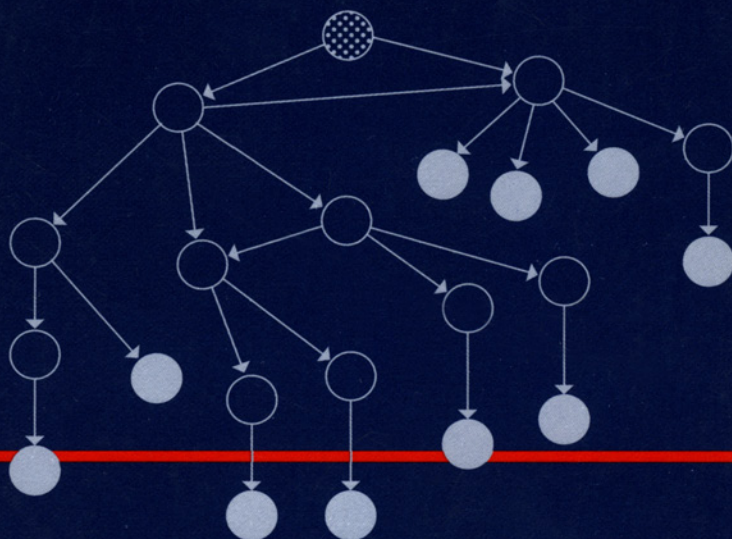


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# A Probabilistic Analysis of the Sacco and Vanzetti Evidence

Joseph B. Kadane  
David A. Schum



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WILEY SERIES IN  
PROBABILITY AND STATISTICS

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# A Probabilistic Analysis of the Sacco and Vanzetti Evidence

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A Wiley-Interscience Publication

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**For Caroline and Anne**

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# Contents

<b>Preface</b>	<b>xi</b>
<b>Acknowledgments</b>	<b>xv</b>
<b>1 Different Wine in an Old Bottle</b>	<b>1</b>
1.1 The South Braintree Crime	4
1.2 The Arrest and Charging of Sacco and Vanzetti	7
1.3 The Trial and Its Aftermath	12
1.4 Disputes about the Verdict in <i>Commonwealth v. Sacco and Vanzetti</i>	17
1.5 Two Probabilists Take an Interest in the Dispute	21
1.6 Probability and Chains of Reasoning: Bayes and Wigmore	26
<b>2 A Standpoint for Our Analysis of the Sacco and Vanzetti Evidence</b>	<b>28</b>
2.1 The Importance of Declaring Standpoint in Inference-Related Tasks	29
2.1.1 Our Standpoint for Analyzing the Sacco and Vanzetti Evidence	32
2.2 Some Thoughts about a Historical Standpoint	34
2.2.1 Our Legacy from Historians	34
2.2.2 Probability and History	42
2.2.3 Final Thoughts about Historical Standpoints	46
2.3 Legal Scholarship and the Credentials of Evidence	47
2.3.1 A Legacy from Evidence Scholarship in Law	48
2.3.2 On the Relevance of Evidence	50
2.3.3 On the Credibility of Various Forms of Evidence	53
2.3.4 Law and Probability: The Probative Force of Evidence	60

<b>3</b>	<b>Chains of Reasoning from a Mass of Evidence</b>	<b>66</b>
3.1	Wigmore's Methods of Analysis and Synthesis 67	
3.1.1	Wigmore's Original Methods 68	
3.1.2	A "User-Friendly" Version of Wigmore's Methods 70	
3.1.3	Wigmore and Modern Inference Networks 71	
3.2	Chains of Reasoning and Discovery 74	
3.2.1	Abduction and Chains of Reasoning 74	
3.2.2	Discovering Sources of Reasonable Doubt 76	
3.3	Marshaling the Sacco and Vanzetti Evidence 77	
3.3.1	The First Stages of Marshaling the Sacco and Vanzetti Evidence 78	
3.3.2	Chart Construction and the Marshaling of Evidence 80	
3.4	Evidence-Charting Conventions 83	
3.4.1	Node and Arc Symbols 83	
3.4.2	Charting Ancillary Evidence 85	
3.4.3	Charting by Sectors 88	
3.4.4	Generalizations 88	
3.4.5	On Credibility-Related Links in a Chain of Reasoning 89	
3.5	Evidence Chart Synopses 89	
3.5.1	The Evidence and Arguments on Penultimate Probandum $\Pi_1$ 90	
3.5.2	The Evidence and Arguments on Penultimate Probandum $\Pi_2$ 90	
3.5.3	The Evidence and Arguments on Penultimate Probandum $\Pi_3$ 91	
<b>4</b>	<b>Grading the Probative Force of the Sacco and Vanzetti Evidence</b>	<b>116</b>
4.1	A Probabilistic Standpoint 116	
4.2	Bayes's Rule and the Probative Force of Evidence 121	
4.2.1	Hypotheses, Priors, and Some Controversy 122	
4.2.2	Two Classes of Hypotheses Regarding Sacco and Vanzetti 123	
4.2.3	Likelihoods, Likelihood Ratios, and Bayes's Rule 124	
4.2.4	Likelihood Ratios and the Aggregate Force of Evidence 126	
4.2.5	Likelihood Ratios for Subsets of Evidence 127	
4.2.6	Likelihood Ratios for Individual Evidence Items 131	
4.2.7	Wigmore, Bayes, and the Trapping of Evidential Subtleties in Individual Items and Combinations of Evidence 133	

4.3	Other Insights about the Probative Force of Evidence	150
4.3.1	Baconian Probability and the Completeness of Evidential Coverage	151
4.3.2	Thought Experiments, Arguments, and Belief Functions	152
4.3.3	Fuzzy Inferences	154
4.4	Likelihood Ratios, FRE 401, and the Probability Debates in Law	156
<b>5</b>	<b>Probabilistic Analyses: Issues and Methods</b>	<b>158</b>
5.1	Epistemic Probabilities and the Quantification of Belief	159
5.2	Research on the Quantification of Belief	162
5.2.1	Psychophysics and Numerical Judgments	163
5.2.2	Research on the Assessment of Likelihoods and Likelihood Ratios	166
5.3	Probabilistic Assessment Plan	169
5.3.1	The Probability Assessors	169
5.3.2	Likelihood Ratio Assessments	169
5.3.3	Numerical Indicators of Prior Presumption of Innocence and Beyond Reasonable Doubt	172
5.4	Telling Stories Using Likelihoods: Sensitivity Analyses	175
<b>6</b>	<b>Probabilistic Analyses: Judgments and Stories</b>	<b>184</b>
6.1	Likelihood Ratio Assessments of the Probative Force of the Sacco and Vanzetti Evidence	185
6.1.1	Assessments for Substantive Collections of Evidence	185
6.1.2	Likelihood Ratios for the Aggregate of All the Evidence	189
6.1.3	Inferred Posterior Odds on Sacco's Guilt	193
6.2	Stories about the Probative Force of the Evidence Concerning Sacco	198
6.2.1	Brute Force Analyses: Stories about the "Star" Witnesses Who Provided Identification Evidence	198
6.2.2	Bayes's Nets Analyses: Stories about the Sacco Firearms Evidence	215
6.2.3	Bayes's Nets Analyses: Stories about Sacco's Alleged Consciousness of Guilt	231
6.2.4	Combining the Stories	236
6.3	On the Completeness of the Sacco and Vanzetti Evidence	239
<b>7</b>	<b>Probabilistic Analyses of Evidence in Various Disciplines</b>	<b>241</b>
7.1	Emerging Technologies for Complex Probabilistic Analyses	242
7.2	Historical Research and the Credentials of Evidence	248

7.3	Another Affair Involving Law and Probability	255
7.4	Probabilistic and Statistical Analyses Based on Masses of Evidence	265
7.5	Studies of Probabilistic Reasoning in Psychology	274
<b>8</b>	<b>Final Thoughts about Nicola Sacco and Bartolomeo Vanzetti</b>	<b>280</b>
	<b>Appendix A. Wigmore Evidence Charts and Key Lists for the Trial and Post-Trial Evidence</b>	<b>285</b>
	<b>Appendix B. Trial Witnesses List</b>	<b>338</b>
	<b>Appendix C. Probabilistic Story Ingredients in Words</b>	<b>343</b>
	<b>References</b>	<b>351</b>
	<b>Index</b>	<b>359</b>

# Preface

This book presents a case study in the application of modern ideas about probability to the difficult task of drawing conclusions from large masses of evidence. Such tasks are encountered in many different contexts, and they frequently involve matters of widespread interest and importance. Evidence forming the basis for probabilistic conclusions has three major properties or credentials that must be established: relevance, credibility, and inferential or probative force. No evidence comes with these credentials already established. The task of establishing them rests, in part, on arguments or chains of reasoning we construct from the evidence to hypotheses or possible conclusions being considered. When there is a large mass of evidence to be evaluated, these arguments or chains of reasoning can become very complex if we approach their construction with care.

A major difficulty is that there is no source we can consult to find arguments that are appropriate for any given mass of evidence. The construction of arguments in defense of the credentials of evidence involves imaginative reasoning. Different persons may construct different plausible arguments from the same evidence. Among modern probabilists there is at least as much concern about argument construction as there is about the numbers, which we call probabilities, that can be applied to arguments. Insights about the properties and uses of evidence in probabilistic reasoning come from many different disciplines. However, with one major exception in the field of law, there has not been much guidance given to persons faced with the task of marshaling their thoughts and evidence in the process of constructing arguments and drawing probabilistic conclusions. In this case study we combine argument-structuring and probabilistic ideas in the task of analyzing a mass of evidence that has five common characteristics. It is incomplete, inconclusive, dissonant, frequently ambiguous, and comes from sources whose credibility is not perfect. In our present case study we have been blessed with computer assistance that persons in the past, who were also concerned about probabilistic reasoning from masses of evidence having these characteristics, could never enjoy.

As a vehicle for our case study we have chosen a law case decided many years ago but which still excites abundant interest and controversy, in part because it involves so many inferential and other issues that are timeless. This case involves a

shoemaker named Nicola Sacco and a fish peddler named Bartolomeo Vanzetti who were charged with first-degree murder in the slaying of a payroll guard during an episode of armed robbery that took place in South Braintree, Massachusetts, on April 15, 1920. Sacco and Vanzetti had close associations with anarchistic groups whose activities were the source of public outrage at the time. On some accounts Sacco and Vanzetti were executed not as murderers but as anarchists.

As one writer put it, the trial and conviction of Sacco and Vanzetti, and their execution in 1927, set off “seismic tremors” that were felt around the world. The case of Sacco and Vanzetti is, arguably, the ranking *cause célèbre* in American legal history. Disputes continue about the measure of justice they received at trial and during their lengthy appeals process. There is also continuing dispute about whether Sacco or Vanzetti were guilty of the charge against them. Indeed they may have been framed by the police and/or prosecution for a crime in which they were not involved. But this is another matter that has excited recent controversy. Our case study involves only the issues of their guilt or innocence and whether there was any conspiracy to frame them. A large mass of evidence was offered during the trial of Sacco and Vanzetti. But an equally large amount of evidence has been generated since the trial, some of it quite recently. The collection of trial and post-trial evidence that forms the basis for our case study is, we believe, suitably massive for us to be able to illustrate many of the interesting and difficult issues encountered by persons who face the task of trying to make sense out of a large mass of evidence.

The circumstances of the crime in South Braintree, the arrest and charging of Sacco and Vanzetti, and their trial and its aftermath are discussed in Chapter 1 along with specific reasons why we have chosen these matters as a vehicle for our case study. The Sacco and Vanzetti case has been called “the case that will not die.” One reason why we have chosen this case is because of the lingering controversy it has generated among persons from several disciplines who have studied it carefully. In our case study we have given very careful thought to the standpoint we eventually adopted in our study of the evidence in this case. In Chapters 2, 4, and 5 we describe the mixed standpoint we have taken that mainly intersects the fields of history, law, and probability, but also intersects the field of psychology. As discussed, there are very good reasons why probabilists applying their methods in other disciplines should seek the assistance of “local guides” in these disciplines. Our focus on standpoint is important and not simply a digression. Unless we are careful in declaring important elements of our standpoint, the reader may wonder why we have dwelled on certain matters at the expense of others. We also wish to record the guidance we have received from scholars in the fields of history, law, probability, and psychology.

Our analysis begins in Chapter 3 as we take on the task of constructing arguments in defense of the relevance and credibility of each one of the 395 items in the mass of trial and post-trial evidence we have considered concerning Sacco and Vanzetti. Here we have taken the counsel of the American jurist John H. Wigmore who was the first person to study, in any systematic way, the task of drawing probabilistic conclusions from a mass of evidence. Wigmore offered analytic and synthetic methods for establishing the relevance, credibility, and probative force credentials of evidence. Until quite recently Wigmore’s ideas, first aired in 1913, were not tak-

en seriously. However, he was the first person to study what are today called *inference networks*. Although the study of inference networks flourishes at present, most current studies do not consider all of the ingredients that Wigmore recognized as relevant and important in establishing the credentials of evidence. Using Wigmore's methods, we have constructed an inference network for the Sacco and Vanzetti evidence. The twenty-eight sectors or divisions of this network appear in Appendix A. This inference network supports all the probabilistic analyses we have performed.

Our probabilistic analyses mainly concern the task of assessing the probative or inferential force of evidence. In our analyses we have adopted a Bayesian view of this process, as discussed in Chapter 4. However, we are quick to point out the present controversy that exists about how the force, strength, or weight of evidence can or should be graded. In fact in our probabilistic analyses we also draw upon insights from a Baconian view of probabilistic reasoning in which the completeness of evidential coverage relevant to matters at issue is a most important consideration. The Bayesian probabilistic view we have adopted, together with Wigmore's approach to argument construction, supplies us with a conceptual "microscope" for identifying and examining the many sources of doubt that lurk just below the surface in probabilistic reasoning. Our Bayesian and Wigmorean methods allow us to identify many sources of doubt concerning the Sacco and Vanzetti evidence that have never been considered because they have never been recognized.

The probabilities at issue in the Sacco and Vanzetti case, and in many other situations, can only be personal, subjective, or epistemic in nature. The reason is that the events of interest in this case are singular, unique, or not replicable. In such situations we are not able to enumerate the frequency with which events of interest occur. In Chapter 5 we dwell upon a variety of issues concerning probability judgments and the basis for them. Here we review research in experimental psychology on the quantification of belief and discuss the relevance of this research to subjective assessments of the probative or inferential force of evidence. In Chapter 5 we also describe the two major forms of probabilistic analyses in this case study. Some of our analyses involve judgments of the probative force of the Sacco and Vanzetti evidence made by the authors and by a historian from whose work we have obtained much insight about this case. In other analyses we use probabilities to tell a variety of different stories about the probative force of this evidence. The mathematics we have at hand supplies us with an ending to each one of these stories. In some of the stories we tell, we are assisted by a computer-based system for performing probabilistic analyses on complex inference networks. The telling of all of these stories provides examples of the process of sensitivity analysis.

The probabilistic analyses we have made of the probative force of the Sacco and Vanzetti evidence appear in Chapter 6. Assessing the probative force of evidence can be decomposed in various ways. A "divide-and-conquer" strategy is frequently employed in the analysis of complex inference and decision tasks. Using this strategy, we attempt to decompose complex holistic judgments into more specific and, presumably, easier judgments. However, there are advantages and disadvantages in this strategy. In decomposing the task of assessing the force of evidence, we make the judgments more specific, but more judgments are required, some of which are

not so easy to make. The probabilistic judgments we discuss were provided in both holistic and decomposed situations. The stories we tell about the Sacco and Vanzetti evidence are all told using numbers. Our mathematical methods, and computer-based systems, allow us to combine these numbers in consistent ways in order to provide endings for each of these stories. But the numerical ingredients and endings of these stories can all be translated into words. These stories are all based on decompositions of the task of assessing the probative force of evidence that are consistent with the chains of reasoning we have constructed using Wigmore's methods. These stories reveal some of the interesting and important subtleties in evidence that are so frequently overlooked.

In Chapter 7 we discuss the relevance of our case study to inferences based on masses of evidence as they are encountered in fields such as history, law, probability, psychology, and others. The fields of law and history are especially interesting, since attorneys, judges and jurors, as well as historians, must be prepared to evaluate masses of evidence having virtually any conceivable substance. Inferences on the basis of the Sacco and Vanzetti evidence are indeed complex. The general topic of complexity is a matter of great interest these days among researchers from many disciplines. We mention how the formal methods we have employed in this case study are able to capture many elements of the inherent complexity of probabilistic reasoning.

In Chapter 8 we express our own conclusions about the probative force of the trial and post-trial evidence in the case of Sacco and Vanzetti. Our case study reports the experience we have had in trying to make sense of a mass of evidence. It is an experience we wish to share with others whose probabilistic reasoning tasks may involve the same problems we have encountered. The story of Sacco and Vanzetti is one of tragedy, to them and to society. Sadly, each new age will require the performance of complex probabilistic reasoning tasks by persons who encounter and study human tragedy; our age is no exception. We have all recently experienced "seismic tremors" of perhaps the same order of magnitude as those experienced in the trial and execution of Sacco and Vanzetti. There are some definite connections between events in the Sacco and Vanzetti case and the recent tragedy in Oklahoma City in April of 1995. The current murder trial of the American athlete Orenthal James (OJ) Simpson is now attracting worldwide attention. Though this trial may never become a *cause célèbre*, as did the trial of Sacco and Vanzetti, judges, jurors, and perhaps historians will certainly have a mass of evidence to consider in rendering their probabilistic judgments about this case.

We live in an age when we are still more adept at gathering, transmitting, storing, and retrieving information than we are at putting this information to use in drawing conclusions from it. To use information as evidence, we must establish its relevance, credibility, and inferential force credentials. There is definite progress being made by persons from many disciplines now concerned about complex probabilistic reasoning based on masses of evidence. Our case study records some of the progress that has been made as well as some of the problems that will continue to be the subject of discourse and debate in the future.

JOSEPH B. KADANE  
DAVID A. SCHUM



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We have many individuals to thank for their guidance and active assistance during our present work. We are especially grateful to the historian David E. Kaiser (now at The Naval War College, Newport, Rhode Island ). We drew heavily upon his work with William Young on the trial and post-trial evidence in the Sacco and Vanzetti case. He assisted us in testing the plausibility of chains of reasoning in the network of arguments that forms the basis for our probabilistic analyses. He also provided us with a variety of probability assessments regarding the probative force of the evidence in this case. We are also indebted to Francis Russell, who gave us very valuable advice early in the project. We are sad that he did not live to participate with us in this research. We have another historian to thank but we cannot identify him or her. This person, identified only as a historian, served on a National Science Foundation panel that reviewed our grant proposal. This person provided some valuable suggestions about historical research that we took very seriously.

In the field of forensic science we received assistance from Professor James E. Starrs (George Washington University), whose work on the trial and post-trial firearms evidence in the Sacco and Vanzetti case was also a source of inspiration. Professor Starrs was helpful to us in the initial stages of our case study as we began to marshal the evidence in this case. We have drawn heavily upon the wisdom and experience of scholars and practitioners in the field of law. Especially helpful to us have been Professors Terence Anderson (Law School, University of Miami), Jeffrey S. Parker (George Mason University Law School), The Honorable Tom Smith (Judge, Provincial Court, Williams Lake, British Columbia, Canada), Peter Tillers (Cardozo School of Law), William Twining (School of Laws, University College, London), and a criminal trial attorney, Kenneth Auerbach (Silver Spring, Md.). Pro-

fessors Anderson, Tillers, and Twining are presently the world's authorities on Wigmore's work on judicial proof upon which we have drawn so heavily in our own work. Our interactions with them over the years has been as inspirational as it has been enjoyable.

We are particularly indebted to Kenneth Auerbach, Ward Edwards (University of Southern California), Andrew Gelman (University of California, Berkeley), Edward Herskovits (Noetic Systems, Inc., Baltimore, Md.), The Honorable Tom Smith, Peter Tillers, and William Twining for their most valuable comments on an earlier draft of this book. Most of their very helpful suggestions found their way into the final version of this book. Wiley statistics editors Kate Roach and Steve Quigley believed in this project and accepted it when it was just a plan. We have been so pleased to work once again with Dana Andrus, who edited our manuscript, and with Rosalyn Farkas of John Wiley & Sons. Their absolutely world-class editorial assistance made the final stages of our work so much easier and enjoyable. It may be a rare event for authors to look forward to working with book editors. But this has been our experience with Dana Andrus and Rosalyn Farkas, who went far beyond simply correcting grammatical and stylistic mistakes. We thank them very much.

The Sacco and Vanzetti case is a highly contentious matter. There is now much contention in the field of probability as it concerns drawing conclusions from evidence having many interesting properties. Persons who write books about contentious matters, especially when they combine two of them, cannot hope to please everyone. We have received very helpful assistance from the persons just mentioned, as well as from the many persons whose works appear on our reference list. But in the end, Kadane and Schum bear the responsibility for what is recorded in this case study.

J. B. K.  
D. A. S.

# A Probabilistic Analysis of the Sacco and Vanzetti Evidence

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## CHAPTER 1

# Different Wine in an Old Bottle

Trials at law become famous for different reasons. Some trials are said to be *landmarks* because they involve judgments by courts that establish important legal precedents and new or revised procedural rules. A very good example is the case of Edward Bushell that took place in England in 1670. Bushell was a member of the jury that had acquitted the Quakers William Penn and William Mead of the charge of inciting to riot. At the time jurors could be attainted and themselves tried for rendering a verdict counter to what the court believed was manifest evidence. Of course this was as unfair to the defendant as it was unpleasant to the jury. But in Bushell's trial the chief justice, John Vaughan, made a ruling that established, in our Anglo-American judicial system, the independence of juries as far as their judgments of the credibility and probative force of evidence are concerned. Justice Vaughan ruled that jurors could not answer questions of law but courts could not answer questions of fact, a division of labor we take for granted in jury trials today. Another example of a landmark case closer in time (1966) is *Miranda v. Arizona* (384 U.S. 436). Miranda's confession in this case was disallowed as evidence against him on grounds that it had been obtained in violation of his constitutional privilege against self-incrimination. The Supreme Court's ruling in this case has had a profound effect upon police procedures following the apprehension of a person in connection with an alleged criminal offense.

Trials can also become famous not because they are precedent shattering or rule altering but because of the immediate and profound impact they have on society. They may involve notable persons, important social or political issues, or controversial verdicts. In such instances they are said to be *causes célèbres*. In any trial there are multiple stakeholders whose different values systems collide, often violently. These stakeholders include the parties in contention, their advocates, court officials, and of course society at large. The fairness and rectitude of decisions made in the settlement of legal disputes are attributes upon which a high value is placed by most members of our society. When there becomes widespread belief that a trial is unjust and the verdict reached is incorrect, the trial may become a *cause célèbre*. Not all alleged miscarriages of justice become *causes célèbres*; it depends on many factors including the issues at trial and their perceived significance, the persons involved, and the times.

This book concerns probabilistic analyses of the evidence in a trial that is arguably the ranking *cause célèbre* in all of American legal history: *Commonwealth of Massachusetts v. Nicola Sacco and Bartolomeo Vanzetti*. This trial began in Dedham, Massachusetts, on May 31, 1921, and ended on July 13, 1921; each of the defendants was found guilty of first-degree murder in the slaying of two payroll guards, William Parmenter and Alessandro Berardelli, in South Braintree, Massachusetts, on April 15, 1920. The judge in this trial, Webster Thayer, made no rulings in this case that identify it as a landmark. Instead, his legacy in this case involves the charge that he presided over one of the worst miscarriages of justice in American legal history. A further possibility is that Sacco and Vanzetti were framed by the prosecution for a crime in which they had no hand in committing.

Following numerous motions, petitions, and appeals made on their behalf, extending over a period of six years, Sacco and Vanzetti were put to death by electrocution on August 23, 1927. Both claimed their innocence of the South Braintree crime until the very end. By most standards Sacco and Vanzetti were hardly notable persons; Sacco was a shoe edger and Vanzetti a fish peddler. But they held political beliefs that were objectionable to many Americans. Implacable anarchists, Sacco and Vanzetti at least participated in the distribution of literature of a seditious nature; they may even have participated in one or more acts of violence whose frequency caused so much public outrage at the time. Individuals and institutions had become targets of what we now term "terrorism." There is now a well-researched account by the historian Paul Avrich (1991) of the anarchism of Sacco and Vanzetti, the acts of violence associated with the anarchistic movement, and the extent to which Sacco and/or Vanzetti may have been associated with or at least witting of some of these acts.

The reader, recalling his/her reaction to the bombing of the World Trade Center in New York on February 26, 1993, or the Murrah Federal Building in Oklahoma City on April 19, 1995, may be able to empathize with the fear and rage expressed by many Americans nearly a century ago. Acts of violence, allegedly associated with anarchists, occurred before the time of Sacco and Vanzetti. On May 3, 1886, police intervened in a strike at the McCormick Harvesting Machine Company in Chicago during which six persons were killed. At a protest meeting in Haymarket Square on the next day, someone threw an explosive device that killed seven policemen and wounded others. Four anarchists were later executed for their alleged part in this incident; a fifth committed suicide. Martyrs were thus created for the anarchist movement and in subsequent years acts of violence associated with anarchism began to occur in many locations throughout the country. In 1901 President McKinley was assassinated by an anarchist named Leon Czolgosz.

Dynamite seems to have been the anarchists' preferred instrument in the early part of this century for inducing social change (today it is fertilizer mixed with fuel oil). In 1905 Luigi Galleani, a prominent anarchist, circulated among his followers a book he had written on the construction of explosive devices (Avrich 1991, 98). Churches were not spared; bombs were set off in St. Patrick's Cathedral and St. Alphonsus's Church in New York in 1914. Package bombs, delivered through the mails, were frequently employed (as they still are today). Avrich (1991, 143) pro-

vides a list of thirty prominent persons to whom package bombs were sent in 1919. All of these persons had, in one way or another, reacted publicly against the anarchists. Fortunately, most of these packages, all marked SAMPLE or NOVELTY, were intercepted by the postal service. The list of intended recipients included Justice Oliver Wendell Holmes, Attorney General A. Mitchell Palmer, Secretary of Labor William B. Wilson, seven senators and congressmen, and two state governors. The rest were other public officials or persons of wealth such as John D. Rockefeller and J. P. Morgan. One anarchist who apparently failed to read Galleani's instructions carefully was Carlo Valdinoci who, on June 2, 1919, made a second attempt on the life of Attorney General Palmer. A bomb planted by Valdinoci destroyed the front of Palmer's home on R Street NW in Washington, D.C. Pieces of Carlo Valdinoci were subsequently discovered all over the neighborhood (Avrich, 1991, 153–154). This is but a sample of the bombing incidents whose frequency across the nation was indeed alarming.

Harsh governmental measures followed, especially upon America's involvement in World War I. In 1917 came the *Espionage Act* which allowed stiff penalties for any interference with the war effort; this act also allowed the postal service to prevent the mailing of any printed materials that advocated treason, insurrection, or forcible resistance to federal laws. In 1918 came the *Sedition Act* which provided penalties for, among other things, utterances or writings that exhibited abuse or disloyalty to the government, constitution, or flag of the United States. Also in 1918 an *Immigration Act* was passed that allowed for the deportation of any person advocating the forcible overthrow of the government. As expected, anarchists were not particularly eager for military service during World War I. Many fled to Mexico and other places; Sacco and Vanzetti chose Mexico. They had met for the first time in 1917 shortly before they both left for Mexico with other anarchists. At the end of World War I came further economic hardship, widespread labor unrest, and along with it the rise of Bolshevism and the "Red Scare" of 1919–1920. During this period subversives and incendiaries were thought to be lurking everywhere; public outrage increased and civil liberties came to be ignored or restrained. Some anarchists fled the country; others were deported.

So it was against this background of social and political agitation, suspicion, and violence that a ruthless but otherwise commonplace robbery and shooting took place in South Braintree, Massachusetts, about 3:00 on a Thursday afternoon, April 15, 1920. Given the anarchistic course they had taken and had shown no signs of altering, it seems very likely that Sacco and Vanzetti would have found trouble sooner or later if they had remained in America. As mentioned later, they certainly expected trouble in connection with their political activities. What is still at issue today is whether Sacco and Vanzetti deserved the particular trouble they found in connection with the events that took place on that April afternoon in South Braintree.

Herbert B. Ehrmann was a member of the defense team acting on behalf of Sacco and Vanzetti during the appeals process prior to their execution in 1927. In his book *The Case That Will Not Die* (1969), Ehrmann tells us that when Sacco and Vanzetti were executed in 1927, "a tremor of seismic proportions rolled around the world" (1969, x). One result of this seismic event has been a tidal wave of ink. It

would be no small task even to locate and count the number of books, articles, novels, plays, poems, and music written here and abroad about the Sacco and Vanzetti case and its consequences to them and to all of society. This case has attracted the attention of scholars from many disciplines including law, forensic science, history, sociology, and political science. It has been no less compelling as subject matter for dramatists, poets, the authors of novels, and even musicians. Joughin and Morgan (1964) discuss the legacy of the Sacco and Vanzetti case in the fields of law and literature. This case, being America's ranking *cause célèbre*, is comparable at least to the *Dreyfus case* in France and to the trials of *Sir Roger Casement* and the *Birmingham Six* in England. As Ehrmann noted, interest in the Sacco and Vanzetti case had not expired in 1969. Twenty-six years later, as we now write this book, interest in this case still shows few signs of expiring. However, as discussed later, there are some persons who believe that interest in this case should expire, at least regarding debates about the culpability of Sacco and/or Vanzetti in the South Braintree crime.

Is it possible that there is room for any more books on the Sacco and Vanzetti shelves? Room might certainly be made for books citing new evidence or evidence existing at the time of their trial but never introduced. The recent works of Young and Kaiser (1985), Russell (1986), Starrs (1986a, b), and Avrich (1991) certainly qualify on such grounds. Our present work does not provide any new tangible or testimonial evidence. What we do offer are structural and probabilistic methods for examining in considerable detail the original trial evidence as well as other evidence that has come to light since the trial. The methods we employ rest upon ideas that are not new; thus we do not say we are "putting new wine in an old bottle." But the wine we put in the old Sacco and Vanzetti bottle is certainly *different* from what it now contains. Sooner or later the evidential and inferential issues in this difficult and intriguing case were going to attract persons having an interest in very complex probabilistic reasoning tasks. The reasons the two of us took an interest in the case of Sacco and Vanzetti and the objectives we entertained in our study of it will emerge as we proceed in this chapter.

## 1.1 THE SOUTH BRAINTREE CRIME

Despite the notoriety of the Sacco and Vanzetti case, even today, it seems very likely that many more people have heard the names Sacco and Vanzetti than know about the details of the crime they were charged with committing. Not all persons interested in our analysis of the evidence in this case will be as familiar with these details as others who have made a study of this case at least part of their life's work. So, with apologies to the latter, here is a brief account of what happened on Pearl Street in South Braintree, Massachusetts, on April 15, 1920. More detailed narrative accounts of the crime appear in Francis Russell's book *Tragedy in Dedham* (1962, 28–48) and in Ehrmann's book *The Case That Will Not Die* (1969, 19–34). Figure 1.1 shows the location of the major points of interest in South Braintree as they appeared in 1920.



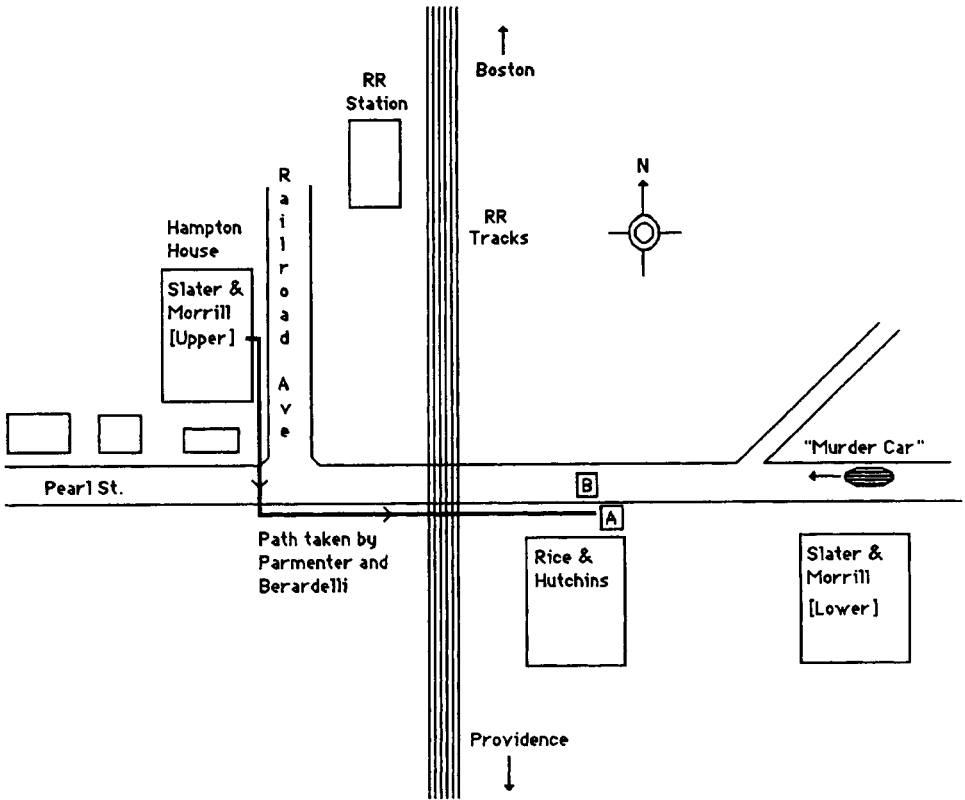


FIGURE 1.1 The scene of the crime in South Braintree, Massachusetts.

Shortly after 9:00 on the morning of April 15, 1920, an agent for the American Express Company was at the railroad station in South Braintree to meet the 9:18 train from Boston. The agent, Shelley Neal, was there to accept delivery of an iron box containing about thirty thousand dollars in bills and coin. This sum of money formed the payrolls of two shoe factories, one of which was the Slater & Morrill Company. As you see in Figure 1.1, the Slater & Morrill Company had two locations. The one just across the street from the railroad station was in a building called Hampton House. The factory in this building was referred to as the "upper" or "number one" factory. To the east, down Pearl Street, was the "lower" or "number two" Slater & Morrill factory. Hampton House also contained the express company's office and it was there that Neal and an assistant delivered the iron box that had arrived by train. One payroll in this box belonged to the Walker & Kneeland shoe company; the other, of about eighteen thousand dollars, belonged to Slater & Morrill. Neal put the Walker & Kneeland payroll in a safe in the express office and then delivered the payroll for Slater & Morrill to its offices in Hampton House. Neal was later to testify at trial about the "suspicious characters" he had seen lurking about

and an unfamiliar black touring car in which one of them was sitting. Like so many other witnesses in this case, Neal gave a story during the investigation that differed from the one he told at trial.

The workers at Slater & Morrill were paid in cash. After Neal's delivery of the payroll to Slater & Morrill, the money was sorted out into envelopes for each employee. A total of \$15,773.51 belonged to the employees of the lower Slater & Morrill factory on Pearl Street. Shortly before 3:00 in the afternoon, this portion of the payroll was ready for delivery to the lower factory. It was placed in two steel boxes, each one secured by a Yale lock. Frederick A. Parmenter, an employee of Slater & Morrill, took one box, and Alessandro Berardelli, a special officer of the town of Braintree, took the other. At just before 3:00 PM, they left Hampton House and began taking the route shown in Figure 1.1. They crossed Pearl Street and walked east toward the lower Slater & Morrill factory. It was the same route Parmenter and Berardelli had taken on many previous payroll deliveries, but usually accompanied by a third guard.

As they approached another shoe factory on Pearl Street, Rice & Hutchins, they must have noticed the two men who witnesses later said were leaning against a pipe-rail fence in front of the Rice & Hutchins factory. In any case, Parmenter and Berardelli passed in front of the two men and were almost immediately attacked by them from behind. In the struggle that followed, Berardelli was shot four times, the last occurring when he was on his knees at location A in Figure 1.1. Parmenter was shot once in the chest and once in the back as he staggered and fell in the street at location B in Figure 1.1. The two assailants then picked up the payroll boxes and fired several other shots; no one else was hit. One of the shots was apparently a signal, since at about this time a dark-colored touring car, which witnesses said had been parked in front of the lower Slater & Morrill factory, moved west down Pearl Street stopping to pick up the two bandits and the payroll boxes. Witnesses said there were three other men in this car before they were joined by the two bandits. The car, later called the "murder car" or the "bandit car," then moved west along Pearl Street and out of town. In a short time Parmenter and Berardelli were taken to a nearby house. Berardelli was dead by the time a medical examiner arrived at 4:00 PM; Parmenter died at 5:00 the next morning. In a brief period of consciousness following an operation to remove the two slugs from his body, Parmenter said he did not recognize the two gunmen he and Berardelli had encountered.

There were many eyewitnesses to events that took place before, during, and after the robbery and shooting. The contradictory and conflicting testimony they gave at trial forms a very important part of our later analysis. Incidents of robbery and shootings involving armed gangs, similar to the incident in South Braintree, were vexing the police and the public at the time. In fact, at the time of the South Braintree crime, police were still attempting to find the persons responsible for an attempted robbery of a payroll belonging to another shoe manufacturing company, the L. Q. White Company of nearby Bridgewater, Massachusetts. This incident had taken place four months earlier on December 24, 1919. A gang and a touring car, similar to the one described in connection with the South Braintree crime, were involved in the Bridgewater incident in which, fortunately, no one had been injured. Quite

naturally the police entertained the hypothesis that the Bridgewater and South Braintree incidents were the work of the same gang.

The crime in South Braintree seemed to the police to have been well planned, possibly involving insiders who knew about the timing of the payroll transfers. Recall Neal's testimony about observing the suspicious characters and the touring car on the morning of April 15. An interesting question concerns why the gang, if it was so well informed, did not try to rob Neal instead of Parmenter and Berardelli. They could have stolen nearly twice the amount of money at perhaps the same risk to themselves. If the men Neal says he observed were later involved in the robbery and shooting, one guess is that they did not know the iron box Neal delivered to Hampton House contained nearly twice the amount of money they actually stole. But Russell argues that the South Braintree crime was the work of "grimly determined amateurs" who initially planned to rob Neal but then, for some reason, backed off (1986, 49). By the way, to this day no one knows what happened to the \$15,773.51 stolen in South Braintree. No evidence has ever come to light that either Sacco or Vanzetti had any of this money.

## 1.2 THE ARREST AND CHARGING OF SACCO AND VANZETTI

The police did know that a car, belonging to a man named Francis J. Murphy, had been reported stolen in Needham, Massachusetts, on November 23, 1919. They also knew that Massachusetts license plate 49783 had been stolen from a car belonging to Warren H. Ellis, also of Needham. Both of these events were significant. Just two days after the crime in South Braintree, Charles Fuller and Max Wind, while riding horseback in a wooded area near West Bridgewater (about eighteen miles south of South Braintree), found an abandoned car having no license plates; they also observed tracks of another car nearby. The police were able to identify the abandoned car as the one belonging to Murphy. Several witnesses to the crime in South Braintree believed this stolen car to be the murder car. One witness later claimed that the murder car bore the license: 49783. The police also believed this car to have been the one used in the Bridgewater robbery attempt. The finding of this stolen car directed the attention of the police southward to the vicinity of Bridgewater. But other events were pointing in this same direction. These events, involving persons associated with the anarchist movement, converged to form the first strands of the noose later placed around the necks of Sacco and Vanzetti.

The first event concerned the increasing heat being put on suspected anarchists; many were being deported and some left the country on their own accord. One person who was served deportation orders in connection with anarchistic activities was Ferruccio Coacci. He was supposed to have reported for deportation on April 15, 1920, but he did not appear. Coacci, who was living in West Bridgewater at the time, called the immigration office on April 16 to say that his wife had been ill and that he needed some extra time to care for her. As it happened, Coacci had been employed by both the L.Q. White and Slater & Morrill shoe factories. The chief of police in Bridgewater, Michael Stewart, was asked by an immigration official to check

up on Coacci. On April 16, Chief Stewart sent two officers to Coacci's residence in West Bridgewater, a house called "Puffer's Place," named after its owner Clarence Puffer. Coacci and his family shared this residence with another person whom we will meet shortly, Mario Buda (alias Mike Boda). The two officers went to Puffer's Place and first observed that Mrs. Coacci seemed to be in good health. But they also observed Coacci in the act of packing his bags. They offered to give him a bit more time but Coacci refused, saying he wished to leave immediately. One of the officers even drove Coacci to the immigration station; he was on a ship bound for Italy on April 18. These events were duly reported to Chief Stewart.

The next day, April 17, the abandoned car and the tracks of a second car were found by Fuller and Wind just a short distance away from Puffer's Place. It did not take Chief Stewart long to generate the hypothesis that Coacci was involved in the South Braintree crime. He at least knew (1) that Coacci had not reported for deportation on the date of the South Braintree crime, (2) that Coacci had apparently lied about the condition of his wife, and (3) that he was now in a great hurry to leave the country. He may also have known that Coacci had worked for both the L.Q. White and Slater & Morrill shoe companies. This information, plus the finding of the car and the second set of tracks by Fuller and Wind, allowed Stewart to believe that he was on the correct investigative path. Stewart must have regretted the enthusiasm of his own officers in assisting Coacci to leave the country. Back to Shelly Neal for a moment. Neal had also told investigating officers that he observed *two* unfamiliar cars in the vicinity as he was delivering the iron box with the payrolls on the morning of April 15. This led Stewart to suspect that there were two cars employed in the South Braintree crime.

On April 20, Stewart and officer Albert Brouillard, of the Massachusetts State Police, paid a visit to Puffer's Place. Coacci was gone by this time, but Mario Buda was there. In the process of questioning Buda, Chief Stewart learned that Buda owned a car but that it was being repaired at the Elm Street Garage, managed by one Simon Johnson and his brother. They also found tracks of a second car in the shed where Buda said he kept his car. In light of this information about Buda's living with the Coacci family and owning a car, Stewart refined his hypothesis to include the participation of Buda in the South Braintree crime. The next day Stewart returned to Puffer's Place only to find Buda gone; Buda had slipped out the back door when he saw the police coming. Stewart then went to the Elm Street Garage and found that Buda's car was still there. Hoping to set a trap for the South Braintree bandits, Stewart asked Simon Johnson to call him immediately if anyone came to pick up Buda's car.

Among the anarchists feeling the heat of increased police activity were Nicola Sacco and Bartolomeo Vanzetti. This heat grew much stronger when they learned that one of their fellow anarchists, Andrea Salsedo, either jumped from or was pushed out of a window on the fourteenth floor of a building where he was being held by the police. They were able to read in the newspapers how Salsedo had, before he committed suicide (according to the news accounts), compromised the names and activities of many anarchists. Sacco had applied for a passport to return to Italy. He had quit his job with the 3-K Shoe Company and had intended to leave

with his family in a short time. But Salsedo's alleged revelations to the police gave rise to another matter of some concern among the anarchists, namely what to do with materials that might be incriminating to the anarchistic movement. Other strands in the noose around Sacco and Vanzetti's necks were being formed.

In Boston on May 4, Sacco and Vanzetti met with two other anarchists to decide upon a course of action in disposing of incriminating evidence. They met with Riccardo Orciani and Mario Buda, whom we have already met. Buda had previously called Simon Johnson to see if the repairs on his car were complete; he was told that his car was ready to be picked up. A decision was made to use Buda's car to collect various items of physical evidence of an incriminating nature. Sacco and Vanzetti were later to claim that the incriminating evidence they were attempting to collect was "radical literature." Avrigh gives an account of how the term "radical literature" was a euphemism then used by the anarchists for *dynamite* (1991, 204). In any case, the four anarchists agreed to meet the following day in West Bridgewater at the Elm Street Garage. So, on May 5, 1920, Sacco, Vanzetti, Orciani, and Buda headed toward West Bridgewater, Sacco and Vanzetti by connecting streetcars from Stoughton, where Sacco lived, and Orciani and Buda by motorcycle. The four men arrived at the Elm Street garage after it had closed. They then went to the home of Simon Johnson where Buda asked for his car. Johnson, noting that Buda's car lacked 1920 license plates, advised Buda not to take it. Buda first said they would take the car anyway but then changed his mind. While this discussion was taking place, Johnson's wife was next door calling the police to tell them that Buda had come to pick up his car. Buda and Orciani left the scene on Orciani's motorcycle.

Mario Buda was certainly no choirboy. In an account given by Avrigh (1991, 204–207), upon hearing of Sacco and Vanzetti's indictment on September 11, Buda planned an act of reprisal. On September 16 he placed a bomb, set to go off at noon, in a horse-drawn carriage at the corner of Wall and Broad Streets in New York. The bomb went off at 12:01 PM; thirty-three persons were killed and more than two hundred were injured. Property damage exceeded two million dollars (in 1920 money). As mentioned again in Section 7.2, this was the worst act of its kind in American history, until April 19, 1995. Buda referred to his bombs as "poofs" (Avrigh 1991, 103). The "poof" Buda set off in New York killed no members of the government so despised by the anarchists but secretaries, stenographers, and other innocents on their way to lunch. Passing through various nets designed to catch anarchists, Buda returned to Italy and was never apprehended.

Chief Stewart's trap, set for Mario Buda at least, was now about to snap shut on Sacco and Vanzetti who, after leaving the Johnsons' home on the night of May 5, had boarded a streetcar in Bridgewater and were on their way to Brockton. Sacco and Vanzetti were gone by the time Chief Stewart arrived at the Johnson's home. It is not clear to this day how Stewart knew or suspected that the two men who left the Johnson's home on foot had boarded a streetcar in Bridgewater. But Stewart called the Brockton police telling them to apprehend two foreigners on the streetcar who, he said, had just tried to steal a car. At this time Chief Stewart had apparently never heard of Sacco and Vanzetti. In response to Stewart's call, two police officers from the Campello station in Brockton, Officers Michael Connolly and Earl Vaughn,

boarded the streetcar and arrested Sacco and Vanzetti on the charge of being “suspicious persons.”

Our narrative ends at this point because what transpired during their arrest and their interrogation at Brockton police headquarters are matters of controversy and were later crucial in the ultimate conviction of Sacco and Vanzetti for the crime in South Braintree. These matters concern a most important element in the prosecution’s case against them: their alleged *consciousness of guilt* in the South Braintree crime. We return to this crucial matter at several points in our analysis of the trial evidence. A few details, however, are uncontested; they served to form some of the strongest strands in the noose growing around their necks. Both Sacco and Vanzetti were armed at the time of their arrest. Vanzetti was carrying a 38-caliber Harrington & Richardson revolver with five chambered rounds; he also had four shotgun shells. Sacco was carrying a 32-caliber Colt automatic with one round chambered and eight others in a clip. In addition he was carrying twenty-three other 32-caliber cartridges of various makes. Also found on Sacco’s person was a penciled announcement of a speech, having radical overtones, to be delivered by Vanzetti at some time in the future.

As we proceed, we will make frequent reference to the transcript of the trial in this case. This transcript is available and carries the title: *The Sacco-Vanzetti Case: Transcript of the Record of the Trial of Nicola Sacco and Bartolomeo Vanzetti in the Courts of Massachusetts and Subsequent Proceedings 1920–7*. The 1969 edition of this transcript we have used is in six volumes, only two of which concern the trial itself. In our present study we reference this transcript as SVTT, followed by volume and page number.

The Miranda ruling concerning self-incrimination, mentioned earlier, was years in the future. However, Chief Stewart testified that he did advise Sacco and Vanzetti that they did not have to answer his questions but, if they did, their answers could later be used as evidence (SVTT, I, 842). During their initial interrogation Sacco and Vanzetti each wove a web of lies concerning their association with the anarchistic movement and about their presence in Bridgewater; these lies would come back to haunt them at their trial. Both Sacco and Vanzetti said they had never heard of either Buda or Coacci and were both evasive when asked if they were anarchists. They said they had been in Bridgewater to visit friends on May 5 and that they had never been there before. What seems clear from the record, however, is that in their *initial* interrogation they were never asked any questions concerning the crime in South Braintree. Such questions were later asked, however, by another actor who now appears on the stage: Frederick G. Katzmann, the district attorney who assumed responsibility for their interrogation and who was later to be the lead prosecuting attorney at their trial. In the meantime Sacco and Vanzetti were held in custody in Brockton on a charge of carrying concealed weapons. A natural hypothesis the police entertained at this moment was that the five South Braintree bandits were Coacci, Buda, Orciani, Sacco, and Vanzetti.

As Katzmann’s investigation proceeded, many witnesses were interviewed regarding the South Braintree crime. In addition there was the testimony of other witnesses regarding the attempted robbery of the L.Q. White shoe factory in Bridgewa-