Hon. Member. His efforts in attempting to tackle this subject are laudable. However, as will become more clear as I proceed, the issues are complex and transcend the issues addressed in this Bill. A more extensive and co-ordinated approach may well be needed.

I know that the Hon. Member has spoken of his concern for the economic necessity of having information flow freely in society. However, I question whether, in fact, by treating all computer information as property, this may create information monopolies which might hinder a free flow of ideas. Does society wish to attach exclusivity to something in a way which it may consider to be publicly useful simply because someone stores the information or idea in a computer?

The statutory monopolies of copyright, patents and trademark laws are based on proprietary concepts of control. If certain conditions are met, the holder of a copyright patent has the right to use that which is copyrighted or patented. However, even here the law has seen the need for a balance and has not granted absolute proprietary rights to copyrighted or patented information or technology.

The monopolies are limited by time, permit use by others for a fee or are lost if they are not used by the holder. Yet Bill C-667 proposes to grant absolute proprietary rights in the criminal law to entities to which even the civil law of property does not grant an absolute proprietary status.

Clearly there is a dilemma between, on one hand, the protection of certain types of information—I say certain because it may not be all types—and, on the other, the need for a free flow of information and ideas. A scholar in this area, Professor R. Grant Hammond, described the two poles of the dilemma as follows:

> In the absence of a system of property rights to information, a market economy will probably not produce the optimal output of information. There is no point in encouraging free-rider behaviour: X has no incentive to incur costs in producting something Y then may use at no cost to himself. Thus, if a society does wish to encourage innovation and the generation of an optimal information stock, one functional vehicle it might imply could be an extended system of "private" property rights. But if that approach is adopted, a dilemma is created. There should then not only be a concern about the stock of information, but also about what happens to it. Once a fee or cost of some kind is placed on the use of information to encourage creativity, as it is through the patent and copyright systems, two very real difficulties arise. First, there may be under-usage of information, since the optimal price for a public good is zero. Second, denial of access to information in an information-based economy is clearly an affront to the most fundamental kind of rights: It is nothing less than a form of intellectual and economic subjugation. The potentiality of this situation has not gone unnoticed by Third World countries.
>
> It is entirely possible that Western legal systems have been much too concerned with the creation of a sufficient stock of information and too little concerned with usage and access—

He continues:

> It seems clear that sound policy in the field of information creation and dissemination should recognize the dilemma which has been described. The thrust of legal and economic ordering should be to acknowledge that it is better to have the information in the first place than not to have it at all. It has already been recognized in the areas of patent and copyright law that informational and innovational activity are useful to the innovator and creator and, in the long term, to the public. Further, disclosure and efficient usage of this stock of information should be encouraged. This policy is grounded partly in societal concerns: There is a very real danger that an information underclass will be created because of the over-zealous use of restrictive property theories. There are also sound economic reasons to support this policy: Research and information generation is expensive; duplication of effort is wasteful; excessive secrecy promotes espionage, and serious diversion of effort occurs every day in industry to find out what competitors are doing.

• (1750)

Thus, should information be considered as a private good, a proprietary commodity, or as a public good, a resource? If both, in what circumstances should the emphasis be on one or the other? These are fundamental questions.

Possibly the criminal law is not the best method to completely resolve the dilemma. Maybe the criminal law is appropriate in some circumstances, but with respect to others, it may not be. Maybe the flexibility of the civil law is more appropriate in some circumstances, and in others, it may not be appropriate. Is there an adequate civil law framework, federal or provincial, which is able to address these issues?

Criminal sanctions and deterrents can only go so far. Are there civil means to, in effect, strip a wrongdoer of any gains made through the misappropriation of someone else's work product? What is the extent of federal protection through the laws of patents, trademarks, copyrights and certain provisions of the anti-combines law? What is the extent of protection in provincial statutes, such as privacy statutes, and so on? Is there in existence an integrated approach or a patchwork quilt? Can we rationally make criminal laws without knowing how they will interact with the civil law in this area? Might not an analysis of how the civil law protects ideas and information reveal approaches which could provide a basis for legal techniques which might be adopted in the criminal law, if the criminal law were to be extended? For example, how successful has the civil law been in attempting to treat information as property? Have better and more successful legal techniques been used in this area of the law? Could these techniques be implemented within a criminal law framework at all? Could an integrated combination of both civil and criminal approaches be the best and most appropriate response to this problem?

Other countries are now beginning to realize the folly of having moved in one direction with respect to information protection without keeping an eye on the other parts of the system. Should we repeat the mistakes of others? Or should we do it right? Canada is attempting to encourage the expansion of innovation and information related industries and services. It is a new technology. There is a new scientific revolution occurring, that of information theory, whose effects may touch not only the economic realm but a vast web of socio-economic relations as well. In an attempt to keep pace with this shift from an industrial world to a new post-industrial, information-based world, our legal thinking in terms of legal institutions and remedies may also need to change. Legal concepts based on an old industrial age society may be inappropriate for a new economic age and its technology. New legal institutions and concepts may have to be developed. For example, new concepts such as the privacy law and access to information laws have