The Need for Evidence Code Revisions To Accommodate Electronic Communication and Storage

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INTRODUCTION

The Law Revision Commission has asked for a report on the revisions that ought to be made to the Evidence Code in the light of the electronic revolution that has occurred in information storage and transmittal. As a trial judge who has tried well over 500 jury trials as well as many nonjury proceedings over a period of some 21 years, I had not encountered any particular Evidence Code problems involving electronic communications or electronic record keeping; but I thought that perhaps the kind of cases I tried had simply not involved the problems that exist.

Accordingly, I contacted the California Attorney General’s Office to see if that office had encountered any problems involving evidence of electronic communications or records. I picked that office because the Attorney General handles virtually all criminal appeals in the State of California, and the civil divisions of the Attorney General’s Office handle a large volume of civil appeals. If there are any problems, I thought that the high volume of appeals processed by the Attorney

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General would surely bring some of them to the attention of that office. I also attended seminars for the Continuing Education of the Bar on the subject of electronic evidence, and I wrote to the panelists and the authors of the texts on electronic evidence. Those panelists in turn consulted the lawyers in their offices to determine if anyone is encountering problems involving electronic communications or records that might be solved by Evidence Code revisions.

None of these sources was aware of any problem involving electronic communication and information storage that necessitated any Evidence Code modifications.

The next step was to review each section of the Evidence Code itself. From that review, it appears that the reason no problem has been presented to the sources I consulted is that the Uniform Law Commissioners in proposing the Uniform Rules of Evidence, the Law Revision Commission in proposing the Evidence Code and various subsequent amendments thereto, and the Legislature in dealing with the Code have had a great deal of foresight, anticipating problems that might arise in the future.

I will now review the Evidence Code and some of the cases that have considered its provisions to show that there is now virtually no problem that necessitates much amendment to the Code. In two minor instances, subsequent amendments to the Code made by the Legislature suggest that other amendments might be made for consistency; but even there, no problem has appeared in the cases, and the amendments suggested are simply precautionary.

**EVIDENCE CODE SECTIONS PERTAINING TO WRITINGS**

Section 250 defines the term “writing” as it is used in the Evidence Code.\(^1\) Section 250 defines the term as follows:

“One writing means handwriting, typewriting, printing, photostating, photographing, and every other means of recording upon any tangible thing any form of communication or representation, including letters, words, pictures, sounds, or symbols, or combinations thereof.

The defined term appears to have been discussed principally in the cases involving the business and public (governmental) records exceptions\(^2\) to the hearsay rule.\(^3\) But the term also appears in the church records exception\(^4\) to the hearsay rule, the dispositive instruments and ancient writings exceptions\(^5\) to the hearsay rule, and the recorded recollection exception\(^6\) to the hearsay rule. Also, the defined

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1. Evidence Code Section 100: “Unless the provision or context otherwise requires, these definitions govern the construction of this code.” All further statutory references are to the Evidence Code, unless otherwise indicated.
2. Sections 1271, 1280-1284.
3. Section 1200.
4. Section 1315.
5. Sections 1330, 1331.
6. Section 1237.
term is used throughout Division 11 (Sections 1400-1605) of the Evidence Code, which governs the authentication and proof of writings. There are also occasional references to the defined term elsewhere in the Evidence Code, such as the sections regulating the examination of witnesses at a trial.\textsuperscript{7}

The definition of a “writing” in Section 250 includes “every ... means of recording upon any tangible thing any form of communication or representation, including letters, words, pictures, sounds, or symbols, or combinations thereof.” The Law Revision Commission Comment to the section states that the term is broadly defined “to include all forms of tangible expression.” (Emphasis added.)

The term is obviously broad enough to include data recorded electronically in a computer; and the courts have readily construed the term to include computer-recorded data.\textsuperscript{8} In some of the cases cited in the footnote, the admissibility of information printed out from a computer has been rejected, and in other cases the information has been held admissible. But the cases have turned on the sufficiency of the foundational showing — the reliability of the information recorded, the timeliness of its recording, etc. The fact that the information comes from a computer printout does not appear to have been a significant problem.

Since data recorded electronically in a computer is considered to be a “writing” in the Evidence Code, we will then consider the specific sections of the Code that refer to writings.

**Hearsay**

*Business and Public (Governmental) Records*

Several cases have considered the admissibility of computer data maintained as business and public records. These cases provide a basis for analyzing of the rest of the Evidence Code insofar as it pertains to computer data as evidence. Hence, we will consider the sections dealing with business and public records first.

Section 1271 states the hearsay exception for business records. Section 1280 states the hearsay exception for public records. Both provide a hearsay rule exception for “a writing made as a record of an act, condition, or event.” The exceptions are similar and overlap,\textsuperscript{9} but the foundational showings differ slightly.

Under the business records exception, the writing must be made “in the regular course of business,” while under the public records exception, the writing must be “made by and within the scope of duty of a public employee.” Under both exceptions, the writing must be “made at or near the time of the act, condition, or event.”

\textsuperscript{7} See, e.g., Sections 356, 403, 753, 768, 769, 771, 870.


\textsuperscript{9} The Law Revision Commission Comment to Section 1280 (the public records exception) states, “The evidence that is admissible under this section is also admissible under Section 1271, the business records exception.” The Comment goes on to point out the differences in the foundational showing that must be made.
And under both exceptions, the sources of information and method and time of preparation must be such as to indicate the trustworthiness of the writing.

The principal difference in the foundational showings is that, under the business records exception, the custodian or another qualified witness must testify as to the identity of the writing and its mode of preparation, while this requirement is omitted from the public records exception. The Law Revision Commission Comment to Section 1280 (the public records exception) states that the section “permits the court to admit an official record or report without necessarily requiring a witness to testify as to its identity and mode of preparation if the court takes judicial notice or if sufficient independent evidence shows the record or report was prepared in such a manner as to assure its trustworthiness.”

Because a “writing” is defined broadly to include any form of recording on any tangible thing, these sections include data recorded electronically in a computer.

Until the repeal of the Best Evidence Rule in 1998, a problem could be conceived regarding data in a computer because, obviously, the data in the computer is the writing under Section 250, and any printout is therefore simply a copy of that writing. However, the enactment of Section 255 in 1977 eliminated any possible problems with computer data that might have arisen because the original data are electronically recorded in a computer. Section 255 provides in part, “If data are stored in a computer or similar device, any printout or other output readable by sight, shown to reflect the data accurately, is an ‘original.’” Since 1977, the Best Evidence Rule has not applied to computer printouts. And, of course, in 1998, the Best Evidence Rule was repealed.

In *People v. Lugashi*, the defendant, an oriental rug merchant, was convicted of grand theft for falsely representing to a credit card issuer, Wells Fargo, that merchandise had been sold on a Wells Fargo credit card. The defendant was accused of using forged credit cards for fictitious sales, thus receiving payment from the card issuer for sales that did not in fact take place. Part of the prosecution evidence consisted of computer printouts showing the transactions from Wells Fargo. The foundation for the admission of the evidence came from a Wells Fargo employee who was familiar with the computer system, how the information was generated that went into the computer, and how to interpret the documents that were recorded in the computer. She was not, however, a computer expert, and she could not testify in regard to the hardware and software that Wells Fargo used.

The appellate court, approving the trial court’s admission of the computer printouts in evidence, rejected the defendant’s contention that a further foundation should have been laid in the form of testimony regarding the computer hardware and software, its maintenance and reliability, and the system of internal checks used by Wells Fargo. The court pointed out that for admissibility purposes, the

10. Former Section 1500, subject to numerous exceptions, barred evidence of the content of a writing other than by the writing itself. The original writing was deemed to be the “best evidence” of its content, hence the name “the Best Evidence Rule.”

foundational showing does not need to include proof that mistakes cannot possibly be made. That showing is not required for manually created business records, and it is not required for computer records. As with manually created records, it is sufficient for admissibility purposes to show the general trustworthiness of the input and the record keeping system. As with any other evidence, computer records are not conclusive and may be attacked on cross-examination and by other evidence.

In *Aguimatang v. California State Lottery*, the computer records of GTECH, the private firm that by contract runs the California State Lottery, were held to be admissible as business records to show that a winning ticket had actually been issued, although the person to whom it was issued never made a claim for the prize. The court said, “Here, the ‘writing’ is a magnetic tape. The data entries on the magnetic tapes are made contemporaneously with the Lotto transactions, hence qualify as business records.”

Although the computer entries were printed out only on an “as needed” basis, so the printouts were not made “at or about the time of the act, condition, or event,” the court also held that the timeliness of the data in the computer (and on the printouts) is to be determined as of the time the data were recorded in the computer, not as of the time that they are eventually printed out.

In *People v. Martinez*, the Supreme Court relied on judicial notice of the statutes requiring timely reports of criminal history information by courts and law enforcement agencies, and on the presumption that official duty has been performed, in holding that a printout of the California Law Enforcement Telecommunications System (CLETS) was admissible to prove the defendant’s prior felony conviction and prison record.

The dissenting justices complained that the majority overlooked the lack of a statutory duty to enter the reported information in a timely way into the computer database. Presumably, the dissenting justices would have been satisfied with the foundational showing if a qualified witness had testified concerning the duty of the public employees involved to enter the reported information as soon as it was received. The majority was satisfied to infer that duty from the other statutory requirements.

In contrast, *People v. Hernandez* reversed the defendant’s conviction of two violent sexual assaults because the trial court admitted evidence from a San Diego Police Department computer program called Sherlock. The information in the database came from police reports of sex crimes; and it was used to circumstantially identify the defendant as the perpetrator of the crimes in question. The evidence

13. Id. at 798.
14. Id.
16. Section 664.
was held inadmissible on traditional grounds applicable to all public or business records: some of the information in the data base came from hearsay reports that were received by police officers and was not based on matters personally perceived by the police officers. Hearsay does not become admissible simply because it is reported to a business or a public entity and is then recorded in a public or business record.

These cases make it apparent that the appellate courts are analyzing evidence of computer business and public records in the same way that they have traditionally analyzed manually prepared records. A showing of the trustworthiness of the input is required. In the case of business records, a qualified witness must show that the input is based on first hand information, is recorded at or near the time of the event, and is recorded in the ordinary course of business for the purposes of the business. In the case of public records, a qualified witness may make the appropriate showing, but the court can instead rely on judicial notice of the statutes requiring the recording and maintenance of the information, and the court can rely on the presumption that official duty was regularly performed.\footnote{Id.} No distinction has been drawn between records produced and maintained manually and records produced and maintained on computer. And it does not appear that any modification of the Evidence Code provisions relating to the business and public records exceptions needs to be considered.

Sections 1281-1284 state exceptions to the hearsay rule for certain special types of public records, such as vital statistics, statements of presumed death, statements that a person is missing in action, etc. In view of the broad definition of writing in Section 250 to include computer data, and the further provision in Section 255 that a printout of that data is deemed an original, no modification of these sections appears to be warranted to deal with the problem of electronic storage and retrieval of the described data.

\textit{Church Records}

Section 1315 states an exception to the hearsay rule for certain family history information contained in church records. The Law Revision Commission Comment points out that church records generally are admissible as business records under Section 1271. The business records exception, however, permits church records to be used as evidence of current events that occur in the church business. The exception stated in Section 1315 makes admissible certain additional family history information typically contained in church records, such as birth dates, parent and child relationships, marital histories, etc., even though the record of those events was not made “at or near the time” of the events.

The cases construing the business and public records exceptions to the hearsay rule make it obvious that church records stored in a computer, and the printouts from those records, will be considered by the courts in the same way that manually
maintained records are considered. Church records, whether kept manually or in a computer, are writings as defined in Section 250. Printouts from computer-maintained church records are considered originals of those records under Section 255. Hence, no modification of Section 1315 is needed to respond to the entry and maintenance of church records in a computer.

Dispositive Instruments and Ancient Writings

Section 1330 states an exception to the hearsay rule for statements in deeds, wills, or other writings “purporting to affect an interest in real or personal property” if the statements are relevant to the purpose of the writing and the subsequent dealings with the property are not inconsistent with the truth of the statement. Section 1331 states an exception to the hearsay rule for a statement in a writing that is more than 30 years old and the statement has been acted upon as if true since it was made.

It is not likely that the revolution in record keeping, storage, and retrieval will have much impact on these exceptions. Wills, deeds, and similar instruments affecting property are required to be in hard copies with affixed signatures. Not many (if any) computers existed 30 years ago that were being used for record storage.

One can envision a case involving a lost will where the document was created originally on a computer, so evidence of the content of the computer would be sought in order to prove the content of the will. As time goes by, there will eventually be ancient computers within the meaning of the ancient documents exception.

But even in these rare cases, the experience of the courts with current writings (current records stored in a computer) suggests that there will be no special problems with these exceptions that would necessitate any change in the statutory language.

Recorded Recollection

Section 1237 states an exception to the hearsay rule for a statement, recorded in a writing, that sets forth a witness’ recollection of an event that he no longer fully remembers. The section contemplates that a witness will testify that he no longer fully remembers certain facts, but when the matter was fresh in his recollection he made a correct statement of the facts in a writing. Then he is permitted by the section to read the writing into evidence. Obviously, this contemplates that the witness will have a paper version, either an original or a hard copy, of the writing in his hand while he is testifying, for it is necessary for the witness to read from it.

Because a writing includes entries made in a computer, and because a printout of the computer entry is deemed an original of the computer entry, it is apparent

20. Section 255; Aguimatang, 234 Cal. App. 3d at 798.
that Section 1237 authorizes a witness whose recollection has been entered into a computer to read a printout from the computer into evidence if all of the foundational requirements stated in Section 1237 are met.

Again, there appears to be no reason to modify Section 1237 because a computer may now be used to store witness’ recollection.

**Proof of Writings**

**Authentication of Writings**

Division 11 of the Evidence Code (Sections 1400-1605) contains a variety of sections dealing with evidence of the content of writings generally and providing special rules for proving the content of certain specified writings. Inasmuch as Section 250 defines a “writing” to include data stored in a computer, it is apparent that the entire division relates to the problem of proving the content of data stored in a computer.

Sections 1400-1401 state the definition and requirement of authentication; then Sections 1402-1421 provide special rules relating to the authentication of certain types of writings.

Section 1400 defines authentication as

(a) the introduction of evidence sufficient to sustain a finding that it is the writing that the proponent claims it is or (b) the establishment of such facts by any other means provided by law.

Section 1401(a) requires authentication of any writing before it may be received in evidence, and Section 1401(b) requires the authentication of any writing before secondary evidence of its content may be received in evidence.

The Law Revision Commission comment to Section 1400 explains the requirement of authentication as follows:

Before any tangible object may be admitted into evidence, the party seeking to introduce the object must make a preliminary showing that the object is in some way relevant to the issues to be decided in the action. When the object sought to be introduced is a writing, this preliminary showing of relevancy usually entails some proof that the writing is authentic — i.e., that the writing was made or signed by its purported maker. Hence, this showing is normally referred to as “authentication” of the writing. But authentication, correctly understood, may involve a preliminary showing that the writing is forgery or is a writing found in particular files regardless of its authorship.

The requirement of authentication, therefore, is simply a specific statement of the requirement, applicable to all evidence, that the evidence be shown to be relevant.21

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The fact that the requirement of authentication applies to computer data and computer printouts, therefore, simply flows from the general rule that the particular computer data and computer printout must be relevant to the pending action.

Thus, in People v. Martinez the prosecution authenticated the printouts of the defendant’s criminal history as coming from the State of California Law Enforcement and Telecommunications System (CLETS) and from the Los Angeles County Sheriff’s Department computer system. The court distinguished People v. Matthews, which ruled criminal history computer printouts to be inadmissible on the ground, among others, that one the printouts in Matthews was unlabeled, the other was labeled but not certified as coming from any particular source, and hence were not properly authenticated.

Similarly, in People v. Lugashi, the people authenticated the computer records involved as being the credit card records of Wells Fargo. No other computer data would be relevant to prove the transactions with Wells Fargo.

In the light of the cases, the sections defining and requiring authentication of computer records before they are received in evidence do not need to be revised.

Most of the remaining sections specifying means of authenticating particular documents — subscribing witness’ testimony, handwriting comparison, admission of the adverse party — cannot be applied practically to computer data at all. And, in any event, the methods for authentication that they describe are not exclusive, so no problem relating to the authentication of computer entries appears to be present in the sections defining and requiring authentication of writings.

Acknowledged Writings and Official Writings

Sections 1450-1454 state certain presumptions that are applicable to acknowledged writings, officially sealed writings, and other officially signed documents. These sections contemplate a hard document to which a notary’s acknowledgment, an official seal, or an official signature has been affixed. The sections simply do not involve data electronically recorded in a computer.

Secondary Evidence of Writings

As the Evidence Code was originally enacted, Sections 1500-1511 stated the Best Evidence Rule and the many exceptions to that rule. That rule, derived from the common law, required that, unless certain exceptional conditions were met, the
content of a writing had to be proved by the original writing, and not by testimony as to its content or by a copy of the writing. The original itself was the “best evidence” of the content of the original.

On Law Revision Commission recommendation, the Best Evidence Rule was repealed in 1998 and was replaced by the Secondary Evidence Rule in Sections 1520-1523.

As recommended by the Law Revision Commission, and as enacted, the Secondary Evidence Rule preserved the protections that the Best Evidence Rule was created to provide, but it eliminated a great deal of unnecessary complexity.30

Section 1520 provides, “The content of a writing may be proved by an otherwise admissible original.”

Under the definition in Section 250, the content of a writing includes data recorded in a computer. Because Section 255 defines a computer printout as an original, Section 1520 provides in effect that the content of a computer entry may be proved by a properly authenticated printout from the computer.31 Hence, no modification of Section 1520 is required to deal with computer data.

Section 1521 authorizes the use of secondary evidence to prove the content of a writing, and then it states limitations on the use of secondary evidence. The principal limitation prohibits the use of oral testimony except as provided in Section 1523. Because an authenticated printout is considered an original, the section necessarily deals with written secondary evidence of a printout. Section 1522 further limits the use of secondary evidence of a writing in a criminal action.

Sections 1521-1522 can be readily applied to properly authenticated copies of computer printouts, so no modification appears warranted.

Section 1523 prohibits the use of oral testimony to prove the content of a writing. Because of the definitions in Sections 250 and 255, Section 1523 therefore prohibits the use of oral testimony to prove the content of computer entries.

Section 1523 also states various exceptions to the rule forbidding the use of oral testimony to prove the content of a writing. Again, because of the definitions in Sections 250 and 255, the exceptions listed in Section 1523 apply to oral testimony concerning the content of a computer or a computer printout in exactly the same way that they apply to oral testimony of the content of more traditional writings. There is no apparent need for modification to make the rules stated in Section 1523 workable insofar as computer data are concerned.

Official Writings and Recorded Writings

Sections 1530-1532 provide for the proof of official writings and officially recorded writings by certified copies of those writings. Because “writing” is defined by Section 250 to include data entered into a computer, and because Section 255 provides that a computer printout is also an “original,” Sections 1530-

30. The Law Revision Commission Comment to Section 1521 states, in part, “this reform is not a major departure from former law, but primarily a matter of clarification and simplification.”

31. Of course, Section 1401 requires that the printout be properly authenticated.
1532 provide for the proof of official records maintained in a computer by printouts with appropriate official seals and official signatures. The sections can be applied to computer data in a straightforward manner, and no modification appears necessary.

Photographic Copies and Printed Representations of Writings

Section 1550 provides that a photographic copy of a writing is as admissible as the original if the copy was made and preserved as a business record in the regular course of a business. If the original consists of computer data or a printout from a computer, the section can be readily applied to a photographic copy of the printout. No modification appears warranted.

Section 1551 provides that a properly certified photographic copy of an original writing that is destroyed or lost is as admissible as the original writing. A 1969 amendment to the section added a specific reference to a reproduction from an electronic recording of video images on magnetic surfaces. That amendment, together with the provisions of Sections 250 and 255 defining a writing to include computer data and an original to include a computer printout, appear to make further modification to accommodate computer entries unnecessary.

Sections 1552 and 1553 were enacted on Law Revision Commission Recommendation in 1998 as part of the legislative package that included the enactment of the Secondary Evidence Rule. They create a presumption affecting the burden of producing evidence relating to the accuracy of a computer printouts. Since the sections were created specifically to deal with copies of computer data and computer printouts, no further modification is necessary.

Certain Official Writings

Sections 1600-1605 deal with the certain kinds of official writings and records. Section 1600 creates certain evidentiary presumptions (execution and delivery) from the recording of certain documents that affect the title to property.

Section 1601 provides for the proof of the content of official records that are lost or destroyed as the result of some public calamity such as the San Francisco earthquake, permitting records such as title company records to be used to reconstruct the destroyed official records.

Section 1603 creates certain presumptions of the regular performance of official duty growing out of the execution of instruments affecting property by public officials pursuant to court process.

Section 1604 creates a presumption of the ownership of land from a certificate of purchase issued by the United States or the State of California.

Section 1605 creates a presumption of authenticity stemming from the recording of copies of original Spanish land title documents that were on file in the office of the United States Surveyor General for California. The predecessor of Section 1605 was apparently enacted in the 1860s to avoid the necessity for producing and
authenticating the original Spanish title documents in litigation involving those Spanish titles and grants.

The effect of these sections is not impacted by the electronic records revolution. It may be that at some time these records will be scanned into a computer and will continue to exist simply as computer entries; but the definition of a “writing” in Section 250 to include computer data, the provisions of Section 255 defining computer printouts to be “originals” of the computer data, and the presumptions of the accuracy of computer printouts provided in Sections 1552 and 1553 will obviate any problems that might arise in applying these sections to records that have been stored in a computer.

No modification of these sections is required to accommodate the electronic storage of records.

Miscellaneous Sections Relating to Writings

Scattered throughout the Evidence Code are a few additional sections that refer to writings and relate to the introduction and effect of evidence concerning those writings. Since “writing” as defined in Section 250 includes data stored in a computer, it is necessary to consider those sections in order to give a complete survey of the Evidence Code sections that relate to evidence of computer data.

Section 140 defines “evidence” to mean, among other things, “writings.” The comment states that the term is defined “broadly to include the testimony of witnesses, tangible objects, ... and any other thing that may be presented as a basis of proof.” The term is obviously broad enough to encompass computer data, and it has been so construed.\(^{32}\) No modification is required to accommodate evidence of electronic evidence.

Section 250 defines a “writing” to include every “means of recording upon any tangible thing any form of communication or representation.” This definition, too, has been construed to include electronic data recorded electronically in a computer,\(^ {33}\) so no modification is required.

Section 255 was added to the Evidence Code in 1977 to define “original.” It recites that “If data are stored in a computer or similar device, any printout or other output readable by sight, shown to reflect the data accurately, is an ‘original.’” Again, the definition has been relied on to admit evidence of computer data,\(^ {34}\) and no further modification is necessary.

Section 310 refers to the term “writings” in providing that questions of law, including the construction of statutes and other writings, are to be decided by the court; and in this context there appears to be no reason to modify the section to accommodate electronic writings.

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32. See, e.g., cases cited supra note 8.
34. Id.
Section 356 states the rule of verbal completeness, i.e., when a part of a writing is given in evidence by one party, the remainder of the writing that deals with the same subject may be given in evidence by any other party. And when a detached portion of a writing is given in evidence, any other writing that is necessary to make it understood may also be given in evidence. The principles stated are as applicable to electronic writings as they are to any other form of writings, and no reason appears to modify the statute to accommodate electronic writings.

Sections 403 and 405 provide the governing standards for the court’s determination of disputed preliminary facts upon which the admissibility of evidence depends. Section 403 specifies the circumstances when evidence shall be admitted upon a production of sufficient evidence to sustain a finding of the existence of the preliminary fact. It provides, inter alia, that evidence will be admitted under this standard when the disputed preliminary fact is the authenticity of a writing. That is, if there is a disputed question as to the authenticity of computer data — e.g., is this really Wells Fargo’s computer data? — the court shall admit the evidence of the computer data upon the receipt of sufficient evidence to sustain a finding of that fact. Whether the data is really the computer data of Wells Fargo is then submitted to the trier of fact for ultimate determination.35

No special rules appear necessary to govern the admission of computer data; Sections 403 and 405, together with the definitions elsewhere in the Code,36 adequately relate to the admission and exclusion of information stored in a computer.

Section 454 provides that when a court, in taking judicial notice of foreign law, resorts to the advice of persons learned in the subject matter, such advice, if not given in open court, shall be in writing. This restriction, which preceded the Evidence Code in former Code of Civil Procedure Section 1875, prevents a judge from receiving oral advice as to the tenor of foreign law. Under the definitions in Sections 250 and 255, however, the court can apparently receive such advice by fax or e-mail. No modification of the statute appears to be necessary.

Section 640 provides a presumption affecting the burden of producing evidence that a writing is truly dated. This presumption, under the definition of Section 250, of course applies to entries in a computer. No reason for not applying the presumption to computer data and computer printouts is apparent. In fact, it is likely that, since computers frequently date entries electronically and automatically, computer dates will probably be accurate more often that dates entered by hand on more traditional writings. No reason for modification appears. The presumption disappears with the receipt of any contrary evidence.37

Section 643 creates a presumption affecting burden of producing evidence relating to the authenticity of ancient dispositive instruments. The presumption disap-

35. Section 403(c).
36. Sections 250, 255.
37. Section 604.
pears upon the production of contrary evidence;\textsuperscript{38} and, in any event, the presumption is created by the fact that the instrument has been acted upon as if it were genuine by people having an interest in the matter for 30 years. There appears to be no reason to modify the language of the statute.

Section 753 provides for a translator when the written characters in a writing cannot be deciphered or understood directly. Under Sections 250 and 255, the section applies to faxes and e-mail transmissions in foreign languages or in a symbolic language that is not ordinarily understood. No modification of the statutory language appears necessary to accommodate electronic writings.

Section 768(a) provides that, in examining a witness concerning a writing (which under Section 250 includes computer entries), it is not necessary to show, read, or disclose to him any part of the writing either before or during the questioning. Subdivision (b) provides that if a writing is shown to a witness, all parties must be given an opportunity to inspect the writing before any questions concerning it may be asked. No modification of the section appears necessary. It simply provides that a witness can be asked about computer entries without showing him a printout; but if a printout is going to be shown to him, it must be shown to all parties before any questions concerning it can be asked. There appears to be no reason to modify the section as it applies to electronic evidence.

Section 771 provides that any writing used by a witness to refresh his recollection, whether used before or during his testimony, must be produced at the hearing on the request of an adverse party. Thus, if a witness read his computer screen before going on the witness stand to refresh his recollection concerning matters covered in his testimony, a printout of the computer data must be produced upon the request of the adverse party; and if a printout is not produced, the testimony of the witness must be stricken. The adverse party may, but is not required to, introduce in evidence such part of the printout as is pertinent to the testimony of the witness.

The rules seem as germane to testimony that has been refreshed by reviewing computer entries as they are to testimony refreshed by other writings. The statutes, with the definitions in Sections 250 and 255, apply to computer-refreshed recollection. So no modification of the statutes appears to be warranted.

Section 870 provides that when a witness was a subscribing witness to a writing, the validity of which is in dispute, the witness can testify concerning his opinion of sanity of the person who signed the writing. The situation contemplated by the statute is not one where electronic entries are involved. The statute contemplates a handwritten signature on a hard copy; and it authorizes the opinion testimony of another person who signed the hard copy concerning the sanity of the person who executed it. No modification of the statute appears warranted.

\textsuperscript{38} Id.
EVIDENCE CODE SECTIONS RELATING TO COMMUNICATIONS

A review of the Evidence Code sections using the term “writing” covers most of the potential evidentiary problems involving electronic communications, electronic data, and evidence of such electronic communications and data. It is, however, possible to communicate electronically with someone in a privileged relationship; so it is appropriate to review the privileged communication sections of the Evidence Code to determine if any modifications are necessary to accommodate electronic communication.

At first blush, no problem under the privilege statutes (Sections 900-1070) is apparent because the privileges apply to all communications made in confidence, including those made in confidence electronically as well as by any other means. The governing statutes do not place any restriction on the means by which the communication may be transmitted.39

However, in 1994 the Legislature saw fit to add a sentence to Section 952, which defines a confidential communication for purposes of the attorney-client privilege. The sentence added in 1994 reads, “A communication between a client and his or her lawyer is not deemed lacking in confidentiality solely because the communication is transmitted by facsimile, cellular telephone, or other electronic means between the client and his or her lawyer.”

It seems likely that this sentence was added to meet a potential argument that, because electronic communications are subject to interception, a client has to be aware that an electronic transmission to his lawyer could disclose the information to third persons, thus depriving the communication of the necessary confidentiality.

If this was the purpose of the addition, it is a problem that affects all of the communication privileges, not simply the attorney-client privilege. As a matter of fact, adding this sentence to the attorney-client privilege definition of confidential communication, while not adding it to the other confidential communication definitions, creates at least an argument that the Legislature did not intend to extend the other communication privileges to cover electronic communications made in the course of the other confidential relationships.

Chapter 3 (Sections 911-920) of Division 8 of the Evidence Code contains general provisions applicable to all privileges. Section 917 relates specifically to most of the confidential communication privileges. In order to meet the potential argument created by adding the sentence on electronic communication simply to the attorney-client privilege, the sentence involved should be removed from the definition of “confidential communication between client and lawyer” contained Section 952, and equivalent language that is applicable to all of the communication privileges should be added to Section 917.

39. See Sections 952, 980, 992, 1012, 1032, 1035.4, 1037.2.
There is an additional problem relating to the communication privileges that might be solved by an amendment to Section 917:

Section 917 creates a presumption of confidentiality in regard to those confidential communication privileges that were mentioned in the Evidence Code when it was enacted. When the Code was enacted, the only confidential communication privileges contained in the Code were the lawyer-client, physician-patient, psychotherapist-patient, clergyman-penitent, and husband-wife privileges. Since the Code’s enactment, the Legislature has created two additional communication privileges: a privilege for confidential communications made in the course of a sexual assault victim-counselor relationship and a domestic violence victim-counselor relationship.

Section 917 provides that a communication made in the course of one of the relationships mentioned in the section is presumed to have been made in confidence, and the opponent of the privilege has the burden of proof to establish that the communication was not confidential. The policy considerations underlying this presumption that are mentioned in the Law Revision Commission Comment to Section 917 apply equally to all confidential communication privileges. Therefore, Section 917 should be amended to make the presumption of confidentiality applicable to all of the confidential communication privileges.

If these suggestions are approved, Sections 917 and 952 should be amended as follows:

917. (a) Whenever a privilege is claimed on the ground that the matter sought to be disclosed is a communication made in confidence in the course of the lawyer-client, physician-patient, psychotherapist-patient, clergyman-penitent, or husband-wife relationship, as provided in Sections 952, 980, 992, 1012, 1032, 1035.4, or 1037.2, the communication is presumed to have been made in confidence and the opponent of the claim of privilege has the burden of proof to establish that the communication was not confidential.

(b) A communication between a client and lawyer, a patient and physician, a patient and psychotherapist, a penitent and clergyman, a husband and wife, a victim and sexual assault counselor, or a victim and domestic violence counselor is not deemed lacking in confidentiality solely because the communication is transmitted by facsimile, cellular telephone, or other electronic means between the parties.

952. As used in this article, “confidential communication between client and lawyer” means information transmitted between a client and his or her lawyer in the course of that relationship and in confidence by a means which, so far as the client is aware, discloses the information to no third persons other than those who are present to further the interest of the client in the consultation or the

40. The problem does not have anything to do with electronic communications; but if the Commission decides to amend Section 917 to deal with electronic communications made in the defined relationships, it would be appropriate to amend Section 917 at the same time to make it apply to all communication privileges.

41. Sections 1035-1036.2.

42. Sections 1037-1037.7.
accomplishment of the purpose for which the lawyer is consulted, and includes a legal opinion formed and the advice given by the lawyer in the course of that relationship. A communication between a client and his or her lawyer is not deemed lacking in confidentiality solely because the communication is transmitted by facsimile, cellular telephone, or other electronic means between the client and his or her lawyer.

**SUMMARY AND CONCLUSION**

The Evidence Code as drafted initially was written in broad terms so that changing technology would not render it obsolete. Minor amendments that have been added from time to time have kept pace with the revolution in data storage and transmission. Electronic data stored in a computer is defined as a “writing” as the Code was originally written, and all Evidence Code provisions relating to writings apply readily to such data. Any problems that might have existed from the fact that the magnetic or electronic images are the originals, while printouts are copies, were eliminated by the addition of Section 255 defining a printout as an original, by the repeal of the Best Evidence Rule, and by the enactment of the presumptions of printout accuracy contained in Sections 1552 and 1553.

A minor amendment to the general provisions relating to privileged communications should be made so that they apply to newly created privileged communications. Another minor amendment should be made to the general provisions in order to be sure that privileged communications do not lose their privileged status simply because they are transmitted electronically.

With these minor adjustments, no further amendment of the Evidence Code appears warranted at the present time to deal with electronic data storage and electronic communication.