

Roberto Calvi's Trial: Suicide or Murder?

Aryan Shah, Livia Ngo, Kody Chantavong and Megan Skrobut University of Washington, INFO 298 'Introducing Digital Humanities'

Introduction

Objective Statement:

Our project aims to investigate the Roberto Calvi Trial and examine the details of the case both before and after his death. We will gain clarity on how and why the court ruling shifted to murder after being ruled suicide 20 years prior.

Research Questions:

To better guide our analysis, we have developed three research questions to ensure we are covering all aspects of the trial.

- 1. How was Calvi's death ruled as murder and not suicide?
- 2. How did public sentiment change over time? How did people's opinions regarding the trial and/or Roberto change over time?

3. What was the motivation of Roberto Calvi's murder?

With regards to the first question, we will be focusing more on the forensic evidence that has made it distinctly clear that Roberto Calvi was murdered. The second question refers to the overall public sentiment over time. We wanted to examine the correlation between key events or the release of certain information and how that has influenced the general public's perception of Roberto Calvi's death. The last question provides additional background with regards to the main characters of the story. For example, it is a deeper insight into the relationships between Calvi and the Vatican and Mafia, who are two main suspects of the trial.

About the Trial:

Roberto Calvi was Italy's most powerful private banker. He joined Banco Ambrosiano as a clerk when the company was a risk-averse institution. Calvi climbed his way up to President of the Bank where he acquired many more banks and offshore accounts. Due to his role, Calvi forged close ties with Archbishop Paul Marcinkus (the chairman of the Vatican's Institute for Religious Works (IOR)), who holds the bank accounts of priests, bishops, cardinals and the Pope, and was a secretive, major shareholder of Banco Ambrosiano.

Timeline of Events Leading up to Calvi's death:

- 1977: A situation happened between Marcinkus and one of his connections,
 Sindona, where Sindona's empire collapsed, and he was being jailed for conspiracy and fraud. Sindona publicly accused Calvi's Banco Ambrosiano of irregularities as an act of revenge because he was denied funds to save his failing bank.
- 1981: Sindon's tip prompted an investigation which led to Calvi's arrest. He stood on trial on charges of illegal currency dealings concerning the equivalent of \$50 million worth of foreign transactions. When he was in prison awaiting trial, he attempted to kill himself and insisted he was innocent. He filed for an appeal and was released while awaiting a new trial on June 21st 1982.
- 1982: Italy's central bank pressured Calvi to account for the bank's nine-figure debt but he was unsuccessful so he turned to Falvio Carboni who smuggled him to

London. London wasn't his final destination because he told his wife and daughter to meet him in Washington DC.

- June 17, 1982: Bank's board voted to remove the missing Calvi as president and dissolve itself & Calvi's long term secretary fell to her death through the Bank's window (ruled a suicide)
- June 18, 1982: Calvi's body was found hanging from Blackfriars Bridge

Data Curation and Cleaning

To clean our sources, we decided to create one cleaning configuration that could be effectively applied for the entire dataset along with each individual analysis tool. It was essential for us to identify the main OCR errors that continued occurring within the dataset in order for us to create a configuration that would rectify such issues. After thorough examination, we decided it would be best to use the 'stop words' feature so we can include customized words that were misspelled or grammatically incorrect to ensure they are not included in the analysis visualizations.

| Stop words | Text Correction |
|--|---|
| Set the words you want the Analysis Tools to ignore. Choose a Starter List | Options for automatic text correction that will be applied before each Analysis |
| | Turn on all options |
| - | ✓ Text Modification |
| said | All lower case |
| Mr Calvi, | |
| Calvi's | ✓ Characters |
| | Remove all extended ASCII characters |
| | Remove all number characters |
| t | ✓ Special Characters |
| s Mr. | Remove all special characters |
| wr. | Set specific characters > |
| a | Set specific characters > |
| about | ✓ Punctuation |
| above | Remove all punctuation |
| across after | Set specific punctuation > |
| afterwards | Set specific punctuation / |
| again | ✓ Spacing |
| against | S Remove all tabs |
| all | Bemove all line breaks |
| almost alone | Reduce multiple spaces to one space (ex: "hello there" becomes "hello |
| along | there") |
| already | ✓ Document Sections |
| also | |
| although | Remove body text |
| always am | Remove all non-body content |
| among | Set specific sections > |
| amongst | ✓ Replacements |
| amoungst | Replace this With this |
| amount | With Ullow |
| an and | |
| another | |
| any | |
| anyhow | |
| anyone | Add a Row |

Initially, we were tempted to make adjustments via the special characters and punctuation feature, however, we realized that it can be difficult to generalize changes for the entire dataset as certain punctuation marks have different meanings and significance in texts. Thus, we decided to add the grammatically incorrect words and spurious symbols as shown in image above, to remove the OCR errors in the dataset. We also adjusted the spacing to remove all tabs, line breaks and reduce multiple spaces to make the text more readable and visually appealing.

Items



Calvi's murder was 'a warning by Mafia'



Calvi Scandal Punctures Vatican Bank Secrecy





convinced bank was murdered

ced, coroner says

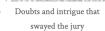
and intrigue that swaved the jury



Arrest in Calvi case



Doctors reveal new Calvi clue Appeal Move over Calvi



Calvi family win first round of fight to quash verdict



'Suicide'

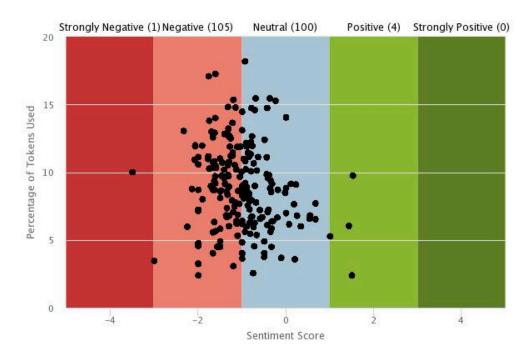
Calvi Family Will Appeal Suicide Ruling

Visualizations

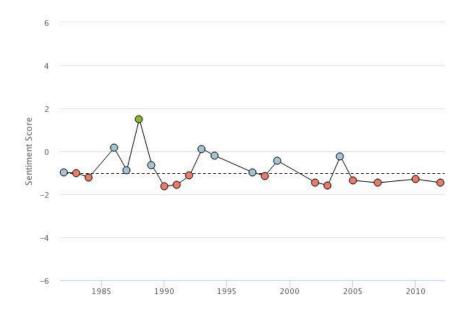
In order to learn more about the Roberto Calvi Trial, we created three different visualizations to interpret from. These visualizations will aid us in understanding the basis of the trial and the events that occurred during this time period.

Sentiment Analysis

One of the visualizations we decided to analyze is a sentiment analysis. A sentiment analysis is a natural language processing approach to determine the emotional tone of a body of text. More specifically, it is a process to determine if the tone of the text is positive, negative or neutral. This analysis is beneficial when trying to understand the overall idea or mood of a certain body of text.



Based on the image shown to the left, the sentiment analysis score for our content set are primarily in between the negative and neutral range. This implies that the there are a great number of negative and neutral words/terms used found in the documents. Looking closely, we can see that there are five more documents that falls into the negative range compared to the neutral range. Furthermore, we can see that only a few numbers of documents lies in the positive range. With this, we can get a overall sense of the emotional tone of the documents. Although these results doesn't necessarily assist us in answering our research questions, we are still able to gain a good insight of the case.



The image to the right displays the sentiment analysis overtime. In other words, it shows the sentiment scores between approximately 1950 to 2015 from the range of -6 (strongly negative) to +6 (strongly positive). Based on the graph, we can see that there are a lot more positive points before 1995 and generally more negative points after. From this, we can infer that there are more negative and/or neutral terms used as time moves forward. This result does aid us in answering the second research question: How did public sentiment change over time? How did people's opinions regarding the trial and/or Roberto change over time? The trend of the public sentiment changed overtime by increasing in negative points. This implies that people's opinions in regards to the trial and/or Roberto Calvi are more negative and neutral as time passes by.

Timelines

This is a timeline of the key events that occurred during the Roberto Calvi trial. With the vast amount of documents and evidence presented in court and unofficially, we believed it would be helpful to have a clear cut timeline of the key events along with its according documents during that time period. It is important to note that the dataset only contained

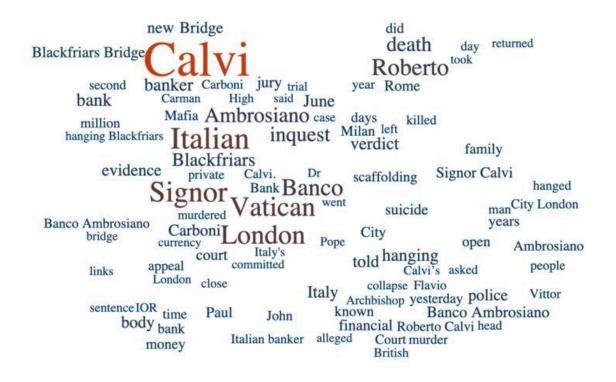
documents from 1982 - 2007, hence we were unable to discuss the events that occurred before or after those dates. We hope this will provide you more insight into the chronological order of the events and give clarity for making your personal decisions into whether Calvi committed suicide or was murdered.



View full timeline

Word Cloud

A word cloud is a helpful visualization because it can provide a comprehensive account of the vocabulary used in the content set. Word Clouds are a type of Ngram visualization. An Ngram is a sequence of words, where N represents the number of words. Ngrams provide the relative frequency of a given gram within a content set. The Word Cloud below is based on the number of times an Ngram appears in our content set divided by the total number of tokens in the content set. It consists of 100 Ngrams and the larger more orange words had a higher frequency (appeared more often) and the smaller bluer words had a lower frequency (appeared less often).



This word cloud is important in our analysis because it allows us to visualize the frequency of words used within our content set in regards to Calvi's death. The words "Calvi", "Roberto", "Italian", "Vatican", "Ambrosiano", "banco", and "Signor" have a high frequency because they are words related to the background knowledge of the trial. This word cloud shows that the frequently used words while writing about the trial are neutral or negative.

We also analyzed word clouds for two time periods within our content set: 1982 - 1990 and 1990 - 2007. These word clouds produced the same top words as the word cloud for the entire content set. This shows that the words used to talk about the trial have stayed consistent overtime. People talk about this case in a neutral, slightly negative way.

Lessons Learned

Correlation between all 3 analyses:

After examining all three analyses : sentiment over time, timelineJS and the word cloud, we identified a correlation. It is worth noting that the worst sentiment score occurred during 1990 which is when Archbishop Paul Marcinkus resigned from the Vatican bank. After examination revealed the death of Calvi was linked to the disappearance of \$1.2 billion dollars in which the Vatican may have had a role, a key figure in the scandal resigned. On the other hand, the year that had the highest sentiment score was 1988 which was the year a Bank in London decided to restructure their ownership and executive board. They replaced the chairman because of his ties with Calvi in an attempt to start afresh. Thus, because of the increasing positive or decreasing negative words, the sentiment score reached its peak positive.

Moreover, after Calvi's body had been exhumed in 1998, the sentiment shifted towards a positive sentiment as there was hope to find new forensic evidence. However, shortly thereafter, pathologists and forensic examiners identified evidence that suggest a clause for murder which is why there is a general negative trend in the latter half of the analysis. Even with the five defendants being convicted then acquitted years later due to lack of evidence, there was no promising documentation within the dataset that would have helped increase the sentiment above 0.

Lessons Learned

We conclude that there is a correlation between the frequent usage of neutral and negative words (as seen in the Word Cloud), the neutral and negative trending sentiment analysis over time, and the articles written about the key events on the timeline.

While there is no way to confirm or deny, these three analyses could begin to explain why the case was so quickly ruled as a suicide. In 1977, Calvi attempted to commit suicide while in prison awaiting his first trial. While awaiting his next trial in June 1982, he was unable to account for the bank's massive debt and fled to london. Three days before the trial, Calvi's body was found. This historical context from the timeline, paired with the consistent neutral and negative sentiment and word cloud, it is possible that the original ruling of the case was a quick conclusion to come to for the detectives working the case.