The Chamberlain Inquiry Database:

A Description and Evaluation

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Often, only the benefits of litigation support systems are described, so that potential users may have unrealistic expectations. Sometimes technical, organisational and logistical problems outweigh the advantages.

1. INTRODUCTION

When Dawson Waldron was first asked to instruct Counsel assisting the Royal Commission of Inquiry into the Chamberlain convictions (the Inquiry), it was agreed that transcript from all previous proceedings and the forthcoming Inquiry should be stored in a computerised database to enable us to find transcript references quickly. This would aid Counsel assisting during the course of the Inquiry, and the database would also ultimately be available to the Commissioner when he came to write his report. We decided to use "STATUS" as we were currently using that software in another case.

Before the Inquiry commenced we were confronted with approximately 5,000 pages of previous evidence. It was clear that the Inquiry would produce a great deal more transcript. In fact at the conclusion of the Inquiry there were some 15,000 pages to deal with.

The inclusion in the database of all previous transcript was necessary for two reasons. First, any new evidence had to be evaluated in the context of the previous transcripts. Secondly, those previous transcripts became exhibits in the Inquiry and consequently had to be considered in detail in their own right.

2. DECISIONS INVOLVED IN CREATING A DATABASE

2.1 In the kind of system which was to be implemented, transcript references are retrieved by

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searching stored information for a certain string of characters, be they words, phrases or other collections of symbols. From a variety of options, the choice was reduced to two storage methods:

(1) "Full text"; or

(2) Summaries.

2.1.1 Full text storage involves recording the entire transcript verbatim in the database. This alternative was rejected for two main reasons:

(1) Given the volume of previous evidence and estimated future transcript, the likely costs (hardware, software and keyboard operators' time) were considered unacceptable.

(2) As we intended to store only oral evidence, we envisaged that it would be difficult to retrieve

obstacle to effective retrieval of information from a full text system.

2.2 We chose to adopt the summary system which involved recording summaries of the transcript using consistent language and format. Therefore, no unedited information entered the database.

2.3 Incidentally, we also opted for a single user system as we did not foresee that more than one person would need to access the computer at the same time. As we were entering summaries only, we decided that a personal computer would suffice with a duplicate sister system in Darwin. The equipment was ordered on our behalf in Darwin and, when it arrived, it diverged from the specifications in several respects. It would have been preferable to order and purchase our own equipment, thereby ensuring direct recourse against the supplier.

3. THE DATABASE

3.1 Structure

We built a database of four chapters, each chapter representing a different proceeding (Chapter 1 – First Inquest, Chapter 2 – Second Inquest, Chapter 3 – Trial, Chapter 4 – Inquiry). This division made it possible to search for references in one proceeding only, or any combination of proceedings.

In retrieval systems of this kind, chapters are further divided into articles. The article is the predetermined unit of information that is retrieved in response to any search request. In this instance we chose to have each article correspond to a page of transcript. Each article contained such

information as the name of the proceeding, the volume and page reference, the name of the witness and a summary of the evidence on that page.

3.2 Form of summaries.

The transcript was processed by summarising it in two ways:

(1) Encoding the contents of each page using predetermined "categories" (see 4.1.1 below)

(2) Abridging the evidence to a short continuous narrative.

3.2.1 Categories

In consultation with Counsel assisting the Commission, we attempted to list all substantial issues raised in both the lay and scientific evidence of previous proceedings. Each issue was then assigned a category number. Every page of the transcript of each proceeding was read and summarised by reference to these predetermined numbered categories.

The category numbers were keyed into the system, translated into full category names (by use of a computer program we developed called SPP) and then added to the database.

Consequently, in the retrieved article, the full category names would appear in a consistent and obviously more legible form.

3.2.2 Narratives

In addition to category numbers, short narrative summaries were prepared for each page of Trial and Inquiry transcript.

The narrative summaries , as well as recording the main points of oral evidence, noted the tender of exhibits, the production of documents under summons and questions asked

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Chamberlain Database Inquiry cont'd

by the Comissioner of witnesses and counsel.

Printed copies of the narrative summaries were regularly distributed to Counsel assisting. The transcript would then be perused and summarised by way of category numbers. This process allowed speedy distribution of the narrative summaries to Counsel and also provided a system of checking that no relevant point of evidence had been missed in the first summary. The two kinds of summaries were then integrated and prepared for entry in the database.

4. EVALUATION

4.1 Retrieval of information

4.1.1 Categories

The SPP program which enabled us to summarise by way of categories provided a very quick, albeit slightly crude, method of summarising the evidence. It also shortened typing time considerably.

The category system was effective when retrieving information from the lay evidence. For example, references to the lighting conditions at the camp site (categories 1:e:ii,1:f:ii) or Mrs. Chamberlain's demeanour prior to the baby's disappearance (category 1:i:i) could be retrieved very quickly and few relevant references were missed.

Often the retrieved information would need to be substantially edited before it represented a useful response. For instance, when asked to locate every reference to the smaller of the two purple blankets which were around the baby before she

disappeared, I retrieved hundreds of irrelevant references. This occurred because I searched on categories 1:m:iv, (locating where lay witnesses had seen blood on blankets in the tent) and, category 7:d (locating references to the scientific testing of the Chamberlains' blankets). As there were several blankets in the Chamberlains' tent and we had not foreseen that we would need to distinguish between them when searching, the categories, and the narratives which often described the tent contents generically, could not answer our specific request.

Notwithstanding the number of irrelevant references produced in this instance, the retrieved information included some references we would not have found by ploughing through the transcript manually, or by relying on inspired recollection.

The categories formulated for the scientific evidence were of little value apart from those which related to particular items. Most expert witnesses gave evidence on very specific and clearly defined areas. The formulation of sufficient categories to cover the sophisticated and detailed scientific evidence presented to the Inquiry would have been an unwieldy and fruitless task.

For instance, we did not require a computer to inform us that every page of an animal hair expert's evidence related to hair, found in either the tent or the baby's clothes. It would have been equally unhelpful to categorize the evidence of a zoologist with expertise in animal detention, who discussed at length the cutting capacity of a dingo's carnassial teeth.

An additional problem was that most of the expert witnesses before the Inquiry had not previously given evidence in relation to the Chamberlain matter. Therefore, we were largely

unaware of the details of their evidence and the formulation of useful categories would have been very difficult.

4.1.2 Narratives

Care was taken to use consistent language when summarising. Accordingly, when the possibility that an Aborigine's camp dog had taken the baby arose, all references to local camp dogs, hybrids and mongrels were easily retrieved.

However, people discussed in evidence who were not to be called and who seemed quite unimportant at the time of summarising, were occasionally omitted from the narratives. Unfortunately, sometimes such people later assumed significance. We should have included in our summaries all proper nouns mentioned in the transcript.

Searching for references in the narratives of the scientific evidence was far less effective. For example, a witness, during previous proceedings, expressed the view that damage to the baby's jumpsuit was caused by a scissor–type cutting instrument and was not the result of a dingo. The basis for this view was the presence of textile tufts which, he believed, could only be produced by scissors. However, experiments conducted after the Trial demonstrated that tufts were also produced by the grinding action of a dingo's teeth.

At the Inquiry, the witness conceded that he no longer thought the existence of tufts was diagnostic of scissor cuts. However, he argued instead that as fibres in the damaged area of the baby's jumpsuit were aligned in a plane, scissors had to have been involved. At the Inquiry, the phenomenon of fibres aligned in a plane was referred to as "planar array", an entirely new term which had not appeared in previous

evidence. Although the witness had alluded to this concept in previous proceedings he had not used consistent terminology in doing so. Consequently the computer could not locate his previous allusions to this phenomenon.

The example of "planar array" illustrates a considerable problem when using a computer to locate references in scientific evidence. A computer can only search for specific words or terms. It cannot locate concepts, particularly when they are inconsistently described. Therefore the usefulness of a computer in retrieving information will largely be determined by the nature of evidence involved, however skilful or prescient the summaries.

4.2 Software – some problems
:   illustrated

During the Darwin sittings in August 1986 I needed to enlarge the database continuously. One day I erroneously added a "SPP" file (the untranslated category numbers) rather than a "STS" file (the output file of translated names). This occurred simply because at the end of a command I typed "SPP" and not "STS". Rather than the computer emitting a warning or reprimand, the entire database crashed and no information could be retrieved at all.

The experts' consoling words that this experience proved that the system was "user–fragile" as opposed to "user–friendly" did little to alleviate the tedious and lengthy chore of wiping the defunct system, restoring data from the backups

and redoing the day's work.

This experience illustrates two points:

(1) Careful consideration needs to be given to computer file naming conventions. Files which represent different stages in one process should be named distinctly, to minimise the possibility of confusing them.

(2) When choosing software, a major consideration should be the consequence of a minor technical error which, while not attempting to vindicate my error, would have to occur sooner or later (especially applying Murphy's law).

5.   CONCLUSION AND RECOMMENDATION

The Chamberlain Inquiry database was certainly useful in retrieving references from the lay evidence. Summarising each page of transcript by reference to predetermined categories, in addition to creating short narratives, was a successful system.

In relation to the scientific evidence, the database was of little value. Understanding the scientific detail contained in the expert evidence was the challenge that confronted us. The retrieval of references, if at all possible, was less important. There would appear to be an inherent problem retrieving references from scientific evidence where complex conceptual descriptions abound.

Our experience with computerised

litigation support was fraught with technical, organisational and logistical problems. It would be somewhat artificial not to weigh such setbacks in the balance when evaluating the overall usefulness of the computer.

For those who are involved in determining whether a database will assist, I list the following recommendations:

1.   At the outset, carefully consider how one intends to use the database. Note that some evidence is more suited to information retrieval and be sure to design a flexible system which can accommodate the late development of issues.

2.   Order and purchase own equipment.

3.   Establish rules regarding the use of consistent language in documents to be entered in database.

4.   Give careful consideration to computer file naming conventions to minimise the possibility of error.

5.   Establish a protocol whereby one person is elected to make decisions regarding the computer, including such things as granting other people access, etc.

These recommendations are far from exhaustive. However, following them may tip the scales in favour of computerised litigation support.

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