Event: The Chamberlains' Convictions.

For Robyn William's Science Show ABC 1986

Coming out of court at the end of a trial like the Chamberlains' - or out of the 1978 Splatt murder trial, or in 1972 out of the Old Bailey after the Lattimore trial, I shouldn't wonder - is a good deal like coming out of a movie in which the story-ending is justifiable, even plausible, but for all that, deeply unsatisfying.

In the Lattimore case, the reason for disquiet came clearer three years afterwards, when an enquiry established the innocence of the three boys convicted of that murder, and they were sent home from prison, with sixty thousand pounds compensation and an apology, and then Splatt was released from gaol not too long ago after an enquiry in Adelaide. Now, guilt or innocence is still in heady dispute in the Chamberlain case - and I'd guess, the Chamberlain infant was slaughtered by her mother or by a dingo according to which suggestion we find the very least plausible - but what puts it alongside cases like Splatt and Lattimore for discussion, by the scientific community, and by the rest of us, seems to be this: so extraordinary a phenomenon was the trial that disquiet of one form or another accommodates both points of view. We had here a case in which, before verdict, the defence lawyers were convinced they had won, the accused were preparing to return to their children, the two remaining Crown prosecutors thought their best chance was a hung jury, the trial Judge had favoured the defence case in his charge to the jury, and journalists who had followed the trial for eight weeks had so swamped their bookmaker with wagers on acquittal that the betting closed.

The jury convicted both Chamberlains, and so - whether or not you think justice was then done - there was a point at the end of the trial when one side or the other knew something was going quite wrong. And, as with the Splatt case, and with the Lattimore, the lawyers and then the commentators were looking to the scientists for blame. Twenty-one forensic scientists and technologists were called by the prosecution to the Chamberlain trial, and a further nine by the defence. Lawyers are well used to using scientific opinion to fill in the gaps where they haven't enough direct evidence, or where

they want to quarrel with the evidence there is, but they were facing more difficulties here than any other prosecution I can think of. The baby had forever disappeared, so the manner of death couldn't be easily demonstrated; the investigation had turned up no instrument which was plausible as a murder weapon; and although newspapers of the time were reporting rumours of religious mania and sacrifice, the Crown conceded, by the trial, that it could suggest no motive at all, not even post-natal depression. So far as eye-witnesses went, all the close by-standers to the event supported, in one way or another, the Chamberlains' account, and one of the Crown witnesses testified that the baby had cried from the tent at a time when it could only have been alive if the mother was innocent

Science was called in early - if we can wind the clock back to August 1980 - in an inquisitive role, more than any other, a few days after the baby disappeared from the camping-ground at Ayers Rock. The Chamberlains' camping gear and clothing was packed up and sent to the Forensic Science Unit in Darwin, and so was the baby's clothing, once that was found, and from there it was all despatched to laboratories, mostly in Adelaide, for examination. But pathologists and biologists there could find no evidence to fit a dingo into the picture. To simulate the tears in the baby's clothing, someone on the investigation team wrapped meat in swaddling clothes and fed it to a captive dingo, while someone else had more success with knives and scissors, but the clincher at the time was that no one could believe that a dingo could have extracted the baby while studs in the garment were still done up, and even the captive dingo had undone two of them to get at the meal it was fed.

What those scientists did not know at the time was this: the policeman who first handled the Chamberlain garment recalled it was open to the midriff, and the witness who found it thought it was open all the way to the leg. But there were other things wrong. The hairs they found on the baby's suit were the guard-hairs of an animal, right enough, either canine or feline, but loose fibres the police had taken from the bedding were either human or too old to belong to a recent dingo; no canine saliva was located on the baby's garment; and, anyway, it seemed to have been deliberately rubbed in a species of vegetation which was suspiciously absent from the ground where the clothes were found. But these discoveries lost much of their force when it was known that the policewoman whose duty it was to search for animal hair in the bedding, thought she was looking for human hair, which was what she sent on to the laboratory; and when it was known that the baby was thought to have been wearing an outer garment which was still missing; and when it was known that the Chief Ranger at Ayers Rock recalled clearly a patch of

scrubbed vegetation where the clothes were found, and where he had assumed already that dingoes had been ragging about with the clothes, precisely there.

Now, when the biologist whose responsibility the identification of dingo hair was, got to know about the selection procedures the police unit had used, he changed his opinion to align with the facts, but the cards didn't always fall that way, because the police style, in this investigation, was a secretive one, and the facts were always slow to come out. However poorly errors in the collection of evidence might serve the interests of justice, it seems to me that it serves the interests of the scientific community poorly too, and - at the risk of flagging my conclusions here too early - that scientists could do something about it.

Secrecy was a feature of the prosecution style in the Chamberlain case right from the beginning, and reached a spectacular peak after the first inquest. You might recall that inquest exonerated the Chamberlains and the then coroner was so dissatisfied with the performance of the Northern Territory police forensic science unit that he thought it should be disbanded and replaced with a different unit altogether. What happened to the Chamberlains after that, happened in secret. The Northern Territory police department created a task force it called Operation Ochre. To Ayers Rock it took biologists, botanists, entomologists, soil analysts. Pieces of the Chamberlains' tent, their clothing, and the baby's clothes went back to the laboratories.

In Sydney, textile scientists dug holes in baby-clothes with knives, with scissors, and with dingo teeth. The Chamberlains' house was raided, then, their car seized, stripped, and examined. The reports coming back from the laboratories became exhibits in a Supreme Court application, because the Crown wanted the first inquest quashed, and wanted another, but all this was arranged in camera, and the Chamberlains were excluded from it. When the Chamberlains' lawyers asked the Northern Territory law department what allegations they were facing, they were refused. When they approached the laboratories, the reporting scientists turned them away, for the most part regretfully, but they were under instructions to divulge nothing.

Now, no-one knows how the press got hold of details that were withheld from the Chamberlains' lawyers - but, God knows, these accidents do happen - and by the time the second inquest opened, journalists were the people best informed about what the evidence might hold, a television reporter was quoting excerpts on air from a police pathologist's report, and the nation was well prepared for the most public murder-hunt in its forensic history. The Crown is entitled to behave with as much secrecy as it chooses,

as things stand, but it doesn't follow that the scientific community must be part of it. Scientists are custodians, in our society, of certain very intricate knowledge, and it's in recognition of this that the law allows, for example, a jury to act on the opinion of an expert even though the jurors are unable to understand the principles on which the opinion is based.

Scientists, by and large, like to have their opinions and their experiments tested and examined, and it seems to me, looking back at the Chamberlain case now, that any procedure - legal or otherwise - that diminishes the opportunity of testing is not heading in the right direction. During the trial, we saw plenty of healthy scientific disagreement, of course: opinions that certain haemoglobin was, or was not foetal; that stains did, or did not, show that the infant's throat was cut; that fibres were or were not chewed by dingoes; but the shame of it lay in the missed opportunities. The defence caught up with some of them at the trial. For example, the pathologist who testified that a dingo couldn't be expected to leave the infant's clothing folded, or in a tidy bundle, had the relevance of that opinion shaken when he was informed that the clothing was found in no such way, and he was surprised to learn so late that when the nappy was found it was in pieces, and not whole, as he's been told to rely on.

A London odontologist who testified that a dingo couldn't open its mouth wide enough to grasp the infant's head, had this belief rectified at the trial, by the defence, but it might have been easier if the Crown had told him that Rangers knew of a dingo which, not long before, had attacked a child who was playing with a soccer ball and then ran off with that ball in its mouth. But it looks now as if the opportunities missed until after the trial are, by far, the more important, and some of them can, now, never be rectified.

The destruction of experimental plates, used by a biologist to identify foetal blood, so that they can never be sighted by scientists for the defence, seems to me to be taking secrecy unconscionably far. When the defence asked the testing authority to identify the batch of anti-sera it used in the identification of that blood, the authority refused, and the defence had to wait until the trial in was session to find out what it was, but if the Crown had simply allowed that information, we mightn't have seen the phenomenon of an open letter signed by twenty-five members of the Australian Society for Immunology protesting the conclusions the Crown drew from those tests. And when the Crown produced a blood-spattered panel from the Chamberlain car - which it said showed blood from the baby's very last heart-beats, and which, you might remember, came to be known as the Arterial Spray - it was not until after the trial was long gone that we find that the spray is - not

only not the blood of a baby - but not blood at all. Whichever way the Chamberlain case goes now, it is not, in forensic terms, a pretty sight, and most of the scientific problems can be traced back to the use of secrecy, so it seems to me that the use of secrecy runs against some deep and basic need in the methodology of science. There are moves now, in Melbourne, to establish an Institute of Forensic Pathology, connected with the new Coroners Court.

John Phillips, now a Supreme Court Judge, led the Chamberlain defence team at the trial, and was then appointed Director of Public Prosecutions in Victoria, and I don't think it's coincidence that the new Institute came out of his term as DPP. It's a step, and a good step, but it can't take the matter as far as it will have to go to satisfy the needs of justice, or I'd guess, the needs of the scientific community. And this is the real point, the scientific community might like to take some responsibility for the way science is treated in our courtrooms, with what they will put up with, with what they will be parties to. Some committee, some body concerned with the modern philosophy of science, with standards, and perhaps with ethics, is needed here to deal with this task, because most of the rest of us haven't done such a good job, so far.