

## **PROBING INTO COLD CASES**

## **ABOUT THE AUTHOR**

An investigative writer, Ronald L. Mendell holds a Master of Science degree in Network Security from Capitol College in Laurel, Maryland. He has the Certified Information Systems Security Professional (CISSP) designation in the information security field. Currently, he is an Adjunct Assistant Professor of Computer Science at Austin Community College in Austin, Texas. Ronald has also done graduate work in investigation and forensic science at National University in San Diego, California. Additionally, he is a Certified Legal Investigator (CLI). *Probing into Cold Cases: A Guide for Investigators* is his sixth book on investigations and security.

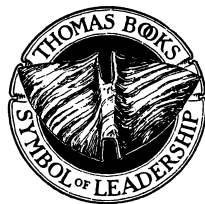
# PROBING INTO COLD CASES

**A Guide for Investigators**

*By*

**RONALD L. MENDELL, M.S., CISSP, CLI**

*Certified Legal Investigator  
Master of Science in Network Security  
Certified Information Systems Security Professional  
Adjunct Assistant Professor Computer Science  
Austin Community College  
Austin, Texas*



**CHARLES C THOMAS • PUBLISHER, LTD.**  
*Springfield • Illinois • U.S.A.*

*Published and Distributed Throughout the World by*

CHARLES C THOMAS • PUBLISHER, LTD.  
2600 South First Street  
Springfield, Illinois 62794-9265

This book is protected by copyright. No part of  
it may be reproduced in any manner without written  
permission from the publisher. All rights reserved.

© 2010 by CHARLES C THOMAS • PUBLISHER, LTD.

ISBN 978-0-398-07903-1 (hard)  
ISBN 978-0-398-07904-8 (paper)

Library of Congress Catalog Card Number: 2009028634

*With THOMAS BOOKS careful attention is given to all details of manufacturing  
and design. It is the Publisher's desire to present books that are satisfactory as to their  
physical qualities and artistic possibilities and appropriate for their particular use.  
THOMAS BOOKS will be true to those laws of quality that assure a good name  
and good will.*

*Printed in the United States of America  
MM-R-3*

#### **Library of Congress Cataloging in Publication Data**

Mendell, Ronald L.

Probing into cold cases : a guide for investigators / by Ronald L. Mendell.  
p. cm.

Includes bibliographic references and index.

ISBN 978-0-398-07903-1 (hard)—ISBN 078-0-398-07904-8 (pbk.)

1. Cold cases (Criminal investigation). 2. Criminal investigations. I. Title.

HV8073.M397 2010  
363.25—dc22

2009028634

*To Rebecah and Rachel*



## PREFACE

The investigative experience offers many challenges in reconstructing past events and in discovering the persons, entities, and organizations involved in a crime or a civil wrong. Cases discovered early, however, usually lend themselves to expeditious handling. More problematic are cases discovered or reopened long after the initial cause. The term cold case is in vogue to describe these most challenging investigations. Cold case units exist in law enforcement agencies throughout America and mainly concentrate on reopening old, unsolved homicides. The popularity of the CBS television police series, *Cold Case*, has launched the idea into public awareness.

While homicide investigation remains within the realm of this book's discussion, we will also explore additional types of cold cases. By developing a systematic approach, the aim is to empower the law enforcement officer, the private investigator, or the governmental investigator in cold case management. Hopefully, the techniques discussed will have wide application to a considerable range of criminal and civil cases. Getting a case "fresh," shortly after the event, is what all investigators seek. Unfortunately, several everyday scenarios play against always starting fresh. Solvability factors do not always emerge early in a case, and limited resources prevent further inquiries by law enforcement. A crime goes undiscovered or undetected for a long period of time. A victim, for varied personal reasons, is not timely in reporting a crime. The injured party in a tort case does not seek legal assistance until a considerable period of time lapses. Or, suspects may emerge in the initial phase of an investigation, but insufficient evidence exists to charge them with the offense.

Cold case investigations revolve around two areas of concern. First, does the investigator need to understand how the crime or tort occurred? Such an investigation would be event driven. For example, \$100,000 is missing from the payroll account. How did the funds disappear and when did it happen? Or, as in the case of the astronomer Clifford Stoll who, while working as a UNIX administrator, discovered a small discrepancy in a computer account's charges. Investigating the discrepancy's cause led Stoll to uncovering a group

of Internet-based spies, as chronicled in *The Cuckoo's Egg*. Second, the investigator may understand the event, but not those responsible for it. Time fogs over the trail leading to the key players in the event. Does a product liability claim arise when an automobile strikes a child riding a seemingly nondescript, very low profile toy bicycle in the street? If so, who is the manufacturer? Who are other people that have asserted similar claims? Who bought the bicycle, and from whom? Such questions are people driven.

Finally, certain stepping stones are available to the cold case investigator. When used systematically, they may allow progress in a previously moribund case. The book discusses fifteen keys that serve as these stepping stones. Ranging from physical evidence (trace materials, bodily fluids, or fingerprints) to tangible things (motor vehicles or digital devices) to information resources (Internet sites, published materials, or documentation), these keys yield footholds to gain leverage in understanding a case. An investigator may proceed spatially through a cold case while using the keys.

In viewing a case as having a “center,” the investigator moves from that center outwardly to build the investigation. The center could be a body buried in the woods discovered years later, a computer usage fee that does not balance against accounts, missing funds from a “dormant” account, or a toy bicycle of unknown manufacture and lineage. One begins internally within the center to see what evidence is available there. (What do the bones tell about the body? Or, what does the design and construction of the toy bicycle say about the manufacturer?) As needed, the investigation expands to the next layer, which is the “proximal,” things that have come in contact with the center. (Such contact evidence can be injuries to the bones or surface marks on the toy bicycle.) The next layer is “distal,” which is the immediate locus or vicinity around the center. (The computer media library down the hallway may have backup tapes or media that can provide transactional history on what happened regarding accounts.) Finally, the inquiry moves to information and evidence available in the world at large, beyond the immediate border (the limbus) of the crime scene or the event's locus. (The Internet is a resource here as well as archival records.)

The discussion that follows in the text offers a new approach to examine what happened in the past. It suggests new ways of seeing and looking for evidence: a spatial perspective on finding clues about clouded history and events. While not all cold cases are solvable, techniques suggested here offer at least a systematic reexamination of the available evidence.

R.L.M.



## INTRODUCTION

Cold cases raise serious challenges for both civil and criminal investigators. The common understanding of what constitutes a cold case usually is a reopened homicide investigation. This text will not quibble with the idea that unsolved homicides represent the ultimate cold case inquiry. Our aim, however, is not to write a work on homicide investigation per se. Without ignoring violent crime inquiries, the text broadens the concept of what is a cold case to include civil matters. Our discussion covers a range of topics from product liability cases to common-law crimes like murder to financial investigations.

The emphasis is not on creating a typical step-by-step guide for particular criminal or civil cases. That approach would be appropriate for fresh cases, where the investigator becomes involved shortly after the incident. However, in Chapter 2 the text does outline the steps for planning specific cold case inquiries. Normally, cold cases begin in a reflective manner, and having a working plan to think through the case is helpful. The investigator looks back on what may have been missed in the initial case investigation or ponders why the crime has just come to light. Rather than rely solely upon checklists, we seek to provide starting points for unconsidered leads or clues. Mental “footholds” to pursue new trails in the case are what we hope to offer.

Peering into the overlooked crevices of the case, reviewing the locus or crime scene with new eyes, and discovering latent connections between individuals are some of the motifs for cold case investigation. Given that the investigator is starting “late,” the inquiry becomes more than a methodical recitation from a tome on criminal or tort investigation. Structured creativity plays a role, as Sherlock Holmes counseled in “A Scandal in Bohemia,” “You see, but you do not observe.” An investigator observing the evidence in new ways serves as the foundation for beginning cold case inquiries.

Cold cases exist in two forms. First, there are dormant or inactive cases. Leads dried up in the initial investigation, or resources became scarce. Suspects may have been identified, but the investigative team was unable to develop adequate evidence against them. Suspects with a credible case

against them may have skipped out. Second, there are cases that come to light long after the crime or the incident occurred. True, human bones found in the woods are a classic example. Investigators also encounter cases involving embezzlement, the theft of intellectual property, product liability, computer crime, and fraud that reach their eyes late in the game. In a civil case in which a judgment was obtained, years later the judgment-debtor may have new assets that need investigating.

The major problems in cold cases are numerous. A relatively short listing of them includes the following:

1. Physical evidence is not readily available. (However, evidence may be misplaced rather than completely lost or destroyed.)
2. Witnesses are no longer around. (Finding them, however, or locating those previously overlooked, may be possible.)
3. Understanding how the incident or crime occurred is not clear. We may know money was embezzled, but we do not know how it was done. (Creating a paper or an analytical trail may still be possible.)
4. Suspects' whereabouts are unknown. (Tracing them, however, may still be feasible.)
5. The tortfeasor may not be known. This can happen in product liability and toxic tort cases. (Research is often still an option.)
6. The judgment-debtor may live in a new jurisdiction, and the trails leading to the current assets are clouded or obscure. (New information about the target's assets may be developed, however.)
7. Records may be lost or destroyed. In the "Digital Age," this is becoming a serious challenge for investigators due to the ephemeral nature of much electronic information. (As a compensating factor, though, computer forensics can aid in reviving or rediscovering sources of records thought lost.)

These cases best respond by using a combination of traditional and forensic techniques, which constitutes a modern synthesis of investigative methods. Based on a premise that states that every case, whether it is criminal or civil, has unexplored avenues, the investigator turns to a spatial perspective in building the case. The spatial perspective assists the investigator in moving from the center of the case (usually the discovered body, the initial evidence of the crime, the defective product, or the crime scene or locus) to outer rings of additional information. Based on the spiral or circle-search methods for crime scenes described in *Criminal Investigation* (Bennett & Hess, 2007) and in other investigative texts, the book also adapts the paradigm from Richard E. Bisbing's model described in "Trace Evidence" in *Medicolegal Investigation of Death* (Spitz & Spitz, 2006). A cold case investigation progresses

from the internal (the case's center), to the proximal (contact evidence), to the distal (immediate vicinity), and to the limbic (the world at large) realms of information.

Spatial movement may occur outside the normal linear timeline of a fresh case investigation. A cold case inquiry may be one, borrowing from Shakespeare's phrase, where "time is out of joint." It may be necessary to start from the case's center, the crime scene or the defective product or the discovery that "something is not right" in financial records. The investigator, however, may find leads that take him or her to other dimensions of the case without passing through intermediate levels. In some cases, it may be necessary to work backward in time to relocate witnesses or evidence. In other cases, the investigator refocuses the spatial or geographic orientation of the matter at hand to uncover new avenues for inquiry.

The internal dimension covers basic identifiers or attributes about the victim. These attributes include date of birth (or age); place of birth; social security number; addresses; occupation or place of employment; relatives and associates; telephone numbers (including cellular); and, in this digital age, e-mail addresses. In addition, medical information about the victim, developed from the crime scene, from medical records and from the autopsy and tests done by the medical examiner, falls within the internal dimension. Psychological information about the victim as well is within the internal dimension. If the center of the case is an object or a defective product, then close examination of its physical attributes falls within the internal boundary of the case.

In the proximal dimension or realm, the investigator considers forensic evidence on the body's or the object's surfaces. Body markings such as scars, needle marks, tattoos, and piercings are also proximal in nature. Additionally, jewelry and personal objects such as key chains, pocket knives, and tools; eyeglasses; and hearing aids can provide useful leads. Clothing, coats, shoes, and hats often yield valuable information about the victim as well. Also falling within the proximal realm is the nonphysical background evidence about the victim provided by the victim's family, friends, and associates.

The distal space involves forensic evidence in the immediate vicinity of the body, the object, or the defective product. Such evidence can be biological or inorganic material ranging from broken glass to blood to paint or fibers. Each scene is obviously unique. Personal belongings and accessories also come under the distal realm. These items can range from luggage to purses and wallets to the unusual, such as musical instruments or golf clubs. Virtually any object is traceable if it has enough identifying information on it or has sufficient individual characteristics.

Finally, the limbic realm encompasses the world at large. At this level, the

investigator is trying to find out how the case's center—a victim, an object central to the case, or a defective product—fits into the community, the jurisdiction, or the larger world. Evidence in this realm may involve motor vehicles; traceable objects such as collectibles, digital devices, or computers; and/or financial records. It can also involve diverse sources of information such as Internet activity, public documents and records, facts concerning an occupation or a profession, published materials, witnesses (new and previously known), and expert assistance regarding the case.

The cold case investigator will move spatially in a different manner from that in a fresh case. His or her approach may be less sequential. At the start of the cold case, the investigator looks for new avenues, leads not pursued or developed in the original case. Jumping from one realm or dimension to another is quite possible. This is not to say that the cold case investigator is haphazard or fickle in what he or she chooses to pursue. The approach also does not mean the original investigators did a poor or a substandard investigation. Rather, new eyes, ears, and minds may raise new questions that create new avenues of investigation.

To make the model more concrete, we can describe a case in which we discover at the internal level a medical condition in the victim: chronic alcoholism. Since the currently unidentified victim was murdered in a “skid row” area, canvassing area bars and liquor stores may yield witnesses with background knowledge about the victim. Even after a passage of time, such inquiries may still be profitable. Never assume that persons with a socially unacceptable lifestyle will not have ties to their own “community.” Everyone has people who remember them.

Tattoos on the victim were distinctive: a military insignia with an arrowhead and a dagger with a reference to Vietnam appeared on the left arm. A nude woman with the name “Ginger” was inscribed on the right arm. Research on the military insignia could be profitable, and canvassing area tattoo parlors may uncover information about the tattoos and the victim.

At this point, one may ask whether these inquiries are any different than what could be done in the original, “fresh” case. True, the original investigation could have completed these steps. However, for whatever reason, they may not have been done. Even if they were done, revisiting previously covered territory can yield new evidence. Sometimes, the cold case investigator goes by gut feel on which avenues could be profitable. Often, this insight on what needs further probing is the product of solid investigative experience and a good understanding of solvability factors.

The main challenge to the cold case investigator is not a lack of insight. Instead, the passage of time may require the cold case investigator to probe more layers of information than those faced by the original case investigator. Persons or sources that were close spatially to the crime scene may now be

farther away. Facts previously on the surface may be buried by intervening events and changes caused by time. For example, research into the military insignia identifies a military unit the victim belonged to during the Vietnam era. Interviews with area witnesses uncover a friendship between the victim and a fellow member of the unit who lived in the area. Locating the “friend” involves going through a long string of addresses for which the forwarding address is sometimes only word of mouth. Time creates these obstacles for the cold case investigator. At times, he or she will alternate between working at different spatial layers in the cold case. Revisiting the crime scene, researching a piece of evidence, locating a new witness, finding an old vehicle, or consulting an expert, these are all activities the cold case investigator may do recursively, moving outwardly and inwardly within the spatial dimensions of the case as required.

Before moving on to the main text, some discussion of the role of crime (or accident) scenes in cold case investigations is in order. Returning to the scene, even after the passage of time, usually is productive. The Kennedy Assassination scene, for example, is essentially still in place. No serious historian or student of the assassination would skip visiting the locus, even more than forty-five years later. Visiting the Texas School Book Depository will neither establish the validity of a conspiracy theory nor quell all questions concerning the event. Yet, the researcher gains firsthand experience on the layout of the scene where the tragic events happened. No book or report can replace the sensory experience of getting a feel for the locus.

Archaeologists and historians understand that ancient places may yield considerable facts about past events. Although time alters space, reconstruction is often possible. When understanding the crime or accident scene becomes central in a cold case investigation, the investigator must retain an open mind about what may still be available at the locus. Very often, the investigator will have considerable resources to aid in any reconstruction.

Police reports, accident reports, diagrams, photographs, and videos made at the time of the incident can be helpful in understanding the locus. In addition, an investigator may secure aerial photographs, satellite photographs, and maps available for the area. Beyond current copies of these visual sources, the investigator may consult national, state, and local archival collections to understand how the scene has changed through time. (Archived satellite photographs are available on the Internet from MapQuest. The Earth Science Information Center of the U.S. Geological Survey provides aerial photographs of the entire United States. Topographical maps of the whole United States are available from the same source.)

The visual materials of photographs and maps can be supplemented by engineering drawings or plans of structures and buildings. Individuals may have personal photographs or video that help to understand the locus at the

time of the loss. News footage of the scene may be available. In addition to the visual perspective, written records in news accounts, public records, and even personal papers can help reconstruct a scene. Witnesses provide an oral understanding of the scene, especially when such accounts correlate with other evidence.

A recent article in *History* magazine (Frost, January/February 2009) about the plot to steal Abraham Lincoln's body in 1876 illustrates how a crime scene can still speak to us long after the event. The article's author had not only the physical locations of the former president's body in Springfield, Illinois, to research but also news accounts, court records, photographs, specifications and records about the tombs, and a previous history about the crime written by Thomas J. Craughwell. There was even expert testimony available from the executive director of the Museum of Funeral Customs in Springfield, Illinois, on the condition of the president's body. From these diverse sources, the article's author presented a clear account about the crimes and the locations where they happened.

Not all events will be as well-documented as the attempt to steal our sixteenth president's body. Yet, we offer the story as an example of what may remain at a scene or about a scene long after the event. More may still exist about a cold case than you realize when first entering the inquiry. This is the theme of this text. An investigator must consider the factors that ended the original investigation. In cases of a recently discovered latent crime originating in the past, he or she must ask what brought the matter into the light of day now. Hopefully, the investigator will ask new questions that suggest new avenues for inquiry. Having "pegs" to hang one's hat on through the renewed questioning process can be vital. These pegs serve as keys to structured thought about the case. In the next chapter, the discussion moves to delineating those keys to successful cold case investigation.

### **INTERNET INFORMATION—A WARNING**

As a final word, some comments about Internet-based information may aid investigators in dealing with this medium. First, this book makes numerous references to sites on the Web. Chapter 8 counsels that investigators need to carefully weigh any source based in the Internet. Investigators should always seek confirmation from other sources before relying solely upon electronic information. Just because information is in electronic form does not necessarily make it reliable, valid, or current. Second, URLs and the content of sites constantly evolve and change. Some references to sites in this book will become dated and no longer valid. Unfortunately, this natural component of information based in cyberspace is something the author can do lit-

tle to remedy in a print medium.

This book makes frequent references to Google<sup>®</sup> as a Web search engine and as a resource for information tools of interest to investigators. Although the author believes Google provides an excellent range of free tools, the intent is not to endorse Google to the exclusion of all other search engines or tools available on the Web. Other good search engines also exist, such as Dogpile<sup>®</sup> for example. The use of online tools discussed relies on the particular investigator's needs and tastes and methodology. Hopefully, the tools and techniques presented here serve as starting points for discovery by the reader.





## ACKNOWLEDGMENTS

The author wishes to thank Ann Bucholtz, MD, for her lectures on forensic medicine and pathology at National University. Her lectures served as the backbone for the medical information provided in Chapter 3. In addition, the author appreciates the resources of the Austin Public Library and of Half Price Books in Austin, Texas. Both institutions made the research for this book a much easier task.



## CONTENTS

	<i>Page</i>
<i>Preface</i> .....	vii
<i>Introduction</i> .....	ix
Internet Information—A Warning .....	xiv
 Chapter 1.    FIFTEEN KEYS TO COLD CASES .....	 3
Basic Identifiers .....	6
Body, Object, or Internal Crime Scene .....	8
Psychology .....	10
Family and Associates .....	11
Forensic Evidence on the Body or Object .....	12
Traceable Objects: Body Markings, Jewelry, and Personal Objects .....	14
Forensic Evidence (In the Immediate Area) .....	15
Traceable Objects: Belongings, Personal Effects Not Worn, Weapons .....	16
Digital Devices and Computers .....	18
Documentation .....	20
Expert Assistance .....	21
Financial Information .....	21
Internet Activity .....	22
Motor Vehicles .....	23
Occupation or Profession .....	23
Published Materials .....	24
Reliable Witnesses .....	24
Traceable Objects (Found Outside the Crime Scene or Locus) .....	25
Chapter 2.    THINKING SYSTEMATICALLY .....	28
Latent Case Investigations .....	31
Product Liability Cases .....	37
Judgment—Debtor Cases .....	38

	Homicides—Searching for Facts and Identity . . . . .	40
	Homicide—Apprehension . . . . .	42
	Equivocal Deaths . . . . .	43
	Creativity . . . . .	44
	A Quick Final Check . . . . .	47
Chapter 3.	THE INTERNAL REALM—THE CASE’S CENTER . . . . .	49
	Basic Identifiers . . . . .	49
	Medical Information . . . . .	54
	Time of Death . . . . .	59
	Autopsy . . . . .	60
	Asphyxia . . . . .	63
	Drugs . . . . .	66
	Motor Vehicle Accidents . . . . .	66
	Anthropological Evidence . . . . .	71
	Entomology . . . . .	71
	Gunshot Wounds . . . . .	73
	Sharp Weapons . . . . .	75
	Medical Summary . . . . .	76
	The Immediate Crime Scene . . . . .	78
	Psychological Factors . . . . .	80
	An Object as the Center of the Case . . . . .	86
	Identifying Characteristics . . . . .	89
	Locating and Tracing Products . . . . .	90
Chapter 4.	THE PROXIMAL REALM—LOOKING FOR CONTACT EVIDENCE . . . . .	92
	Locard’s Principle . . . . .	95
	Jewelry . . . . .	99
	Tattoos . . . . .	102
	Trace Evidence on Objects . . . . .	104
Chapter 5.	THE DISTAL REALM—VENTURING A STEP FARTHER . . . . .	106
	Rethinking the Crime Scene . . . . .	109
	Belongings . . . . .	112
	Photographs . . . . .	113
Chapter 6.	THE WIDER ENVIRONMENT—TANGIBLES . . . . .	117
	Digital Evidence . . . . .	118
	Motor Vehicles . . . . .	124
	Everyday Traceable Objects . . . . .	132
	Examples of Traceable Objects . . . . .	135
	Between the Covers . . . . .	138
	Forensic Issues . . . . .	139
	Summary . . . . .	140

Chapter 7.	THE WIDER ENVIRONMENT–PEOPLE . . . . .	142
	Locating Experts . . . . .	143
	Developing Occupational and Professional Information . . . . .	246
	Uncovering Witnesses . . . . .	150
	Canvassing the Locus . . . . .	150
	News Accounts . . . . .	151
	Other Official Reports . . . . .	152
	Relatives and Associates . . . . .	153
	Homeless Witnesses . . . . .	153
	Coworkers . . . . .	156
	Using Electronic Sources . . . . .	156
Chapter 8.	KNOWLEDGE . . . . .	158
	Library and Internet Research . . . . .	158
	Published Materials . . . . .	170
	Cyberprofiling: The PC . . . . .	171
	Cyberprofiling: Internet Transactions . . . . .	172
	The Myth of Anonymity . . . . .	179
	Modus Operandi . . . . .	181
	Financial Information . . . . .	183
	Geographical . . . . .	185
	Personal Identifiers . . . . .	186
	Transactional Data . . . . .	187
	Working the Infosphere . . . . .	189
	Cyberprofiling: Collaborative Spaces . . . . .	190
Chapter 9.	FINANCIAL INFORMATION . . . . .	194
	The Nature of Financial Information . . . . .	194
	Factors in the Existing Case . . . . .	196
	Stages in a Cold Case Financial Investigation . . . . .	199
	Examine Critical Attributes . . . . .	199
	Develop a Theory of the Case . . . . .	203
	Investigate Financial Motives . . . . .	204
	Examine Business Ties . . . . .	207
	Consider Explicit Sources . . . . .	208
	Consider Tacit Sources . . . . .	208
	Consider Embezzlement Schemes . . . . .	209
	Fraud Sources Examined . . . . .	210
	Tracing of Funds . . . . .	211
	Computer Forensics Review . . . . .	212
	Topics and Main Avenues of Investigation . . . . .	212
	Connections . . . . .	213
	Motives . . . . .	214

	Sources .....	215
	Special Techniques .....	216
	Criteria for a Financial Inquiry .....	218
Chapter 10.	PUTTING IT ALL TOGETHER–SYNTHESIS .....	223
	Critical Thinking–Looking for Patterns .....	223
	Reasoning .....	226
	Problem-Solving Techniques .....	232
	Data Integrity .....	239
	Profiling .....	240
	Analyzing the Evidence .....	243
<i>Appendix:</i>	MASTER CHECKLIST–COLD CASES .....	247
<i>Glossary</i> .....		279
<i>Bibliography</i> .....		285
<i>Index</i> .....		293

## **PROBING INTO COLD CASES**





## Chapter 1

### FIFTEEN KEYS TO COLD CASES

As indicated in the Introduction, the cold case investigator needs some help in thinking through the original case. A structure for sorting the facts of the case is essential for determining starting points for further inquiry. Our overall structure is spatial. The investigator begins at the case's center: a body, a failed product, an accident or crime scene, or the facts that caused the discovery of a latent crime. He or she then moves outwardly from the center through nearby realms of evidence and information into the community and the world at large.

Beyond this general concept, the investigator needs specific keys to understanding the case. Before listing the keys, a caution is warranted. No book can list every possible kind of physical and nonphysical evidence that may come to play in an investigation. Defining general categories, however, is feasible. The text hopes to point out reasonable avenues for investigative discovery. Then, the investigator through common sense and creativity can build on the model the book offers.

Evidence can be either physical or nonphysical. The analysis of physical evidence derives from the sciences of chemistry, physics, biology, and geology. Numerous television programs in recent years, whether they are dramas or nonfiction, have served to heighten the public's interest in the solving of crimes through scientific methods. Physical evidence, whether it is broken glass, paint, blood, or fiber evidence, can answer many questions in a case. It cannot always quench all the issues in a case, however. Information from human sources is also essential.

Nonphysical evidence requires analysis from the social sciences of psychology, sociology, and criminology. Understanding the psycholo-

gy of victims and offenders and their family and social relationships is a large component in many criminal investigations. Recognizing the patterns or typologies of criminal behavior serves as the basis for profiling. Conducting effective interviews and interrogations of witnesses and suspects and evaluating what they have to say form the central basis of most investigations, whether they are civil or criminal matters. In addition, knowing where to find information from a variety of sources such as public records, databases, computers, business records, and the Internet borrows from research methods developed in the social sciences and by historians. Locating witnesses after the passage of time often involves the combined skills of the historian, the psychologist, the real estate agent, and the seasoned “beat cop.”

The discussion that follows in the text recognizes the importance of both physical and nonphysical evidence to cold cases. The fifteen keys in cold cases represent both types of evidence. In cold cases, these two approaches to evidence build upon each other. In some cases, however, the remaining avenues of inquiry may be forensic ones. In other cases, human sources may be the only ones available. Most cold cases, however, will rely on both sources of evidence to some degree.

The fifteen keys in cold case investigation are as follows:

1. Basic identifiers
2. The body, object, or crime scene
3. Computers and digital devices
4. Documentation—business, public, and private
5. Expert Assistance
6. Family and associates
7. Financial information
8. Forensic evidence
9. Internet activity
10. Motor vehicles
11. Occupational and professional information
12. Psychology
13. Published materials
14. Reliable witnesses
15. Traceable objects

Skeptical readers may point out that these categories or keys are not anything new to investigators. The book’s aim, however, is not to