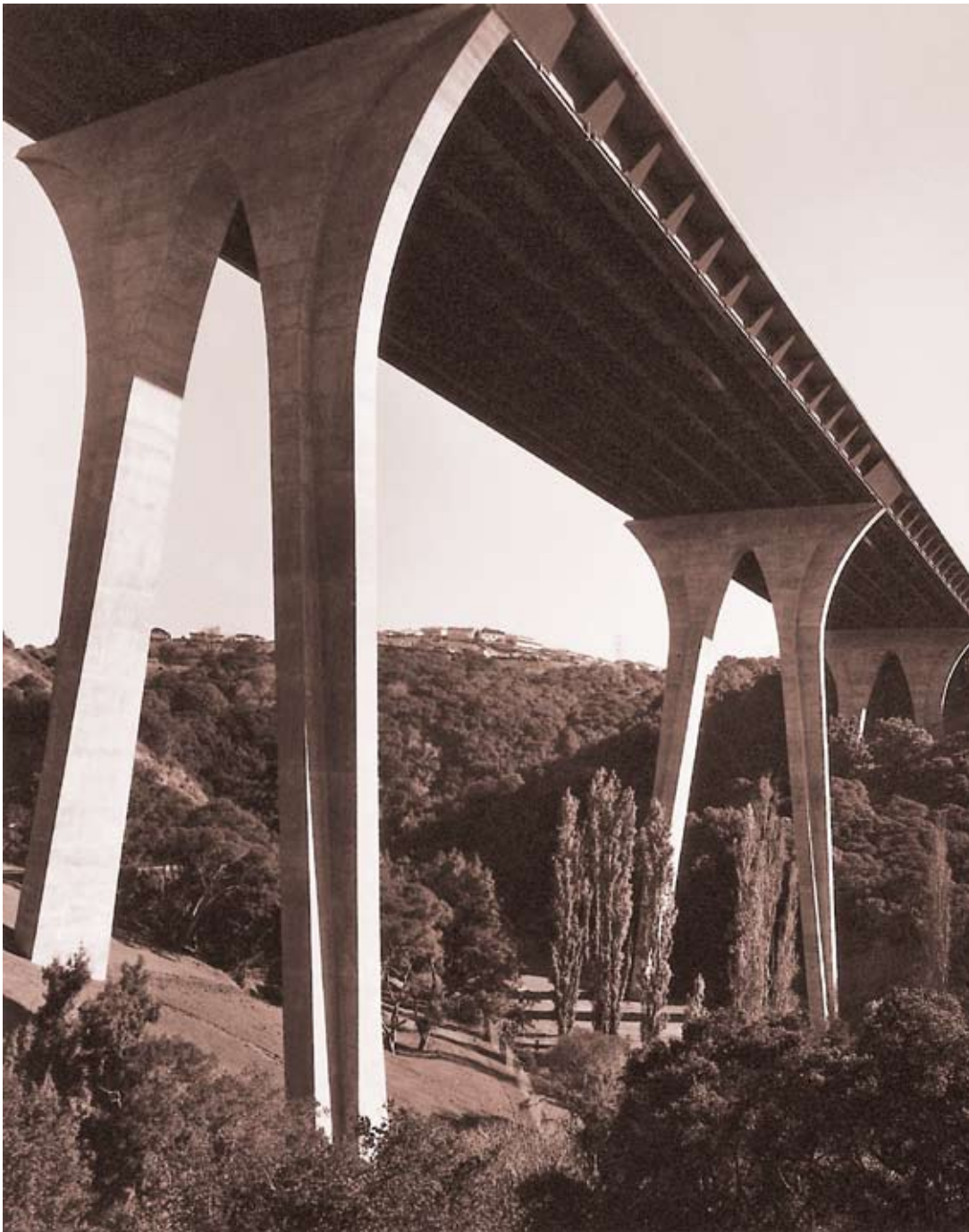


The CACNews

News of the California Association of Criminalists • Second Quarter 2008



EUGENE AND PATRICK DORAN MEMORIAL BRIDGE

The President's Desk

Looking Forward

When I became President I wanted the CAC to grow and members to become more involved and interested in what we do as an association. When asked to volunteer I had members stepping forward and requesting to be placed on committees, and members are waiting in line to become part of a committee when a position opens up. I am very proud of this association and what we all do to make it that much stronger. Thank you to all who volunteered and those waiting to step into open positions.

Another important issue we addressed this year was to form the Science & Justice Committee, which was set up to track legislature that affects forensic scientists and crime laboratories. Already we have reaped the benefits of this committee by making our members aware of bills that have directly affected us this year.

This past year we lost one of our founding members. Lowell Bradford was a student of Paul Kirk and helped to found the Santa Clara County Crime Laboratory. He is well published and was involved in many aspects of the field of forensic science, from teaching to being a board member of several associations. He truly made an impact in our field and will be missed.

I want to thank the members of the board that I have had the pleasure to serve with these past two years. I look forward to working with the new board and our President, Jennifer Mihovich. I encourage you all to join us at the Spring Seminar in San Diego. Your continued support in our Association is what keeps us strong and is much appreciated.



"I am very proud of this association and what we all do to make it that much stronger."



Julie Leon
CAC President



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Because of the computerized typesetting employed in *The CACNews*, submissions should be made in the form of MS-DOS compatible files on CD or by e-mail. Text files from word processors should be saved as ASCII files without formatting codes, e.g. bold, italic, etc. An accompanying hardcopy should be submitted along with the file. Graphics, sketches, photographs, etc. may also be placed into articles. Please contact the editorial secretary for details.

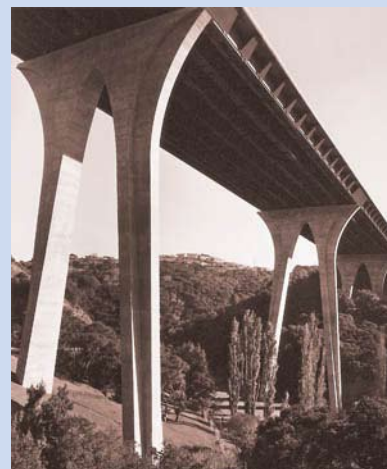
The deadlines for submissions are: December 1, March 1, June 1 and August 15.

The CACNews

www.cacnews.org

On the cover...

*What does this
bridge have to do
with criminalistics?
Answers inside!*



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CAC members Steve Renteria (*above*) and Paul Dougherty explain evidence recovered from a homicide case that began in Thousand Oaks and wound up in the hills of Los Angeles County. The episode of Court TV's *North Mission Road* was titled "In the Line of Fire" and aired Friday, August 10.

Workshops Planned for May Meeting

Fire Scene Investigation presented by John De Haan, (*below*) May 5-6, 2008. This is a comprehensive two day training on Fire Scene Investigations. This training will be held off-site. We will examine the dynamics and behavior of fire and the scene by setting controlled structure fires. If you like to set fires, this is the workshop for you!

Crime Scene Reconstruction presented by Tom Bevel, May 6, 2008. Unwrap the mysteries of crime scene reconstruction with one of the premier experts in this field. Learn how to reconstruct a scene using the scientific method and flowcharting to arrive at well founded and defensible conclusions.

Steroids Workshop presented by DEA Southwest Laboratory, May 6, 2008. Join us for a lesson on Steroids, What You Need to Bulk Up On. This workshop will discuss the classes, naming, synthesis, scheduling, and analysis of common steroids. It will be taught by senior forensic scientists from the DEA Southwest Laboratory.



DNA Workshop, (multiple presenters) May 6, 2008. This workshop will provide a full day of presentations on topics of interest to the forensic DNA community. Certificates will be provided for 8 hours of continuing education.

McCrone Research Institute Announces 2008 Course Calendar

American Institute for Conservation of Historic and Artistic Works (AIC) funding is now available for the McCrone Research Institute's Microscopy for Art Conservators (#1206) course scheduled for October 6-10, 2008.

Through this opportunity, AIC members will pay a reduced tuition amount of \$800 - \$400 less than the normal registration fee of \$1,200. Registrations may still be submitted to Lauren Logan at McCrone Research Institute online, by fax, or phone but copies of current resumes should be faxed to Lauren Logan at 312-842-1078. This program is supported in part by the Foundation of the American Institute for Conservation of Historic and Artistic Works.

A Forensic Light Microscopy course will be hosted by the California Criminalistics Institute in Sacramento, California and taught by McCrone Research Institute on June 23-27, 2008. Registration is open to CAC members at no cost for tuition and \$500 tuition to non-CAC members - please note: a \$115 materials fee will be due from all students by the start of the course. Please contact Mr. John Rush or see the CCI website (www.cci.ca.gov) for registration forms and further information.

DNA Statistics at the University of Washington

Bruce Weir has moved from North Carolina State University to the U. of Washington. He continues to have an interest in statistical genetic issues associated with DNA evidence, and is currently working on predictions of matching/partial matching in large databases. It seems important to attach variances or confidence intervals to those predictions. He has been working on the effects of relatedness on matching in order to assess the prospects for familial searching in databases.

He is working with Kristen Lewis, a student of Dr. Mary Claire King, who is adding studies of mtDNA and Y-STR markers to this area. Bruce and his colleagues Drs. Amy Anderson and Cathy Laurie have also been working with Dr. Sam Wasser on identifying the geographic source of the elephants whose tusks have been found in poaching seizures.

He teaches an online graduate-level course through the University of Washington on "Statistical Genetics for Forensic Scientists" each Fall, and he offers a short course on the same topic, as well as more general "Genetic Data Analysis" short courses during the Summer Institute in Statistical Genetics in Seattle each June. This year he will be joined by Dr. John Buckleton for the summer course.

Details about the summer courses are at www.biostat.washington.edu

He can be reached at bsweir@u.washington.edu



July 7-11, 2008 - The Millennium Knickerbocker Hotel - Chicago, Illinois

Inter/Micro 2008

The Millennium Knickerbocker Hotel
163 E. Walton Place, Chicago, Illinois

July 7-11, 2008

Meeting Website: <http://mcri.org/home/section/101-102/inter-micro-2008-conference-homepage>

Call for Papers: <http://mcri.org/home/section/101-103/2007-inter-micro-call-for-papers>

Titles and Abstracts due by March 15, 2008!

Registrations before June 11th receive discounts:

<http://mcri.org/CMSuploads/InterMicro%202008%20Registration%20Form-62804.pdf>

Brief Summary:

Since 1948, McCrone Research Institute (www.mcri.org) has sponsored the Inter/Micro symposium. Now celebrating its 60th anniversary, this week-long meeting offers presentations on all aspects of microscopy, methods and materials. Most of our attendees feel that Inter/Micro is the best conference they attend all year due to the quality of the content in the multidisciplinary technical papers, the experts in all areas of microscopy that regularly attend, and the personal atmosphere of the entire meeting.

Meeting Dates: July 7-11, 2008

Exhibition Dates: July 8-9, 2008, 9:00 a.m. – 5:00 p.m.

Workshops: July 10th & 11th, 2008 at McCrone Research Institute (topics to be announced)

Meeting Events:

- The '*Evening with Brian*' presentation: This year the Monday evening lecture and discussion topic will be followed by a mixer with the speaker, scientist, and author, Brian J. Ford of Gonville & Caius College, Cambridge University.
- 2008 Inter/Micro Banquet – closing ceremonies for the meeting and following the banquet, the State Microscopical Society of Illinois (SMSI) will hold its Annual Meeting and auction.
- presentations from experts in all areas of applied and electron microscopy
- social hours for discussions and networking with speakers, exhibitors and other attendees on advances in microscopy research, techniques and instrumentation
- nightly events for building friendships old and new
- the opportunity to discover Chicago right outside the front door of the Millennium Knickerbocker Hotel in the heart of Chicago's 'Magnificent Mile' of shopping, restaurants and sights
- workshops on Thursday and Friday to further your own microscopy skills

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The Editor's Desk

ENCOURAGEMENT

Giant woes...

A recent article identified the projected worst players at every position in Major League Baseball. The Giants had three. Indeed, if it were not for the Giants there may not even have been a list!

It's a good thing...

...the Giants play in a "pitcher's park" because they now have an excuse for not hitting.

The thinking...

...it's a time for growth. Brian Sabean, the Giants general manager is focused less on the short-term success and more on the long-term competitive health of the franchise.

Here's a thought...

It is better to try and fail than to never get out of the boat and not even know you're a failure.¹ Applies to quite a bit in life, though maybe not sky diving.

Following up...

There is a story about a certain man, Peter, who, encouraged by a friend, was able to walk on water while some of his colleagues looked on from a boat.² We have some information about Peter, quite a bit about his friend, and not so much information about what those who remained in the boat were thinking. But, considering that those in the boat were everyday people I think we could, and will, speculate on that a bit.

When we examine this story we may be able to identify with some of those individuals. In fact, we might be able to identify with more than one depending on the stage of our life we examine. Who do you identify with and why?

Let's first look at Peter's encouraging friend. Peter knew there was something special about him from the very time he laid eyes on him. The two of them became close friends, traveling together for several years, eating meals together and working side-by-side. In fact, they became so close that Peter's friend could really read Peter like a book. He knew Peter's strengths and his weaknesses. He knew when Peter was speaking beyond his ability to back it up and when he was being heartfelt and genuine. Peter's friend also knew how to encourage him.

Would you consider yourself to be an encourager? Have you taken the time to get close to someone, know them so intimately that you could really encourage them even when all human reasoning would suggest failure was right around

the corner? Let me restate that a different way. How many people have you known for a long time, lived with them side by side, worked alongside them for many years and yet not know them well enough to be an encouragement?

I have heard many a Little League coach or high school coach reason that kids need to be told they have no chance of making it to the big leagues so they won't be disappointed when it does not happen. I have witnessed many children not have a dream for the future because they were never encouraged to have one, no matter the obstacles that might present themselves. In fact, those are the same teenagers that claim it is everyone else's fault and never their own as they wander aimlessly into adulthood. That's the problem with a society that is more impressed with shallow successes than the personal growth experienced through failure.

What does it take to be an encourager? Well, let's look again at Peter's friend. Looking throughout their relationship we see that the encouraging friend spoke the truth and whatever was spoken was intended to build up and not tear down. In a way, it was selfless speech—Peter's friend was secure enough in who he was that he did not have to tear someone else down to make himself feel better. So, first and foremost, our speech has to be selfless.

It also takes time. There has to be time spent and it has to be quality time. It is possible for individuals to live alongside one another for many, many years and never have a real clue about their previous hurts, pains and joys. What's my proof you ask? 50% divorce rate. If we want to be an encourager we are going to have to take time and invest it into the lives of others. Peter's friend had this intimate time with him such that even when words of correction came, Peter could receive them knowing that even these were an encouragement.

Finally, it requires compassion. This is not a simple, "Gee, I'm sorry it did not work out. Just try harder next time." The compassion Peter's friend showed repeatedly was much more than that. The compassion of Peter's friend was much deeper and genuine. So much so that he could be seen



Ron Nichols

CAC Editorial Secretary

¹ David Leatherby, Calvary Temple, February 3, 2008.

² Holy Bible, Matthew 14:22-36.

as actually entering into Peter's suffering when he suffered. This is a pain for a friend that you can actually sense as if it were your own. "Why," you might ask, "would I ever want to consider doing this? As if I did not have enough pain of my own?" This line of thinking is pretty sad for two reasons. The first is that it is likely you have never been touched by true encouragement. The second is that there is no joy like the joy experienced together after first experiencing pain together.

Let's turn our attention to Peter. We know enough of him to know he was quite expressive. There was not a foot he didn't taste and most times he had a daily diet of it. In fact, many would say he took one foot out of his mouth only long enough to insert the other one! He would boldly proclaim something one moment and suffer correction for the empty boasting it was. Yet, the very next moment he would be recognized for his insightfulness when he boldly proclaimed something else.

Pete was a fisherman. He knew the reason boats existed—so people could actually go out onto the water and not sink. Boats existed because of human reasoning. Yet, Peter did not allow the restriction of human reasoning to stand in his way. By definition, human reasoning is both relative and limited. How is it relative? Have you ever had anyone close to you say, "That's not the way we do it. That's not the way our family is." Your boat is defined, in part, by those you connect yourself with. It is also limited by the resources seemingly at your disposal. We all have a boat of human reasoning. Peter was no exception. Yet, he was willing to step outside the boat so that he could experience something greater.

Are you willing to get out of the boat? Are you willing to take that risk to do something great and leave the comfort of good enough? In some ways I believe we all have a bit of Peter in us. I have no doubts that at some point each one of us has stepped outside the boat. The one thing that would be different though is what happened to us when we did. Were we met and lifted up by an encourager or were we brought down by those who were either too limited in their own dreams or too fearful to get out of the boat to begin with?

Even without having first hand knowledge of what was said, can you imagine what was said by Peter's colleagues as he went to get out of the boat? I think we all know enough of human nature to speculate at least for a bit. The self-recognized patron saint of human reasoning may have yelled out, "Peter! You can't do that! Dude, that's why we have this boat!" Mr. Envious Green might have simply remarked under his breath, "Show-off. Boy, I can't wait to throw this in your face." The Earl, Faint of Heart may have been right alongside side Peter, but then sitting down at the last minute content in good enough. Let's not forget Peter's well-meaning Little League coach—"Kid, you just don't have the talent or skills. Just sit down." I could spend more time on those that were in the boat but I won't. Indeed, the story teller did not even see the importance of naming them by name.

Do you want to live on in the hearts of friends and family as an encourager? Then it is my deepest hope for you that you find that encourager for yourself, one who will enter alongside you into your deepest pain and rejoice with you in your greatest joys! It is out of being truly encouraged that we can encourage another.

Do you want to be Peter? Then do not be afraid of failure. Do not be so concerned with how the world defines success but rather on the personal growth you experience as a result

of those times of failure. Keep this in mind as well – it was because of Peter's own failings that he could become an encourager to others.

Are you content to stay in the boat? Well, I guess that's fine too though I think many of us would be grateful if you did so quietly.

Until next time, my best to you and your families.

Row

The King's Highway

Once upon a time, a king had a great highway built for the people who lived in his kingdom. After it was completed, but before it was opened to the public, the king decided to have a contest. He invited as many of his subjects as desired to participate. The challenge was to see who could travel the highway the best, and the winner was to receive a box of gold.

On the day of the contest, all the people came. Some of them had fine chariots, some had fine clothing and fancy food to make the trip a luxurious journey. Some wore their sturdiest shoes and ran along the highway on their feet to show their skill. All day they traveled the highway, and each one, when he arrived at the end, complained to the king about a large pile of rocks and debris that had been left almost blocking the road at one point, and that got in their way and hindered their travel.

At the end of the day, a lone traveler crossed the finish line warily and walked over to the king. He was tired and dirty, but he addressed the king with great respect and handed him a small chest of gold. He said, "I stopped along the way to clear a pile of rocks and debris that was blocking the road. This chest of gold was under it all. Please have it returned to its rightful owner."

The king replied, "You are the rightful owner." "Oh no," said the traveler, "This is not mine. I've never known such money."

"Oh yes," said the king, "you've earned this gold, for you won my contest. He who travels the road best is he who makes the road better for those who will follow."

Remember those words of wisdom as you travel the road of life!

—Author Unknown

jmm.aaa.net.au/articles/4507.htm

The Expert Witness: **Knowledge and Communication** **(The Deadly or Dynamic Duo)**

by Debra Guiou Stufflebean

Introduction

Knowledge and communication skills constitute the most effective expert witness. Both are vital to the reputation of the expert witness. In the words of Cicero, "Wisdom without eloquence produces very little that is beneficial." Yet Shakespeare quite accurately spoke of the other extreme, "Fire and technique lacking substance are a tale told by an idiot, full of sound and fury, signifying nothing" (Leech, 1985). It is fair to say that knowledge and communication are of mutual benefit to one another. This paper is addressed to those expert witnesses who are recognized as knowledgeable in their fields but who may be seeking suggestions for improving the delivery of that knowledge. The focus of the paper is on increasing credibility, language choice, and nonverbal cues.

Credibility

First impressions have a lasting impact on a juror's perception of the witness.

The witness's professionalism can be instantaneously sized up based upon the posture, carriage, and attire of the witness before any words are ever spoken. We are more accepting when the appearance matches our expectations and tend to reject those which don't (Leech, 1985).

Persons stereotype individuals according to their professions. For instance, doctors are considered to be very knowledgeable, influential, sharp dressers, and helpful. If the person who testifies on the stand does not meet this preconceived image, chances are that whatever is said will not likely be believed. What happens, though, when the preconceived image is not flattering?

In a survey of 25 nontraditional students (mean age 27 years), the preconceived image of an economist was less than flattering. This was the same sample who gave the above description for doctors. When asked to describe the economist as an expert witness, these statements summarize most of the comments: "They talk in circles." "They are similar to politicians as they can always justify their own opinions." "Their vocabulary is difficult to understand." "They use overly technical words." And they even used such descriptions as "stuffy, strange, and boring" to describe the way most economists dress.

It is rather jarring to people to have their stereotypes challenged. A great deal of cognitive dissonance takes place when images do not match expectations. It is imperative, however, that the professional image of the economists be changed so that it more closely correlates with the image of other professional witnesses.

Survey results from a jury trial wherein two economists testified for each party indicated that the jury found the econ-

omist that was perceived as more charismatic, organized, and sharply dressed as more believable. This shows that it is a goal that can be achieved.

Stereotyping by the jury is not only *their* problem, but it's *your* problem.

You are on display the same as if you were performing in an arena, only this audience, the jury, tends to be more critical than most audiences. The expert should keep this in mind whenever he/she is in view of the jury before, after, or during the trial. In addition, the jury is going to have help in viewing you, the forensic economist, as lacking in the expertise of other expert witnesses. "You don't personally know if Mr. X is disabled, do you? You're not a medical doctor, are you? You're not a rehabilitation specialist, are you? In fact, you don't really have any idea whether Mr. X will sustain an economic loss, do you?" (Baker, 1990) So what are some of the ways that the forensic economist can appear more credible?

Status/Power Perception

Status is often thought of interchangeably with power as it gives the appearance of power (Henley, 1977). Persons viewed as having high status are more relaxed in posture and carry themselves with confidence. One should let the hands fall along the side seams of the pants or skirt. If they hang to the front or to the back, you are probably slouching or too erect and may appear "stiff" (Leech, 1985). Once seated they may have a sideways lean or even slight recline in position (Henley, 1977). The witness should take the stand with coat buttoned and then unbutton the coat to relax into the witness chair to begin testifying. Folded arms and buttoned jacket can be interpreted as defensiveness and lack of ease (Henley, 1977).

*"Have you ever **not** been allowed to testify?" When the response was, "yes," the attorney hammered in his point, "Is that because the judge determined your credentials were not sufficient to allow you to give expert opinions?"*

Appearance/Attire Perception

Physical appearance is usually the initial basis for our reactions to other people and all of us have stereotypes of relating appearance to personality: (Heun, 1978) i. e., the absent-minded professor in disheveled clothes and horn-rimmed glasses. The ill fit of clothing is often a status predictor. As mentioned earlier, one survey showed that persons would expect a doctor to be a sharp dresser. Apparently this is true because of the negative reaction that a jury had to a doctor who once took the stand in a red shirt, baggy pants, deck shoes, and a captain's sailing cap. (It was his day off and he was going boating later that day.) Suddenly this was not a prestigious doctor but a playboy who lived the high life off of high doctor fees.

This article first appeared in *Journal of Forensic Economics* 4(3), 1991, pp. 317-327, and is reprinted here with the author's permission. Suggested by Raymond Davis.

According to John Molloy, an image expert, pinstriped suits for either men or women have traditionally been used for trying to sell something important (Henley, 1977). As an expert witness, nothing could be more important than selling the testimony given. Testifying is serious business. It requires serious clothing.

The style, pattern, fabric, and color should be on the conservative side. Generally dark suits of navy blue or charcoal gray with white shirts or blouses and simple, expensive accessories are suggested (Leech, 1985).

Research indicates that it can be dangerous to be too fashionable, particularly for the female expert witness. She should never attempt to appear as masculine as a man in her attire. She must strive to maintain femininity yet not come across as sexy. For example, she should be leery of slits in the skirt that reveal too much leg and avoid wearing pastels and bright colors. Unfortunately, a woman's appearance, even more so than a man's, goes a long way toward determining how seriously she will be taken as a professional (Leech, 1985).

There is a wider latitude for individuality than may appear by these suggestions. Although there are image consultants which can assist in establishing a wardrobe that can provide the very best first impression, most economists are resistant to spending their time or money on such services. This is most unfortunate because numerous studies indicate that when clothes fit well and are selected to enhance the person's natural coloring, the person tends to perform better, their confidence zooms, posture improves, and they speak with more assurance (Leech, 1985).

Credentials/Reputation Perception

Persons of equal or higher status often drop formalities that would normally be used if the person being addressed were of higher address than the speaker (Henley, 1977). The expert cannot afford for this to happen in the courtroom. It is particularly important that the attorney address the expert with all the respect entitled to a professional. Frequently making reference to the expert witness as doctor or professor enhances their credibility and awards them a position of power.

During cross-examination opposing counsel have been known to ask what the economist prefers to be called. "I see you have a Ph.D. in Economics, would you prefer to be called Dr., Professor, or Mr.?" If the response is, "I don't care," from that point on the witness will surely be addressed as "Mr." or "Sir." Sometimes this happens even without a willing participant. Opposing counsel deliberately addresses the witness as "Mr." or "Sir." Counsel has done a good job of maintaining respect—no obvious faux pas committed—while undermining the expert's authority. If this does happen, it is particularly important that the attorney who has retained the expert witness summarily reiterate the witness's credentials during re-redirect. "Dr. Knowledge, you have analyzed similar situations in the past, and based upon those years of expertise, would you again state to the jury your professional opinion."

Generally, experts are retained to match or excel over the opposing counsel's witness. This is when credentials should be publicized. Most professionals enjoy speaking of their accomplishments, and taking the stand is not a time to be modest. Remember, it is the goal of the opposition to undermine your authority.

An attorney asked an expert witness what appeared an innocent enough question one time just to plant doubt in the minds of the jury about the expert's credentials.

"Have you ever not been allowed to testify?" When the response was, "yes," the attorney hammered in his point, "Is that because the judge determined your credentials were not sufficient to allow you to give economic expert opinions?" (Baker, 1990) The denial had been due to testimony about the inflation rate but the attorney had been successful in what he had hoped to accomplish. The merits of the expert witness should be clearly established. It is a grave error to allow opposing counsel to stipulate as to a witness's credentials.

Considerable time should be given to the reputation of the expert witness in the areas of publications and presentations. If the economist is testifying on a medical malpractice case and has written a chapter as a co-author in that particular area, then this should be emphasized. Not only does the writing of the chapter add to the credibility but the names of the other authors does as well. "Who you know" says something about the person. If the expert has presented a paper in Washington, D. C. or London, England, people are impressed with the names of the places where such presentations have been given.

Professional credentials aren't the only things to consider. If the jury is primarily comprised of blue collar workers (and most of them are) then referring to military backgrounds or previous work experience in addition to academics can establish a common ground or bond between the expert and the jury. Any background given to the jury about the expert witness can cause a prejudgment on the jury's part about how knowledgeable the witness is about the facts of the case.

Clear Communication of Knowledge

The way that the witness is questioned, again, alludes to the confidence that the attorney puts in the expert to be a professional and know what they are talking about. Abrupt questions and answers are not as impressive as letting the expert tell the story. Order and placement of testimony also has a bearing. It is generally thought to be best to refute the other side's testimony before presenting one's own thoughts. Strongest arguments should be placed at the beginning. The first one to testify always has the edge as they are less likely to be tuned out, however, the most recent testimony can be the deciding factor in a very controversial issue where no judgments have already been made (Trenholm, 1989).

Often the expert has no say concerning the order or the style of testimony. These suggestions are generated towards what would be ideal. Very few experts ever rehearse a question and answer scenario of their testimony. Rather, they are invited to lunch and the attorney will turn to the witness during coffee and say, "This is what I'm going to ask you are we all set?" Normally they are relying on how well the witness performed during the deposition and assuming that

**Repetition is good ... first you tell
them what you're going to tell
them, then you tell them, then you
tell them what you told them.**

Stufflebean—The *Expert Witness*

the performance will be the same in the courtroom. However, there should be a difference between the demeanor of the witness when being deposed versus courtroom demeanor. During a deposition a witness should be more reticent. The more information given, the more likely that statements from the deposition will be pointed out during court testimony to give the appearance of contradiction. Also, the more education they give opposing counsel about their own methodology, the easier it makes their job in finding another expert who will refute it. Being reticent in the courtroom, however, will give the appearance of being unsure, not confident, or hiding something. The expert needs to be overly cooperative, willing to educate, and thoroughly narrate his/her opinion.

Narrative

The expert must be able to clearly communicate to the jury his/her perspective in arriving at a certain decision or opinion. The most persuasive trials are those wherein the lawyers put forth their issues by use of storytelling techniques. The expert should act as a character that tells one portion of the story. Stories are more easily comprehended by juries. People can relate in the same way as they do to a good book or a movie (Matlon, 1988).

Consider this forensic economist's storytelling technique in explaining the methodology used in a wrongful death case. "As we make a forecast of a person's future income, typically we expect a person's income to grow during the future. So in making a judgment about the appropriate or inappropriate growth rate, a considerable amount of research goes into gathering that data, but once the data is gathered, it can be used in more than one case ... switching methodology creates problems ... the methodology in a wrongful death should be the same regardless of which individual we may be talking about. In the basic analysis you probably would make five assumptions. Let's go through them one by one. The first assumption would be the base salary which was being earned at the time of the accident. We assume that the facts we are given are the correct figures. The next assumption is the projection that the person will continue in the same employment until the age of 65 years ..." (Baker, 1990) The point to be made is that the forensic economist takes a formula and tells a story step-by-step in terms that are easily comprehended by the jury. This format is much more inviting to listen to than the mundane question and answer means by which it is traditionally done.

Logical Reasoning

Different kinds of reasoning may be employed in the persuasive argument of testimony. The first way is to establish that the cause logically generates the effect that the expert is purporting. To do so one must be convincing that no other cause could contribute and that the effect is not a byproduct of another cause. Often, when the expert witness is an economist, the controversy in testimony lies in their choice of approximating certain parameters such as the growth factor and discount rate. Their testimony can entail defending their own methodology in a sensible way to the jury so that it will be adopted as a plausible means for arriving at liability. Herein lies the other advantage to utilizing the storytelling technique as demonstrated above. With every step of the process, the expert has the opportunity to defend and persuade the jury that this is the correct and most plausible way to calculate the loss.

Still another way to establish good reasoning is to tie the testimony back in with the credentials of the witness. Un-

der the Federal Rules of Evidence the testimony need only be based upon the expert's years of experience in that they have "seen this before" and that sufficient signs exist to warrant the conclusion. Naturally the case could be depicted as generic and representative of hundreds of others that are just like it (Trenholm, 1989).

Word Choice

Repetition is good when the way something is said is varied slightly but the same message is conveyed. Like most teachers will tell speech students, first you tell them what you're going to tell them, then you tell them, then you tell them what you told them. The expert should begin by explaining the steps of the analysis so that the jury can understand the actual calculations which will be given next and then finally, during redirect, tell the jury again in a short story the summary of what you have just told them. Use of personal pronouns creates psychological closeness between the witness and the jury (i.e. here vs. there, now vs. then, we vs. you, I vs. one) (Trenholm, 1989). Talk to the jury, not to attorney doing the questioning.

The expert witness should use simple, clear language. The following is an actual response to the question, "What are these calculations? ... These are calculations here, numbers that I use to help me crunch out the actual numbers that have to be crunched out to come up with the figures." (Source purposely omitted) Could any response be more ambiguous? The essence of brilliance is making something complicated simple (Leech, 1985). According to one economist, "Economics is often defined as the art of making the obvious obscure" (Eck, 1990). Even professionals disagree among themselves as to what the difference is between usable income, disposable income, and take-home pay. It is very important to be clear about the terms used. (By the way, is there any difference?)

One expert made reference to the defendant as "having a substantial deficit in I.Q." The same thought could be stated as "slow mentally" with quicker comprehension from the jurors. Definition of abbreviated terms that will be used throughout should be made the first time they are ever said (i.e., C.P.I.—consumer price index, O.T.S.—Office of Thrift Supervision). Many persons may have heard the term, but do not know what it means. On the whole, abbreviated terms are not a good idea because even after they have been defined, there will be a lag time in remembering what it stands for each time the term is spoken.

Jargon does give the assurance that the person must know what they are talking about, after all, "they do speak the language" and therefore should not be totally eliminated from testimony. To many it is impressive, even when it is not understood and adds to the authority of the speaker. However, testimony that is free of jargon conveys honesty and the person is thought to be more "down to earth" (Fast, 1979). The best rule of thumb, again, is to define technical words that may not be understood. To tell the jury that historic loss, present value of future loss, growth and discount rates were all taken into consideration and then it was mortality adjusted without explanation of what these things mean is the same as telling you, the reader, that I employ the Social Judgment/Involvement Theory based upon demographic results of audience analysis before giving a presentation. You may not have any more of an idea about what that means than the jury has about the areas of your analysis.

Many times persons adjust speech by use of euphemisms, which are just a more refined way of saying something

that may appear too direct when stated clearly. However, the courtroom is no arena for “sugar-coating” your language. Words carry power. Avoid clichés and vogue words. Use qualifiers sparingly (i.e., almost, maybe, hopefully). Powerless speech includes hesitations such as “well”, “and ah”, “you know”, answering questions with questions, and hedging (“I guess”, “I may have”). This, again, is an anonymous example. “Well, ah, in conjunction with the V.P.I., I used, oh, another book that had some professional study but I can’t remember the name of it but it had to do with hours individuals work around the house and that kind of stuff. Oh, you know, the name is about three lines long.” Testimony becomes more powerful when intensifiers are used such as “very” and “certainly” as it shows the level of commitment by the speaker in what he/she believes (Matlon, 1988). “Can you explain that Dr. X?” Reply, “Certainly.”

The expert should provide easy directions for his/her testimony by enumerating (“my first point is ...”), emphasizing certain aspects (“a particularly important factor...”), restating the position (“Look at this another way...”), inviting perspective-taking on the part of the jurors (“Put yourself in this position ...” or “If you could just think about it this way...”). The expert witness must keep the speech clear by not running words together which can be avoided by carefully enunciating each word which is also a power punch—and not allowing the tone of the voice to fall off at the ends of sentences (Leech, 1985).

Analogies are another way of using language more powerfully. Analogies tend to “paint pictures”. For an example, someone could describe a sharp pain as “having a hot fireplace poker thrust into your side”. Analogies make comparisons between things that are familiar and things that are not. Figurative analogies compare things that differ considerably, such as comparing the forecast of a person’s income stream to an airplane taking off, leveling off, and then landing (retirement). Literal analogies compare things such as comparing the way the present value formula is the same as investing x amount of dollars today in order for it to mature into \$10,000 five years from now so that junior can go to college. Analogies will cause the testimony to come alive and appear more real and meaningful to the jury. The key is to make the comparisons understandable to the average Joe. “No matter what rate we have coming down the pike, if the investment is designed properly then future inflation is going to be a wash.” What does that mean? Analogies can be very helpful in linking case information to something in the experience or knowledge of the jury (Matlon, 1988). For instance, one forensic economist does a good job of explaining the impact of taxes to loss calculations by comparing it to painting a house. You have the tax consideration, the consumption consideration, and the household services consideration. If the man paints the house himself there is an economic value in painting the house. If those services are to be replaced and hired, they must be paid for in after-tax dollars. If the economist places a value on the economic service and then converts it to a pre-tax rate, then they must also forecast the future tax structure. In a different type of case, valuation of a business, considers how much the person could make working for someone else and then adds from that point. The condition of the business, the uniqueness of the service, is easily grasped when compared to collecting antiques or used automobiles. One first considers the book value of those things but the condition it is in and the uniqueness adds to the value (Baker, 1990).

Visual Aids

Visual aids are used for three primary reasons. They provide interest, clarification, and retention. Statistics are frequently used with analogies to clarify testimony. In order to make statistics more meaningful, tables, graphs, bar charts and pies are often used as visual aids. These particular types of visual aids are best prepared by a computer graphics expert or someone who can draw them with artistic precision. Some experts have these capabilities but for those who do not, the professional image conveyed by having them done is usually worth the expense. Nothing looks more unprofessional than bars that are not drawn with a ruler or a lopsided pie wherein the percentages do not add up. Numerical data is hard to grasp unless it can be seen as well as heard. This is particularly frustrating for the economist whose expertise deals with numbers. Such expert witnesses are more effective when using visual aids to accompany their testimony. The information they are trying to convey is like trying to teach someone about the game of “Black Jack” without using cards. (Notice the effective use of an analogy to get my point across.) The economist needs a chart that shows historical loss. This is the day it starts, this is the day it ends, and this is how many dollars it is. The same is true for the present value of future loss. This is the day it starts, this is the day it ends, and this is how many dollars it is.

Picture visual aids are always better than word visual aids. Data are often better synthesized in graphic rather than tabular form. The visual aid should consist of rounded numbers but make it perfectly clear to the jury that they have been rounded for purposes of the visual aid only (it is suggested not to round more than one decimal place as there is considerable difference between 17.6 and 18 when one is talking about millions of dollars). Giving too much information on any one visual aid can cause confusion. The visual aid should facilitate the oral testimony. You do not want the jury to be reading and trying to figure out a complex visual aid while trying to testify. Use “progressive disclosure”, show the material only as it is actually being discussed. For example, the present value formula used by economists is best disclosed progressively rather than on a prepared visual aid. It is much easier for the jury to understand the formula as it is being written out when the economist explains what the growth rate is and from what it was derived and what the discount rate is, and so forth. This is when it becomes particularly important to remember to write large and legibly. The most common complaint about visual aids is that they cannot be seen. It is surprising how many college professors do not consider the distance of the audience from the blackboard when writing assignments.

Another means of progressive disclosure which looks more polished is to juxtapose (overlay) information one on top of another. Start out with the big picture first and then break it down (Leech, 1985). Overhead transparencies are particularly good because the witness may be permitted to interact with the visual aid and highlight or add information as needed. Plus the information is magnified while the visual aid is small enough to put into a brief case. Layering transparencies are very effective in showing “cause and effect.” For an example, in a disability case, a pie chart could be very effective in showing percentage of income disbursements prior to the accident with an adjusted overlay showing how the injury affects those percentages and how disbursements are modified.

The following may be some helpful hints. Keep printing on graphs horizontal as vertical printing causes the viewer to

Stufflebean—The *Expert Witness*

have to cock the head to read it. When making a comparison between data it is best to put the numbers in columns across from one another rather than rows wherein the information is one on top of the other (Leech, 1985). When itemizing information, use bullets, dingbats, or asterisks (tiny circles, squares, or stars) to set each item off.

Bar charts and pie charts are good, particularly when done in color. Keep color and bar schemes simple. Warm colors advance towards the audience; red, orange, and yellow are best. Cool colors retreat; avoid violet, blue, and green. If a visual aid has a dark background, white, yellow and orange are best. A light background is enhanced by use of black, red, and orange. If a graph is used, color code the lines, but more than three lines on a graph becomes confusing.

Some economists feel that the use of the blackboard in the courtroom reinforces their credibility as a professor who is knowledgeable in the field of economics. One advantage to the use of blackboards is that once the information is put on it, the information remains as a reminder to the jury unless the opposing counsel thinks to erase it. And, as stated earlier, still another advantage is progressive disclosure. The information can be put up as it applies to the testimony which may be less confusing than a prepared visual aid that encompasses much detail.

Far too many experts produce bad visual aids which are hard to read, cluttered, and unimaginative. Such visual aids do more harm than good. Think of a visual aid as like a highway road sign. It should be of single focus, be simple, clearly printed, scrubbed of any unnecessary detail, and easy to read (Leech, 1985).

Nonverbal Communication

While research to date cannot tell someone what nonverbal behavior means, we can explain how nonverbal behavior is interpreted. Therein, lies a big difference. Many persons are intrigued with knowing what meaning lies behind someone's nonverbal behavior. Does a certain act have a deeper psychological meaning? What research can tell us is how others interpret nonverbal behavior that is observed and as an expert witness, knowing how you may be perceived by the jury based upon your nonverbal style can be very beneficial. Women tend to pay closer attention to nonverbal cues than men (Henley, 1977). Therefore, jury consisting of more women may scrutinize the witness's performance more closely than men on the jury.

Voice Rate, Volume, and Inflection

Nerves often cause shallowness or shortness of breath which signals frustration, fatigue, and a sense of helplessness. The more nervous the witness is, the faster he/she will tend to speak. The question-response format of trial testimony will often prohibit this from being a problem. However, there are times when the expert is given free reign to explain procedures when the expert needs to remember that while he/she works with that kind of information daily, it is like learning a foreign language to most jurors. Slower speech shows conviction, thoughtfulness, sincerity, and gives the jurors an opportunity to digest what is being said. Practice some isometric exercises of slowly inhaling and exhaling before taking the stand.

Sheer volume gives power to influence (Henley, 1977). Volume tends to reflect authority and if the witness does not speak loudly enough, he/she may be interrupted and requested to repeat the same information. When the voice is soft the witness appears to cower to a state of helplessness, defense-

lessness, that says, "Don't attack me" wherein a projected voice shows power (Fast, 1979). Women have to be particularly cautioned to speak up. The acoustics in the courtroom may not be the best and when speaking to different ages, there may be certain hearing impairments that must be taken into consideration.

Changes in pitch are known as inflections. Nothing can put someone to sleep faster than a monotone voice. Changing the rate and volume of one's voice provides variety and may also convey a message about the witness's personality to the jury. The "way" something is said may suggest to the jury that the witness is jovial, sincere, sarcastic, or angry. For example, persons interpret pauses according to the length of time taken between a question and the expressed answer. Too long of a pause registers pomposity, exaggeration, and deceit. When a short pause is used the person is thought to be organized, together and definite (Fast, 1979). Make use of silence when thinking of a response rather than filling the void with utterances "ah", "umm", and so forth. Silence commands respect and keeps persons in suspense. Vocal fillers on the other hand may be construed as lack of knowledge or poor ability to speak.

Gestures

There are some particularly effective gestures that may accompany oral testimony that enhance the expert witness's authority. Gestures can entail not only body movements but eye contact and facial expressions. Nonverbal gestures carry the most influence when they are natural and harmonize with the message (Henley, 1977). It is important to appear open. Tightly clasped hands and crossed legs cause the witness to appear defensive, tense (Matlon, 1988).

Freely use the hands as you would in other conversations, (provided you don't "talk with your hands"), do what is the most natural for you (Leech, 1985). A particularly effective gesture is called, "Steepling" (Birdwhistell's term). Fingertips together, palms apart, one touches the fingertips together in a raised position and the closer to the chin one exhibits steepling the more confident and important the person is thought to be. Thoughtfulness and evaluation is often conveyed by hand-to-face gestures such as stroking the chin (Henley, 1977).

It is only natural to look away frequently when organizing one's thoughts. To gaze into the eyes of listeners while speaking may result in information overload because we are always monitoring our audience for feedback (Henley, 1977). However, from eye contact we are able to tell whether the audience understands what is being shared. Eye contact should be done with frequency rather than consistency. The more familiar one is with the testimony, the better the witness will be at maintaining frequent eye contact with the jury.

People regard facial expressions as more trustworthy than words. As a child, we are often told to "wipe that look off of your face" or "don't look at me that way" because facial expressions convey more information than our words. If nonverbal and verbal messages do not match, people always believe the nonverbal cues. This is probably true because words are easier to falsify than looks. A fleeting expression will give a hint to the truth of a situation momentarily before a person is able to stop themselves and gain control over the facial expression. This lack of synchronization between the words being expressed and the facial expression may create some question in the minds of the jury about the accuracy of the testimony (Ekman & Friesen, 1975).

Sincerity and a belief in what one is testifying about will

usually generate testimony that has verbal and nonverbal harmony. A person can become so preoccupied with “do’s and don’ts” that they add to the stress of the situation. It is important to be yourself. However, we can each improve with practice. Observation of your testimony on video tape may give some insight as to what mannerisms are an asset and which ones require remedial action.

Conclusion

This paper has focused on ways that an expert witness may enhance his/her credibility, more clearly communicate their knowledge, and has made some suggestions for nonverbal cues during testimony. A good expert witness should capitalize on his/her teaching capability and be willing to explain any factors that are the basis for the final opinion. They need to be patient and cooperative. With a little practice in improving communication skills they can relax and be confident in their own knowledge.

There are very few books out on legal communications that pertain to the points brought up in this paper. A review of books available at some law schools show that books referenced as legal communications deal with legislation that governs computer technology, media, consumer education, etc.. There are numerous books about legal composition which offers assistance in written skills but few, if any, that deal with oral skills. Later in life, very few professionals want to go back to school to take classes in public speaking and even those classes may provide limited benefits to the expert witness. Trial consultants are becoming more in demand because they can provide assistance in the areas addressed herein. Many professionals are acknowledging the importance of their services.

To conclude, ponder this thought: While details of one’s testimony are important, many jurors “believe” the testimony of the expert whom they “like” the best. Personality seems to have a terrific impact on believability. Those experts that appear more charismatic, honest, friendly, and helpful seem to endear themselves to the jury and this has a bearing on how persuasive the witness is considered to be. Which just goes to show that knowledge and communication are a dynamic duo. Absence of either could be deadly.

References

- Baker, William Gary, and James R. Eck, Institute for Forensic Economics, Interviews 8/ 90 and 12/90.
- Ekman, Paul and Wallace Friesen, *Unmasking the Face*, Englewood Cliffs, NJ: Prentice-Hall, Inc., 1975.
- Fast, Julius and Barbara Fast, *Talking Between the Lines*, New York, NY: Viking Press, 1979.
- Henley, Nancy, *Body Politics*, Englewood Cliffs, NJ, Prentice-Hall, Inc., 1977.
- Heun, Linda R., *Developing Skills for Human Interaction*, (2nd Ed.), Columbus, OH: C.E. Merrill Publishing Co., 1978.
- Leech, Thomas, *How To Prepare, Stage, and Deliver Winning Presentations*, New York, NY: American Management Association, 1985.
- Marion, Ronald J., *Communication in the Legal Process*, New York, NY: Holt, Rinehart and Winston, Inc., 1988.
- Trenholm, Sarah, *Human Communication Theory*, Englewood Cliffs, NJ: Prentice-Hall, Inc., 1986.

Award Nominees Sought

Paul Kirk Presidents Award

The CAC Paul Kirk Presidents Award was established to recognize outstanding new members to the profession of criminalistics. This is a joint award with our sister organization, the Forensic Science Society of the United Kingdom. Every other year the CAC selects one member to send to a meeting of the Society. The travel and meeting expenses are covered by the two organizations. Candidates must be members of the CAC in any status, and must be employed in the profession for fewer than six years.

Anthony Longhetti Distinguished Member Award

This is an award to honor long term service to the association. There is no limit to the number of times a person may be nominated or receive this award.

The candidate must be a member of the CAC (in any category).

The candidate must have contributed significantly to the Association in one or more of the following areas:

Long term service to the association as a member of the Board of Directors or in committees.

Sustained production of papers or technical notes in newsletters or at seminars.

Organization of study groups or workshops, etc.

Significant research and dissemination of the information to the forensic science community (i.e. journal or newsletter publications, seminar papers, workshops, study groups, etc.)

Any other unusual or significant contributions to the improvement of the profession of criminalistics.

The nomination period is April 1-July 1.

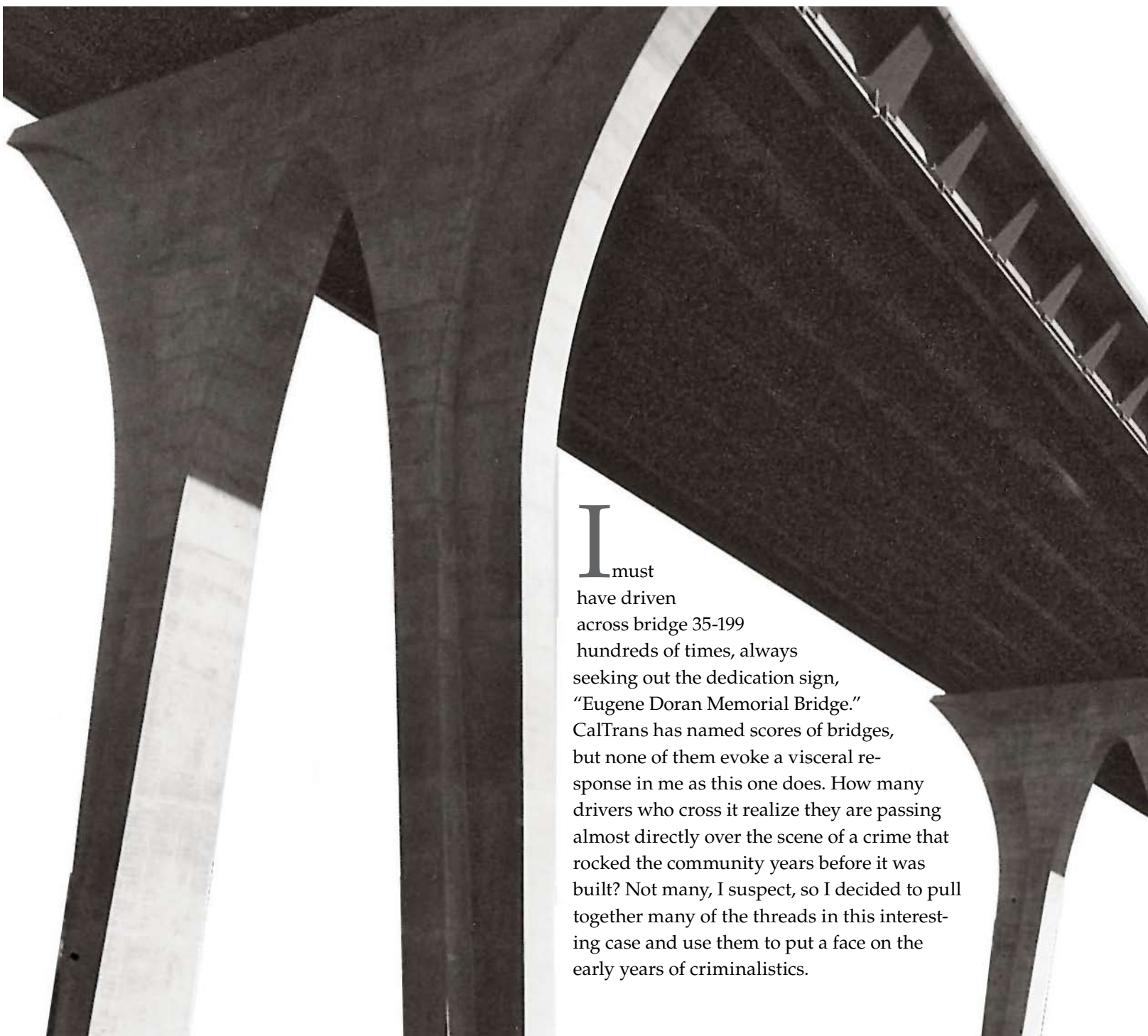
Please contact Mey Tann with questions (951) 361-500.
mey.tann@doj.ca.gov

Bridge

35-199

*Bridges made of concrete and steel span distances,
but sometimes they span decades. . .*

By John Houde



I must have driven across bridge 35-199 hundreds of times, always seeking out the dedication sign, "Eugene Doran Memorial Bridge." CalTrans has named scores of bridges, but none of them evoke a visceral response in me as this one does. How many drivers who cross it realize they are passing almost directly over the scene of a crime that rocked the community years before it was built? Not many, I suspect, so I decided to pull together many of the threads in this interesting case and use them to put a face on the early years of criminalistics.

It is 4 o'clock, Wednesday morning, August 5, 1959. The weather has been mild in the south bay area. Ike is in the White House; his vice president, Richard Nixon, just today returned from a visit with Nikita Khrushchev. Ford Motor Co. is about to dump the Edsel as a bad idea, and a transistor radio costs a week's salary.

Lonely Road

Thirty-six year-old Eugene Albert Doran is patrolling the Black Mountain Road area in the town of Hillsborough, California. Officer Doran, "Gene" to his friends, had only been on the department a little over three years. Asleep at home are his wife, Alice, who is five months pregnant and his two sons, Eugene, Jr., and Patrick, both in their early teens.

Gene Doran had been working at the San Mateo Humane Society, and lent a hand to the San Mateo Sheriff's Office as a reserve deputy. He had his sights set on a full-time job as a deputy, but a position opened up at the Hillsborough PD first and he took it. After a year or so learning the ropes, he went to the SFPD police academy to finish his training.

At one minute past four a.m., dispatcher William Offield calls Doran, "Time check, car 14."

Doran replies, "Car 14, I'm at Black Mountain near Skyline."

There were few houses in that area, and any other cars tooling along at that hour are bound to raise a good cop's suspicions. When Officer Doran spots a new Pontiac Catalina with a young male driver, he turns on his red lights, stopping the car on Bunker Hill Road, just off of Skyline Blvd. This area has often been described as "lonely" and is technically just outside the Hillsborough town limits.

"Just hang on, it may be hot"

Six minutes later, Doran calls, "Car 14, give me a hot check on SCP424."

"Check 14," replies Offield.

There wouldn't be a computerized list of stolen cars for many years, so license plates were checked against a "hot sheet" typed up regularly.

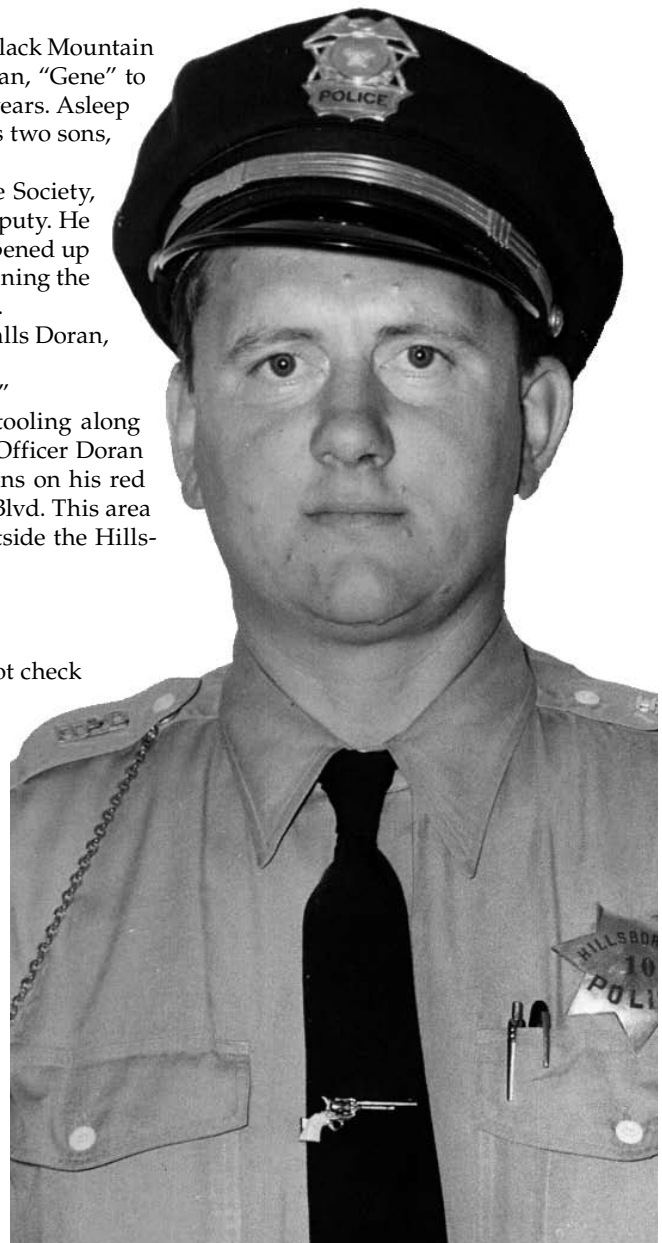
As Offield began to reply, he was interrupted by a dispatcher in San Bruno, who had been monitoring Doran's call.

". . . just hang on, it may be hot," she said. "Those plates are hot out of San Bruno, stolen 31 July."

"You get that, Car 14?" inquired Offield.

It is 4:09 a.m. Offield waits a couple of minutes more and tries again, but is met with silence.

A few more tense minutes pass, and Offield puts out a radio



Eugene A. Doran

alert to San Mateo sheriff and surrounding police departments to search for Officer Doran. They know where he was a few minutes before, so the search radius is fairly limited.

At 4:49 a.m., two Belmont PD officers see the lights of Doran's car and find him. The car motor is still running.

Thirty-seven year-old Morris Grodsky responds to the crime scene in the crime lab's panel truck, which he is allowed to take home at night. When he arrives, he finds a uniformed police officer lying face up next to his patrol car. Three gunshot wounds are visible in the face and neck. On the hood of the patrol car are a pair of handprints wide apart, as if a suspect was being searched.



Morris Grodsky

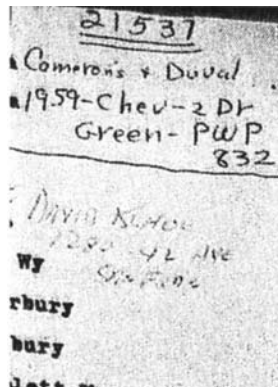
In the 1950's the concept of a police agency hiring a professional scientist to handle forensic evidence is fairly progressive. The LAPD had been doing it for years, but smaller agencies needed to warm up to the idea. When this case comes to Morris, the California Association of Criminalists is only five years old.

Morris' job at the San Mateo Sheriff's Office is referred to as criminologist. He points out, however, "I have found that often criminalistics is confused with criminology. They are not the same. Criminalistics uses the physical sciences to study physical evidence. Criminology is a social science or behavioral science which focuses upon the criminal, his origins, his behavior, his rehabilitation and criminal patterns."

When he was discharged from the US Army in 1946, Morris began taking pre-med courses. While at college, he became intrigued by the field of criminalistics and switched majors. He eventually graduated from Cal, Berkeley in criminalistics, where he studied under Paul Kirk. Now he found himself in a brand new field where there were few jobs, so he earned a master's in education and taught science at the high school level and finally forensic science and criminal identification at the City College of San Francisco.

After he arrives, a crowd begins to gather. Since the crime occurred in an unincorporated area, San Mateo Sheriff Earl B. Whitmore assumes charge of the investigation.

Morris remembers, "Within a short time, there were many people at the locale, coroner's men, detectives, newspa-



Doran's clipboard



The 1956 Hillsborough Police Department. Gene Doran is in the back row on the right

per reporters, the police photographer, other patrolmen and police officials. There were certain indications evident at the scene. The officer's revolver was missing. He was known to carry a .38 caliber Smith and Wesson revolver, [bearing serial number K145451.] The initial impression was that possibly he had been shot with his own weapon. He had been killed at the very spot where his body was found. There was no indication of dragging or movement after death. The interior of the patrol car was neat, with no indications of a struggle, nor blood spatters. Laying on the front seat was a clipboard with note paper. The last thing written on the top sheet was the name, David Kehoe. On the victim's left side near his neck, lying there on the roadway, was a small piece of paper. This was a blood spattered receipt for a driver's license application made out to David Steven Kehoe of a San Francisco address.

"Solving a crime is really a team effort. I have often thought of the elements involved in a good investigation. These include communication, information, the use of available resources, and co-operation. How many cases have gone unsolved because different agencies held different pieces

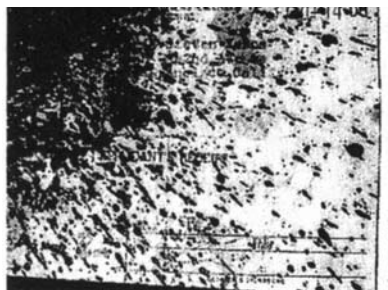


Sheriff Earl Whitmore

of a jigsaw puzzle which, if put together, would have clarified a mystery? Information comes from witnesses, victims, suspects, formal records and archives. All sources should be used. Other available resources include the crime laboratory, the medical examiner's office and appropriate specialists.

"In our country we have somewhere around 50,000 separate law enforcement agencies. Without cooperation, we would have serious problems in our investigations; problems compounded by rapid transportation and mass communication. Criminals can move swiftly from one place to another and the authority of most law enforcement agencies is geographically limited. Quite often police departments must depend upon the assistance of other police departments.

"Although this case occurred many years ago, it still serves as a good illustration of a classic investigation which at first appeared to be destined to failure."

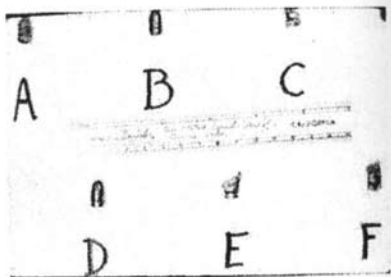


The bloodstained receipt

"We were starting at zero"

The first information a criminalist receives about a case is sketchy at best, and most likely just plain wrong. It's a bit like an image that's badly out of focus, gradually becoming clearer as more information is gathered.

"This appeared to be a wonderful break. We had the name of the driver who had been stopped. But as our investigators, joined by San Francisco police, checked out the address



The six recovered bullets

on the license application, we quickly learned that this was a false name. There was no such person."

The bloodstained DMV receipt is a key part of the investigation. It is dated just the day before. The name and much of the address are legible, but the left half of it is obscured.

The problem is presented to the newest member of the San Mateo sheriff's crime lab, thirty-one year-old photographer Walter Houde.

"This was my first case and the pressure was intense. I photographed the receipt with infrared film and the whole thing became readable."

Heavily-armed detectives waste no time converging on the address in San Francisco, but the unfortunate fellow living there quickly establishes no connection to the crime.

The name and address on the receipt are fake, and it appears that the applicant must have pulled the information out of thin air. The clerk at the DMV could not recall much about the individual and it is thought that he backed out of the process when he realized he would have to submit to photographing and fingerprinting. Oddly, if he had completed the process his replacement license would have been mailed to the bogus address.

Morris recalls, "We were starting at zero, no witnesses and no suspect. I attended the autopsy where the following information came to light. The victim had been shot six times. These were penetrating wounds. The bullets did not exit the body. Certainly this was no high powered weapon. The pathologist removed all of the bullets and turned them over to me. We discovered immediately that these were .32 caliber

Officer Doran's patrol car as seen by Morris Grodsky. The van in the background is the crime lab van.



bullets showing engraved rifling marks with a left-hand slant. The munition had most likely been fired from a .32 caliber Colt revolver. The gun was probably fully loaded and all six shots had been fired. By using a probe, the pathologist was able to determine the trajectory and angle of each shot. There were three shots very close together entering almost horizontally in the nose and upper lip. These were probably the first shots. They had probably been fired at a close range and very rapidly to have such a tight pattern. There were two more shots in the abdominal area entering at an upward angle.

"I believed that these had been fired after the officer was on the ground. He was lying face up, having been felled by the three head shots. The assailant then bent over the victim and pumped two shots in the abdomen. The sixth shot entered on the left side of the neck below the jaw. I believed that this last shot was meant to be the coup-de-grace. Because of the caliber and the brand of weapon, we could be certain that it was not the patrolman's gun that had been used. The officer's clothing was also turned over to me to be examined in our laboratory.

"We immediately released the information concerning the weapon that had been used. All police departments in the area were advised to be on the lookout and to check their sources. We would appreciate any information regarding any possible suspect who was known to carry a .32 caliber Colt revolver."

... who is David Stephen Kehoe?

As the first day in the investigation draws to a close, the evening papers run stories asking for public assistance in locating a man named Vincent Kehoe. An SFPD detective recalled a suspect in a beating case was named Kehoe and although he is cleared of this crime, his brother is off on a hunting trip. Could there be a David Kehoe among them?

The next day, a memorial service is held for Officer Doran with a funeral planned for Friday. Because of his service in the U.S. Air Force, he will be buried at the Golden Gate National Cemetery. His family attempts to notify Gene's stepfather, who is out of town, before he hears the news on a radio news broadcast.

Morris remembers, "In the following days our office received numerous calls offering possible leads on suspects. As it turned out, these were false leads, but each one had to be pursued. One call came in, however, which began to look very promising. Redwood City police Sergeant George Bold was actively investigating several crimes in his community. He had a suspect whom he was unable to locate. One of his informants had told him that his young suspect was carrying a small caliber revolver. According to his description, this was an elaborately engraved gun, plated with gold and silver and with ivory handgrips. The informant could not say whether or not it was a Colt, but he knew that the suspect was crazy about this beautiful little firearm. The name of the suspect is Alexander Robillard."



Road map with fingerprints from the abandoned car.

Alex had been released on probation in April after serving half of his 6 month sentence for burglarizing a service station. At nineteen, his chaotic youth had left him hardened and versatile. In June, he held up a service station with an accomplice, Lawrence Portillo. At one point, Alex handed him the weapon and said "be careful, it has a hair trigger and makes a lot of noise."



Alexander Robillard, XIV

The gun is a .32 Colt revolver, stolen from the glove compartment of a car owned by a company executive. It is valued at \$1,000 and memorable because of its artistic decorations.

Grodsky recalls, "Alex was not unknown to our department. He had been convicted of stealing cars and selling them in Mexico. He had been involved in burglary, passing stolen checks and, most recently, in the armed robbery of a gas station, which was the crime being investigated by Sgt. Bold. Robillard had dropped completely out of sight,

but we did have mug shots and fingerprint records from his previous incarceration. If the license plates were still on the car, they might be spotted by an alert patrolman. So we now had some possible directions for our investigation."

The massive media blitz and interagency communication pays off. The Yolo County sheriff's office receives a report from a West Sacramento motel manager who had earlier been asked to keep a lookout. When a man matching the description and two companions stopped at the motel briefly, the manager wrote down the license number of their car. Unfortunately, the license number comes back to a seemingly unrelated woman. But when San Mateo Deputy DA Wilbur Johnson hears the plate number, he recognizes it immediately. Johnson, who describes himself as having a "photographic memory" recalls that this car belongs to the mother of a Victor Miramontes, a defendant in a hit-run case he worked on. Victor served in the San Mateo jail at the time Alex was also in custody.

By Friday, old mugshots of Robillard were printed on the front pages of local papers. A woman and a truck driver report seeing an armed man matching Robillard's description buy one of those newspapers at a market in Watsonville, about 80 miles south of the crime scene.

Morris remembers, "There were some positive developments. Many of Robillard's friends were questioned. A girlfriend said that Alex was indeed driving a stolen car, a new white Pontiac. Another friend remembered that Alex had gone to San Francisco one day to obtain a new driver's permit. I believe that his license had been taken from him when he was convicted of car stealing. He would have to use a phony name if he were to obtain a permit. Information such as this led us to believe that we might be on the right track."

San Mateo detectives discover that one of Alex's closest friends in grammar school was David Anthony Kehoe, and

another friend was named Stephen. They now suspect that Alex is travelling with Victor Miramontes and Victor's wife.

The FBI is asked to join the manhunt as it is likely to cross state lines.

Grodsky relates, "... we received a call from San Francisco Police Department. One of their patrolmen had spotted what might be an abandoned car on a street in the Sunset district. This was a white Pontiac with no license tags. SFPD had contacted our department. Possibly this was the car we were seeking. I went to San Francisco and met up with Duayne Dillon, the great criminalist of the San Francisco PD. Together we checked the car for fingerprints or any other evidential materials. We recovered many smudges and partial prints, and in the glove compartment we found three road maps. In the San Francisco crime lab we treated the maps with ninhydrin, a chemical which only recently had been found to be very useful in the development of fingerprints on paper. Some excellent prints were developed. One of these was a beautiful thumb print which matched the thumb of Alexander Robillard perfectly. The car was found to be a stolen vehicle. So we could now establish a connection between a stolen car and Robillard. But we had no way of connecting this with the murder."

Detectives stakeout the Miramontes' home and arrest them when they arrive late Friday night. The couple admit they gave Robillard a ride to Reno and visited some casinos with him, but claim they left him on a street corner in Reno that afternoon.

Grodsky recalls, "Reno police were contacted and really scoured the city but were unable to come up with the missing suspect. Perhaps he had already departed. But where could he go with his meager resources? We figured that his only means of travel would be by bus."

Reno detectives quiz the ticket clerk at the Greyhound bus station. They turn up a receipt for \$19.03 that is connected to a man fitting Robillard's description, but there is no destination. They ask, "How far could he get for that amount?" The clerk suggests that this would be the fare to Salt Lake City.



The Colt .32 with the pearl handles

Room 204

At 5 a.m. Saturday morning, the Salt Lake police are alerted. Every officer in the city, including those off-duty join in the search of motels and inns. About a block from the bus station is the small Upland Hotel. When two patrolmen describe Robillard to the desk clerk, he replies, "yeah, he's in room 204." The officers literally pounce on Alex as he sleeps, one putting a gun to his head. They report that there wasn't much of a struggle. The fancy pistol is found along with

more ammunition. Alex had tried to dye his hair red with peroxide and ammonia, but it isn't hard to recognize him.

Sheriff Whitmore charters a plane to Salt Lake City. He travels with the police chief of Redwood City and a deputy district attorney. While they wait for the sheriff to arrive, police bring Robillard before a Utah judge where he waives extradition. When Whitmore arrives, he sits down with Alex and begins a lengthy interrogation. He wants to know about the night of August 5th and details about Alex's car theft operation. Alex readily admits he was present when Officer Doran was shot, but denies pulling the trigger. He claims an accomplice did it, but he can't reveal who that second man is.

Grodsky recalls some the results of that interrogation, "Alex said he was driving the stolen car and this other guy was in the passenger seat. The officer's car came behind us



Doran's uniform shirt. Gunshot residues indicate a firing distance of about 16 inches.

with lights and siren. There was this side road and we pulled over to the edge. I got out of the car and was talking to the policeman. While we were talking, my friend took the gun out of the glove compartment, got out of the car and started shooting at the officer.

"Alex was questioned as to the distance from which the shots were fired. He described this as about twelve feet."

On Saturday, Robillard is escorted to a United Airlines flight with Whitmore and three other police officers. He is not handcuffed and appears relaxed and jovial, often joking with flight attendants. He is amused that no one on the plane is aware of why he is being brought to California. When asked about details of the crime, however, he is mute. He is booked on a burglary charge, while murder charges are prepared. Also booked is a known accomplice, William Bosson, as insurance against the possibility that Robillard's claim is true. Whitmore says, "I know we have the right guy, but maybe there's more than one right guy."

Just six days have elapsed since Gene Doran's murder. Alex Robillard tells detectives that he tossed the stolen license plates bearing the SCP424 numerals into the bay off pier 40 in San Francisco. The sheriff orders two divers to search for them. As a crowd gathers along the wharf, the divers indicate they are having no success. In addition to the license plates, divers are looking for Officer Doran's service revolver.

In the county jail, Robillard is examined by a psychiatrist who pronounces him a "normal youth with an average IQ." Alex's mother, Mary, visits him in the jail and promises to hire a defense lawyer for him.

When Robillard "remembers" that he actually tossed the stolen license plates off Pier 36, the divers are sent back. This time, they find both license plates in the mud.

The next day is Tuesday, August 11, 1959, and the case is declared ready for the grand jury. Alex says his name is Alexander Robillard, XIV, the fourteenth in a direct line of men bearing that name in his family.

The relief fund for the Doran family reaches \$8000, roughly one year's salary for a young police officer. Alice Doran says she is overwhelmed by the spontaneous generosity.

Sheriff Whitmore tells the press Robillard "loves that pearl handled gun. . ." and that if he had tossed it, he might have escaped prosecution.

On Wednesday, Morris Grodsky announces that he has made a match between the .32 Colt revolver and the bullets recovered from Doran's body.

"I received the revolver and carried out test shots which were then subjected to comparisons with the bullets recovered from the body of the dead officer. My conclusion was that all six shots had been fired from that gun.

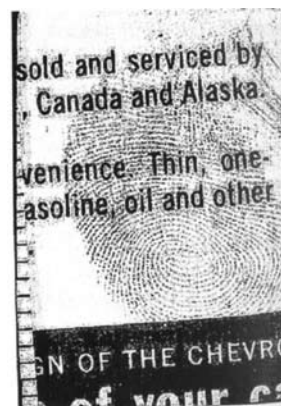
"I had the opportunity to conduct many tests. At our firearms range, I fired test shots from the Colt into targets set at varying distances, from contact to distant range. With this weapon, using the same brand ammunition as that which killed the officer, there were no gunshot residues on the targets at a distance greater than 36 inches. I found that there were gunshot residues at the site of the two bullet holes on the officer's uniform shirt.

"When these residue patterns were compared to the patterns on the experimental targets, they corresponded most closely to patterns made from a distance of approximately sixteen inches. So these shots had been fired at close range. The very tight pattern of the facial entry wounds indicated that the shots had been fired in extremely rapid succession without even aiming so that they too would have to be at a close range. On the shirt collar adjacent to the neck shot which was the coup-de-grace, I found powder residue, and under the collar I located several grains of unburned "Bullseye" powder; the same type which was loaded in the cartridges which had been used. This would indicate a very close up shot at such an angle that powder grains would be blown under the shirt collar."

The court appoints legal counsel to represent Robillard when he states he lacks money to hire his own.

On August 17, Robillard is indicted for murder by a San Mateo County grand jury. Also indicted for being an accessory is Victor Miramontes. Prosecutors say he helped Robillard escape and helped him try to change his appearance.

At the Doran family home, a ceremony is conducted by the National Police Officer's Association. Also in attendance is Hillsborough Police Chief Walter Wisnom. Officer Doran is



Above, a thumbprint from the roadmap. Below, Robillard's known thumbprint.



posthumously awarded the Medal of Merit for heroism. The relief fund has now grown to \$27,000.

On September 5th, Robillard's attorneys ask for a change of venue. They argue that the sheriff had infiltrated the jail with an undercover narcotics officer who won the confidence of Alex and then wrote a report detailing Alex's "confession." They say that prospective jurors in the county would no doubt have read that report. Sheriff Whitmore admits that he asked the state to look for narcotic smuggling in his jail, but that if there was a confession, he didn't know about it. The San Francisco *Chronicle* actually names the undercover officer and writes that he was known to have a knack for winning the confidence of cellmates.

While trial preparations are underway, Grodsky's work continues in the sheriff's crime lab.

"Under the guidance of the pathologist, we had prepared a mannequin by drilling holes at all six wound sites. These holes were drilled at the exact angle at which the bullets had entered. Dowel rods were inserted so that the court could understand the angles from which the shots had been fired."

Alex is busy as well. On September 8th, Alex had seemingly vanished from his jail cell on the fifth floor of the Hall of Justice. It is quickly discovered that he had managed to crawl into an attic space, searching for a way to get to the air ducts. In order to accomplish this, he had pried loose two steel plates in the ceiling. The sheriff reassures the press that he would have "needed a hacksaw" to get any farther than he did, and would have triggered an alarm in any case. Nevertheless, from that point forward, Alex is considered an escape risk and accompanied by several officers whenever he goes to court.

Six days after the escape attempt, Robillard is back in court formally pleading not guilty to the murder charge. It appears that there is going to be a long, drawn-out trial.

On September 30, the San Mateo DA asks the judge to dismiss charges of accessory against Victor Miramontes. This appears to be a prosecution strategy, as Miramontes' trial would have revealed certain information crucial to the Robillard trial.

While the rest of the country reels from the television quiz-show scandal, Robillard's defense team gets a boost from the addition of George Nye, formerly the chief public defender for Alameda County. The defense is successful in delaying the trial for a few more weeks over the objections of DA Keith Sorenson.

On November 16, events suddenly turn. Just as prospective jurors prepare to be selected, a conference is called between the trial judge, Frank Blum, prosecutor Keith Sorenson, Alex and George Nye. The outcome of the conference is evident on Alex's face as everyone files back into the courtroom. With "tears streaming down his face," Alex Robillard, XIV pleads guilty to murdering Eugene Doran.

But the plea comes at a price: Robillard's attorneys want the jury to determine the degree of guilt and the sentence. This troubles Judge Blum, who states that it is up to the court to determine the degree of guilt. After a bit of research he decides that there is no reason why the jury can't act in an advisory capacity.

Trial begins on November 17, and a jury of nine men and three women are impaneled.

Morris remembers, "The trial was now under way. We were able to present our evidence and testimony. We proved that Robillard's gun had been used, that the shots were fired at close range, and that the story of an accomplice firing from a distance was a fabrication."

One of the prosecution's exhibits is Grodsky's mannequin with the dowels indicating bullet paths sticking out in six directions. It causes a stir as it is wheeled into court. The defense objects to it as inflaming the jury, and the prosecution counters that it will aid the jurors in determining if the killing was premeditated.

"I had that damned gun"

Before the trial could resume the next day more surprises are in store as Alex conducts an unprecedented press conference in a vacant courtroom. Perhaps for the first time, we hear the most accurate version of what happened on the morning of August 5th. Through tears, Alex admits he turned to burglary and robbery because he wanted to be a "big shot." He admits that he and Doran had come very close to parting without anyone getting shot. He says that Doran ordered him to put his hands on the car. But then he overheard the San Bruno dispatcher's voice saying ". . . just hang on, it may be hot." Alex says he thought Doran was going to search him and that "I had that damned gun in my pocket." He tells how he threw Doran's gun into the Sacramento River.

The appellate record relates that, "Defendant drove to his home and began to listen to the radio to see how much the police knew about the killing, and the next day began a systematic disposal of any of the incriminating evidence that might be used against him. When he thought he had covered all of his traces, he left the state."

"Defendant's counsel argues that defendant acted irrationally after the murder and that his panic and thoughtlessness are demonstrated by his clinging to the murder weapon with an almost morbid fascination. Actually his keeping of the murder weapon demonstrates just how calmly defendant was acting and thinking. He admitted on the witness stand that he kept the pistol because he was considering having the barrel rebored so that he could send it to the police later on to show that his pistol had not been the murder weapon and also because he thought he could use it to raise some escape money by pawning it."

Decades later, in a book published in 2005, former Los Angeles gang member Ernie López claims to have spoken to Alex in prison. He recalls that Alex told him he shot a cop accidentally, while crashing through a police roadblock.

Reporters from the Reno *Evening Gazette* quote Robillard, "I couldn't see a way I could throw it over the bank or anything. I don't know. I didn't think. I reached in my pocket real fast and then he drew his gun. The next thing I knew, I was just standing there clicking the gun."

When the trial resumes, Sheriff Whitmore is called by the prosecution and describes Alex's life of crime, including everything from passing bad checks to stealing cars with the help of a crooked car salesman. This will cause contention later, because of a legal principle prohibiting the listing of prior "bad acts" during a trial, but guilt has already been decided.

The prosecution's final witness is William Bosson. He was once a friend of Robillard and testifies that a few days after the murder, Alex had told him "it was him or me. I had to do it. . . I had to be sure he was dead so I shot him once in the neck."

When the defense begins their portion of the trial, Alex is heated in his denial of Bosson's story. He gets so emotional, the trial is continued so Alex can regain his composure.

Grodsky recalls, "As the trial progressed, there was a dramatic moment in the courtroom when Robillard confessed that he alone had killed the officer."

"The defense pointed out that he had simply panicked when he was stopped. They stressed that he had grown up in a dysfunctional household; that he was only nineteen."

As the trial winds down, Whitmore orders scuba divers to continue to search for the officer's missing gun. They scour

the bottom of Crystal Springs reservoir and even portions of the Sacramento River where a highway crosses.

The day before Thanksgiving, the trial goes to the jury. The Oakland *Tribune* prints the last part of the closing arguments. For the prosecution, DA Keith Sorenson describes Robillard as “no kid with a toy. This was a man, mature beyond his years; a masterful, commercial criminal in the best—or worst—sense of the word.” Defense attorneys counter that Robillard is “young and foolish. . . a kid who was too scared to think.”

After seven hours the jury returns a verdict of guilty of murder in the first degree. Robillard is immediately placed on suicide watch, his belt and shoelaces are removed.

On November 27, 1959, twenty-four hours after Robillard is found guilty, Alice Doran gives birth to her third son, Gary. The relief fund stands at \$30,000.

The verdict in this part of the trial is to determine degree of guilt only. After the holiday, the jury will return to court to decide on the penalty.

When court recvenes, the defense puts Alex’s mother, Mary, on the witness stand. She paints a bleak picture of Alex’s home life as a child. His father was abusive, alcoholic, suicidal and would fight with Alex, she says.

“He’s too young”

The spectre of the death penalty begins to galvanize the local community. In a letter to the editor published in the Oakland *Tribune* the writer muses, “. . . if the jury decides to send him to the gas chamber, and Robillard asks for a beer for his last meal, will they grant his request or will they say, ‘Sorry, but you’re too young.’”

By December 10th, the trial is over. The defense rests after eliciting testimony from a list of 18 witnesses from Alex’s past, including a Shasta County judge, foster parents and former teachers.

The fate of Alex Robillard is in the hands of the jury. DA Sorenson closes, “. . . you can fix the penalty entirely on what happened to Officer Doran. . . That fact is sufficient. . .” The defense team speaks to the jury, “. . . society has failed. . . you have to decide whether he is a vicious mad dog or a lonely boy. . .”

The next day, the jury reports that they are deadlocked 9-3. They will not say which way. Alex holds another press conference. He weeps as he states that, “I would die myself if I could bring that man back to life. But I don’t think I should be used to satisfy the vengeance of these policemen. I’m not afraid to die. . . I’m not afraid to face God.”

Just after six p.m., on the second full day of deliberation, a tearful jury notifies Judge Blum they have reached a verdict. The impasse had been broken after listening to five hours of testimony transcripts. They wanted to rehear Alex’s account of what happened, and especially wanted to hear the testimony of the former roommate who recalled Alex’s reaction after the murder.

The jury foreman issues a written statement thanking Judge Blum for his “kind treatment” and just how difficult the decision had been. “. . . This is truly the most difficult decision that any panel has had to deliver and it has been reached to the moral satisfaction and certainty of all. . .”

It will be the first death sentence issued in San Mateo County since 1898.

Robillard takes the news calmly, but later states to the press that, “I think the foreman of the jury was working for the prosecutor.” He also accuses the police of trying to make an example of him, giving him the death penalty just because he killed a policeman, since other convicted murderers had not been similarly sentenced.

Morris recalls, “A very interesting piece of evidence which was not presented at the trial was the blood spattered receipt found next to the victim at the crime scene. I had examined this piece of paper and had attempted to develop fingerprints using ninhydrin. A fragmentary print was developed and compared to Robillard’s thumb print. There are interfering blood stains and an unfortunate fold in the paper, but there is an intriguing similarity between the two prints.

“The officer’s gun has never been found. I imagine that it is now a lump of rust in the Pacific ocean.”

Capital punishment cases are automatically appealed to the California State Supreme Court, and Judge Blum cannot set an execution date until after the appeal is decided.

On Christmas Eve, Robillard chats with Sheriff Whitmore as he is escorted to San Quentin prison. He asks the sheriff if he could invite his friends to watch his execution.

In February of 1960, Alex fires his court-appointed lawyer and writes a motion for a new trial himself, citing mistakes that were made in his transcript among other things. He sends the motion to Judge Blum, who rejects it.

In the summer of 1960, just after Alex celebrates his 20th birthday, his newly appointed appellate attorney, Vincent Hallinan, files a brief that brands Alex’s trial team as incompetent, a charge his former defense attorneys angrily dismiss as “a lie.”

“Remarkably free of error”

Six more months pass. Alex has now been on death row for a year. On Dec 29, 1960, the California State Supreme Court publishes its opinion. The judgement is affirmed. The decision is reached by the full court and is unanimous.

Each one of the arguments raised on appeal are shot down. “Was the evidence sufficient to sustain defendant’s conviction of murder in the first degree? Was defendant ably and competently represented by his counsel during the proceedings in the trial court? Did the trial court commit prejudicial error in receiving in evidence (a) a manikin, which was used to illustrate the path of the bullets fired into Officer Doran’s body by defendant, (b) photographs of the deceased officer, and (c) evidence showing some of defendant’s past crimes and illegal activities? Was it error to permit the jury to sit in an advisory capacity during the trial on the degree of defendant’s crime?”

Justice Marshall McComb closes his opinion, “It would appear from a reading of the record in this case that it is remarkably free of any type of misconduct by the district attorney or defendant’s attorneys. No error appears.”

With the appeal settled, Judge Blum is free to set an execution date. On Valentine’s Day, 1961, he orders Robillard to die in San Quentin’s gas chamber on April 26.

Appeals to Governor Brown for clemency are not met with success either. The young age of Robillard gives the governor pause, but it’s not enough to commute his sentence. A simultaneous appeal is also rejected by a federal judge.

On the eve of the execution, a second appeal for a stay of execution is rejected by the state supreme court. Alex says, “In some ways, I’ll be glad to get it over with. . . but it’s a strange thing—knowing when you’re going to die.” Alex meets with Father Mullen, the prison’s chaplain, and is given last rights.

At 10:03 a.m. the following morning, cyanide pellets are dropped into acid and Alexander Robillard, XIV is pronounced dead a few minutes later.

Protesters picket outside the gates of the prison, one carrying a sign that reads “Cyanide is for insects, not people.”

The warden of the prison recalled to reporters that Alex

told him "I'm only 20 years old, but I'm going to try to die like a man." He said he was sorry, that he hadn't intended to kill anyone and that he was sorry for Officer Doran's family.

Morris remembers that time, "Some years later I worked with a friend who had been a captain of the prison guards at San Quentin. I asked him if he had come to know Robillard. He said that he did know him; that Alex had confirmed his confession, and seemed to have found some inner peace before he was executed."

A witness, writing anonymously, says he was a guard at San Quentin and observed the execution, "There is room for around fifty witnesses, and most of them were cops, the exception being two Jesuits. One of them held Robillard's eyes during the entire thing. After the execution I was anxious to speak with the Jesuits. One of them had obviously heard Robillard's confession. Fr. John Enright, SJ, with whom I spoke, was from St. Ignatius High in San Francisco, and I asked him if Robillard was prepared to die. He smiled kindly and said that he was. This made me feel good. I had never thought about the death penalty, whether or not I believed in it. Since the Robillard execution, I am convinced it is right."

Morris offers, "Over the years I have felt that this case was an excellent example of the important elements of an investigation, as it did incorporate information, the use of records, the use of scientific resources, and cooperation among police agencies. Information was garnered from police archives and from the questioning of associates and friends of the suspect. Communication and cooperation of several other police agencies were essential. And finally the utilization of forensic resources played its role in the successful culmination of this investigation."

Epilogue

In 1963, the Division of Highways decided that they would like to add some beauty to the planned I-280 freeway. World-renowned architect Mario Ciampi was asked to apply his signature style, and in 1967 the bridge was completed. Soaring 270 feet above the San Mateo creek, it was officially named the Eugene A. Doran Memorial Bridge in May, 1969.

As luck would have it, tragic loss was not over for the Doran family. In February of 1967, Eugene's second son Patrick Michael Doran was killed by a land mine in the Quang Nam province of Viet Nam. Patrick had served less than one year as a United States Marine and was 20 years old.

In 2004, Hillsborough Mayor D. Paul Regan said he had received a letter from California State Senator Jackie Speier requesting support from the City Council to redesignate the bridge. The City Council agreed. By August, 2004, the bill to rename the bridge had been passed unanimously and chaptered.

In March of 2006, the families of Eugene and Patrick Doran gathered at the Hillsborough City Council meeting to watch as a Marine Corps color guard started a ceremony for the unveiling of the newly remade bridge sign.

It reads,

**Hillsborough Officer Eugene Doran
USMC LCPL Patrick Doran
Memorial Bridge**

Bridges made of concrete and steel span distances, but sometimes they span decades.

Acknowledgments

Much of the scientific portion of this article is adapted from Morris Grodsky's autobiographical "The Homeboy's Odyssey: the Saga of the Journey from Orphan Boy to Criminalist." I am most grateful to him for permitting me to raid the "pantry" of his experiences. One of the contributors to the early phase of the investigation was my own father, Walter, and I'm so glad he shared with me the story of his first case as sheriff's photographer. I also wish to thank Captain Nick Gottuso and the Hillsboro Police Department for their generous assistance in researching this article.

Sources

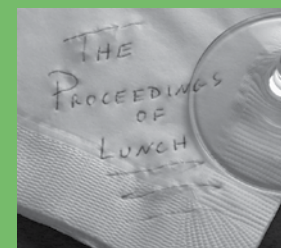
Morris Grodsky, *personal comm.*, Jan 2008
Walter Houde, *personal comm.*, Jan 2008
Grodsky, M., *The Home Boy's Odyssey*, 1st Books, 2004
Oakland Tribune
San Francisco Chronicle
San Mateo Times
Reno Evening Gazette
Marysville-Yuba Appeal-Democrat
Nevada State Journal
San Mateo Post
Nick Gottuso, Capt., Hillsborough Police Department, Hillsborough, Calif.
Hillsborough Newsletter
Lopez, E., Perez-Torres, R., *To Alcatraz, Death Row, and Back: Memories of an East LA Outlaw*, University of Texas Press, 2005.
Anon., "L.A.", *The Execution and Good Death of Alexander Robillard*, www.traditioninaction.org/Questions/B096_DeathPenalty.html
Ontario-Upland Daily Report
Van Nuys News
CalTrans News
Hillsborough City Council Minutes
Combat Area Casualties Current Files (CACCF)
www.leginfo.ca.gov
People v. Robillard (1960) 55 Cal.2d 88

Photo credits

Bridge, portraits of E. Whitmore and M. Grodsky used courtesy of Walter Houde. 1956 HPD group photo, E. Doran, used courtesy of Hillsborough PD. All case photos are used courtesy of Morris Grodsky.

John Houde is the author of "Crime Lab: A Guide for Nonscientists," Calico Press, 2006.

Genetic Witness: Through the Lens of a Social Scientist



One of us was recently asked if we really met for lunch to discuss the ideas leading to these columns. The idea for these musings did actually grow out of informal lunchtime discussions that we have had throughout the years (running into decades). Formal publications are all very well, but the time lag imposed for an article to be peer-reviewed and appear in a print journal necessarily hinders its currency.

We use this column as a vehicle to expeditiously share our current thoughts on topics of interest to the forensic science community. It is neither the last nor the only word on any particular issue, just a snapshot of our thoughts about some current topic that is currently being discussed around water-coolers and in break-rooms around the world.

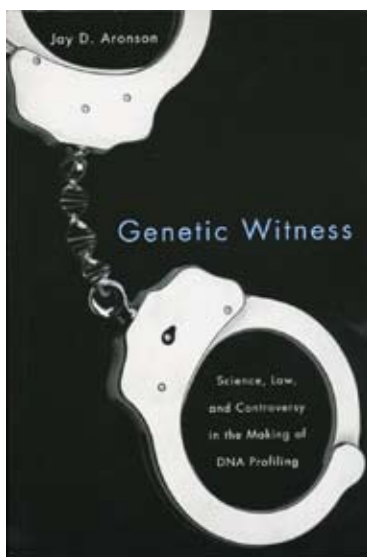
But back to the lunch part, while we still make a point of meeting for lunch as often as we can, these days we are lucky to be on the same continent at the same time. Today, lunch consists of a burrito out of a Styrofoam container in the conference room of a lab where we both accidentally happen to be observing some analysis on behalf of co-defendants. It was a good burrito, but lacking the accompaniment of the requisite Corona. Most of this discussion is taking place in a car on the 205 over coffee in travel cups. But, heck, we have a whole 45 minutes with no phone interruptions—wait, whose cell is that ringing?

Regarding the topic at hand, we recently became aware of a book on the history of forensic DNA and agreed to review it for this column. *Genetic Witness: Science, Law, and Controversy in the Making of DNA Profiling*, by Jay D. Aronson, [Aronson, 2007] documents the introduction of forensic DNA analysis into the legal system. The title, which takes its cue from an early government publication on the potential forensic uses of DNA [US Congress, 1990], and the cover, taken from Cellmark's early marketing material, are perhaps talismanic of Dr. Aronson's approach to the subject matter. He performs a detailed review of forensic DNA history from its inception in the mid-1980's to the late 1990's. By definition, then, his review concentrates on the now obsolete RFLP technology, making the

discussion feel dated rather than historical. In some sense, this challenge colors the entire work. The "history" of DNA profile is so recent that we do not yet have the benefit of a generational perspective, such as Simon Cole provides in his definitive work on fingerprint comparison, *Suspect Identities*. [Cole, 2001] The field is still rapidly evolving, from both a scientific and legal, as well as a social, perspective.

Dr. Aronson performs a heroic job of documenting the first decade of court battles and challenges to the then-novel application of DNA typing to human identification. This careful work will almost certainly provide immeasurable benefit to future historians, but relatively little synthesis can be offered when discussing such recent history. Through no fault of the author, the volume is more compendium than historical perspective.

What perspective exists, however, is most definitely viewed through the lens of Dr. Aronson's mentors, for the most part early academic critics of forensic DNA profiling. While it is incontestable that those challenges were key toward propelling forensic DNA to the gold standard status it enjoys today, the work is clearly skewed toward a particular point of view. This will unfortunately allow many in the current forensic DNA community, the overwhelming majority of whom work for law enforcement, to conveniently dismiss many of the important points that Dr. Aronson illustrates. If the goal was to present an objective treatment, Dr. Aronson should have made a more aggressive attempt to solicit a variety of alternate viewpoints; however if the goal was to present the microcosm of history from a particular perspective, then the goal has



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been achieved. Each reader must discern the authors' intent for themselves.

A good story requires heroes and villains and this one is no exception. However, Dr. Aronson has accepted, perhaps a bit too readily, some of the dogmatic representations presumably made by his sources. One mantra that is repeated throughout the book, and undeniably sets the tone, is first proffered on page 6 of the book, in the last paragraph of the first chapter:

What is even more alarming is that none of these mistakes were discovered by forensic scientists themselves or by the numerous layers of quality control and quality assurance that the public is told guarantees valid and reliable results. Instead, they were discovered by journalists, crusading defense lawyers, or advocates of civil liberties.

Having (as forensic scientists working in the trenches) found an error or two ourselves, we feel that this apparent foundational cornerstone of the book does a great disservice to the forensic community. It is unnecessarily sensationalist and fundamentally incorrect. While it is true that the bright spotlight of the media is too often required to force systemic change, most of the high profile errors mentioned were initially discovered by DNA analysts, either during internal review, or by independent scientists working for the defense. We can't think of one that was actually discovered by a journalist or "civil liberties advocate," although one particularly egregious situation was brought to light mostly through the efforts of a defense attorney well-educated in DNA. Some of the errors, and the analysts making them, certainly persisted for far too long, due, in fact, to the culture of social trust and scientific authority that Dr. Aronson explains and laments. However, minimizing the role that scientists have played in detecting error and fraud misrepresents reality. Further, countless errors, of which Dr. Aronson could not possibly be aware, precisely because they were detected and corrected internally, by definition do not make headlines.

It is unclear why Dr. Aronson considers STR analysis "the nail in the coffin." He eloquently and correctly determines that current and future issues stem more from the "competence of the system" rather than the "reliability of the technology," meaning that the human decision making process that comes into play at every point, from deciding which piece of evidence to analyze, to which alleles to call, to how to testify to one's results in a courtroom. And he clearly outlines issues (some of which we agree with, others with which we disagree) that he considers unresolved. One rather odd comment, that "... [Barry] Scheck and [Peter] Neufeld's decision to champion DNA evidence as the gold standard of forensic science certainly set back the defense's cause when it comes to challenging DNA evidence," seems to imply that no other competent defense attorneys exist. While Scheck and Neufeld have left an indelible mark on the litigation of DNA issues, the discussion has moved far beyond their initial challenges. The O.J. Simpson trial is well over a decade behind us, and dozens, perhaps hundreds, of defense attorneys specializing in forensic science and forensic DNA, continue to labor, sometimes even successfully, on behalf of their clients.

Many forensic DNA analysts, whether employed in public laboratories, private laboratories, or in private practice, will take offense at the rather thinly-veiled infomercial, found on

page 200, for one particular group of defense experts. With all due respect to our friends and colleagues who comprise this group, they are hardly the only game in town, as Dr. Aronson would seem to suggest. And unfortunately, almost all the specific technical information in that particular paragraph is either misleading or blatantly incorrect.

However, the most significant gap in Dr. Aronson's work entails his failure to consider forensic DNA analysis within the context of the practice of criminalistics and forensic science. Forensic DNA analysis exploded onto a centuries-old landscape littered with both the monuments and detritus of numerous and diverse forensic disciplines. Because of its strong academic roots, and the scrutiny to which it was subjected before finally enjoying (more or less) general acceptance, DNA profiling rapidly displaced dermal ridge prints as the new gold standard. Dr. Aronson describes this phenomenon as an "inversion of credibility." As a result of this emergence, all of the other forensic disciplines have had to suddenly confront higher standards, increased scrutiny, and in most cases, reduced budgets. The other side of that coin is that, especially in its most recent iterations of exquisitely sensitive megaplex typing kits, and low copy number analysis, forensic DNA is now confronting the very issues with which trace evidence analysts have struggled for decades. In the end, DNA is just another form of trace evidence, and, sophisticated technology aside, the fundamental concepts of forensic science cannot be ignored.

In taking on this work, Dr. Aronson has accepted certain challenges, only some of which are within his control. We presume that he will continue to follow forensic DNA and that future projects will emerge. We hope that he will take our comments in the spirit in which they are intended, as critical, but friendly commentary from two individuals who not only survived, but actively participated in the early development of forensic DNA profiling. This volume is a credible start, but only just that. Analysts who did not live through the early days of RFLP will find the history a valuable context for current challenges. Social scientists will, at the very least, appreciate the detailed documentation of the first decade of forensic DNA profiling. More time is required to determine how this early history of a revolutionary application of science will be viewed by future generations.

Our more modest and immediate goal is to figure out which time zone we are currently inhabiting.

References

Genetic Witness: Science, Law, and Controversy in the Making of DNA Profiling. Jay D. Aronson. Rutgers University Press, 2007

U.S. Congress, Office of Technology Assessment, Genetic Witness: Forensic Uses of DNA Tests, OTA-BA-438 (Washington, DC: U.S. Government Printing Office, July 1990).

Suspect Identities: A History of Fingerprinting and Criminal Identification. By Simon A. Cole. Cambridge: Harvard University Press, 2001.



Vote!

CAC Board of Directors Candidate's Statements

For President-Elect:

Mary Hong, OCSO

I have been a Criminalist/Forensic Scientist for the Orange County Sheriff-Coroner Department since 1985 and a CAC member since 1986. I have served on the CAC Board of Directors as Membership Secretary from 1990-1994 and Recording Secretary from 2004-2008. Membership in the CAC has provided me with several mentors who have guided me during my career. CAC sponsored functions, such as study group meetings and seminars, have afforded the opportunity to see how other laboratory systems operate. This type of contact is critical as our profession continues to advance, both in technology and in personnel. Most of the California laboratories are experiencing growth due to the increased demands for the analysis of physical evidence. The CAC must continue the mission to provide a forum for training, information exchange, mentoring of new scientists, and promotion of professionalism in Criminalistics. Because of my previous CAC Board experience and length of time in this career I have seen many changes in the practice of Criminalistics and hope to be able to address future challenges to our field. I would like to continue contributing to the CAC and its Membership by offering my candidacy for President-Elect. Thank you for your consideration of my candidacy.

For Regional Director North:

Jeanette Wallin, JB DNA Lab

I have a BS in Biology from Willamette University and a Master's of Public Health in Forensic Science from UC Berkeley. After obtaining my master's degree, I worked for Applied Biosystems as an R&D scientist in the HID group developing the AmpFISTR DNA typing kits and related support for the application. After 3.5 years of a gruelling commute, I accepted a position with the CA Dept of Justice DNA lab. I have been here for close to 9 years now, primarily doing casework with occasional "rotations" through various validation projects and whatnot. I have been a member of the CAC since ~1994 and it would be my pleasure to coordinate the northern California meetings.

For Recording Secretary:

Jaime Miller, OCSO

I have been a Forensic Scientist with the Orange County Sheriff-Coroner Department for 5 ½ years and have been a member of CAC since 2002. I want to give back to the organization that has provided me with countless benefits and can think of no better way than taking a more active role. As Recording Secretary I will work hard to ensure that membership is kept current and involved in all the issues affecting our profession. This position would be my first major role in this organization, and I look forward to attending meetings and working with the board and committees. Thank you for supporting me for Recording Secretary.

For Membership Secretary:

Pat Huck, LAPD

I have been a member of the CAC since the 1980's. As a new Criminalist at Orange County Sheriff-Coroner's Department, I actively attended the CAC meetings, workshops, dinners and study groups. Through the CAC I gained specific skills applicable to casework, but more importantly I learned the true spirit of being a Criminalist. I met many criminalists who were role models for me, and others who I could network with over the years. I consider myself a criminalist generalist, having worked in O.C. when the lab was still small, and for the Bureau of Forensic Services in Santa Rosa and Sacramento when those labs were small. We all needed to be proficient in multiple disciplines, went to lots of crime scenes, and testified in court often. As the Forensic Manager for ICITAP, a US-DOJ police training program, I encouraged new criminalists in many countries to attend professional meetings and start their own professional organizations. I am currently working at LAPD in the Serology/DNA Unit. I would be honored to give my time and effort to support the CAC as your Membership Secretary.

UP & Coming

30 Years of CAC Seminars: *Past, Present and Future*

Year	Season	Laboratory	Location	Chairperson	Notes
1980	Spring	DOJ-Santa Barbara	Santa Barbara	Robert Cranston	
1980	Fall	DOJ-Modesto	Yosemite	Duane Lovaas	
1981	Spring	LA Sheriff	Los Angeles	Barry Fisher	
1981	Fall	Washoe Co Sheriff	Lake Tahoe	Enrico Togneri	
1982	Spring	Orange Co Sheriff	Orange County	John Ragle	Joint Mtg-NWAFS
1982	Fall	DOJ-Sacramento	Sacramento	John DeHaan	
1983	Spring	San Francisco PD	San Francisco	Debbie Wakida	
1983	Fall	San Bernardino Sheriff	Ontario	William Baird	
1984	Spring	DOJ-Watsonville	Monterey	Steve Cooper	
1984	Fall	San Diego PD	San Diego	James Stam	
1985	Spring	Oakland PD	Oakland	Jan Bashinski	UC Berkeley Co-host
1985	Fall	Los Angeles PD	Los Angeles	Greg Matheson	
1986	Spring	Contra Costa Co Sheriff	Concord	John Patty	
1986	Fall	DOJ-Riverside	Palm Springs	Faye Springer	
1987	Spring	Washoe Co Sheriff	Reno	Enrico Togneri	Joint mtg w/NWAFS
1987	Fall	Huntington Beach PD	Irvine	Eston Schwecke	
1988	Spring	Inst. Of Forensic Sciences	Berkeley	Chuck Morton	
1988	Fall	Orange Co Sheriff	Costa Mesa	Carol Sidebotham	
1989	Spring	CCI	Sacramento	Lou Maucieri	
1989	Fall	Cal Lab	Irvine	Carol Hunter	
1990	Spring	San Mateo Co Sheriff	San Mateo	Nick Stumbaugh	
1990	Fall	LA Co Sheriff	Long Beach	Dave Hong	
1991	Spring	San Francisco PD	San Francisco	Debbie Madden	
1991	Fall	San Bernardino Co Sheriff	Ontario	Hiram Evans	
1992	Spring	DOJ-Fresno	Bass Lake	Gary Cortner	
1992	Fall	Ventura Co Sheriff	Ventura	Margaret Schaeffer	
1993	Spring	DOJ-DNA Berkeley	Berkeley	Jan Bashinski	
1993	Fall	San Diego Co Sheriff	San Diego	Randy Robinson	
1994	Spring	Oakland PD	Oakland	Mary Gibbons	
1994	Fall	LA Sheriff/LA Coroner	Pasadena	Munoz/S. Dowell	Founders 1st Joint w/ FSS
1995	Spring	Contra Costa Co SO	Walnut Creek	Karen Sheldon	
1995	Fall	Los Angeles PD	San Pedro	Joe Hourigan	
1996	Spring	Santa Clara Co Lab	Milpitas	Raymond Davis	Founders
1996	Fall	DOJ-Riverside	Palm Springs	Steve Secofsky	
1997	Spring	Sacramento Co Lab	Sacramento	Ann Murphy	
1997	Fall	Orange Co Sheriff	Irvine	Liz Thompson	Founders
1998	Spring	Forensic Analytical	Monterey	Amy Mongan	
1998	Fall	San Diego PD	San Diego	John Simms	
1999	Spring	For. Sci. Associates	Oakland	Peter Barnett	Founders
1999	Fall	San Bernardino SO	Ontario	Mike Kellett	
2000	Spring	SERI	Napa	Brian Wraxall	Joint w/FSS
2000	Fall	CSULA	Glendale	Tony Longhetti	Founders
2001	Spring	CCI	Lake Tahoe	Victor Reeve	
2001	Fall	Los Angeles Co Sheriff	Universal City Walk	Dean Gialamas	
2002	Spring	San Francisco PD	Fisherman's Wharf	Bonnie Cheng	Founder-Brian Caddy
2002	Fall	Los Angeles Coroner	Huntington Beach	Dan Anderson	
2003	Spring	Washoe Co Sheriff	Reno	Suzanne Harmon	Joint w/NWAFS
2003	Fall	San Diego Sheriff	San Diego	Parsons/Lukomski	Founder, Wynbrandt
2004	Spring	San Mateo Sheriff	Foster City	Mona Ten	
2004	Fall	Ventura Co Sheriff	Ventura	Michael Parigian	
2005	Spring	Oakland PD	Jack London Square	Tom Ambercrombie	Founder-C. Morton
2005	Fall	LAPD	Los Angeles	Henry Tuazon/B.Miller	

2006	Spring	Contra Costa Co. SO	Concord	Paul Holes	Joint w/ FSS
2006	Fall	DOJ Riverside	Temecula	Elissa Mayo	Founder-Wraxell
2007*	Spring	Orange County	Anaheim	Pennie Laferty	
2007	Fall	DNA Richmond	Berkeley	M. Mannion Gray/ S. Hallford	
2008	Spring	San Diego PD	San Diego	T. Dulaney/Frank Healy	Founder
2008	Fall	Sac. Co. Lab		Cara Gomes	
2009	Spring	San Bernardino		Craig Ogino	
2009	Fall	Santa Clara		(Grady Goldman)/Joe Fabiny	Founder
2010	Spring	Fresno DOJ	Fresno	Nancy McCombs	
2010	Fall	Alameda Co Sheriff		Michelle Dilbeck	
2011	Spring	LASO		Heidi Robbins	Founder
2011	Fall	CCI+ possible Sac DOJ?		Cecilia von Beroldingen	
2012	Spring	Kern Co. Joint w/ IAI		Greg Lawkowski	
2012	Fall	San Francisco PD	SF	Bonnie Cheng	Founder
2013	Spring	San Diego Sheriff			
2013	Fall	Santa Barbara?			
2014	Spring				Founder
2014	Fall	San Mateo?			

*North/South switch occurred

List courtesy Annie Murphy, CAC Seminar Committee.

A Refresher on CAC Membership Classes

There will be a modification to the CAC application posted by the end of this month. One significant change will be that the applicant will be required to ask the references to submit the recommendation letter.

Affiliate Membership: This class is designed for students preparing to enter the field as well as members who have retired after five or more years as a Full or Corresponding Member.

Currently, (Student) Affiliate Members may maintain their membership indefinitely as long as they are actively seeking employment. There is no requirement that Full or Corresponding Members change to Affiliate Membership upon retiring. Dues are lower for Affiliate Members, but they are not allowed to vote at Business Meetings or hold office on the Board of Directors. Affiliate Members are approved by the Board of Directors.

Provisional Membership: This class is designed for those employed as laboratory scientists engaged in work directly related to the forensic sciences. This is the entry level class for most criminalists in California. Affiliate Members are required to apply for Provisional or Corresponding Membership within six months of employment in the forensic sciences. Provisional Membership may only be maintained for up to three years, by which time the Provisional Member must either have elevated to Full Membership or have their membership transferred to Corresponding Membership. Provisional Members are allowed to vote at business meetings, but are not allowed to vote by proxy or hold office on the Board of Directors. Provisional Members are approved by a vote of the Members at a CAC Business Meeting.

Corresponding Membership: This class is designed for those employed as laboratory scientists engaged in work directly related to the forensic sciences, but who are unable to regularly attend CAC meeting and seminars. This is the entry level class for most criminalists outside of California.

Affiliate Members are required to apply for Provisional or Corresponding Membership within six months of employment in the forensic sciences. This is also the class of membership for those Provisional Members, who for some reason, have not been able to regularly attend CAC functions. There is no requirement for Corresponding Members to upgrade to Full Membership, although they are free to do so if they have been sufficiently active in the organization. Corresponding Members are allowed to vote at business meetings, but are not allowed to vote by proxy or hold office on the Board of Directors. I want to re-iterate this, because of questions from some members, Corresponding Members are not obligated to upgrade to Full Membership and their membership will not be terminated if they cannot regularly attend CAC meetings or seminars. Corresponding Members are approved by a vote of the Members at a CAC Business Meeting.

Full Membership: This class is designed for those members who actively participate in the CAC. You cannot join the CAC as a Full Member, nor can Affiliate Members become Full Members without first becoming a Provisional or Corresponding Member. Full Members are allowed to vote at business meetings in person or by proxy, and are allowed to hold office on the Board of Directors. If a Provisional or Corresponding Member has regularly attended CAC meetings and seminars, they may request that their membership be elevated to Full Member. The elevation of Provisional or Corresponding Members to Full Members is approved by a vote of the Members at a CAC Business Meeting.

Life Membership: This class is for Full or Corresponding Members who have had an exemplary record of service to the CAC and to the field of criminalistics. Life Members are elected by the Board of Directors. Life Members are allowed to vote at business meetings in person or by proxy, and are allowed to hold office on the Board of Directors. Life Members are not required to pay dues or registration fees.

—Eucen Fu, Membership Sect'y

Harry Johnson Remembered—

One of the Few

Harry C. Johnson, a thirty-plus year criminalist from the DOJ/BFS Sacramento Lab, died November 15, 2007, at age 99. He started at DOJ in the early 1940's, in what was the only bureau, known as CII (Criminal Identification and Information). He worked with Roger Greene, the first state criminalist.

As a talented, light-hearted generalist with encyclopedic knowledge, he had many abilities for varied casework. Trained as a chemist at U.C. Berkeley, he had the mental discipline for firearms/toolmark cases, and the analysis of paint chips using microscopes, the emission spectrograph, and infrared spectrophotometer. His rhythm and wrist action in the Kozelka-Hine blood alcohol distillation method were something to behold. He conducted several early drinking/driving correlation studies at the CHP Academy.

In 1954, he was one of the founding members of the CA Association of Criminalists. Photographs of Harry and his work are on the wall near the classroom at the CA Criminalistics Institute in Sacramento. He testified all over the state from the only lab DOJ had at the time (pre-1972). He was once one of only four Criminalists working for DOJ. Salaries had bottomed out, and the other experienced criminalists accepted better opportunities. Harry was left as a reluctant supervisor to train the other three of us, all non-criminalists who qualified at the lowest entry level. Around 1972-73, DOJ secured funding to start new labs in counties not having their own forensic resources. He traveled around the state helping set up laboratories for local jurisdictions, eventually retiring around 1977.

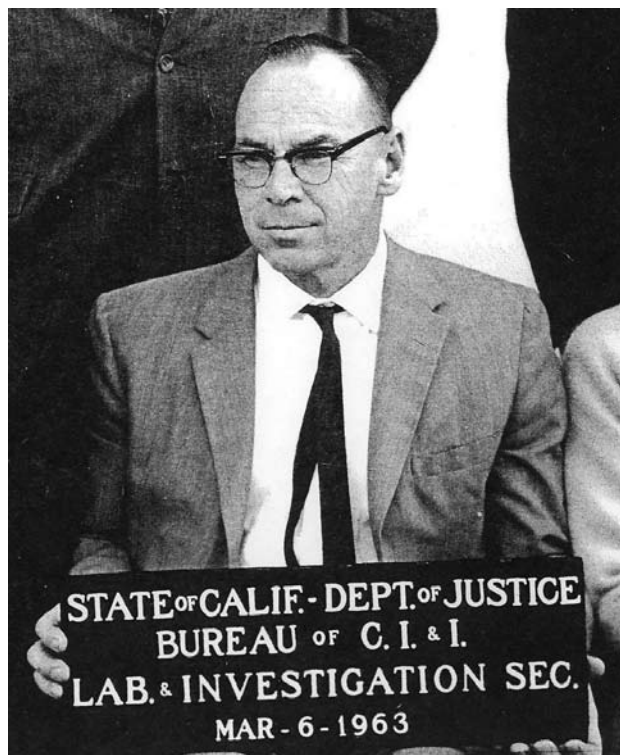
The Harry Johnson Award is a citation periodically presented to DOJ examiners to recognize outstanding work. It came about from our contributions for a retirement gift for Harry. Staff tried to get him to reveal a gift preference. He thanked all his well wishers and asked that we use the collected 127 to spotlight the achievement of colleagues or students. This award has been presented over the years to various people – usually at the DOJ/BFS State Technical Exchange Program (STEP Conference).

“One of the Few”—he did his best, keeping humor, mentoring of subordinates, and the playing of a wicked game of cards (Hearts) as hallmarks of his delightful personality. Grateful for your patient guidance and excellent training ... it was just what we needed. Rest in peace, Harry.

—Lou Maucieri, Sacramento



Obituary: Harry Johnson, 99, Pioneering State Criminalist



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FEEDBACK

The Best Kept Secret in Forensic Science

Editor:

Every knowledgeable forensic science professional knows about the Promega®, the AAFS, and the Association of Firearm and Toolmark Examiners meetings, but few seem to be aware of the InterMicro meeting and the associated post meeting hands-on workshops. Unfortunately, the proof is the lack of forensic scientist attendees at this important meeting for trace evidence analysts and all those working with microscopic evidence.

What other venue allows a forensic scientist to interact with professionals from various industries of microscopical interest, world-class scientists from other countries, and microscopists of all varieties (light, electron, and spectroscopic)?

These contacts can be useful resources and references for casework or obtaining standards not obtainable by other means.

Where else does one learn about the source of lycopodium spores in a vaginal wash from a sexual assault case, a technique used by a fictional character in a detective

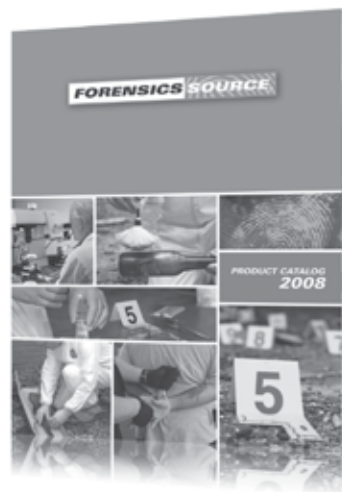
story useful in separating traces of soil on the pants of a victim leading to the confession by the suspect, how Raman, FTIR, or SEM support the identification of microscopic particles by the light microscope in anthropology to zoology, and the state-of-the-art use of Raman, FTIR, SEM, and TEM for microscopic evidence?

The hands-on-the-microscope workshops offered after InterMicro are conducted by nationally or internationally recognized scientists in their respective microscopical areas of interest. After one InterMicro meeting, you might learn from the country's leading paper-fiber expert, the next year receive an introduction to crystallography, or indoor dusts and molds. Each year different topics are covered. The lessons learned could be useful for unusual trace evidence found at indoor scenes, linking a body to a location, or for trying to identify a crime scene location.

Forensic scientists in trace evidence, DNA, and any section where microscopic evidence needs to be collected or identified should plan on attending InterMicro.

—Wayne Moorehead

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Can't Find It?

To reduce the costs of publication, the *CACNews* may place calls for nominations and other items that were previously found in the newsletter mailing as inserts or ON THE WEB. Visit www.cacnews.org to see what is offered. Content changes periodically, so visit often!

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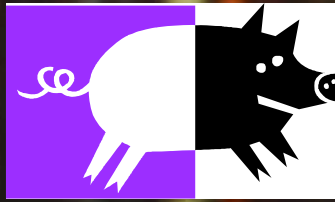
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**Come find out why you want to remove your lei and
grass skirt before you dig a pig out of the ground at a
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Tom Bevel unravels the mystery of crime scene reconstruction.

DNA analysts share the wonderment of matching that impossible sample to the right suspect.

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