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Court Record in the Age of Artificial Intelligence

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By Fredric I. Lederer

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Our appellate system largely rests on the ability of appellate judges to review what happened at trial. Traditionally, "what happened" was determined by reviewing a verbatim text transcript of the trial proceedings. That transcript necessarily omitted non-text data, especially how the trial judge and any jury perceived the witness, leaving factual conclusions largely unchallengeable as only trial attendees could observe "demeanor evidence." Modern technology is now disrupting all aspects of the court record and the experts who prepare it.

Use of the record

Any discussion of the "court record" traditionally emphasizes its appellate use. However, with the advent of daily copy and then more immediate forms of transcript, most notably realtime transcription made possible by computer transcription support, the use of the record broadened greatly. Once counsel and judge could consult an accurate transcript during and immediately after trial, trial lawyers could use the transcript as a trial tool, reviewing testimony for further examination, closing argument, and requests to the judge for jury instruction. In return, the judge could use it to help determine what jury instructions to give or how

to decide the case**.** But with the advent of electronic recording, the record could consist of recorded audio and video – or even more. For years, the Center for Legal and Court Technology (CLCT) has made a "multi-media court record," consisting of electronically recorded audio and video, the realtime text transcript, and visual images of exhibits. In 2017, with the help of For the Record (FTR), CLCT made what is believed to be the world's first virtual reality court record, permitting appellate judges to observe witness demeanor evidence as if they had been at trial. Full use of such a record could banish the reliance on a trial court's factual findings – and lengthen appeals.

Making the record

Today, we divide the usual ways of making a court record into three primary categories: stenographic (in which the reporter uses hand-operated computerized equipment to create the transcript); voice writing (in which the reporter either uses a computerized voice recognition system trained to the reporter's voice or, in a more basic form, repeats what is said to a recording and then transcribes it) and electronic recording, with the recording often accessible by time stamp and possible "log notes" (noting what happened at a given time). All of these methods work; all can work well; and each tends to be especially appropriate in given cases.

In April, 2019, CLCT's McGlothlin Courtroom hosted an experimental (simulated) Navy Court-Martial in which FTR and Microsoft made an open microphone automated Artificial Intelligence (AI) record. FTR recorded the audio and gave it to Microsoft, which used an AI-based speech recognition system to produce an impressive transcript, complete with punctuation. With improved accuracy and computerized speaker identification, this type of system should be fully usable, accurate, and inexpensive. It may also penetrate the current courts of non-record, forcing the legal system to provide more meaningful appeals from first order courts.

Let us be frank, and to emphasize, what follows is a prediction that, even if it ends up being reality, will take some time to implement. At present, human court reporters can guarantee that problems such as people speaking over each other and electronic failures, whether due to technology or human error, are caught and coped with. AI systems soon will be able to do the same. I have heard members of court reporting firms speak of how AI will improve their practice, enhancing their product and business. This is undoubtedly true but short sighted. Rather in the mid or long term, AI systems will entirely replace our valued court reporters and recorders, whether at trial or at depositions. AI systems continue to learn and to modify their vocabularies. They excel in dealing with huge amounts of data, and one AI system

can share data and learning with thousands of others – all without salaries. If this proves true, what are court reporters and firms to do?

The Path Forward

Most successful court reporters are bright, highly competent, and insofar as we have seen, likely to be perfectionists. With proper retraining, they would make outstanding courtroom technologists, court staff who would be charged also with assuring the local operation of the AI-record system.

The court record companies are another matter. Some undoubtedly will purchase, develop, and provide the AI systems themselves. Others will lease and monitor the systems. But, another possibility also exists.

Traditionally, the court record has contained the transcript and any exhibits. Today, parties increasingly present audio and video evidence from cellphones, drones, police bodycams and sedans, and similar sources. This is part of the court record. Most courts are not properly prepared to accept this evidence, unless it's in a given format and supplied on specified media, and they are not able to properly store, safeguard, and provide this data as required. Few courts want to operate server farms with major security requirements. They might, however, be happy to offload their data to reliable cloud storage maintained by a trusted "court record" company.

Conclusion

Artificial intelligence is machine learning. In the past, vocabulary, accents, illnesses and more combined to make technological transcription improbable at best. AI's forte, its very reason for existing, is analysis of vast amounts of data with potentially constant modification of its own programming as it learns from that data. Ultimately, AI will replace human court reporters and recorders and that may happen faster than many expect. As this takes place, and likely affects court appellate practice, we should make every effort to protect and transition our valued court record colleagues**.**

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