



Similarly, I had difficulty with Dr. Lew's characterization of the so-called "striations" on Neil Stonechild's wrists. The evidence established that he had his sleeves pulled down over his hands to keep them warm. If there was a cuff that might cause marks of some sort it would not be in relation to his wrist. I refer, of course, to the cuffs that would be on his jacket. I am satisfied that the lumber jacket that he wore likely had button cuffs and would not have contained cuffs of the sort one would see on a windbreaker. I shared the same experience as other observers at the Inquiry: I could not see any striations of the sort described by Dr. Lew. If I stood alone in this failure I might feel differently. I would respectfully suggest that Dr. Lew was enhancing her opinion, because of the desire to support her opinion. The enhancement was not justified.

Overall I did not find the evidence of Dr. Lew very helpful.

I pause to note that at the conclusion of the Inquiry, I was provided with a copy of a proposal prepared by Dr. Evan Matshes and Dr. Emma Lew. It is entitled "Competent Death Investigation: A plan for change in Saskatchewan". I have had an opportunity to review the recommendations briefly but it would not be appropriate in the circumstances for me to comment on them as they are quite comprehensive and involve a number of important questions about infrastructure, financial resources, and the like, and particularly the question of recruitment of appropriate personnel.

A well respected Saskatchewan forensic pathologist, Dr. Harry Emson, has provided a critique of the report in a letter to the Saskatoon StarPhoenix published June 18th, 2004. That letter has been added to the Inquiry file for the information of any person interested in the discussion about the possible establishment of a Medical Examiner System.

9 | The Expert Evidence – Photogrammetric Evidence

Gary Robertson³⁵⁸

Gary Robertson was one of the most controversial witnesses at the Inquiry. He is an expert in photogrammetry.

Photogrammetry is described as "the science and engineering of taking measurements from imaging"³⁵⁹, whether electromagnetic media or photographic images. Photogrammetry is utilized in a number of different fields as a measurement tool. It has been used by the Transportation Safety Board to assist in crash investigations. It has also been used by a number of police agencies in the United States and in Canada as a forensic identification resource. Photogrammetry has also been used as a tool to assist in the measurement of human tissue imprints.

Mr. Robertson's education was outlined in some detail. He received his Cartography Technician (Photogrammetry) Diploma from Algonquin College of Applied Arts and Technology in 1973. He has conducted research for the National Research Council and was employed by the Government of Canada from 1976 to 1980 doing close range photogrammetry at historic buildings and other structures. He is a member of the American Society in Photogrammetry and Remote Sensing. He has authored a number of articles on the subject and has given a number of courses to police officers and others in his speciality.

³⁵⁸ Evidence of Gary Robertson, Inquiry transcript, vol. 21-23 (October 20-22, 2003): 3958-4428

³⁵⁹ Evidence of Gary Robertson, Inquiry transcript, vol. 21 (October 20, 2003): 3963

Part 4 – The Evidence

In the course of testifying as to his qualifications, Robertson was questioned about his curriculum vitae. It contained the following statement:

“Q. And it states, ‘1976 to ‘77 under government sponsor attended University, sorry,’ ‘attended Ottawa University to complete credits for certification in civil engineering.’

A. Right.”³⁶⁰

Robertson conceded, after lengthy cross-examination, that he had not in fact completed the courses. Counsel suggested that his misdescription was intended to enhance his qualifications, and that it cast doubt on his reliability. The real question, however, is whether it impacts in any significant way on his opinion at this Inquiry as to the marks on the body of Neil Stonechild. An expert’s opinion is not discarded, because of an error in his or her curriculum vitae. I was referred by Counsel to the comments of Sopinka, Lederman, and Bryant in the *Law of Evidence in Canada*, pages 536, 537. I quote:

“The test of expertise so far as the law of evidence is concerned is the skill in the field in which the witness opinion is sought. The admissibility of such evidence does not depend upon the means by which that skill was acquired. As long as the court is satisfied that the witness is sufficiently experienced in the subject matter at issue, the court will not be concerned with whether his or her skill was derived from specific studies or by practical training, although that may affect the weight to be given to the evidence.

And the authors go on to refer to a decision in *Rice versus Socket*. It says, “The derivation of the term ‘expert’ implies that he is one who, by experience, has acquired special and peculiar knowledge of the subject of which he undertakes to testify and it does not matter whether such knowledge has been acquired by study of scientific works or by practical observation.”³⁶¹

The witness was also confronted with the comments of a Dr. Williamson, an expert who testified at a U.S. trial in which Robertson’s evidence was also presented. Williamson took exception to the opinions expressed by Robertson as a result of his photogrammetric analysis. As I pointed out to counsel during the hearing, without knowing the circumstances of that trial, I cannot draw any conclusions as to the accuracy of Robertson’s opinion or Dr. Williamson’s.

Commission Counsel pointed out that Robertson was employed by the RCMP to conduct the tests he described. Obviously the RCMP thought his credentials were sufficiently reliable to ask his opinion. The witness also referred to a number of appearances which he has made in Canadian courts at the Provincial and Superior Court level.

Commission Counsel made it quite clear that the witness was being asked a very narrow question.³⁶² The following comments are illustrative:

³⁶⁰ Evidence of Gary Robertson, Inquiry transcript, vol. 21 (October 20, 2003): 4032

³⁶¹ Evidence of Gary Robertson, Inquiry transcript, vol. 22 (October 21, 2003): 4149-4150

³⁶² I refer particularly to Evidence of Gary Robertson, Inquiry transcript, vol. 21 (October 20, 2003): 3959, 4020-4021, and 4079



“MR. HESJE: Now, Mr. Commissioner, it’s – we’ve called Mr. Robertson to provide expert evidence in the area of image processing, image interpretation and application of photogrammetry, that is to the making of measurements from an image or photograph. The purpose of his evidence is to provide – the purpose of his testimony, I should say, is to provide evidence as to measurements of imprints on the body of Neil Stonechild and a comparison of those measurements to measurements of a known object.”³⁶³

In the final analysis, Robertson’s evidence is limited to his methodology in measuring marks on Neil Stonechild’s face and wrist elicited from enhanced photographic images obtained at the autopsy and in correlating those observations to determine if the measurements of the marks were consistent with the measurements of a known object. He was not asked initially to correlate the measurements of the marks with the measurements of handcuffs. Indeed, in his initial examination and analysis, he knew nothing about handcuffs as a possible cause or indeed anything else. Later he was provided with a set of Peerless handcuffs—the type used in 1990 by Saskatoon Police Service—and asked to measure the dimensions of these handcuffs.³⁶⁴

In doing so, he commented on the controls used to verify his observations:

“Q. All right. And as I understand it, in order to positively identify or individualize an impression as having originated from a specific source one must follow what’s called the principle of individualization?

A. That’s correct.

Q. And can you confirm for me that this principle states – or do you know the principle without me reading it to you and that you can advise us?

A. I have a pretty good idea, but – yes.

Q. Okay. Well if I suggest to you the individualization of an impression is establishing by finding agreement of corresponding individual characteristics of such number and significance as to preclude the possibility or probability of their having occurred by mere coincidence and establishing that there are no differences that cannot be accounted for? Is that –

A. That’s correct?

Q. – the principle?

A. Yes.

Q. And is that the principle that you apply in coming to whatever conclusions you come to with respect to this matter?

A. Yes.

Q. All right. And as I understand it, precise measurement comparisons on skin versus physical objects are seldom exact due to the elastic properties of the skin?

³⁶³ Evidence of Gary Robertson, Inquiry transcript, vol. 21 (October 20, 2003): 4020-4021

³⁶⁴ Letter of Gary Robertson to RCMP, dated November 30, 2000, Inquiry exhibit P-101

Part 4 – The Evidence

- A. Yes.
- Q. And if that's so that the dimension attributes for the skin will be larger than the physical object because of the –
- A. Not always, because it depends on where you're taking the measurement from.
- Q. All right.
- A. But it would have – yeah.
- Q. Then would that be what you would ordinarily expect, that the dimension attributes for the skin will be larger than the physical object?
- A. It's not all the cases.
- Q. Okay. Would that be the general proposition or not?
- A. Yeah, there's a possibility, yeah.
- Q. Okay. And so with the principle of individualization you would have to account for any differences before an impression can be individualized?
- A. Yes.
- Q. That's in accordance with the principle? And in this case, applying that principle and being an expert as so qualified by this Commission, you came to a conclusion that a positive identification could be made in this case with respect to what caused the impressions?
- A. Yes. There was five particular areas of the mark on the wrists that I measured had corresponding dimensions that would correspond to the handcuff that would meet that criteria.
- Q. All right. So based on your analysis you came to the conclusion that the marks found on Mr. Stonechild are consistent with having been made by Peerless handcuffs; is that not so?
- A. They – yeah, the dimensions would match to the handcuffs that I measured.
- Q. Well I'm going further than that. I'm saying that you came to the conclusion – you can correct me if I'm wrong – that the marks found on Mr. Stonechild are consistent with being made by Peerless handcuffs?
- A. That's correct, yes.
- ...
- Q. Okay. But in this case you precluded the possibility or probability of this having happened, that is, the factors that fit in were a mere coincidence?
- A. Yes, I mean it wasn't – if it was just two areas, then I wouldn't be able to make that statement. But if you have five consistent areas, that's the – how I based it on. But as far as statistical information, I can't comment –
- Q. No, and I'm not –



A. – on that.

...

THE COMMISSIONER: Because as I understand your assignment, you were simply to measure these two elements, the marks you say, and to measure the handcuffs and indicate what the points of similarity were, or convergence, if you will?

A. Yes. And then I pointed out the five – there was five areas of similarities.

THE COMMISSIONER: But I don't understand you to be saying categorically that these marks were caused by handcuffs. You're saying, because of these two things, those are consistent. That is it's – there's a consistency between the design of the handcuffs and –

A. Right.

THE COMMISSIONER: – the marks that were seen. That's as far –

MR. HALYK: Well –

THE COMMISSIONER: That's as far as he really went."³⁶⁵

Ultimately, all Robertson could say that was he identified certain imprints on Neil Stonechild's wrist and he was able to measure those points in relation to each other and create a diagram showing their relationship.³⁶⁶ From these observations he was able to say that handcuffs could have caused the marks, but some of his evidence, as I understand it, went further: The imprints were likely caused by handcuffs.

Similarly, he testified that the marks on the young man's nose and face were consistent with the forceful application of the set of handcuffs. He prepared a photograph of the deceased youth's face on which he superimposed a set of handcuffs.³⁶⁷

I pause to note that evidence came to light shortly before the Inquiry that the handcuffs used by Cst. Hartwig and Cst. Senger in 1990 had different dimensions than the handcuffs measured by Gary Robertson.³⁶⁸ The difference in the measurements of the two sets of handcuffs, however, is insignificant as the difference is no greater than the margin of error that Robertson had identified in his report.³⁶⁹

An enormous amount of attention was paid in cross-examination to the factors which might affect the accuracy of his measurements and his conclusions. In my respectful view, the witness's opinions on the narrow questions put to him by Mr. Hesje were never successfully challenged. Were his measurements accurate? They were. Was he able to demonstrate a convergence or a correlation between the marks and a known object, such as handcuffs? He was. We were reminded by Commission Counsel that Robertson was called before the Inquiry because of his part in the RCMP investigation. The objective was to see that every bit of information made available to the RCMP was brought forward to the Inquiry and to that

³⁶⁵ Evidence of Gary Robertson, Inquiry transcript, vol. 22 (October 21, 2003): 4197-4203

³⁶⁶ This appears in Robertson Report to RCMP, Inquiry exhibit P-103

³⁶⁷ This appears in Robertson Report to RCMP, Inquiry exhibit P-103

³⁶⁸ Memo of Cst. Shelley Ballard to Barry Rossmann, dated October 1, 2003, Inquiry exhibit P-138

³⁶⁹ Evidence of Gary Robertson, Inquiry transcript, vol. 22 (October 21, 2003): 4184-4185

Part 4 – The Evidence

extent, Robertson's participation was necessary. I must say that I was dismayed by the amount of time devoted to his evidence and the intensity of his cross-examination. It is not necessary for me to accept his evidence as to the cause(s) of the marks on Neil Stonechild's body in order to reach the conclusion set out hereafter. However, given his treatment during the Inquiry, it is appropriate that I comment on his evidence and my conclusions in respect to it.

Robertson's evidence established the origin of the marks on a balance of probabilities. His evidence confirms a suspicion of that which is obvious to the naked eye. It is also a suspicion that Keith Jarvis shared with the RCMP shortly after viewing the photographs for the first time in 2000:

"I have seen marks very similar to that myself over the years as a police officer. It can be the result from someone being placed in handcuffs who has been detained. It could be from [unintelligible] many things.... Ah... often times you don't even have to put handcuffs on tight an' people move their hands around an' can get marks...It could be from anything really, looking at it, looking at the marks in the photographs ah... **I'm not an expert but I would say it would probably be consistent with handcuffs.**"³⁷⁰ (Emphasis added)

The suggestions that clothing would have been a cause is without merit as I have noted elsewhere. So is the suggestion that vegetation caused the abrasions to the young man's face. Ultimately, Robertson's evidence was helpful and played a part in establishing what likely happened to Neil Stonechild on the evening of November 24/25.

10 | The Expert Evidence – Memory Experts

In this section, I examine the evidence of experts who were called to provide opinion evidence with regard to memory formation and retention. I begin with the evidence of John Richardson. His evidence had a broader purpose. He was called to calculate blood alcohol levels given certain assumptions, and to discuss the likely effect of such blood alcohol levels on an individual's physical and neurological functions. He is included in this section as one of the most central aspects of his testimony was the likely effect of alcohol on memory.

John Steven Richardson, Ph.D.³⁷¹

John Richardson has a Bachelor's Degree from the University of Toronto in Honours Psychology. He has a Masters Degree from the University of Vermont in Experimental Psychology. He obtained his Doctorate in Psychopharmacology in 1971 from the University of Vermont. Psychopharmacology is the study of the effects of drugs on brain function. He is currently a professor with the Department of Pharmacology at the College of Medicine, University of Saskatchewan.

Dr. Richardson was qualified to give opinion evidence on the following points:

- (a) the calculation of blood alcohol content at various points in time, based on certain assumptions as to rates and amounts of consumption; and

³⁷⁰ Transcript of RCMP Interview of Keith Jarvis on October 12, 2000, Inquiry exhibit P-107

³⁷¹ Evidence of Dr. Richardson, Inquiry transcript, vol. 30 (January 5, 2004): 5731-5850; and Inquiry transcript, vol. 31 (January 6, 2004): 5851-5914