IN THE HIGH COURT OF AUSTRALIA No. A8 of 2017
ADELAIDE REGISTRY

ON APPEAL FROM
THE SUPREME COURT OF SOUTH AUSTRALIA

BETWEEN: FRITS GEORGE VAN BEELEN
Appellant

-and-

THE QUEEN
Respondent

APPELLANT'S SUBMISSIONS

Part I:

I certify that this submission is in a form suitable for publication on the internet.

Part II:

On 12th June, 1973, Frits George Van Beelen was convicted of the murder of Deborah Joan Leach on Taperoo Beach on 13th July 1971.

The prosecution case was that between 4.10 p.m. and no later than 4.30 p.m. on that day Van Beelen was able to hold Deborah's head under sea water causing death by drowning. After her death he then had sexual intercourse with her body.

Each of those basic elements of the prosecution case was based on the evidence of the forensic pathologist, Dr Colin Henry Manock, who conducted an autopsy on the body on 16th July 1971. His opinion as to time of death was based on his examination of the stomach contents.

The defence case was a denial of any contact at all with Deborah. Van Beelen was on Taperoo Beach between 4.10 and 4.30 p.m. on 15th July 1971. The defence argued that Dr Manock's opinion as to time of death was wrong. That argument was based on the evidence of forensic pathologist Dr Derek Allen Pocock.

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6. The case was therefore presented to the jury as a contested question of expert opinions (or fact).
7. Subsequent to all of the trial and appellate proceedings scientific research demonstrated that Dr Manock's opinion should never have been proffered as expert evidence. Clearly his evidence as to time of death had no basis at all in science and had no scientific validity whatsoever. This was demonstrated by the evidence of Professor Michael Horowitz in the Court below.
8. It is submitted this Court should hold that this case should never have been presented to the jury as a contested question of expert opinions. There never should have been any such contest. Given that circumstance, a miscarriage of justice occurred.

Part III

9. The Appellant has considered section 78B of the *Judiciary Act 1903* and considers no notice should be given in compliance with that Act.

Part IV

10. R v VAN BEELEN [2016] SASCFC 71 (13 July 2016)

Parts V and VI

In the High Court of Australia Special Leave Application

11. From *Van Beelen v The Queen* [2017] HCATrans 19 (10 February 2017) (underlining added):

> **MR KIMBER**: ...In my submission, the fact that there is new science about time of death that Professor Horowitz spoke of in the court below answers the question as to why the evidence was found unanimously to be fresh but it does not of itself say much if anything as to whether it is compelling. That requires a detailed analysis of how the case was run and also the evidence that Dr Pocock gave which challenged directly the conclusion of Dr Manock as to a time of death of no later than 4.30 pm.
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> **NETTLE J:** That is true but what is put against you is that whereas Dr Pocock's evidence was of opinion, what can now be adduced through the new Professor Horowitz is scientific fact as demonstrated by evidential analysis.
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> **MR KIMBER:** That is true, further analysis. That is true, and that is why it was accepted as fresh evidence, but that is where one needs to look at what the context of this trial was, because what this evidence does in the view of the majority in the court below on the whole of the evidence is only extend the time of death beyond that estimated by Dr Manock by some 10 or 20 minutes, no more than that.
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> ...
>
> **NETTLE J:** But does it not admit of a reasonable possibility that it may have been somebody else?

MR KIMBER: Well, that requires an analysis of the whole of the evidence in the case and also the way the trial was conducted. There is a risk of an assumption here that the trial was conducted on the basis that because of the evidence in the trial she had to be dead by 4.30. Can I take the Court to the analysis in the joint judgment of what actually was put to the court on that issue because, in my submission, the case was not conducted on the basis that the whole of the evidence showed that she must have been dead by 4.30, and that is where this unanimous agreement of the court below that we are only extending the time of death out by 20 minutes has significance.

...

It was not being put by the prosecutor that the whole of the prosecution case showed that she was dead by 4.30. Indeed, as the court observes in paragraph 142 and particularly in the final paragraph extracted within that paragraph, there was much more reliance placed upon the civilian evidence – the mother of the deceased who said that she got home at 4.40, looked out of the window and saw the dog on its own in the area of the beach.

...

So the case was not left to the jury on the basis that on the whole of the evidence in the prosecution case they could find with certainty that she was dead by 4.30. ...

...

This might be a different case if the circumstantial evidence, outside of the evidence of Professor Horowitz, allowed for a time of death that stretched beyond 4.50 pm. But that is not the unanimous conclusion of the court below. All judges in the court below, including the Chief Justice in dissent, find that they should approach the question of substantial miscarriage of justice, the ultimate question under the section, on the basis that the child was dead by 4.50.

True it is the way the case was conducted, the applicant could not have been the killer much after, if at all, 4.30 pm because there was no challenge to the evidence of his wife that he picked her up very shortly after 5.00 pm from the city. But all we have is a case conducted at trial where the prosecutor and the judge allowed for a time of death of after 4.30 pm, a conviction against that background and now some further confirmation by science that the science does not tell us that she was dead by 4.30. But, the whole of the prosecution case already told the jury that at trial.

12. We have made specific reference to the argument presented by the Respondent (Director of Public Prosecutions) at the Special Leave Application for two reasons:

First: Mr Kimber makes it clear that in his opinion it is necessary for this Court to undertake a detailed analysis of how this case was run. We agree and for that reason we now present our detailed analysis dealing in turn with –

i. First Trial and First Appeal
ii. Second Trial and Second Appeal
iii. Petition Judgment
iv. Judgment of Vanstone and Kelly JJ in the Court Below

v. 'Teare' Judgement

Second: Mr Kimber makes it clear that a critical issue for this Court is whether it was put to the jury that they had to find that the time of death was no later than 4.30 p.m.

13. Our specific submission is that if Van Beelen did attack Deborah Leach, cause her death by drowning her and then violate her body it is not possible for those events to occur after 4.30 p.m.

Narration of Agreed Facts[1]

14. On 15th July 1971 Deborah Joan Leach, aged 15 years, attended Taperoo High School where she was a student. She left the school that day with a fellow student Janice Hazelwood, and both girls walked together to Deborah's home in Morea Street where they parted, Deborah going into her house. The only witness who stated positively that she had seen Deborah after she parted from Janice was Janice's mother. At about 4.00 p.m. when Mrs Hazelwood was driving along Morea Street she saw Deborah, who was wearing "a greeny brown jumper and slacks", running west on a paddock which separates Morea Street on its east from Lady Gowrie Drive on its west. At that spot a car park lies further west than the Lady Gowrie Drive, and further west again is the beach. In the general vicinity of the car park is a track leading to the beach. She saw that Deborah was accompanied by her dog, which was running free. Mr Tajak, the proprietor of a kiosk near the car park, said that he saw a dog on the beach and a girl running and following the dog. He said that the girl was wearing what looked like a school uniform. He said he left his kiosk at about 4.00 p.m.

15. Deborah's mother arrived home from work at 4.40 p.m. on that day. Neither Deborah nor her dog was at home. She saw Deborah's school uniform hanging in her wardrobe. She saw Deborah's briefcase and a cake that she assumed Deborah had baked that day at school. At 4.50 p.m. she looked through the front window of her home and saw Deborah's dog running on the beach. She walked down to the beach, called her daughter, but received no response and could not see her. She called the dog and took it home. She saw no one else on the beach. At about 5.00 p.m. she went back to the beach and walked some distance north but saw no sign of Deborah. Two searches by Deborah's father and a neighbour, the first of which was at about 6.15 p.m., found no trace of Deborah. (We can find no specific reference to the colour of the dog.)

[1] Adapted from *The Queen v Van Beelen* (1972) 4 SASR 353 at 356-358.

16. At about 4 a.m. on 16th July, 1971, Deborah's small transistor radio, her dog lead and one of her rubber boots were found by police officers searching the beach. Then at about 4.15 a.m. Deborah's body was found by a police officer, not far away near a bank of seaweed and covered by seaweed. Her body was lying face upwards with both arms raised above her head. Her body was clad in a pair of slacks under which was a pair of pants. Both of these garments had been completely removed from the left leg and were pulled down to the level of the calf on the right leg. There was a rubber boot still on the left leg. A brown jumper was pulled up such that the waist band partly covered her face. A white singlet and her brassiere were still in their normal place on her body.

17. Dr Manock attended the scene and made a preliminary examination of the body but did not take the body temperature. Later that day he conducted an autopsy and concluded that the cause of death was drowning in sea water and that someone had committed an act of sexual intercourse on her body after her death. From his examination of the contents of the stomach Dr Manock fixed the time of death as between 3.30 p.m. and 4.30 p.m. on 15th July. In cross-examination he refused to concede that the time of death might have been later than 4.30 p.m. His estimate of the time of death was based on evidence of what Deborah had eaten for lunch the day before and an assumption that she had started to eat that lunch at about 12.15 p.m.

18. A number of persons were found to have been on the beach in the afternoon of 15th July, 1971. They included a man, woman and child who had been fishing from the water's edge, a man walking his dog, and three men who arrived in a car with a trailer and boat who subsequently launched the boat to go fishing but shortly came back in to land as the weather appeared to be deteriorating. The man who had been fishing from the beach said he left the beach at about 3.40 or 3.45 p.m. and saw what he believed to be a cherry-coloured Datsun car turn off the road and onto the beach. The three men with the boat said they saw a red Torana car with the registration number starting with the letters RCC parked on the beach when they arrived at the beach and still there when they left at about 4.20 p.m.

19. On 29th July, 1971, Frits Van Beelen, the owner of a red Torana, registered number RCC718, was questioned by police. He admitted to having been driving around and being on the Taperoo beach on the afternoon of 15th July but was at the GPO in Adelaide by 4.55 p.m. to pick up his wife from her workplace. It was accepted that it would have taken at least 25 minutes to drive to the GPO from Taperoo beach.

20. Van Beelen was arrested on 6th October, 1971, and charged with the murder of Deborah Leach.

First Trial – First Appeal

21. Reference is made to pages 371-372 of the judgement of the Court of Criminal Appeal.[2]

> "Dependent, we think, on the establishment of these points, or some of them there were consequential complaints that the learned Judge should have found that there was no case to answer at the conclusion of the Crown case (Ground 6) and that he should, in any event, have withdrawn the case from the jury at the conclusion of all the evidence (Ground 22).
>
> The first set of questions really raises two questions, a wider question about the proper approach to circumstantial evidence and a narrower question relating to a certain passage in the summing up. As will be seen, we think that the argument fails on the wider question, but succeeds on the narrower one.
>
> Before analysing the argument it is, in our view, desirable to focus attention on the precise nature of the questions which arose out of the scientific evidence in relation to what have been called the trace materials. But we would say first that, in our opinion, the direct factual evidence was insufficient without the scientific evidence to permit the case to be left to the jury, either at the close of the Crown case or at the close of all the evidence. At most this proved that the appellant had the opportunity to commit the crime, that he was somewhere about the locality at somewhere about the time the girl met her death on the assumption that the medical evidence about the time of death was accepted. This obviously was not enough to justify conviction, nor do we think that the missing elements could be supplied by disbelief in the evidence of the appellant or his wife. Such disbelief may well make it safer to draw an inference of guilt if material sufficient to support that inference is otherwise present: but it cannot create a prima facie case if the material is otherwise insufficient. It would be different, of course, if anything he said could be construed as an admission, and there were times during the argument we were inclined to the opinion that the appellant's failure, according to himself, to see the girl or her attacker, at a time when the jury might well have thought that they must both have been present in the locality he said he was, could be construed as a tacit admission that he was the attacker himself. However, reflection has convinced us that, because of the size of the area in question and the banks of seaweed on the beach behind or between which people might have been obscured from sight it would be entirely unsafe to and wrong to draw any such inference. All, then, depends on the scientific evidence. Was it

[2] *The Queen v Van Beelen* (1972) 4 SASR 353 at pp371-2 (citations omitted, underlining added).

possible to draw from that inferences as a result of which, in conjunction with the appellant's presence on the beach at the relevant time, the jury could be satisfied beyond reasonable doubt of his guilt."

22. Specific reference is made to:

i. at trial it was argued by the defence there was no case to answer;

ii. without Dr Manock's evidence as to cause and time of death there was no case to answer – "All, then, depends on the scientific evidence."

iii. the reference to "relevant time".

iv. The evidence of Dr John Laing.[3]

"A statement by Dr John Laing, a consultant forensic pathologist of New South Wales, was tendered by the defence and was accepted with the consent of the Crown. Dr Laing said that he inclined towards the view that death was "closer to 4.10 p.m.", but that he could not exclude the time of death being as late as 5.00 p.m. or even later than that."

23. General Remarks on the Trial[4]

"This case imposes great and possibly insoluble problems to the traditional system of criminal trials and appeals. The trial lasted from 4th July to 19th October, 1972 and occupied seventy-one sitting days. The appeal lasted for a fortnight and occupied the time of three judges for more than ten sitting days. The transcript of the evidence at the trial ran to 3,321 foolscap pages and this Court eventually had to consider nearly 4,000 pages of documentation of various kinds. 214 exhibits were tendered. There were eventually twenty-nine grounds in the notice of appeal as of right, many of them with numerous sub-heads, and eleven grounds in the application for leave to appeal. Of this mass of evidence, nearly five-sixths, on our rough estimation, was made up by expert scientific evidence on each side, often of a highly technical and confusing nature.

....

... What is far more disturbing, in our view, is the sheer impossibility of a jury retaining in its mind this confused and heterogeneous mass of evidence. ..."

24. That is an accurate and for present purposes an adequate analysis of how the first trial was run.

[3] *The Queen v Van Beelen* (1972) 4 SASR 353 at pp357-8.
[4] *The Queen v Van Beelen* (1972) 4 SASR 353 at pp364.

25. The Expert witnesses[5]

1) For the prosecution: Dr CH Manock, forensic pathologist; Dr Judith Hay, serologist; Detective-Sergeant Cocks, SA Police Forensic Science Laboratory; Dr RE Collins, geologist; Mr Peter Schultz, analyst; Messrs Pike, Priest and van der Brook, paint chemists; Mr Crisp, senior analyst; Mr Kuchel, botanist.
2) For the defence: Dr Harding, biochemist; Dr Rogers, Reader in Biochemistry; Dr Both, geologist; Mr Malin, metals scientist; Dr Haken, polymer chemist; Mr Fish, biologist and Deputy Director, Home Office Central Research Establishment, Aldermaston, England, Dr Taylor, statistician; Dr Laing, forensic pathology consultant.

26. It was in fact and remains to this day a unique trial. As an example, the United Kingdom Home Office at that time provided enormous support, at basically the expense of that Office, to the defence case.
27. During the seven months of highly confusing and technical evidence (very little of which could now be described as "science") Dr Manock's evidence as to cause and manner of death became, in a sense, irrelevant.

Second Trial – Second Appeal

28. Dr Manock's evidence is now the critical issue.
29. Crown address

> ...Then Mr Borick attacked the book that I referred Dr Pocock to, the Lovell something or other, anyway one that had the diagram in it, but he missed the whole point. That diagram and that experiment – and incidentally experiments don't get out of date if they are conducted in 1952, healthy students are much the same -- ...
>
> ... The whole point about this experiment was that there was only 25 minutes at any point coming right down the [p2739] scale from the original 900 millilitres or whatever it was, down to the total evacuation of the stomach. At any point along the line there was only 25 minutes difference between the quickest and the slowest, 12½ minutes each side of the average. ... (Transcript, second trial of Van Beelen, pp2738.15-2739)

> He [Dr Manock] didn't know what little variability she might have, or what variability she might have for ingestion, but he thought an hour would cover those contingencies.

[5] Taken from *The Queen v Van Beelen* (1972) 4 SASR 353 at pp361-3.

There it is, ladies and gentlemen, accept his [Dr Manock's] opinion, if you feel you can. If you feel you ought to, reject it. If you feel you ought to accept it as giving a general indication, if you think you ought to, but if you don't think you ought to don't take it quite so specifically to the hour as he puts it, but don't let us entertain this story about him being irresponsible and having no basis in the authoritative scientific work, because I submit to you on the basis of what I have just put to you this is just not true. (Transcript, second trial of Van Beelen, p2740.20)

30. As we shall demonstrate, that submission to the jury becomes the 'high-water mark' of the Respondent's case on this appeal.

31. Summing up

... It is an elementary proposition that you cannot draw a conclusion from a fact unless you are satisfied of the existence of the fact. For example, Dr Manock bases his opinion as to the time of death on several matters of which the most important is the fact that Deborah ate a pastie [sic]and an apple pie and drank a container of milk at lunch time and that she began her meal at a particular time. Obviously you cannot uphold his conclusion even if you are satisfied of his learning and honesty unless you are satisfied that the facts on which the conclusion is based have been clearly proved. ... (Transcript, second trial of Van Beelen, p2809.6)

....

The Crown case is that one, the deceased died on Taperoo Beach between 3.15 and 4.15 o'clock in the afternoon of the 15th July, 1971, or at latest 4.30 p.m. (Transcript, second trial of Van Beelen, p2809.28)

....

... You must ask yourself whether Debbie died on the beach. The sea material found in her lungs may lead you to think so. If so, we must consider carefully when she died. We know that she was alive at about 4 p.m. on the 15th. We know that she died some time before 4.20 a.m. on the 16th ...

To try to fix a time of death more precisely we have to consider the evidence of Dr Manock the pathologist. You will have to make up your minds as to whether to accept him as a man of science, competent in his work. You will have to determine what weight you give his evidence, and since his evidence is founded on other evidence, especially on evidence of the

stomach contents and the time of the last meal before death, you will have to examine that evidence too. (Transcript, second trial of Van Beelen, p2817.15, underlining added.)

32. Again, there was a no case submission.

Petition Judgment

33. Dr Manock's evidence as to time of death accepted.[6]

> "There is, on our appraisal of the additional evidentiary material, assessed in conjunction with the evidence, the addresses, and the summing up at the trial, nothing of appreciable probative value to controvert the following conclusions of fact (which were plainly open to the jury and which must have been reached by them in order to convict).
>
> 1. That the time of death was somewhere between 3.30 p.m. and 4.30 p.m."

34. Sandercock's confession

> The confession made on Sunday 18th July, 1971 by Brian John Sandercock, as recorded *In the matter of a Petition by Frits Van Beelen* (1974) 9 SASR 163, is contained in ANNEXURE 'A'.

Judgment of Vanstone and Kelly JJ in the Court Below[7]

35. At Para 139, the majority said:

> We have read the evidence of Dr Manock and Dr Pocock. We have also read the evidence of Mrs Hazelwood, her daughter and Mrs Leach. The evidence of these three civilian witnesses is compelling as to the timings of what they saw, and indeed as to other matters. In light of that, the conflict between the two experts assumed less importance than it otherwise might have. The resolution of that conflict could not be said to be critical to the outcome of the prosecution. That is particularly so in circumstances where times were important and Dr Manock did not purport to offer more than a span of time within which death would have occurred. Even then, his evidence was challenged by that of Dr Pocock and severely criticised by the defence.

36. The Court is now referred to Para 141:

> Crown counsel put to the jury that Dr Manock's opinion as to the time of death, based on information about her last meal, her movements that day and on his observations on autopsy, was that she died between three and four hours after commencing her last meal. Counsel discussed the failure of Dr Manock to take a body temperature and suggested it was explicable for the reasons given by Dr Manock in evidence. Counsel discussed with the jury the approach of Dr Manock to the fixing of time from the stomach contents. Counsel referred to the various texts which had been put in cross-examination, which

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[6] *In the matter of a Petition by Frits Van Beelen* (1974) 9 SASR 171.
[7] *R v Van Beelen* [2016] SASCFC 71 (13 July 2016) [79] – [176].

counsel suggested generally supported Dr Manock's position. He concluded that survey with these remarks, at t/s 27392740:

> "... so, ladies and gentlemen, Dr Manock – I don't know whether he was right or whether he was wrong. That is for you to make up your mind how much weight you are prepared to put on what he has to say about this. He was the first to agree that there were a number of variables.
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> ...
>
> He knew what her general state of health was because he had just done an autopsy on her. He assumed emotionally she was fairly stable and Dr Pocock, having had the facts put to him, agrees. He said he didn't know whether she had eaten all the meal, but he assumed she had. *He didn't know what little variability she might have, or what variability she might have for ingestion, but he thought an hour would cover those contingencies.*
>
> There it is, ladies and gentlemen, *accept his opinion, if you feel you can. If you feel you ought to, reject it. If you feel you ought to accept it as giving a general indication, if you think you ought to, but if you don't think you ought to don't take it quite so specifically to the hour as he puts it*, but don't let us entertain this story about him being irresponsible and having no basis in the authoritative scientific work, because I submit to you on the basis of what I have just put to you this is just not true. [Emphasis added.]" (Italics in original, underlining added.)

37. We now refer back to our 'high-water mark' submission. Before developing that argument reference is made to the following further passages.

38. At Para 142:

> Having returned to the topic of the failure to take the body temperature, and having referred at length to Dr Pocock's evidence about that, Crown counsel continued at t/s 2744-2745 as follows:
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> ...
>
> Do you think that we were dealing with a normal sort of person in this girl? You heard Christine Antonowicz say what she had for lunch. Would you, the ladies particularly, consider that that was an average sort of meal? And if you think that that was an average sort of meal and this was an average sort of girl then on Dr Pocock's authority, if on nobody else's, three to four hours would be a reasonable thing for stomach emptying time.
>
> *Now, the scientists have had their go. Just let me tell you now what Mrs Leach said. In some ways it is just possible you might find Mrs Leach's evidence even more commanding than that of science.* [Emphasis added.] (Italics in original, underlining added.)

39. At Para 143:

> Counsel then referred to Mrs Leach's evidence, reminding the jury that Mrs Leach returned home at 20 to five and noticed that her daughter had been in, changed her clothes and left the cake on the table. He reminded the jury that Mrs Leach said that her daughter "was always home when I got home normally ...", but that it was quite a warm day and Mrs Leach thought her daughter might have taken a longer walk than usual. Counsel then said at t/s 2745-2746:
>
> She was always home at twenty to five. Why do you think she wasn't home this night? For ten minutes Mrs Leach thought: "it might be because it is an unusually

mild winter day and maybe she is going to be a bit longer." Ten minutes was enough to see out Mrs Leach's patience and faith in that sort of thing. *When you see through the photographs is there any doubt why that girl was not home at her normal time of twenty minutes to five when her mother got home? Is there any doubt in your mind that if something had not happened to her on the beach she would have been home? Is there any doubt in your mind she had been attacked by twenty minutes to five? And when the scientists have had their say sometimes you come back to just a little piece of factual evidence which throws a great searchlight onto the whole situation – this girl was not home because she couldn't get home.* [Emphasis added.]

It can clearly be seen from the above that the prosecuting counsel put to the jury that, on the basis of Mrs Leach's evidence alone, it could be satisfied that the deceased had been attacked by 20 to five that afternoon. This was a powerful submission. If accepted, Mrs Leach's evidence effectively rendered unimportant the contest between Dr Manock and Dr Pocock about the reliability of stomach contents as a basis for estimating time of death. (Italics in original, underlining added.)

40. At Para 145:

Having discussed the cause of death – being drowning – the Judge went on to say this at t/s 2817-2819:

...

To try and fix a time of death more precisely we have to consider the evidence of Dr Manock the pathologist. You will have to make up your minds as to whether you accept him as a man of science, competent in his work. You will have to determine what weight you give to his evidence, and since his evidence is in some respects founded on other evidence, especially on evidence of the stomach contents and the time of the last meal before death, you will have to examine that evidence too. ... (Underlining added.)

41. At Para 147:

... A few moments later, the jury was sent out. It is not entirely clear to us what reservation was being referred to. We have already set out the passages in which the Judge discussed Dr Manock's evidence. It seems that the relevant reservation spoken of must have been the fact that the expert witnesses and texts spoke in terms of three to four hours (or thereabouts) being an average time, or the fact that it was not known whether Deborah Leach had consumed the whole of her lunch, or that it was unknown whether emotional disturbance had played a role. In any event, the final advice given to the jury about Dr Manock's evidence was, it seems to us, that it could not be treated as being completely accurate, although the timespan might well have been correct. (Underlining added.)

42. At Para 148:

And so it can be seen that both the Crown counsel and the Judge clearly put to the jury that, on the basis of Mrs Leach's evidence, it could form the view that Deborah Leach was attacked, certainly by 5.00 pm, but probably before 4.40 pm. (Underlining added.)

43. At Para 151:

> Secondly, we are far from accepting that, had Professor Horowitz's evidence been available at trial, Dr Manock's evidence would have been tested on the *voir dire* and ruled inadmissible. In our view, the state of the evidence before us is very far from showing that. Perhaps Dr Manock would have accepted the research and Professor Horowitz's conclusions. Perhaps he would have modified his own evidence to speak in terms of averages or modes. Perhaps he would have been discredited before the jury. We do not consider that the fresh evidence before us, particularly presented in the way it was, with a marked lack of system, is such as to cast doubt on the admissibility – as opposed to the weight – of Dr Manock's opinion. (Underlining added.)

44. At Para 152:

> Thirdly, setting aside Dr Manock's evidence on time of death only increases the span of time within which death must have occurred by either 10 or 20 minutes: being from 4.00 pm to either 4.40 pm or 4.50 pm. That variation depends on what weight is placed on the deceased's departure from routine in failing to be home in time for her mother's arrival at 4.40 pm. Even on the outer limit, remembering that Mrs Leach saw no-one when she arrived at the beach, the murderer must already have departed that area before 4.50 pm. Therefore, absent Dr Manock's opinion that death occurred not later than 4.30 pm, the time available to an unknown person to have come onto the beach, committed the murder and have left is extended by only 10, or at most, 20 minutes. In summary, extracting Dr Manock's evidence has little impact on the thrust of the prosecution's case. The finding of guilt does not imply acceptance of Dr Manock's evidence: nor is the evidence of Professor Horowitz inconsistent with the applicant's guilt. (Underlining added.)

Royal Commission Report concerning the conviction of Edward Charles Splatt

45. In his report to the Government, Judge Carl Shannon said:[8]

> ... bearing in mind the uniqueness of the Trial in respect to its dependence upon scientific evidence, it becomes quite clear that *in the conduct of such a Trial* a very serious obligation lies not only on the scientists who give evidence but on the representatives of the legal system who are responsible for the conduct of the Trial.
>
> - The vital obligation which lies upon the testifying scientists is that they spell out to the jury, in non-ambiguous and precisely clear terms, the degree of weight and substance and significance which ought properly to be attached to the scientific tests and analyses and examinations as to which they depose; and specifically the nature and degree of any limitations or provisos which are properly appended thereto.
> - And the critical responsibility which rests upon the legal persons is to ask such detailed and probing questions of the scientists as are most likely to elicit the type of evidence just mentioned.
>
> Of course, in that context of question and answer, the primary responsibility must always remain with the scientist: because it is he who should know the nature and scope of his scientific analysis and the limitations and exceptions properly attached to the results he achieves.
>
> ...

[8] *Royal Commission Report concerning the conviction of Edward Charles Splatt* (1984), Government Printer, South Australia. (Italics in original, underlining added.)

If there is a failure on either side in respect to the exercise of that responsibility which I have just discussed it is the jury (and ultimately the particular accused) which suffers; in that it (the jury) is inadequately informed as to essential matters upon which its ultimate verdict must depend; it being the tribunal of fact which must give the final decision. (At p52.)

Those instances which I have given are intended as illustrations of the serious obligations which attach, in a criminal trial before a jury, to both the scientific witnesses and to Counsel who are questioning them. It is incumbent upon the scientific witness to state very clearly and precisely the definition and applicability of the terminology employed by him and the exact limitations and boundaries of his scientific testing and of his conclusions based thereon. As far as Counsel is concerned, the essential purpose of the adversary system is to ensure that he probes and investigates to the furthest limits of relevance. It seems to me that, in respect to the Trial which is the subject of the present Inquiry, there were notable failures in both respects which I have discussed; the inevitable result being that, in respect to those matters, the jury was either not informed at all or inadequately informed as to relevant and critical aspects or, in essence, was misinformed as to those aspects. (At p59.)

The Application to call Professor Teare[9]

46.

This is an application under s. 359(*b*) of the *Criminal Law Consolidation Act* 1935-1971 that in an appeal against conviction for murder this Court should take the evidence of Professor R. D. Teare, who is professor of forensic medicine in the University of London, England, consultant in pathology to St. George's Hospital, lecturer in forensic medicine and toxicology at St. Bartholomew's Hospital Medical College, Westminster Hospital Medical School and the Metropolitan Police Training College, and who has specialized in forensic medicine since 1938.

....

There was no further application in relation to Professor Teare or any other expert witness until 9th July, 1973 when, after he had begun his re-examination of Dr. Pocock, the appellant's counsel applied to the learned trial Judge for an adjournment of the trial to enable him to bring Professor Teare from London to give evidence. He stated that he wished to call Professor Teare to support the opinion of Dr. Pocock on what he suggested was a conflict between Dr. Manock and Dr. Pocock. He characterized that conflict as being "upon whether or not body temperature can be taken, as to the estimate of the time of death based on stomach contents and ..... with regard to hypostasis, with regard to the appearance of the lungs, with regard to the failure to take test for the possibility of drugs." He said: -- "The two that are most important are the failure to take temperature of the body and the estimating of the time of death on the stomach contents. From the cross-examination and from the comment your Honour made in the course of discussion when talking of Dr. Laing's evidence it seemed to me with regard to what Dr. Pocock was putting it was not fully understood and may not have been fully understood by the jury. ..... It seems to me almost certain the jury may be confused by the evidence that has gone

[9] *The Queen v Van Beelen (No. 2)* (1974) 7 SASR 117 at 118-9.

and the true picture is not being presented to them. I therefore feel it my duty to renew my application to call Professor Teare." ...

The Trial Prosecutor and Gastric Emptying Rate differences between individuals

47. It is against the background of the Professor Teare Application that the cross-examination of Dr Pocock, and the subsequent submissions made by the prosecutor to the jury should be considered by this Court.

48. In his evidence-in-chief at the second trial of Van Beelen, Dr Manock told the jury that an interval of one hour covered all the variables that might occur from, *inter alia*, rate of digestion.[10] In cross-examination Dr Manock conceded that the deceased's rate of stomach emptying could be different to normal but that that difference would be within the range he allowed for in his one hour.[11] Dr Manock later confirmed in answer to the trial judge that an interval of one hour was sufficient to account for the variables he had considered present in his estimate of time of death.[12]

Interpretation of Figure 572

49. During his cross-examination of Dr Pocock, the prosecutor put to him a copy of the text book "Principles of Human Physiology", 11th edition, by Lovatt Evans (1952), directing his attention to the bottom of page 882 and specifically Figure 572 on page 883.[13] [Figure 572 is headed "Volume of gastric contents plotted against time, as determined by 185 serial test meals on 19 healthy students". (A footnote in the text leads to the origin of Figure 572 as being Hunt and Spurrell, *J. Physiol.* (1951) 113, 157-168.)]

50. On being asked by Dr Pocock if he was to read it or comment on it, the prosecutor replied:[14]

> I think it would be better if I put my understanding to you.

51. There followed a brief discussion about the information contained in the heading to Figure 572 and then the prosecutor in a couple of questions explained to Dr Pocock what the experimenters had done, noting that the graph showed the reduction of volume of the material in the stomach, to which Dr Pocock said:[15]

> Yes. I would like to make the point if I may that this graph is obtained on an indifferent substance such as pectin not food of course – an indifferent substance.

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[10] Transcript, second trial of Van Beelen (1973), p640.
[11] Ibid, p647.
[12] Ibid, p654.
[13] Ibid, pp2564-5.
[14] Ibid, p2565.8 (underlining added).
[15] Ibid, p2565.29 (underlining added).

52. The prosecutor ignored that qualification concerning the nature of the "meal" used in the experiment, immediately saying to Dr Pocock (and the jury), "The point I want to make out of this graph is ... [sic]" and went on to describe there being three lines on the graph, one being the "average result" and the two lines on either side of that line showing the standard deviation.[16]

53. The prosecutor then said to Dr Pocock:[17]

> What I put to you is that if you read across the graph from the left hand axis which shows the amount of material left in the stomach, that the time difference read off on the horizontal line between those who passed the material out of their stomach quickly and those that passed it out slowly is not more than, I would say, about 20 to 25 minutes at the most.

54. Dr Pocock expressed a qualified agreement, and went on to make a comment about total stomach emptying, and referred again to the so-called "meal" being an "indifferent substance". To which the prosecutor immediately replied:[18]

> But the point I want to make out of that is that on the basis of this experiment anyway that the differences between individuals did not amount in practical terms to more than about 20 or 25 minutes.

55. The trial judge then commented "either ten minutes more or ten minutes less?", to which the prosecutor replied that he thought "more properly would be 12½".[19] It would seem that the time difference of 20-25 minutes was fixed at least in the mind of the trial judge, if not the jury. And that was where the topic was left.

56. The prosecutor, however, revisited his "point" that there was only about 20-25 minutes difference in stomach emptying times between individuals, in his Crown address, in effect emphasising it in the minds of the jurors:[20]

> The whole point about this experiment was that there was only 25 minutes at any point coming right down to the scale from the original 900 millilitre or whatever it was, down to the total evacuation of the stomach. At any point along the line there was only 25 minutes difference between the quickest and the slowest, 12½ minutes on each side of the average. Now, the experiment had nothing whatever to do with the question of emptying time. It was to measure what were the constitutional differences between people in these experimental conditions and the constitutional differences appeared in these series of experiments.

57. The prosecutor then went on to refer to Dr Manock's acceptance in his evidence that there was a number of variables involved in his interval of one hour. It is not unreasonable to suggest that the prosecutor's "point" was being made through Dr Pocock to try to

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[16] Ibid, p2565.33 (underlining added).
[17] Ibid, p2566.13 (underlining added).
[18] Ibid, p2566.30 (underlining added).
[19] Ibid, p2567.
[20] Ibid, pp2738-9 (underlining added).

demonstrate to the jury that on the Crown case there was only a small difference in gastric emptying rates between individuals and thus this small variation would be well covered by Dr Manock's interval of only one hour being sufficient to account for all the variables he had considered present in his estimate of time of death.

Significance

58. However, the "**point**" that the prosecutor kept referring to, that there was only about 20-25 minutes difference in stomach emptying times between individuals, can now be shown to be wrong and misleading.

59. The interpretation of the graph put forward by the prosecutor was incorrect. Figure 572 was presented in the textbook to demonstrate rate of gastric emptying. As such, it did not display the information in a form which allowed the correct determination of the *normal variation* (constitutional differences) of emptying times between individuals. To use the graph in the way the prosecutor did to make his "point" was **wrong**; to use the graph for a purpose for which it was not intended was a mis-use of science.

60. More profoundly, the test "meal" was a solution of pectin, the "indifferent substance" referred to by Dr Pocock, meaning it had very little calorific value. From the evidence provided by Professor Horowitz it is now known that it is the calorific value which determines emptying rate:

> The variation between healthy individuals is enormously large, so in fact if you calculate rates of gastric emptying in ballpark terms there's a four times variation in the normal rate of gastric emptying, between about one kilocalorie per minute, to about four kilocalories per minute in a given individual, and this has been only relatively recently recognised.[21]

61. In addition, the test "meal" was composed only of liquid. It was not a usual meal of solids and liquids with substantial calories; it bore no resemblance or relationship to the meal the deceased was assumed by Dr Manock to have eaten either in its physical composition or calorific value (which Professor Horowitz estimated to have been about 680 calories).[22] As such, the data presented in Figure 572 had **no relevance** to the case of Van Beelen. Dr Pocock was possibly alluding to this situation by his two references to the "indifferent substance" but it appears that he was never allowed by the prosecutor to elaborate on his point. Even if he had been, he would not have been able to put the position as strongly as can be done now when emptying rates of mixed solid/liquid meals can be measured accurately. Professor Horowitz told the Court below:

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[21] Transcript: *The Queen v Frits Van Beelen*. No SCCRM-15-279 (22 March 2016) at p14 (underlining added).
[22] Ibid, at pp33-34.

> ... in 1976 was the first time they succeeded in measuring emptying of a solid meal accurately ... 1976 I mean at the same time, was the first studying of measuring solids and liquids at the same time; which is how we usually have them.[23]

62. It is to be noted that the prosecutor was aware that the test "meal" was a liquid, and he knew that liquids passed through the stomach quicker than solids ("It is everybody's sayso ..."), but he nevertheless went on to make his point "anyway".[24]
63. It is also to be noted that the textbook and graph in question were never put to Dr Manock in his examination-in-chief or his cross-examination. It can be further noted that the prosecutor, in the way in which he put the material to Dr Pocock, in effect gave the evidence himself, based on his understanding which was both wrong and misleading, whereas such expert evidence would have been expected to have been provided by a Crown witness.
64. It can be fairly assumed that when the prosecutor referred to his "understanding" and gave his instructions to Dr Pocock as to how to read the graph that that "understanding" and those instructions would have been provided to the prosecutor by Dr Manock.

Final Submission

65. It is accepted Professor Horowitz's evidence is fresh.
66. His opinion is not in dispute.
67. Given (1) the acceptance of the prosecution that Van Beelen was at the GPO at 4.55 p.m. and (2) the distance between Taperoo beach and the GPO is 19.5 km (Google Maps), it is totally impossible that the attack on this girl occurred after 4.30 p.m.
    a. There was never any reference at either trial or in any of the appellate arguments to the length of time this crime must have taken.
    b. It is impossible to envisage the attack lasted under 15 minutes.
    c. In order to convict Van Beelen the jury had to accept Dr Manock's evidence.
68. It is fundamentally clear that Dr Manock did not comply with the 'Splatt' obligations as to his evidence concerning:
    a. cause of death
    b. manner of death
    c. time of death.
69. It is also clear that the prosecuting authority did not comply with its obligation to properly evaluate the Sandercock confession:

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[23] Ibid, at p9.
[24] Transcript, second trial of Van Beelen (1973), p2566.26ff.

1) Sandercock's mental state

2) the café discussions.

1. It is in this context that the observation of Nettle J is of critical importance.

"But does it not admit of a reasonable possibility that it may have been somebody else?"

Part VII

2. Section 353A of the *Criminal Law Consolidation Act 1935 (SA)* as it applied at the date of the commencement of this appeal continues to Apply.
3. A copy of this section is attached.

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Part VIII

4. The Appellant seeks Orders that:
   1) the new evidence of Dr Michael Horwitz be declared to be fresh and compelling within the meaning of Section 353A of the *Criminal Law Consolidation Act 1935 (SA)*;
   2) the Appellant's conviction for murder handed down on 12 June 1973 be quashed.

Part IX

5. The Appellant estimates the number of hours required for the presentation of the Appellant's oral argument as three hours.

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Dated 17 March 2017

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Version: 16.12.2016

Criminal Law Consolidation act 1935

Copy taken from the Web Site of the

South Australian Attorney General's Department.

353A—Second or subsequent appeals

(1) The Full Court may hear a second or subsequent appeal against conviction by a person convicted on information if the Court is satisfied that there is fresh and compelling evidence that should, in the interests of justice, be considered on an appeal.

(2) A convicted person may only appeal under this section with the permission of the Full Court.

(3) The Full Court may allow an appeal under this section if it thinks that there was a substantial miscarriage of justice.

(4) If an appeal against conviction is allowed under this section, the Court may quash the conviction and either direct a judgment and verdict of acquittal to be entered or direct a new trial.

(5) If the Full Court orders a new trial under subsection (4), the Court—

(a) may make such other orders as the Court thinks fit for the safe custody of the person who is to be retried or for admitting the person to bail; but

(b) may not make any order directing the court that is to retry the person on the charge to convict or sentence the person.

(6) For the purposes of subsection (1), evidence relating to an offence is—

(a) ***fresh*** if—

(i) it was not adduced at the trial of the offence; and

(ii) it could not, even with the exercise of reasonable diligence, have been adduced at the trial; and

(b) ***compelling*** if—

(i) it is reliable; and

(ii) it is substantial; and

(iii) it is highly probative in the context of the issues in dispute at the trial of the offence.

(7) Evidence is not precluded from being admissible on an appeal referred to in subsection (1) just because it would not have been admissible in the earlier trial of the offence resulting in the relevant conviction.