II. COMPUTERS AND THE LAW: THE IMPACT OF TECHNOLOGY ON PREVAILING LEGAL PRINCIPLES

Computers present difficult problems for the legal system. Because the subject matter is technically complex, many lawyers regard computer law as an esoteric, highly specialized area in which only the prescient and foolhardy dare enter. The authors in this section vigorously dispute this assumption. They suggest that the real problems presented by computers in our society—i.e., the invasions of privacy and absence of accountability of computer designers and users—result from the legal profession's failure to direct computer development. When lawyers become knowledgeable in the fundamentals of computer technology, they will realize that traditional legal principles are sufficiently flexible to accommodate it. Only then will the legal profession be able to reflect upon the nature of the computer, consider its role in society, and determine the appropriate legal norms and institutions to control its development. The authors urge lawyers to undertake this exciting, essential work and suggest some preliminary steps in this effort.

Richard L. Bernacchi discusses the special problems of computer contracts. Although data processing systems have assumed an integral role in an increasing number of businesses, lawyers have only recently begun to confront the problems created by this new technology. Bernacchi acknowledges that the technological complexity of data processing and the absence of agreed upon definitions for the technological terms within the industry have thus far These problems are surmountable, howoverwhelmed lawyers. ever, and Bernacchi outlines several steps that will enable lawyers to control and direct computer contracting. Beginning with the premise that a computer hardware or software system purchaser expects to receive a complete system designed to meet his needs, the lawyer should incorporate into the contract by reference all proposals and correspondence concerning the purposes for which the computer system is being purchased. He should also establish

standards to govern delivery dates, and specify individual steps in the delivery process, tying compensation to the performance of each step. In addition, the lawyer should provide for remedies in case of breach to ensure that the nonbreaching party can meet his immediate needs without resort to the courts.

Because even the most careful lawyers are unable to anticipate every problem that might arise in the performance of a contract, they will occasionally find themselves in court representing their client as plaintiff or defendant. Professor Chandler considers the legal theories on which computer liability may be based. Although computer users may be liable in tort for negligence, a complaining party faces two difficult problems: First, the standard of "reasonable care under the circumstances" is not clearly established for computer use, and it is therefore difficult to determine negligent conduct in a particular case. In addition, unless courts recognize that a computer is usually reliable and apply the doctrine of res ipsa loquitur, a complaining party will probably be unable to prove causation of the injury by human negligence rather than unavoidable machine error. A computer user or vendor may be liable in contract if he has not clearly allocated the risks of development and performance in the contract. He may also be strictly liable in tort or liable under an implied or express warranty theory, unless he has specifically limited his liability in the contract. Finally, Professor Chandler calls upon lawyers dealing with computer liability issues to consider what role the computer should play in our society and who should ultimately bear the risks for its development and injuries caused by it.

Once a lawyer is embroiled in litigation, certain problems develop in regard to use of computers. Haley J. Fromholz discusses the modifications in the Federal Rules of Evidence and Civil Procedure that provide courts with sufficient discretion to adapt to problems presented by computerization. After reviewing the reported cases, he notes approvingly that courts generally recognize that the presence of computers does not alter the basic rules of evidence, discovery, or confidentiality. He urges lawyers to inform themselves about computers to enable them to recognize when computers can profitably aid in litigation and when they present unique evidentiary or discovery problems requiring new solutions.

The special technology of computers creates problems which traditional legal principles cannot easily accommodate. Protection for computer software and data banks, discussed by Michael S. Keplinger, is such an issue. Keplinger explains the activities of the National Commission on New Technological Uses of Copyrighted Works, which was established in 1974 to recommend to the President and Congress changes in the copyright laws necessitated by advancing computer technology. Carefully striking a balance between the public interest and that of the creator of a work, the commission's proposal precludes the unauthorized input, output, or storage of a work within the memory components of a computer system while specifically prohibiting copyright protection for ideas, procedures, principles, discoveries, or concepts.