ANALYSIS OF EVIDENCE

HOW TO DO THINGS WITH FACTS BASED ON WIGMORE'S SCIENCE OF JUDICIAL PROOF

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Little, Brown and Company

Analysis of Evidence

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Preface

The Why, What, and How of this Book

The Why: A Practical Note

Once upon a time a well known law firm became involved in a multimillion dollar law suit on behalf of its main corporate client. It was the biggest case in the history of the firm. Three of the partners (the senior partner in the firm and two litigation partners), six young associates, and four paralegals worked on preparing the case. Hundreds of thousands of dollars were spent on document copying, depositions, and other investigations; hundreds of hours were spent on preliminary negotiations with the other side; thousands were invested in discovery and legal research. Eventually the day came when all negotiations had failed and discovery was as complete as it could be, and the stage was set for preparing for trial.

The senior litigation partner called the junior associate to meet her in the special document room that had been set aside solely for this case. The room was filled with files, documents produced in discovery, deposition transcripts, memoranda, correspondence, and reports of experts for both sides, all carefully listed and indexed. "Ed," said the partner, "we have busted our guts in collecting and indexing this mass of material. All that needs to be done is to analyze and organize it for trial. That's your job. Start now." The young associate looked around at the tons of paper. His heart sank. Nothing in law school had prepared him for this. He did not even know where to begin. He broke down and wept.

The hypothetical is unrealistic, but many practicing lawyers tell stories that are almost as extreme. So do historians, police detectives, investigative journalists, intelligence analysts, and other professionals. Such stories are part of professional mythology in many spheres of activity. Like all myths, this one is open to several interpretations. For present purposes, let us concentrate on the senior litigation partner. Clearly, she made a misjudgment. But in what did this consist? Did she believe that the law schools' standard

claim that they teach students "to think like lawyers" includes a claim that they also teach skills of ordering and analyzing facts? Did she assume that such analysis is something that can be done instinctively by any intelligent person? Did she really believe that this aspect of trial practice was so straightforward that, even in an important case, it could be entrusted to an inexperienced junior colleague? Or did she think that cataloging documents is more specialized work than analyzing evidence?

This book starts from the premise that such assumptions are false. Basic skills in ordering and analyzing evidence are, in our view, important and teachable skills that are generally neglected in legal education. They involve rigorous, but quite straightforward, intellectual procedures that are most efficiently and effectively learned by direct study. One can muddle through relying on instinct and trial and error, and over time good lawyers become highly skilled at fact-handling. But, essentially because it is a species of applied logic, we believe that this is a form of intellectual training that is both suited to and best done in law school.

The purpose of this book is to lay a foundation for mastering a necessary set of basic professional skills in fact analysis. These revolve around constructing, reconstructing, and criticizing arguments about disputed questions of fact. They include techniques for structuring a problem and organizing a mass of data (macroscopic analysis) and techniques for detailed analysis and evaluation of particular data and phases of complex arguments (microscopic analysis). Our main purpose is to present a vehicle for learning certain usable basic skills of analysis, argument, and practical problem-solving; hence this book can be used as core or supplemental material in a variety of ways and in a variety of courses. The obvious and tested uses are in basic or advanced courses in evidence and trial or pretrial advocacy; but we believe that it could be usefully employed as well in any skills course that seeks to develop the intellectual component of practical lawyering skills (and indeed in pre-law and other undergraduate courses concerned with rigorous reasoning about disputed questions of fact).

This book represents a departure from traditional approaches to the study of evidence. For that reason, it is appropriate to begin by saying something about the history, rationale, and methods of our approach and explaining its relationship to standard views about lawyering, legal education, and courses on evidence. Let us begin by taking a second look at the story of the weeping associate. The account in the parable as it was presented above could not have happened in real life. For one thing, legal research, fact analysis, and procedural problems are all interconnected at every stage of litigation. Presentation and diagnosis of a client's problem,

^{1.} Underlying these intellectual skills are fundamental theoretical questions about the nature of the world of fact and what is involved in trying to know, understand, and argue about it. These questions are perennially controversial. See generally, W. Twining, Rethinking Evidence (1990). Since particular techniques of analysis are premised on assumptions concerning contested questions of philosophy, we touch on these questions and make our working assumptions as clear as necessary.

constructing a theory of the case, researching the applicable law, and factual investigation and discovery do not divide neatly into separate operations that can be taken one at a time in a series of distinct stages. They all interact with each other at every stage. For example, taking a deposition typically presupposes that a good deal of information has already been gathered, that the nature of the problem has been diagnosed, at least provisionally, and that the legal rules applicable to the situation have been ascertained. Thus a more plausible, but nevertheless greatly simplified, account of what happened might go as follows.

A complaint has been filed alleging that the corporation has engaged in predatory pricing and other unfair trade practices in selling its goods in violation of the antitrust laws. The senior partner has read the complaint and assembled a team of three associates to help her with the preliminary analysis. The four proceed to the corporation's executive offices. The president and the vice president for sales steadfastly deny that any of their sales representatives have engaged in any improper practices. The senior partner sends two associates to the library to do research to determine whether the complaint alleges facts sufficient to state a claim under each of the antitrust laws identified. She tells the vice president that she will assign Ed to interview sales representatives and review contracts, correspondence, internal memoranda, purchase orders, invoices, and other documents to determine what evidence may exist within the corporation to prove or disprove allegations in the complaint so that the firm can develop an answer and discovery strategies. "Ed," she says, "you stay here. Interview as many sales people as possible and assemble a sample of the documents that may be relevant to the allegations in the complaint. By the end of next week, let me have a detailed memorandum analyzing the evidence found and recommending what further investigations we should undertake." Although weeping may not be one of Ed's options, we postulate that Ed would approach the assignment with a sense of despair and would reflect, at least briefly, on how inadequately law school had prepared him for his first, major, nonlibrary assignment as a lawyer.

The Why: An Historical and Theoretical Note

Every lawyer must know enough about basic legal principles to be able to identify potential legal problems in a client's request for assistance. The lawyer must have research skills sufficient to find the authorities from which to derive legal principles that are relevant to resolving the problems. The lawyer must have investigative skills sufficient to discover and document facts that are relevant in light of available legal principles. The lawyer must have the interpersonal and communication skills necessary to gather and transmit information effectively. The lawyer must know how to employ such knowledge and skills effectively in different roles — as counsellor, as draftsman, as negotiator, and as advocate. In all the roles and for each of the tasks, however, the lawyer must be able to analyze both the law and the

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facts and to relate the two. The lawyer must have skill in both law analysis and fact analysis and be able to combine the two effectively. Both are aspects of practical reasoning, but the specific methods of reasoning required for each component differ. Skill in one does not necessarily produce skill in the other. The distinctions between the two are central to this book.

Legal analysis is familiar to students, teachers, and practitioners of law. Legal analysis requires reasoning and analytic skills necessary to derive and apply legal principles to a specific set of facts. The case method was designed to teach these skills. The facts are given in the case at hand, in the teacher's hypothetical, or in the partner's assignment memorandum to the law clerk. The student or the clerk is required to determine from the cases or other authorities the relevant legal principles and, in light of how those principles have been applied in analogous situations, to determine how they would, should, or could be applied to the facts given.

Legal analysis ordinarily requires analysis of the facts, but customarily this analysis is limited to selection and variation and to identification of facts needed and lines of investigation to be pursued. Which of the given facts are likely to be (or should be) perceived as important by the court? How can the facts be structured to make it clear that the case at hand falls clearly within the rule for which the student or practitioner contends? What additional facts are necessary to determine the principles to be applied? Although facts are crucial in law analysis, the facts are ordinarily treated as given and are used to manipulate and test the scope and applicability of legal rules.

Factual analysis is different. It is more familiar to practitioners than to students. The skills necessary are those required to organize and analyze a mass of raw data — the evidence actually or potentially available — and to determine the inferences that can properly be drawn from that data in relation to the ultimate facts in issue in a case. To illustrate the distinction. factual analysis ordinarily assumes that the applicable legal principles are given. Agreed jury instructions for a trial, an indictment, or the settled pleadings would be examples. From these the lawyer can determine the ultimate factual propositions that must be proved if the plaintiff or prosecutor is to win. The analytic and reasoning task for the lawyer then becomes determining whether the factual data available as evidence support inferences that can be ordered to frame a compelling argument that the elements of the ultimate proposition have or have not been proven according to the applicable standard of proof. Although the principles of logic are involved in both legal analysis and factual analysis, the application of these principles in factual analysis differs from their application in legal analysis.2

^{2.} The evaluative component in lawyers' notions of "questions of fact" will be considered below in Chapter 6. See generally Zuckerman, Law, Fact or Justice?, 66 B.U.L. Rev. 487 (1986). The separate, but related, issues relating to questions of professional ethics will be a recurring theme of this book.

A simple illustration may help clarify the distinctions between the two kinds of analysis. Client Smith has tearfully told lawyer Brown: "I saw the housekeeper enter my hotel room as I was leaving for breakfast. When I returned, my diamond bracelet was missing. The hotel is responsible. I want them to pay me \$2500 so I can replace it." These facts are sufficient to permit Brown to send her newest law clerk, Jones, off to the library to determine whether Smith may have a claim against the hotel. Through careful research and analysis of the law, Jones is able to report that controlling precedents establish the following: If the preponderance of the evidence shows that a housekeeper employed by a licensed public hotel stole personal property from the room of a paying guest, then the hotel is liable to pay the guest damages equal to the fair market value of the property on the date it was stolen. The same law clerk should quickly identify some of the factual inquiries necessary to bring Smith's claim within the rule: Was the hotel publicly licensed? Was Smith a paying guest? Did such a bracelet in fact exist? Was Smith the owner? If so, what was its fair market value on the date it was stolen? Assuming all those questions are satisfactorily answered, what remains?

Brown still has a difficult task. What time did Smith leave the room? What time did she return to it? If Smith says she left at 8:30 A.M. and returned at 10:30 A.M., how strong is the inference that: "It was the person Smith saw entering the room at 8:30 A.M. who stole the bracelet"? Assume Smith cannot identify the particular person, but can only testify that: "The person who entered the room at 8:30 A.M. was a woman with dark brown hair wearing a black and white uniform with the emblem of the Royal Hotel on it and carrying an armful of towels." How strong is the inference that: "It was a housekeeper employed by the hotel that entered Smith's room at 8:30 A.M."? What of Smith's credibility? Perhaps she lost the bracelet elsewhere and is pursuing this claim because she had no insurance.

Even before Brown files suit, she will have to confront and resolve these problems. Additional evidence is needed. After the suit is filed, the problems may become more complex. Assume, for example, the hotel produces evidence that the uniform that all housekeepers are required to wear includes a cap that, properly worn, conceals their hair and that hotel policy prohibits housekeeping staff from entering guest rooms prior to 9:00 A.M. unless specially requested by the guest. Brown must now analyze not only the inferences that can be drawn from the evidence she might present on behalf of Smith but also the conflicting inferences that are suggested by the hotel's evidence. She must determine the net effect of all the evidence in relation to the ultimate fact(s) that are disputed and must be proved: "Smith's bracelet was taken from her hotel room by a housekeeper employed by the hotel." (She may now wish to send Jones back to the library to determine whether the hotel would be liable for negligence if an imposter wearing a housekeeper's uniform was the thief.) These judgments will provide the basis for her decision to recommend dropping the claim, settling for a particular amount, or taking the case to trial.

Law analysis and fact analysis are reflexive. The initial law analysis developed a principle that identified clear areas where further fact investigation and analysis were needed. The additional facts developed would require additional research and analysis of the law — for instance, "Is a statement of policy by an employer admissible as evidence to show that all employees behaved in accord with the policy?" Nonetheless, the distinctions between legal and factual analysis are important. Moreover, we believe that factual analysis has not received adequate attention in legal education.

In the United States, a single insight contributed heavily to the development of the university law school. Christopher Columbus Langdell saw that scientific methods of inquiry and reasoning could be applied, using reported decisions as the data. From this insight, he argued that scholars could engage in the study of law in a manner consistent with the tradition of rational inquiry developed in the great universities and that law scholars could cull and classify the available data, the reported decisions, and organize them for presentation to students. Langdell suggested students could learn appropriate methods of inquiry and analysis from studying the reported cases and at the same time could learn by induction and application the basic legal principles deemed by their faculty to be necessary to sound legal practice. The case method develops skill in rational inquiry to discover relevant principles of law and in rational argument to apply these principles to known sets of facts. In the reported decisions and in the hypothetical problems presented by the teacher, the facts are selected and given, usually in fairly abstract fashion. The student is challenged to find, analyze, and apply the available legal principles to those facts. The student's ability to do this work can be rigorously evaluated through his or her written and oral products. Through this method, students often develop skills of a high order in the law analysis component of legal reasoning. Langdell and his disciples were successful in developing and implementing the method and in communicating their insights. Their insights led to the establishment of the legendary American university law school with its case books and quasi-socratic methods of instruction.

The case method, however, deals primarily and almost exclusively with the law analysis component of legal reasoning. The method deals only secondarily with problems of fact analysis. Reported decisions present distilled facts in which the inferences have already been largely drawn and the factual issues, if any, have been limited and defined. Although lines of factual inquiry and alternate means of proof might be considered, the method does not provide comparable opportunities for analyzing and organizing facts in relation to known or postulated legal principles. Students are systematically denied access to the mass of raw data, the evidence and potential evidence that lawyers preparing a case must analyze and develop.

Much that Langdell and his contemporaries produced from their scholarly application of the method has not survived. But the method has been refined and proved adaptable to different perceptions of the functions and applications of law. It remains dominant in legal scholarship and teaching, and, so long as legal scholars remain committed to the belief that their enterprise should be governed and evaluated by the principles of rational inquiry, the method is likely to continue to occupy a commanding position in both areas.

At the same time, scholars, educators, and practitioners have long questioned the near total dominance of the case method as a method of inquiry and of education.3 In particular, the profession and the legal academy have recognized that the analytical skills and substantive knowledge produced by the case method of study are necessary but not sufficient to the rendition of competent legal services. The contemporary expansion and changing nature of the legal profession, particularly in the United States, has produced a strong demand that law schools expand their curricula to include training in other skills lawyers need to perform basic lawvering tasks — interviewing and counselling, negotiation, trial advocacy, and the like. As a result, most law schools have incorporated substantial skills training offerings into their curricula. Programs using simulation techniques to provide training in trial practice and other lawyering tasks have flourished. Clinical programs have been developed to provide interested students controlled practice opportunities within the educational environment.

These offerings focus upon lawyering tasks that require fact analysis — the development, analysis, and marshalling of raw data — as well as law analysis. Interviewing and counselling programs attempt to teach the students to gather facts and to use them in light of available legal principles to counsel a client. Trial advocacy programs require students sometimes to gather and always to analyze, marshall, and present facts to a tribunal in a manner consistent with the rules of the tribunal and likely to be persuasive in light of the available legal principles. In our view, however, legal educators have not developed a method of training in fact analysis that is comparable in rigor to the training in legal analysis provided by the case method. Both teachers and students lack a systematic method of inquiry and analysis to determine precisely and rigorously whether the facts do (or could be ordered to) support the inferences necessary to justify the logical application of particular legal principles and to evaluate the resulting product. For that reason, participants as well as observers are often left with a concern that students in these offerings may be learning little more than ill-defined interpersonal skills and skills in dramatic presentation and argument in a courtroom setting. Critics of such programs would limit them on two grounds. They are costly, and their benefits are not readily measurable. Simulation courses and clinical programs lack the kind of theoretical and intellectual foundations that traditionally characterize university

^{3.} In recent years direct teaching of particular skills has begun to become established both in law school and in continuing legal education. Development has tended to be ad hoc and unsystematic. This book is intended as a contribution to the systematization of the teaching of basic professional skills. See, e.g., Learning Lawyers' Skills (N. Gold, K. Mackie, W. Twining, eds. 1989).

programs. The fear, sometimes well-founded, is that scarce university resources are being used to teach students bedside manner and courtroom etiquette, the tricks of the trade, and that even this is not done in a way that permits measurement and rigorous evaluation.

The authors believe that John Henry Wigmore had a powerful insight that addresses these concerns and provides the foundation for developing rigorous skills in fact analysis. He argued that methods and principles of scientific inquiry and investigation could also be applied to the analysis of the evidence available in a legal dispute. He argued that the principles of inductive logic could and should be applied in the analysis of disputed facts in a legal setting. He presented the principles of logic that underlie judicial proof in a rigorous fashion and, more importantly, created a method of analysis through which a mass of evidence could be organized and rigorously analyzed in relation to the legal principles postulated as controlling in the particular case with the results recorded in a systematic way. So strong was his belief that as long as he was Dean at Northwestern Law School his course on *Proof*, the study of the principles and their application, was a required course and a prerequisite to his course on Evidence, the study of the legal rules by which evidence was admitted to or excluded from consideration by the fact-finding tribunal. Unlike Langdell's insights, however, Wigmore's were not effectively communicated and did not become a part of legal education.4

The authors believe Wigmore's statement of the principles governing rational inquiry into disputed facts and his methods for rigorously analyzing and ordering the possible inferences provide a link between fact and law that has been overlooked and that can provide the foundation for the rigorous training in fact analysis that would significantly improve the quality of many contemporary skills offerings and legal education generally. Both the principles and the methods fall squarely within the tradition of rational inquiry and analysis for which the university environment is particularly well suited. More importantly, they provide the foundation for developing a highly effective method of instructing students in one of the two basic components of legal reasoning: the analysis and evaluation of facts in relation to available legal principles. The authors have tested that belief in the classroom for several years and in the process have sought to develop Wigmore's basic insight. The present book reflects their belief and their experience. At its core is a modified form of Wigmorean analysis.

5. The tradition is described, and the point is developed in W. Twining, Rethinking Evidence, 32-82 (1990); see also below at 94-104.

^{4.} Wigmore's theories were incorporated into his treatise and became a force that influenced the development of theories of relevance among evidence scholars. See, e.g., Tillers, Modern Theories of Relevancy, in IA Wigmore, Evidence, §37 (Tillers rev. 1983), and W. Twining, Theories of Evidence: Bentham and Wigmore (1985). The method of analysis did not, however, become a part of legal education, and the theories occupy a relatively small part of the traditional course on evidence.

The What of This Book

The first chapter is a series of materials, cases, questions, and exercises. These are designed to illustrate and illuminate the contexts in which rigorous factual analysis is necessary and the nature and complexity of the task. They are also designed to pose the theoretical and practical issues addressed throughout the remainder of the book. Chapters 2 and 3 introduce the principles and the methods of analysis. Wigmore's presentations provide a foundation. The authors' contributions have been threefold. First, we have supplied notes and comments clarifying points on which Wigmore seems fuzzy or outmoded and identifying issues he failed to address adequately. Second, we have throughout developed the concept of standpoint and maintained a distinction that Wigmore overlooked, the distinction between the use of the principles and methods by lawyers in the various phases of litigation work and their use for other purposes, such as their use by judges and juries in deciding cases or by scholars or students in studies from an historical standpoint — for instance, in evaluating reported decisions or analyzing historic trials or legal events. Third, we have developed and refined the methods and attempted to demonstrate how they can be (and should be) used by lawyers preparing for trial and in other practical activities.

Chapters 4 and 5 provide materials for applying the principles and the methods of analysis to specific cases. Chapter 4 presents an edited version of the trial and appellate proceedings from the record of an English cause célèbre, Rex v. Bywaters and Thompson. These extracts are followed by extensive questions and exercises. In our view, trial records are a valuable source that legal educators have largely neglected. The particular case provides material both for applying the principles and methods to very complex and elusive data and for exploring a range of theoretical issues. Chapter 5 develops the uses and limitations of the principles and methods from the standpoint of the lawyer preparing for trial and sets them in the context of the trial process as a whole. That chapter also includes descriptive sections and notes by the authors, illustrative materials and exercises, and two small and two intermediate pre-trial records for use as exercise material.

Although we believe Wigmore's presentation of the principles of reasoning and methods of analysis falls squarely within the mainstream of Anglo-American scholarship, it is clear that he did not satisfactorily address a class of problems that are important for lawyers and that have emerged in recent debates as central issues for scholars. How is the strength of an inference to be determined? How is the net persuasive value of a mass of evidence to be assessed? How are judgments about the probative force of different items of evidence to be combined? How does the lawyer (or the trier of fact) determine whether a mass of evidence, which logically supports the truth of the proposition ultimately to be proved, satisfies the applicable standard of proof? What do we mean when we say a proposition

has been proven to be "more probable than not," proven by "clear and convincing evidence," or proven "beyond a reasonable doubt"?

We confront these problems directly in Chapter 6 and in an appendix on probabilities and proof. Chapter 6 deals with evaluation of evidence, with particular reference to standards for decision, methods of expressing degrees of persuasion and of probative force, and the role of scientific and common sense generalizations in evaluating evidence and how such generalizations are thought to operate in jury selection. The presentation there raises theoretical questions, but only in contexts that are likely to be familiar to lawyers and law students. The appendix on probabilities and proof is more theoretical and technical. It explores the theoretical and practical problems posed by the use of mathematical probabilities in evaluating evidence. The main part of the appendix has been contributed by Philip Dawid, a distinguished professor of statistics. It introduces some basic axioms of probabilistic analysis and illustrates their application in contexts, such as paternity suits, discrimination cases, and actuarial analysis, where their use has come to be accepted. The appendix also presents problems that illustrate the recent theoretical debates and controversies about potential uses and abuses of probability theory in litigation.6

The How: A Note on the Genesis and Suggested Uses of This Book

William Twining is a legal theorist interested in rethinking the subject of evidence within a broadened conception of the discipline of law. He was originally attracted to Wigmore's approach because it broadened the notion of "legal reasoning" to include questions of fact and it went beyond study about the nature of reasoning to helping students to learn how to analyze, construct, and evaluate complex arguments. Terence Anderson is a teacher of intending practitioners and a trial lawyer who is committed to the view that intellectual rigor is an essential basis for, and component in, good lawyering. To him, Wigmore's statement of the principles and the methods of analysis provided a formulation for a systematic, thorough, and demanding training in preparation for trial and practical argument. This collaboration between a jurisprude and a practitioner should surprise only those who believe in a divide between theory and practice. In fact, it is no coincidence that both are alumni of the University of Chicago Law School and were taught (at different times) by Karl Llewellyn and Soia Mentschikoff Llewellyn and that their shared interest in Wigmore surfaced in a seminar presided over by Dean Mentschikoff at the University of Miami School of Law.

^{6.} We have also included a glossary of basic terms developed in this book. Many of the terms and concepts introduced throughout the book may be unfamiliar to students, especially to those who have not taken a standard course in evidence or formal courses in logic. The glossary is intended to ease the language barrier by providing a ready reference with concise definitions.

In the process of collaborating, we have each learned from the other, but we suspect that the main outcome has been that Wigmore has been Llewellynized.

We have developed and used these materials in three kinds of courses. Twining has used them as the basis for intensive study in year-long courses, at both the undergraduate and graduate levels, that focus upon the theoretical aspects of evidence and proof. In those courses, students are required to select and submit a rigorous charted analysis of the evidence in a cause célèbre such as Bywaters and Thompson (pages 173-250) as their major project for the course. Anderson has used them for intensive study in two-credit workshops and as the basis for the trial practice portion of a three-credit course designed to prepare students for supervised practice in clinical internships. Students in these courses have typically been required to select and prepare a chart analysis of the evidence available for a trial problem such as United States v. Wainwright (pages 291-305) or the Estate of Warren (pages 305-328) and to submit a trial notebook translating the products of the chart analysis into the form they would use at trial. In recent years, Anderson has incorporated these materials into a standard four-credit course on evidence. Students there typically are required to chart only a small exercise, such as State v. Archer (III) (pages 153-154). Anderson uses exercises such as United States v. Richard Able (pages 20-25) to incorporate analysis into the final examination.⁷

We have taken these potential uses into account in preparing the present version of this book. For that reason, Chapter 1 includes more exercises than either of us would use in a single offering. In a large evidence course, for example, we might only use the Judgment of Solomon, Sargent v. Southern Accident Insurance, and United States v. Richard Able for classroom discussion. In such a course, we would be likely to require students to chart a simple problem such as State v. Archer (3) only to ensure that they have understood the principles and method sufficiently to facilitate classroom discussion and final examination. On the other hand, in a more intensive seminar, our coverage would be broader and our assignments more demanding. The selection of materials would be guided by the particular focus of the course — such as trial practice or adjudication theory.

A final note: Our own use of these materials as well as the experiences of our colleagues has persuaded us that these materials require vastly more learning than teaching. Discussion and debate may clarify the concepts, but their application can only be learned, not taught. We believe that the most efficient, and perhaps the only, way to master the principles and methods

^{7.} The late Professor Thomas Ewald of the University of Miami School of Law made valuable contributions, and we had hoped he would join the enterprise before his untimely death made this impossible. He was the first to use portions of the materials in a standard evidence course, and the Sargent v. Southern Accident Company exercise (pages 17-20) is based upon one of his final examinations. He also used portions of materials in the yearlong, nine-credit trial program that he directed until his death. He developed the materials for his program in valuable ways that have since aided our work.

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of analysis is to apply them to specific problems. That application also furnishes the basis for a greater insight and understanding of the issues posed, but not wholly resolved, in the last chapter and the appendix. Having analyzed and charted the inferential relationships between a series of propositions and the inferences tending to support or negate an ultimate proposition of fact, the student must necessarily confront problems of evaluation. We believe such exercises make the teaching and discussion of the materials on that topic more meaningful.

Terence Anderson William Twining

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