

Hard to Stomach: The Case of Steven Truscott

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Abstract

On September 30, 1959, Steven Truscott was declared guilty of first-degree murder and sentenced to death by hanging. Some of the critical evidence used in his case was provided from an analysis of stomach contents during the autopsy. This analysis was used to estimate time of death to a small window that overlapped with eyewitness testimonies, making Truscott seem undeniably guilty. Almost 50 years later, Truscott appealed his case and was acquitted. New evidence regarding the legitimacy of post-mortem stomach content analysis was presented, and the original testimony was determined to be insufficient evidence. This case became infamous in Canadian history and led to recommendations regarding the use of gastric evidence in the legal system.

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On a summer evening in 1959, 14-year-old Steven Truscott gave a young girl a ride across town on his bike. Nearing midnight, the girl's father reported her missing to the police. Two days later, her body was found in the woods. She had been sexually assaulted and strangled, and the prime suspect was Truscott (*R. v. Truscott, 1967*). Over a 15-day trial, Truscott was found guilty and sentenced to death (*R.v. Truscott, 1967*). Nearly 50 years later, the Court of Appeal acquitted him, and he received 6.5 million dollars in compensation from the federal government (CBC News, 2008). What caused a young boy to be tried for first-degree murder? What evidence was presented? And, most importantly, what happened nearly 50 years later to change the outcome?

The Facts

Lynne Harper, a 12-year-old girl from Truscott's class in school, was seen riding on the crossbar of Truscott's bicycle on the evening of June 9, 1959. Truscott would testify that he was giving her a ride to an intersection by the highway, stating that he dropped her off and left her unharmed (*R. v. Truscott, 1967*). On June 11, around 2 p.m., her body was found by a search party. The next evening, Truscott was taken into custody and charged with first-degree murder (*R. v. Truscott, 1967*). Instead of being tried as a juvenile, he was tried as an adult for capital murder. The punishment, if found guilty, was death by hanging (Kaufman, 2004). The trial began on September 16 in the Supreme Court of Ontario in Goderich. The verdict was reached on September 30, and Truscott was declared guilty and received the death sentence, making him the youngest death row inmate in Canada (VanLaerhoven & Merritt, 2019). Four months later, the case was appealed, and the punishment changed to life imprisonment (VanLaerhoven & Merritt, 2019).

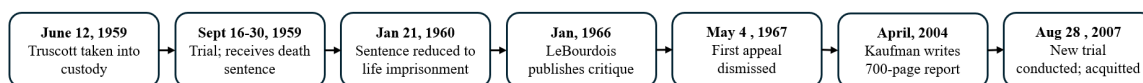
Seven years later, Isabel LeBourdais published *The Trials of Steven Truscott*, a book outlining why she believed Truscott was innocent. This led to much public debate, and the Supreme Court of Canada reviewed that case (*R. v. Truscott, 1967*). The law had changed since Truscott was originally tried, allowing appeals to be made to the Supreme Court (Kaufman, 2004). The evidence was reviewed, including Truscott's testimony, and on May 4, 1967, the Court declared that an appeal would have been dismissed as there was not sufficient new evidence (*R. v. Truscott, 1967*). After 10 years in prison, Truscott was released on parole. In 1997, the Association in Defense of the Wrongly Convicted (AIDWYC) began

collecting documentation to prove Truscott's innocence (Kaufman, 2004). The evidence included undisclosed witness statements from government archives and new expert testimonies. Truscott appealed to the Court, stating that the original verdict was a miscarriage of justice. He was acquitted on August 28, 2007 (*R. v. Truscott, 2007*).

In the 1959 trial, some of the evidence included various eyewitness testimonies from others who saw Truscott on his bike or talked to him in the days surrounding the murder, an abrasion on his penis, fresh bike tracks where the body was found, inconsistencies in Truscott's police statements, and evidence from pathologist John Penistan about Lynne's time of death (*R. v. Truscott, 1967*). The Crown called sixty witnesses to the stand (*R. v. Truscott, 2007*). Accounts included testimonies from various people who saw Truscott with Lynne between 7 p.m. and 7:15 p.m., as well as testimonies from children who saw him alone around 8 p.m. The Crown argued that this window of time where no one saw Truscott would have been sufficient time to commit the crime (*R. v. Truscott, 2007*). Additionally, Dr. Penistan estimated that Lynne died between 7 p.m. and 7:45 p.m. after analyzing her stomach contents (*R. v. Truscott, 1967*). This complete overlap in timing between the witness testimonies and the supposed time of death was a large contributor to Truscott's initial guilty verdict.

Figure 1

Timeline of Events



A Major Issue

One of the most critical pieces of evidence was Dr. Penistan's declaration of the time of death using an analysis of the stomach contents. Unfortunately, this type of evidence can be very unreliable (Berg & Jaffe, 1989). Legge and colleagues (2016) highlight some of the many ways that gastric emptying can be influenced.

Firstly, the content of the meal itself, such as calories or volume of liquid, can influence the rate of digestion (Leege et al., 2016). In a 2019 study, Mazzawi and colleagues found that gastric emptying was more rapid for high-caloric meals than low-caloric meals. Healthy participants were randomly assigned to begin with either the high-caloric (i.e.,

nutritional juice supplements) or low-caloric (i.e., cooled commercial meat soup) meals. Ultrasonography measured the stomach at five different times throughout digestion. Between two and six days later, participants would repeat the procedure with the opposite meal. It was found that the size of the antral area was larger in the high-caloric condition throughout all the measurements, suggesting that there was slower gastric emptying. While a major strength of this study is the within-subjects design, allowing to control for individual digestion differences, the researchers acknowledged that they were not able to control for the time of day, which may also influence digestion (Mazzawi et al., 2019). Lynne Harper died after eating dinner with her family. Her dinner consisted of turkey, potatoes, peas, ham, bologna, and pineapple upside-down cake (*R. v. Truscott, 1967*). Due to the amount of food consumed at dinner, it may be possible that it would take longer to digest. It was also mentioned in the appeal that nobody knew how much food was eaten at dinner, which makes it extremely difficult to tell how much was digested (*R. v. Truscott, 2007*).

Psychological and physical stressors, such as fear, stress, and physical trauma, can also play a role in gastric emptying (Legge et al., 2016). One study measured gastric behaviour using a gastric barostat. Healthy participants had a prepared drink and were induced into a neutral or anxious state using facial expressions and an autobiographical story. Gastric behaviours, such as accommodation, were found to be significantly worse in the anxiety condition. (Geeraerts et al., 2005). Considering the state in which Lynne Harper was found, it is quite likely that she experienced severe psychological distress before dying. Multiple expert witnesses called upon during the 2007 appeal stated that the emotional state of the victim could slow digestion and explained that if Lynne was kidnapped, as suspected, it is highly likely that her digestion slowed considerably (*R. v. Truscott, 2007*).

Recommendations

In the 2007 appeal, expert testimonies were given regarding the stomach content examination. One expert, Dr. Micheal Pollanen, stated that when the original trial occurred, most autopsy evidence was highly dependent on authoritative experience and anecdotal evidence (*R. v. Truscott, 2007*). Since then, there has been a major shift towards an evidence-based approach which emphasizes the importance of experimental evidence. He cited developments in gastroenterology and explained that gastric emptying can be more closely

monitored (*R. v. Truscott, 2007*). If this type of evidence is used in court, it should be experimentally backed and not based on anecdotal evidence.

Tröger and colleagues (1987) conducted one of the first empirical studies examining gastric emptying. They compared the volume of food remaining in 47 autopsies to the volume and time of the last meal. They were able to estimate the mean survival time of food after intake. They found that if 90 percent of the meal was found, it was most likely eaten within an hour before death with a 98 percent confidence interval of three hours. If 50 percent of the meal was found, it was probably eaten between three to four hours before death with a 98 percent confidence interval of not less than an hour and up to 10 hours. If 30 percent of the meal was found, it would have been eaten around four to five hours before death with a 98 percent confidence interval between one and two hours and no more than 10 to 11 hours (Tröger et al., 1987 as cited by Madea, 2023). One issue with this method, though, is that the volume of the last meal must be known. There is also a relatively large range within the confidence limit, which makes it hard to draw definitive conclusions. This study certainly highlights how inaccurately precise the conclusions drawn by Dr. Penistan in Truscott's case were.

Evidence provided through analysis of gastrointestinal contents should be treated with caution. As demonstrated above, even empirical evidence leaves a relatively large range for the possible time of death. Expert testimony should always be provided that clearly outlines the unreliability of these types of measurements and explains how they obtained their results. The method of obtaining these results should also be based on empirical evidence and not anecdotal. This case highlights the importance of proper expert testimony in the justice system and allows future generations to learn from these mistakes and prevent similar wrongful convictions from reoccurring.

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