U.S., but there is no indication, from available evidence, of U.S. data being exclusively stored in Canadian data banks. Accordingly and notwithstanding the possible development of such Canadian banks, the Canada to U.S. flow is treated as typical and primary focus is placed on the questions to which it gives rise.

In addition to the consideration of these questions, the report also considers certain issues emerging from two other situations. One is where data stored in Canadian banks is sought by U.S. and other foreign entities. The second is where data is gathered about Canada and Canadians and placed in U.S. data banks.

The first gives rise to questions of the terms and conditions under which this data is and ought to be made available. Normally these are matters determined by contracts, wherein the terms, conditions, rights in the data, users and so forth are carefully set out. (In the case of confidential data, the regulation would be quite strict). What might be helpful here in addition, however, is for Canada and the U.S. (as well as other countries involved) to conclude an international agreement establishing principles governing (subject to particular contracts in different cases) the flow of this data, and an institutional mechanism for applying the principles in particular cases.

In respect of the other situation, the matter is less easily dealt with. Information has become increasingly "a-national". Non-confidential data gathered and stored about nationals or resources or facts of one country can not easily be regulated. Nor perhaps should they be.

In connection with facts about individuals, Canada could insist that Canadians who tap U.S. data banks for facts about Canadians (e.g. credit ratings) would be subject to the same laws that might be established domestically in respect of Canadian banks, to ensure privacy, a right to establish correctness and currency of record, and so forth. Internationally, Canada could propose an international agreement that would require the operators of data banks in each country (the U.S. for example) to respect the laws of the country about which data is stored (e.g. Canada) when making such data available to customers. Such a principle, affirming the rights of states in data gathered in and about them and

their nationals, might be helpful in other areas as well. In addition, an international agreement would prevent Canadians from attempting to circumvent Canadian laws by establishing banks in more laissez-faire jurisdictions. In general, and with respect to many of the particular problems outlined in this paper, the international nature of the topic merely adds a dimension to problems the substantive solutions to which have probably first to be reached within the Canadian context.

We turn specifically to the typical situation outlined at the outset. While exhaustive factual information about the numbers, types and owners of interconnections with foreign data banks is difficult to obtain, it is clear that these links are numerous and increasing.

One example is provided by the U.S. National Crime Information Centre in Washington. The RCMP has a terminal in Ottawa whereby information is fed into the Centre which has access to Canadian and U.S. information. At present, this is limited to data on stolen vehicles but future plans are to include other information such as data on offenders of the criminal code. By 1972 it is expected that the facility will be available to all Canadian police forces.

Another example is provided by the Metropolitan Life Insurance Co. which, while its main computer and data bank are located in Ottawa, does have a link between Ottawa and New York. Information pertaining to actuarial reserve values on policies is passed to New York and there is also an exchange of programme information to ensure system compatibility.

The National Bureau of Economic Research (NBER) in the United States has sponsored at least one conference with a view to creating a central information source by means of voluntary reporting about the existence of (economic research) data banks, in order that duplication may be avoided and exchange facilitated. Cooperation is envisaged on at least a North American scale. Additionally, some private surveys of data banks have taken place.

Any consideration of the legalities of international transfer of information should encompass the many relevant aspects of national and international library networks and the multiplicity of specialized information systems (whether library-based or not) with international ramifications.

The automation of library processes through the application of electronic data handling techniques to both international and external aspects of bibliographic operations represents, essentially, a mutation rather than something brand new. The data banks, in the form of card catalogues and similar devices, on which the library of today depends are changing, but the change is in most respects quantitative. Whereas the former information retrieval systems were limited to a search for data under broad subject headings without the capability of obtaining detailed information, the larger storage capacities of new data processing systems now allows for the wide scanning of large volumes of information coupled with the capability of extracting only the specific data required.

The implications in Canada of this change are best exemplified by changes within the federal government itself: by the broad powers, including responsibility for national and international library and information service operations, vested in the national librarian under the 1969 National Library Act, and by the Government's instruction that the National Science Library shall develop a national information network for science and technology under the general direction of the national librarian. These developments which will involve libraries at all levels of Government and throughout Canadian industry will involve even more active use of every device for information storage, retrieval and transfer over which questions of legality under present law can be raised.

It would seem desirable to have some procedure in Canada for obtaining a complete and up-to-date picture of the pattern and other details of Canadian data stored in U.S. or abroad.

The problems which the storage of data abroad can give rise to, may be divided into two broad categories - the "political" and the "legal". Any such attempt at compartmentalization inevitably runs both the risks of oversimplification and of arbitrary miscategorization. Thus, for example, the problem of a conflict between a U.S. law that permits data about individuals to be employed in a manner which Canadian law would deem an illegal invasion of privacy, or vice-versa, would be a legal problem, but one with important political dimensions. The line between the two is often blurred, and many issues can be validly interpreted as having both significant political and legal aspects.

Nevertheless it is of value to differentiate among those problems which affect the sovereignty, pride, and security of Canada and Canadians - labelling them "political", from those dealing with the applicability of existing laws - domestic and international - to certain issues traditionally considered to be matters for lawyers - classical legal questions such as copyright.

II. POLITICAL QUESTIONS

Turning to the political problems first, these comprise a grab bag of possible nightmares for Canadian self-esteem. For one thing, it could become extremely difficult to apply Canadian laws, in the area of privacy, and of the authorized use of data, to computers and data banks not physically in Canada. Orders of Canadian Courts, on searching Canadian businesses for instance, could become nullified simply because records were stored abroad beyond their reach. Another fear is that certain kinds of critical security, economic and resources information could fall into the hands of foreigners. A more fundamental problem could be created if Canadians were to continue their willingness to store data abroad and to concomitantly abdicate any role in developing their own capacity in the field. This could have the general impact of putting Canada even farther behind in computer and data bank skills and technology.

It would seem, however, that the most significant political problems tend to revolve mainly around the question of access: specifically, the question whether or not the Canadian sender can at all times and in all cases retrieve the data he has sent for storage into the computer, and to whether or not anyone else has access to or rights to examine or use it, either in the transmission (input or output) stages or in the storage ("stay-put") stage.

It is probably true that in nearly all cases, there is a contract between the Canadian sender and the American "storer", governing privacy, access and related questions. However, it is not entirely certain that the U.S. government will always refrain completely from requiring either that American computer companies reveal the nature or at least certain categories of the information they are storing - whether domestic or foreign - that access to certain information should be available to government authorities or other parties than merely the sender, or even that certain types of data may not be released for security or other reasons. This last would be more than possible where Canadians had access to data banks, in which their information and that of American sources were stored in one pool.

These various possibilities cannot be ruled out, especially in the face of current explorations by American authorities of a wide range of alternatives on how to cope nationally with questions of computers and access, privacy and so on.

The question of access, then, is a significant one. However, while it would of course be undesirable to have Canadian information inspected or otherwise interfered with in the U.S.A., and even to have to continually turn to U.S. computers for information on Canadian statutes, traffic statistics, etc, a policy of attempting to prohibit or of discouraging the foreign storage of Canadian data might be unduly negative and inhibiting. Instead, bilateral agreements with the U.S. should perhaps be sought on the free flow of transferrable and storable data. Being reciprocal, these agreements would also help to eliminate whatever misgivings U.S. users might have about employing Canadian computer utility services and about storing their data in Canada.

Domestically, Canada should provide intelligent support for the development of competitive hardware and software capacities in this country. This would not only help to assure that more vital Canadian data were stored in Canada, but could also attract a good deal of foreign business.

III. LEGAL QUESTIONS A. PROPRIETARY INTERESTS

Turning to the legal questions, the first issue that arises is that of proprietary interests in data and computer programs. Based on the terms of reference of Study 3(c), it is assumed that "proprietary interests" refers only to private rights to exclude others, and that "data being communicated and stored" refers both to the storage of protected material and the protection of stored material. The comments below do not outline the nature of operation of any law except insofar as it may bear specially upon the subjects of Study 3(c). For example, if data banks enjoy copyright protection under the existing statute, they are subject to the general law about the precise nature of the rights, limitations upon them (doctrines of substantiality and fair dealing, compulsory and statutory licenses), term of protection, and enforcement provisions.

It should be borne in mind that in the development of copyright and related law in connection with the protection of intellectual property, domestic and international law tend to borrow heavily from each other.

With respect to computer data the legal questions relating to proprietary interests have not yet been adequately dealt with at either the international or the domestic level. Both the relevant statutes and common law principles in Canada (the Copyright Act dates from 1924, the Patent Act from 1935 and the operative Copyright Conventions from 1928 and 1952) antedate the technology of computer storage and retrieval of information, and none have been applied authoritatively in Canada to that technology. It is largely by analogy that opinions as to the existing law can be made. An inter-departmental sub-committee on copyright and related questions arising from both satellite and computer communications has now been established to carry out a full examination of the questions involved and to attempt to work out a Canadian position at both levels. In the international sphere, UNESCO, Bureaux Internationaux Réunis pour la Protection de le Propriété Intellectuelle (BIRPI) and the Intergovernmental Committee (IGC) have been holding meetings and study conferences on the subject. However, at this point, the state of the law is somewhat uncertain and the application (or non-application) of the laws to the technology is fortuitous.

The opinions expressed in this study should accordingly be read with the above in mind. Moreover, the international and the domestic flow of data will be treated as raising essentially similar questions in regard to proprietary interests.

Material in which copyright subsists probably cannot legally be stored in a computer in Canada without the owner's consent. Section 3(1) of the Copyright Act gives the owner the sole right to reproduce the work "in any material form whatsoever" and sub-section (d) specifies, as an example, the making of "any ... contrivance by means of which the work may be mechanically performed or delivered". This latter provision may have only a limited effect and may even depend on the types of peripheral output equipment attached to the computer, because "performance" and "delivery" are terms of art which do not envisage hard-copy reproduction, but the general prohibition probably covers storage in the machine itself. One American court even went so far as to classify an electromagnetic field as a material form for the purposes of copyright law. Such an interpretation would cover direct input by optical scanner.

Copyright protection goes only to the form of expression and even textual digital storage undoubtedly alters that form in a sense, but such alteration would unlikely save the storage activity from amounting to infringement. In any case, by Section 3(1)(a) the general right includes translation. A more difficult problem arises if only isolated aspects of a work, or a summary written for computer storage is stored. At what point does storage cross the line between "form of expression" of a work, which is protected, and informational or idea content which is not?.

Even if input without consent does not constitute infringement, output of a protected work would. Manipulation or other use during the "stay-put" stage amounts to library use of a work but, in the absence of reproduction or performance would not infringe copyright.

Section 3(1)(f), which assures to a copyright owner the exclusive right to communicate his work by radio communication, would not affect transmission by wire.

It has been held that deposit of an unpublished manuscript in a library does not amount to "publication" within the meaning of the copyright law (see Copyright Act, s. 3(2)). It might follow that storage in a computer, even with multiple access facilities, would not constitute publication. This has implications for the term of protection under Section 6, for compulsory licences and possibly also for the public performance component of copyright.

With respect to material protected by laws of confidence, whether or not it also enjoys copyright, it is likely that machine storage subject to multiple or partly uncontrolled access would constitute publication and would thereby offend the common law requirement of secrecy. "Publication" does not have the same meaning in this context as it does in copyright law. On the other hand, such material is only protected so long as it is in some real sense confidential and its distribution strictly controlled.

With respect to the data bank as an asset in itself, independent of the legal status of individual items of data, protection may come either through copyright law, through the common law of confidence, or conceivably through the statutory law of unfair competition.

Apart from requirements of author nationality, Section 4(1) of the Copyright Act confers copyright on "every original literary ... work", and by Section 2(v), "whatever may be the mode or form of expression". Section 2(n) defines "literary work" to include tables and compilations, and the courts have found it to include catalogues of numbers, indexes, directories and other data. "Originality" has a precise meaning in copyright law to the effect that the work proceeded from the author's own mind or effort and was not copied from a similar work. The notion of "work" has been held by the courts only to refer to a certain indefinable minimum of expense, labour, skill, judgement or imagination expressed in a material form which is more or less permanent and capable of identification. Thus it would seem that a data bank would attract copyright although, depending on the character of the data, the doctrines of substantiality and fair dealing would reduce the effectiveness of protection. Also, of course, persons who invest in the assembly of marketable data may not find adequate protection in rights of reproduction and public performance.

Any copyright in a data bank would normally be owned by the major investor, perhaps even on a joint authorship basis, although some doubt could arise in the case of research grants or other support to, say, university personnel for the creation of data banks. Preferably, these doubts would be resolved in advance by contract.

Audio output facilities could have the effect of making a data system a "contrivance by means of which sounds may be mechanically produced" within the Copyright Act, although Parliament probably envisaged something more akin to a phonograph record. Special provisions applying to such "contrivances" concern the existence of copyright (Section 4(3)), the term of protection (Section 10) and statutory licence (Section 19).

The common law of confidence could give more extensive protection than copyright in that it comprehends access to, and any use of, the contents of a bank. Its limitations are (1) the asset must have a carefully limited distribution, and accordingly, the numbers and types of peripheral hardware items, and the restrictions on their use, could be critical, and (2) protection is limited to breaches of confidence or acts of bad faith. In this latter respect, a simple notice can be effective.

Section 7 of the Trade Marks Act may well go beyond the common law in this respect. By subsection (e), "No person shall do any ... act or adopt any ... business practice contrary to honest industrial or commercial usage in Canada". Uncommonly sweeping for Canadian legislation, it implements our obligation under Article 10 bis of the Paris Convention on industrial property. Its full scope has not yet been established by Canadian courts, but they have recently begun using it expansively.

Contracts, of course, are also very effective in the use of data banks and the sale of data, whether by electronic or other means of transfer. For example, the standard DBS contract for the sale of data under its CANSIM System provides:

> "4. The Purchaser will not reproduce, duplicate, or copy any data tape or data card for further distribution or authorize, or permit any person to do so except with the written permission of the Bureau".
>
> "5. The Purchaser will not transfer, sell, lend, lease, license, or otherwise dispose of any data tape or data card provided pursuant to this Agreement except with the written permission of the Bureau."

A contract, of course, binds only the parties to it.

As for Canada's international obligations respecting data storage and transfer, it is clear again that existing treaties were not negotiated to deal with the subject. The only intellectual property conference recent enough to have considered the issue, namely, the Stockholm Conference to revise the Berne Convention (1967), did not consider it at length. Nor was the issue raised in the working papers of that conference. The Text negotiated at Stockholm did include a new general right of reproduction "in any manner or form", but, while the better informed persons at the conference held the view privately that computer input was thereby covered, there was and is no official indication to that effect. This, despite the anxiety of book publishers at the conference that computer input be specified in the treaty.

Whether or not the Stockholm Text covers computer input of protected works, Canada has neither signed nor ratified its substantive provisions and the Act is not yet in force. At the same time it should be borne in mind that most countries regarded the new provision respecting reproduction to be largely declaratory.

In other respects the broad language of the Copyright Act mirrors the language of the applicable copyright treaties.

Canada is a party to both the Berne Convention and the Universal Copyright Convention; however, the U.S. is party only to the U.C.C. Under both, nationals of non-member countries become eligible for the Convention guarantees in member countries by publishing first in a member country. For most purposes this also includes "simultaneous" publication which by the Copyright Act, means within a period of fourteen days from the date of the first publication. American nationals have long enjoyed this "back-door" to the Berne Union. Even on the basis of the Canadian definition of publication "issue of copies of the work of the public") data storage could create problems where the nature of the data and the peripheral equipment turns publishing into a private demand operation. Additionally, the tendency of recent revisions of the Berne Convention is to redefine "publication" in functional terms of availability to the public. International communications networks and information systems could lend quite an impact to such a redefinition, since the place of publication would be technologically determined.

BIRPI and the IGC have almost completed a joint study of the copyright and related implications of computer data banks. The study will probably be released in 1971 and will form the basis for discussions and decisions over the next three years.

So far as the law relating to computer programmes is concerned, there is a high measure of interest and a low measure of agreement. There is no specific Canadian law on the subject and laws in other jurisdictions are in an uncertain state. From established legal concepts, the leading candidates to provide protection are copyright, confidence, contract and perhaps, patents.

When programmes were wired into the hardware as part of the circuitry there was little doubt that they were patentable as part of a useful machine. Only very recently, however, (in a few court cases and an announcement of the U.S. Patent Office in 1969), has the United States indicated willingness to grant patent protection embracing programmes in more adaptable forms. Invention and novelty are presumably seen to lie in the algorithm, and utility in the object programme as part of a functioning machine. In the United Kingdom patent protection is granted to programmes on a similar basis, although the Banks Committee, reporting on the British Patent System, July 1970, recommended that no patent protection should be granted to such programmes.

In the United States, the U.S. Patent Office had published guidelines on the patentability of computer programmes to the effect in general, that they were unpatentable. However, following the decisions of the American Courts in the case of Prater & Wei, and in the case of Bernhart, those guidelines were withdrawn and each application is now considered individually on its own merits, bearing in mind the effect of those two court decisions. The Bernhart decision held, in effect, that a computer

programmed in a new way was patentable, being considered as a new machine. The other decision held that an automated process may be patentable. Consequently, these two types of subject matter are now being allowed. The U.S. Office, however, is still refusing protection on programmes per se, and algorithms.

The Canadian Patent Office recently established a tentative policy against patent protection of computer programmes pending a binding judicial decision or the imminent revision of Canadian intellectual property laws. It is expected that the Economic Council of Canada will report on the protection of computer programmes and their impact on the Canadian economy in March, 1971.

Currently, in Canada, programmes probably attract copyright protection. Beginning with the algorithmic diagram, each stage through the flow chart, the source programme, assembly and object programme constitutes a literary work whether expressed on paper, punched cards, magnetic tape or disk, and whether it is a systems programme, a general purpose or a special purpose programme.

In fact, programmes are currently distributed on the basis of copyright and the law of confidence. To reproduce terms from a standard IBM licence agreement:

> " No right to print or copy, in whole or in part, the licensed programs or optional materials is granted hereby except as hereinafter expressly provided".
>
> " The Customer shall not copy, in whole or in part, any licensed programs or optional materials which are provided by IBM in printed form under this Agreement".
>
> " The Customer agrees to reproduce and include IBM's copyright notice on any copies, in whole or in part, in any form, including partial copies in modifications, of licensed programs or optional materials made hereunder in accord with the copyright instructions to be provided by IBM".
>
> " The Customer agrees not to provide or otherwise make available any licensed program or optional material, including but not limited to flow charts, logic diagrams, and source code, in any form, to any other person without prior written consent from IBM".
>
> " The Customer agrees that he will take appropriate action with his employees, by agreement or otherwise, to satisfy his obligations under this Agreement with respect to use, copying, modification, and protection and security of licensed programs and optional materials".

" Within one week after the date of discontinuance of any licence under this Agreement, the Customer will certify to IBM in writing that the original and all copies, in whole or in part, in any form, including partial copies in modifications, of the licensed program and any optional material received from IBM or made in connection with such license have been destroyed".

In the United States, trade secret law (i.e. the law of confidence) is subject to state jurisdiction while statutory intellectual property law falls within federal jurisdiction. The courts have recently been attempting to sort out the implications of this division of power and the reach of the doctrine of federal pre-emption. The most recent decision, that of Lear Inc. v. Adkins (U.S. Supreme Court, 1969) indicates the possibility that if something is eligible for copyright or patent protection (federal, statutory) it may be deprived of essentially conflicting protection under state law. Alternatively, American courts might reach the position that trade secret law is pre-empted by federal decisions concerning the appropriate limitations upon the general right to copy. In other words, it is possible that computer programmes in the U.S.A. will rely more and more upon statutory protection. Effects of such a development would be felt in Canada because of the nature of the industry.

For better or worse, most of the debate over programme protection has centered on patent and copyright law. In general terms patent law would not cover all programmes and its terms of protection is shorter than that of copyright law, but it would provide very extensive coverage where it did apply. Copyright law would protect more programmes and for a longer period, and would be easier to obtain, but would be less effective from the owner's point of view. Also in general terms, the programmers, service bureaus and software houses want higher protection than do the hardware manufacturers.

IBM, for example, has proposed a new system for the protection of programmes which mixes elements of patent law, copyright law, trade secret law and unfair competition law. Essentially, it is a registration system providing ten years protection against copying, providing that a "description of the concepts" underlying the programme is made public at the time of registration. The programme itself would remain secret for the ten year period.

Thorough revisions of both copyright and patent law are well advanced in the U.S. Congress, and their decisions will probably have to be considered in the drafting of future Canadian legislation.

International obligations bearing on programme protection are characterized by the same vagueness as was outlined above with respect to data banks. There is no special law on the point, although presumably programmes come within the copyright conventions.

B. COMPETITION: COMBINES AND ANTITRUST

Beyond proprietary interests, the next legal questions arise from competition policy.

Revisions to the combines legislation are being drafted and will be introduced in Parliament, so there is little point in analyzing the existing Combines Investigation Act. Briefly, the existing Act extends beyond "articles of commerce" (data?) to very few services, and there is little doubt but that the new statute will cover services more comprehensively.

Domestically, in both Canada and the United States, the relationship between the general antitrust laws and the standards or powers of regulatory boards has been unsettled. The need for improved coordination and established priorities continues. An example of an area in the communications industry where problems may well arise is the need to encourage standardization and technical compatibility without discouraging entry or innovation.

The Sherman Act has been notorious for its foreign reach. It prohibits activities "in restraint of trade or commerce among the several states or with foreign nations...." and is applied to activity which has an undesirable economic impact in the United States. By applying to American companies it has a worldwide impact. However, any country would presumably do most things within its power to achieve its domestic economic goals. Insofar as communications is concerned, and given the continental character of telecommunications systems, American policy on the relationship between carriers and data processing, for example, may well affect Canadian policy. Data banks can be located anywhere, and U.S. authorities are unlikely to permit Canadian decisions about the structure of the teleprocessing service industry to frustrate their own antitrust and related policies.

Antitrust problems which seem particularly relevant to the communications industry are mergers, exclusionary or other

restrictive monopolistic practices (e.g. Carterfone[1]), vertical integration, price discrimination, exclusive dealing, long-term requirements contracts and tying (e.g. the "unbundling" issue).

The imminent structure of international information systems demonstrates most acutely the need for international agreement on the above issues.

The Kennedy Round of GATT negotiations has had the effect of expanding many economic markets beyond political boundaries, thereby increasing the general interest in a multilateral antitrust treaty. In the specific case of the communications and information industry, the technology dictates that the relevant geographical market for most regulation will be either continental, regional, hemispheric or global. There is no general antitrust treaty, although the OECD has considered the possibilities. Limited regional cooperation has, however, been achieved in the European Coal and Steel Community and the European Common Market.

For Canada's immediate purposes, bilateral agreement with the United States might be adequate. From the time of the Fulton-Rogers understanding of 1959 Canadian and American Departments of Justice have followed a policy of mutual notification and consultation respecting such antitrust enforcement as might have effects in the other's jurisdiction. The 1959 arrangement was continued in 1969 by a Basford-Mitchell understanding (Hansard, November 5, 1969, pp. 574-75) but, while it is a useful institution for cooperation in the control of multi-national economic activity, the agreement does not attempt to negotiate binding standards or formulate common goals. It remains a voluntary framework to deal with problems as and when they arise.

C. IMPORT AND EXPORT CONTROLS

On the matter of export and import controls with regard to computer data, lawmakers - both at home and abroad - do not appear to have given this much attention.

Inasmuch as copyright and patent protection involve exclusive national rights they imply certain impediments to importation by persons other than the owners, which would apply equally to data and programmes so far as they may be covered by those laws. Sections 27 and 28 of the Copyright Act, enacted within the Berne Convention, deal specifically with limitations on import and provide a procedure for utilizing Schedule C of the Customs Tariff.

[1] In 1957, the U.S. AT&T System had filed a tariff forbidding the attachment or connection of equipment into facilities furnished by the telephone company. On June 26, 1968, the F.C.C. found that the tariffs in question were "unreasonably unlawful and unreasonably discriminating" under the Communications Act. (Reference: Carter and Carter Electronics Corp. v. American Telephone and Telegraph Company et al. FCC 68-661. Decision of June 26, 1968)

D. THE TAXABILITY OF DATA

The next issue pertains to the taxability of data crossing the border. Despite the technical feasibility of transferring large amounts of data by telecommunications means, it appears at present that in most cases, it remains more convenient and economical to transfer data by physical transfer of its container.

However, when data is carried across the border, practice apparently varies. In one case it was the value of the physical tapes that was used to establish the rate of customs duty, whereas in another, it was the value of the programme. Yet when the programme is sent by telecommunications means, (which is what the individual in the latter case, faced with a high duty, simply did) no such provisions are enforced. It should be noted that the I.T.U. Plenipotentiary Conference at Montreux, 1965, adopted a formal opinion expressing "the desirability of avoiding the imposition of fiscal taxes on any international telecommunications".

With regard to sales tax, the federal government has applied a sales tax under the Excise Tax Act to computer programmes, holding that the recording of transmitted impulses on tapes and discs is the manufacturing of goods, and that they are liable to tax whether they are sold or manufactured for the manufacturer's own use. The Ontario Government has also expressed an interest in applying a sales tax in this area.

Canada, along with 24 other countries, is a party to the Beirut Agreement (UNESCO) of 1948 under which parties agree to exempt visual and auditory materials of an Educational, Scientific and Cultural character from customs duties, currency controls and any necessity for an import licence. It was noted at a meeting of governmental experts convoked in 1967 to review the agreement that technological progress had dated it somewhat in that new audio-visual products such as videotape, microfilm and computer tape may not be covered. It was also noted, however, that a wide interpretation is in practice being placed on the agreement's provisions. Canada is not a party to the related Florence Agreement of 1950, which is more extensive in the materials exempted, but which only exempts them specifically from only customs duties.

E. OTHER LEGAL QUESTIONS

Beyond these, Canada is bound by Article 35 of the I.T.U. Convention relating to the secrecy of international telecommunications. Moreover, it is obliged under Article 17 of the Radio Regulations of the I.T.U. to prohibit and prevent both the unauthorized interception of radiocommunications not intended for the general use of the public and the unauthorized disclosure of intercepted "information of any nature whatever". This principle should perhaps be generalized to cover both wire and wireless communication.

On the subjects of liability and individual privacy, Canada will probably want to extend internationally the effect of decisions she may reach domestically. Indeed, international co-operation may well be necessary to make domestic decisions and laws fully effective.

Again, as with respect to the more classifically political questions, agreement with the U.S.A. is Canada's first priority, for geographical and technological, as well as economic and political reasons.

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