

PEOPLE V. FLECHTNER: ANALYSIS OF THE SHOOTINGS OF ADAM OWEN, ANGELA LEIRD AND ROBERT LIGHT

By Bryan R. Burnett

This report analyzes and reconstructs the shooting in the driveway at 4554 Begonia Road, Phelan California on October 4, 2009 at approximately 1945 hrs. Dennis Flechtner, was the shooter and the deceased were Adam Owen, Robert Light and Angela Leird. There was a single witness to the shooting, Whitney Telliano. The shooting was the culmination of a twelve-year dispute between neighbors Dennis Flechtner and Angela Leird. Over those years there were frequent exchanges of insults and complaints filed against each other with the San Bernardino Sheriff's Office. There was also a disagreement as to property line between the properties. Angela Leird and residents of her house also claimed that Flechtner would paint insulting signs on the fence facing her property and later paint over the signs. No images were presented of the signs. Toxicology showed that both Adam Own and Robert Light were positive for methamphetamine. Angela Leird was positive for Phenyl and alcohol. Dennis Flechtner claimed he had had several drinks prior to the shooting, but no toxicology report was submitted for him.

Three murder-one charges were filed against Dennis Flechtner based mainly on the account of the 22-year old witness, Whitney Telliano. Telliano, a visitor to the Leird house and friend of Robert Light, claimed there was a verbal confrontation between Flechtner and Adam Owen near Flechtner's driveway. Angela Leird, Robert Light and Telliano allegedly approached the Flechtner driveway to "retrieve Owen," according to Telliano. Leird and Light subsequently succumbed to Flechtner's alleged taunts and joined with Owen in an attack on Flechtner. Telliano said that Flechtner lured the three to him with his insults. The deceased obviously did not realize Flechtner had a .357 revolver tucked into his waist band. Telliano remained nearby on the dirt road and witnessed the shootings.

Curiously, the prosecution's case against Flechtner was based almost solely on Whitney Telliano's early account of the events preceding the shooting and the shooting itself. There was no attempt by the prosecution criminalists to evaluate the evidence in a shooting scene scenario. Indeed, I understand from the defense attorney, Gary W. Smith, that there was even a suggestion by the prosecutor during trial that the deceased were shot in the road outside of the Flechtner property. This certainly was not the case. The shooting occurred on Flechtner's driveway well within his property.

Whitney Telliano's account of the shooting was wrought with proved inaccuracies and continual significant changes of that account up to trial. Her credibility in trial was destroyed and the prosecutor's case fell apart.

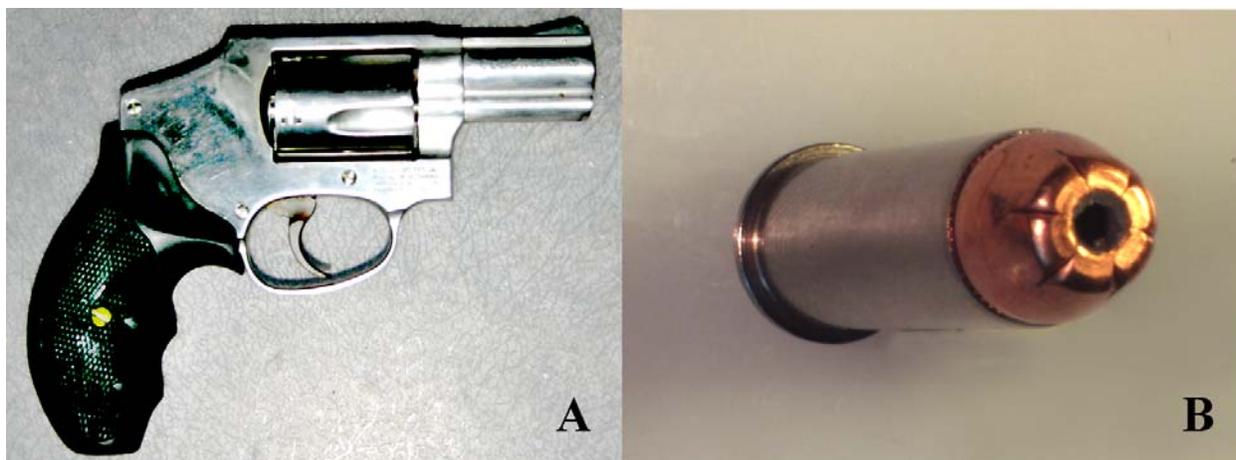


Figure 1. A. Five shot Smith and Wesson, Model 640-1, serial # BUB8788 . **B.** Ammunition used in the shooting, .357 caliber Hornady (Frontier) 158gr “JACKETED FLAT POINT XTP. When “Hugo” at Duncan’s Gun Works (San Marcos, California) was told the brand (Hornady) and for the price paid (10.99) he stated that this ammunition has been discontinued and with that price, it was likely purchased mid to late 1970s.

The purpose of this report is to reconstruct the shooting scene from prior to the time and place of the shots to the three mortally wounded persons leaving the area of Flechtner’s driveway. Required are estimates of the positions of the three decedents before, during and after the shooting. The foot and shoe impressions in the dirt road in front of Flechtner’s driveway are important in establishing where the decedents approached the driveway. The location of the bloodstains also assist in placing the decedents’ location when the shooting occurred. Witness Telliano’s path was described in the discovery, but her two approaches and departures to/from the shooting scene (first with Leird and Light and then to verify the condition of the decedents prior to the police arrival) were not documented in the dirt road either in the images or in the drawing generated by the criminalists of the decedents’ foot tracks to the shooting scene.

The majority of this report was prepared for defense counsel in behalf of the defendant, Dennis Flechtner.

The .357 revolver and ammunition used by Flechtner are shown in Fig. 1.

The Test Firing of the S&W .357 Revolver

The Smith &Wesson (S&W) .357 revolver (Fig. 1A) with the Hornady (head stamp FRONTIER) .357 ammunition (Fig.1B) was fired multiple times at Iron Sights indoor range, Oceanside, California using targets constructed with double knit fabric from an old t-shirt and Whatman Benchkote paper/plastic (Haag, 2006) (Fig. 2). A test firing was also conducted with just Benchkote. The distance between the targets and muzzle were varied from 2 to 23.5 inches in these tests.

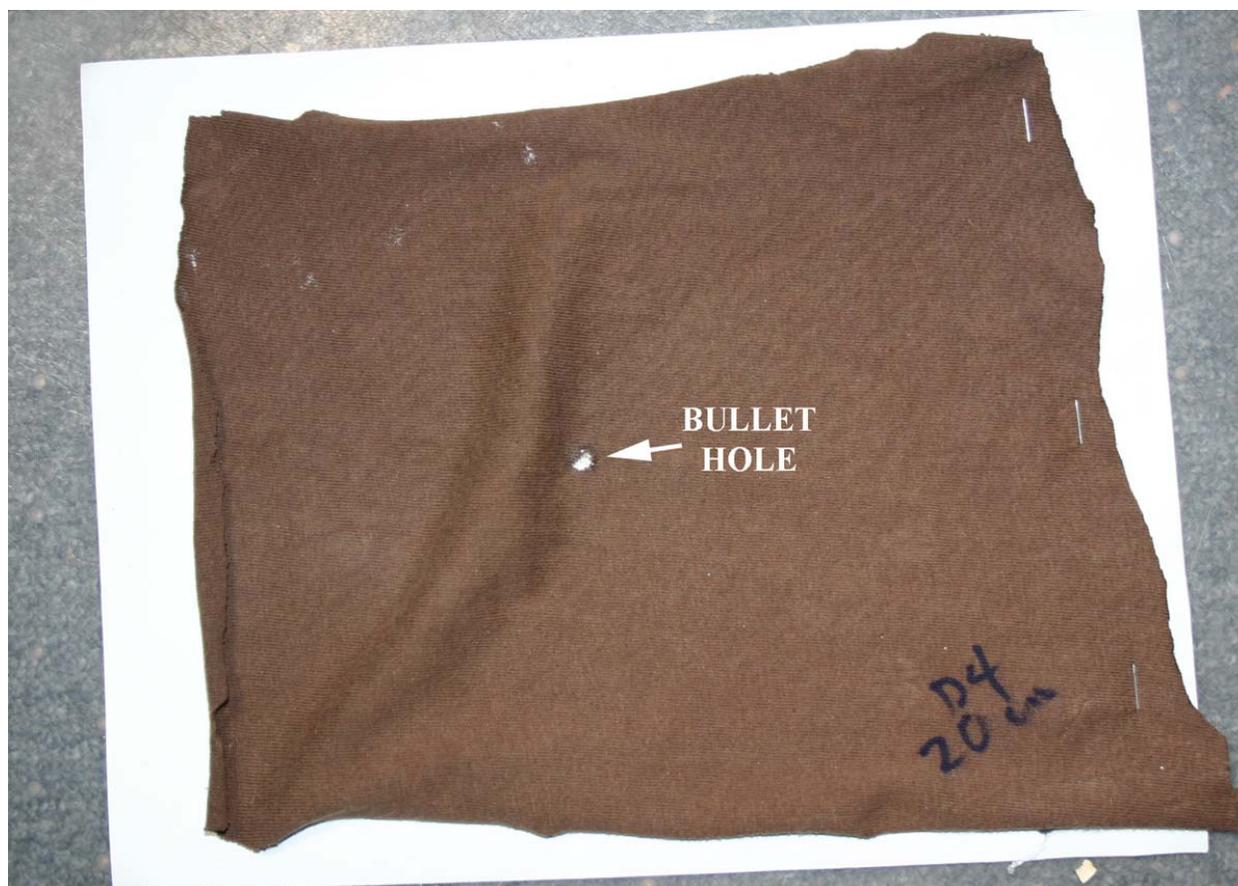


Figure 2. The test fabric from an old t-shirt which was similar in weave and fabric thickness to Adam Owen's t-shirt. The test fabric was fastened over the Benchkote paper which was in turn attached to plywood and then shot with .357 Hornady ammunition in the S&W .357 revolver.

Adam Owen: Muzzle - Target Distance

Adam Owen was shot with the muzzle close enough to produce skin stippling through his t-shirt (Fig. 3). Skin stippling that surrounds a gunshot wound is produced by partly burned and unburned gunpowder particles that have enough momentum to penetrate skin as well as fabric. The reconstruction of the shooting scene, requires reliable estimates of the muzzle-target distances for all the deceased. This was done by test firing the S&W revolver used in the shooting with the same ammunition at targets as described above. Complicating such a determination is the extensive dried blood on the shirt at the location of the bullet hole which can interfere with chemical tests such as Modified Griess if not performed correctly. Chemical tests for gunpowder-derived nitrites (Modified Griess) or lead (sodium rhodizonate) destroys the gunpowder/gunshot residue (GSR) evidence and in the interest in preserving evidence, an important issue for the court granting the defense access to the evidence, were not performed while the evidence was in my possession. All the described tests on the decedents' clothing are nondestructive, except for the removal of blood from the some of the samples (of SEM analysis) taken from the shirts of the deceased.



Figure 3. A. The deceased Adam Owen at the shooting scene. **B.** Close-up image of the bullet wound in Owen's chest showing the stippling around the wound which indicates the muzzle was at an intermediate range to him when fired. The type of firearm and ammunition require test firing at targets at different distances to estimate the muzzle-target distance to the deceased. This was done in this study.



Figure 4. A. Backlit test fabric that was shot with the .357 muzzle at 4 inches from the fabric; penetration of unburned and partially burned powder has produced small holes around the bullet hole in the center of the fabric. **B.** Backlit target, which was shot at 12 inches, where only half of the Benchkote material was covered with the fabric (on left). The fabric filtered most of the powder particles from penetrating the Benchkote paper surface.

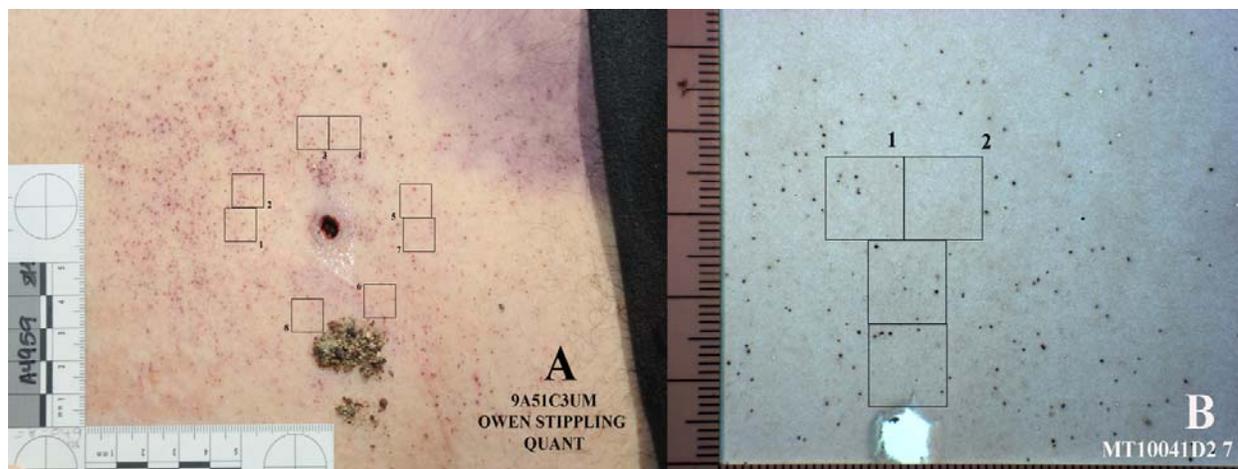


Figure 5. *A. Image of the stippling around the chest wound of Adam Owen. One cm squares were drawn in Photoshop 2 cm from the margin of the bullet hole. B. The Benchkote target shot at 4 inches that had the test fabric over it when shot. Same procedure as in A, but the paper target was backlit in order to count the powder flakes which went through the paper.*

Important in determining the muzzle-target distance that produced the Owen stippling is to include a fabric covering for the target material in the test shootings. The fabric shot at different distances will also provide material to compare the fabrics from the Light and Leird clothings to be examined in the SEM. The test fabric was a well-worn t-shirt cut into sections and placed over Benchkote test paper (Fig. 2). The places of penetration by gunpowder of the shirt's fabric is readily observable when back lit (Fig. 4A). The shielding effect by the fabric can be seen in Fig. 4B where the left half of this fabric that was shot at 12 inches was covered with fabric and the right half was not. Thus, the t-shirt fabric acts as a barrier to the high energy powder particles that strike the shirt from a short-distance muzzle-target shot. At issue with the shot to Owen and the other two decedents are where these individuals were standing in relation to the muzzle of the S&W .357 revolver when fired and is, of course, important information for the reconstruction. Results of these tests will also determine if Leird and Light were within 2 feet of the muzzle when shot.

The technique I use to estimate muzzle-target distances in intermediate-range shots (Burnett, 1989) requires the removal of a small patch of fabric near the bullet hole in the fabric. The test is nondestructive. Blood is removed from the patch by a solution of sodium/calcium hypochlorite (bleach) and it is mounted on a scanning electron microscope (SEM) platform and examined in the SEM. Adherent GSR on the fabric fibers is not affected by this procedure (Burnett, 1993 and 1995). The density of the GSR on the fibers of the fabric is compared to test fabric samples shot with the same gun and ammunition. Unfortunately, the sample taken from Owen's shirt near the bullet hole in addition to blood, was heavily coated with dirt, which with the removal of the blood remained - obscuring the GSR on the shirt. Two alternative methods were used to estimate the muzzle-target distance for Owen.

Table 1. Results of the stipple counts from Owen's chest and from the Benchkote paper shot a 4 inches.

	NUMBER PER 1 cm REGION								
	1	2	3	4	5	6	7	8	\bar{X}
OWEN CHEST STIPPLE	29	31	18	28	16	21	20	38	25
D2 10 cm/ 4 inches	20	18	10	9	13	15	6	13	13

Table 2. Radius measurement of the stipple patterns for gunpowder from the test shot and Adam Owen using the same .357 revolver and ammunition used in the shooting at issue. The Owen measurement is highlighted. Age related degradation of the ammunition could affect these values.

	TARGET MUZZLE DISTANCE	r inches	
PAPER TARGET ONLY	D7 10 cm/ 4 inches	2.25	} powder pattern partly off target
	D14 15 cm/ 6 inches	4.0	
	D8 20 cm/ 8 inches	4.75	
	D9 30 cm/12 inches	5.0	
	D13 30 cm/12 inches	5.25	
	D10 40 cm/16 inches	—	
	D11 50cm/19.5 inches	—	
	D12 60cm/22.5 inches	—	
FABRIC + PAPER	D3 5 cm/ 2 inches	1.24	} very few powder particles
	D2 10 cm/ 4 inches	2.75	
	D4 20cm/ 8 inches	3.75	
	D5 30 cm/12 inches	~4.75	
	OWEN CHEST STIPPLE	3.2	

Two methods are presented to estimate the muzzle-target distance: density of the stipples on Owen's chest and radius from the bullet hole to the outer edge of the stippling pattern.

The density of the stippling on Owen's chest around the bullet hole is shown in Fig. 5A. Eight 1 cm squares were drawn in Photoshop around the bullet hole at 2 cm from the bullet hole edge. The same procedure was done on the fabric-target shot at 4 inches (Fig. 5B). The results of the counts of gunpowder and stipples from within the 1 cm squares are shown in Table 1.

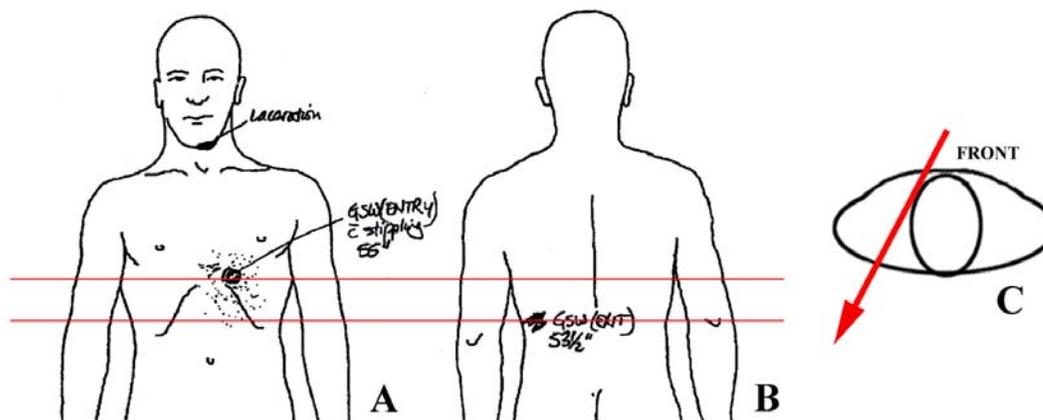


Figure 6. Bullet trajectory for Adam Owen. **A.** Anterior view of the autopsy drawing showing the location of the entrance wound in the chest of Adam Owen. **B.** Posterior view showing the exit wound. The parallel red line vertical gap indicates Owen was leaning slightly forward when he received the bullet. **C.** Estimated trajectory (from A and B) on the horizontal plane through Owen's body which shows Owen was rotating counter clockwise when he received the bullet. A & B from the Adam Owen autopsy report.

The results of this analysis show that the density of the gunpowder particles in the 8 squares on average (mean = 25 particles) is about twice that detected on the Benchkote paper that was covered with fabric for the average (mean = 13) of the same number of squares. The muzzle-target distance for the test firing was 4 inches. The results for just this test indicate the muzzle-target distance for the chest shot to Owen was less than 4 inches.

The other test, however, produced a different result (Table 2). The radius of the stipple mark around the bullet hole in the chest of Owen were averaged from 4 different measurements at different locations, 90 degree offset for each (Table 2, bottom), as well as the averages made the same way for all the test shots, both with and without fabric covers. The Owen's average radius value, 3.2 inches, places Owen's chest between 4 and 8 inches from the muzzle based on the Benchkote targets. This average distance is estimated to be approximately 6 inches. Without the fabric cover on the Benchkote target material, the estimate is about 5 inches for the muzzle-target distance.



Figure 7. Robert Light's left anterior t-shirt sleeve showing an apparent bullet hole in its hem (at arrow). This corresponds to the first strike by the bullet in Light's upper forearm. The hole below the arrow could have been derived from the bullet exit. The other two holes to the left of the image correspond to an entrance and exit wound consistent with the trajectory of the bullet where it entered the upper left arm and exited prior to entering the axilla. However, the irregular tear and size of the latter suggest a different origin.

Assumptions are in these experiments that the test t-shirt fabric adequately simulates the t-shirt of Owen and that the Benchkote material is appropriate for this simulation. Lucien Haag is a well-known shooting scene reconstructionist and has sufficiently tested the Benchkote paper for standard muzzle-target distance estimations (Haag, 2006).

Considering the density of the powder fragments/stippling on Owen's chest, I believe this lowest estimate is the most accurate. However, it is apparent more tests are needed, which is beyond the scope of the analysis presented here, to ascertain the reason for the variability in these estimates. For the purpose of the reconstruction, 5 inches is a reasonable estimate for the distance of the .357 muzzle to the chest of Owen.

Adam Owen - Autopsy Bullet Trajectory

Figure 6 illustrates the vertical and horizontal trajectory of the bullet through Adam Owen's body. Assuming the revolver was level when fired, Owen was leaning slightly forward. He was rotating counter clockwise when he received the bullet.

The autopsy report states " The bullet path from the entry wound in the front of the torso passes into the upper part of the epigastrium, grazing the upper surface of the left lobe of the liver and continues through the dome of the diaphragm along the posteroinferior aspect of the heart,

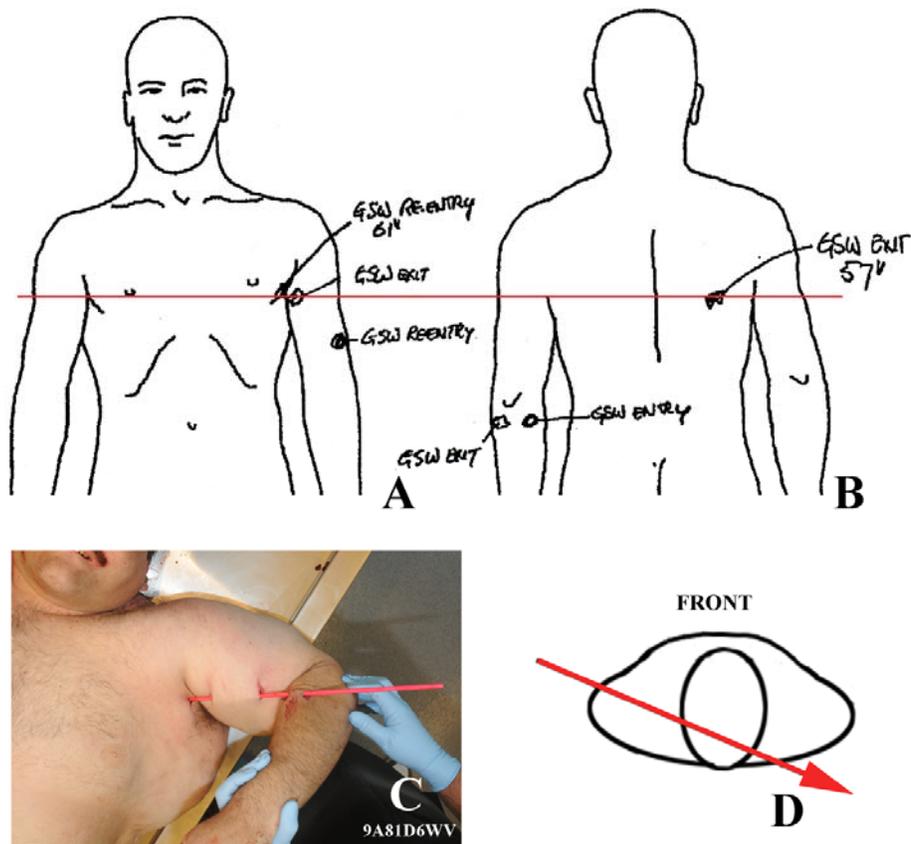


Figure 8. Bullet trajectory for Robert Light. **A.** Anterior view of the body in the autopsy drawing showing the location of the entrance wound in the chest after passing through two locations on his left arm. **B.** Posterior view showing the exit wound location. The horizontal red line through both the axilla (chest) entrance wound (A) and the exit wound in Light's back (B) indicate Light was fully erect when he received the bullet. **C.** Image prior to autopsy and after the body was cleaned shows the bullet trajectory through the left arm. The position of the upper arm was perpendicular to the body and the forearm was down as shown by the arm position with the trajectory rod in place. **D.** Estimated trajectory on the horizontal plane through Light's body (estimated from the drawings A and B) shows Light was rotating clockwise when he received the bullet. A & B from the Robert Light autopsy report.

lower esophagus, through the left lower lung lob, exiting the chest cavity. ... The wound through the heart is about 10 cm in length, passes through the full thickness of the free wall of the right ventricle.” Of concern as to the reconstruction of the shooting is when Owen would start dripping blood to the ground. Previous experience for a similar wound and overlying clothing (Burnett, 2010) indicates Owen would start dripping blood in 2 to 3 seconds from the shot. The first drop closest to the shooting location (i.e., most distant from the deceased's final location) would be an important consideration when combined with other evidence in the reconstruction of the locations of Flechtner and Owen when each were shot.

Table 3. Gunshot residue results from the analyses of the samples taken from the hands of Robert Light and Angela Light. These results are important in showing both deceased were in close proximity (within feet) to Flechtner when they were shot. Pb = lead, Sb = antimony, Ba = barium.

		PbSbBa	SbBa	PbBa	PbSb	Total
LIGHT	LEFT HAND *	171	87	46	221	525
	RIGHT HAND	9	2	0	14	25
LEIRD	LEFT HAND	2	1	0	6	9
	RIGHT HAND	39	22	14	146	221

* values extrapolated to 100% (58.43% of stub analyzed)

Robert Light: Muzzle - Target Distance

Robert Light's left arm could have been exposed to high energy gunpowder particles (producing skin stippling) from the blast of the discharge of the .357 revolver if he was standing within 12 to 18 inches of the muzzle (Burnett, 2010; Heard, 2008). However, no stippling was noted on Light's arm. Muzzle GSR could have been deposited on the target fabric if the muzzle was within 2 feet of the arm. A bullet hole was located on the hem of the left sleeve of light's t-shirt (Fig. 7), which appears to correspond to initial bullet entrance wound in the proximal fore arm, was sampled for SEM analysis. The focus was on the density of the GSR 1 cm from the hole (bullet rub GSR was not documented at the margin of the fabric hole). No GSR was found on the sample taken 1 cm from the margin of the hole which means Light's left shoulder was more than 2 feet from the muzzle of the revolver when he was shot.

The autopsy report states, "The bullet path from ... the left axilla passes through the lateral aspect of the left fourth rib, continues through the left upper lung lobe, across the mediastinum, grazing the left atrium and aortic arch, continuing through the right lung and through the posteriolateral aspect of the right fifth rib to exit wound in the back. ... The aortic arch, though grazed, is not perforated. There is equivocal perforation of the left atrial wall." Important to the reconstruction of the shooting is when Light started dripping blood. Since he was only wearing a t-shirt, Light would start dripping blood between 3 and 7 seconds from the shot. This estimate considers that there was only minor injury to the heart and associated major vessels and is based on the work presented in the St. Louis case (Burnett, 2010). The first drop closest to the shooting location (i.e., most distant from the deceased's final location) would be important when combined with other evidence in the reconstruction of the location of Light

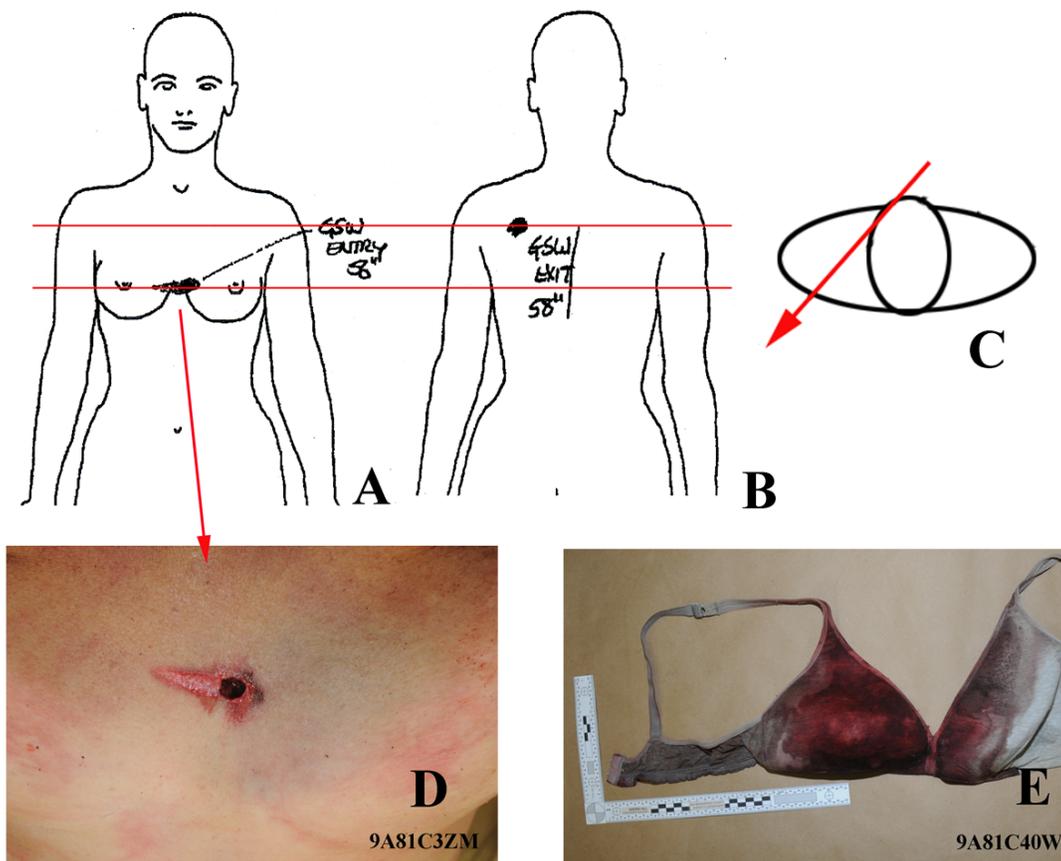


Figure 9. Bullet trajectory for Angela Leird. **A.** Anterior view of the body in the autopsy drawing showing the location of the entrance wound in the chest. **B.** Posterior view showing the exit wound location. The parallel red line vertical gap does NOT indicate Leird was leaning slightly backward but, as was noted in the autopsy report, the bullet deflected off Leird's breast plate in an upward direction. **C.** Estimated bullet trajectory (from A and B) on the horizontal plane through Leird's body which shows Leird was rotating counter clockwise when she received the bullet. Some bullet deflection is possible in this plane. **D.** Image prior to autopsy and after the body was cleaned shows the bullet entry wound with an associated abrasion which likely came from the bra cup margin **E.** Leird's bra likely produced the abrasion associated with the bullet hole seen in D. But, no damage to the bra was noted in the region where the bullet contact apparently occurred. A & B from the Angela Leird autopsy report.

when the shot to him occurred. The estimated positions of the other deceased also assist in placing Light when the shooting occurred.

Robert Light - Gunshot Residue Burden

Gunshot residue samples were taken from both left and right hands of Robert Light. The heavy GSR burden detected on his left hand (Table 3) was from him being in range of the muzzle blast of the shot from the .357 revolver. It is known that the concentration of muzzle GSR on targets drops off exponentially with distance of that target from the muzzle (Burnett, 1989, see Fig. 12 therein). It is apparent from the GSR burden on Light's hands (Table 3) that the left

side of Light's body was oriented toward the shooter when he received the bullet. The trajectory of the bullet (Fig. 8D) also shows that Light's left side was oriented toward the shooter at the shot.

No GSR was discovered on the fabric sample taken from Light's left t-shirt sleeve.

Angela Leird - Autopsy Bullet Trajectory

Figure 9 illustrates the trajectory of the bullet through Angela Leird's body. She was rotating counter clockwise when she received the bullet.

The autopsy report states for Leird, "The bullet path after the deflection goes into the left side of the chest, passing through the left lung along the interlobar fissure and hilus of the lung, exiting the chest cavity through the left fifth posterior intercostal space. There is at least 2 liters of blood in the left pleural cavity. There is no blood in the pericardial cavity, right pleural cavity."

Leird's gunshot wound was less severe than the wounds of Owen and Light, but fatal nonetheless. Heavy external bleeding from her bullet wounds and associated blood dripping would be delayed even more than that of Light and she likely lived slightly longer than Light. In addition, Leird was wearing a flannel sweatshirt which absorbed blood. Her first blood drips occurred well into her retreat from the driveway and appear to have started on the dirt road at placard 10.

Angela Leird - Gunshot Residue Burden

Gunshot residue samples were taken from both left and right hands of Angela Leird. The heavy burden detected on her right hand (Table 3) was from her being within the muzzle blast of the shot from the .357 revolver. She also could have received part of the muzzle-origin GSR from the Light shot. It is known that concentration loss of muzzle GSR on targets drops off exponentially with distance of that target (Burnett, 1989, see Fig. 12 therein). It is apparent from the GSR burden on Leird's hands (Table 3) that the right side of her body was oriented toward the shooter when she received the bullet, but she was more distant from the muzzle than was Light. This assumes the same hand orientation and collection procedure as it was for Light. The trajectory of the bullet (Fig. 9C) also shows that Leird's right side was oriented toward the shooter at the shot. No GSR was discovered on the fabric samples taken from Leird's t-shirt. Two consistent spherical GSR particles were found on the flannel sweatshirt sample that was taken in proximity to its bullet hole.

Shooting Scene Measurements

Three of the detectives performed the measurements of the shooting scene at 4554 Begonia Road. "We used the southeast corner of the residence at 4554 Begonia as our reference point.

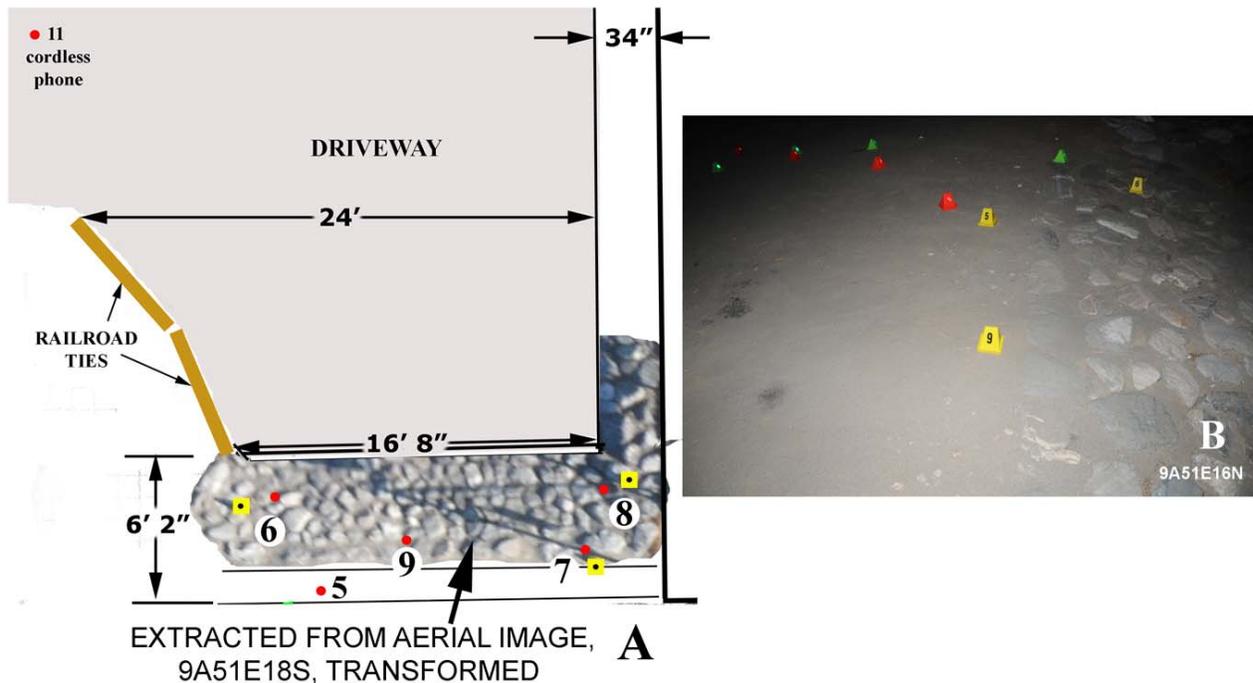


Figure 10. **A.** Scaled reconstruction using the measurements made at the shooting scene on April 13, 2011. The stone area image overlay was obtained from an aerial image and transformed in Photoshop to compensate for the perspective distortions of the image. The yellow squares with central dots are overlays added in Photoshop of the locations in the image of the observed yellow placards. The red dots are the locations of the indicated placards according to the measurements made by the detectives. Lack of an expected uniform displacement between the placards and their associated measurements indicates the laser measurement system was unreliable. The measurement at 9 is likely erroneous. **B.** Shooting scene image showing placards 5 and 9 are aligned on an approximate east-west axis. The laser measurement of placard 9 places this placard on the rocky entry to the driveway (see “9” at A on left). Clearly, the laser south measurement for this placard is erroneous.

We used a Leica ‘Diasto’ model A5 laser for the measurements (#1061650338).” There was no indication in the discovery of any calibration of this system. By calibration, I mean using a tape measure and the laser system to determine the variability inherent in the laser system. Indeed, a number these placard measurements appear to be off. The error in each measurement is not uniform (Fig. 10A).

Secondly, there were no measurements of any architectural features of the shooting area with either a tape measure or the laser system. Without architectural measurements (e.g., the corners of the driveway) the provided placard measurements are meaningless. Thus, I was forced to visit the shooting site (April 13, 2011) to obtain these measurements. Figure 10B shows, when the scaled layout of the driveway is applied to the measurements, that placard 9, which its laser

measurement places on the rock entry area (Fig. 10A), in the scene images (e.g., Fig. 10B) shows this placard in the dirt just south off the rocky driveway entrance.

A shooting scene reconstruction depends on the construction of a scaled diagram with representations of the evidence items (e.g., bloodstains) in place, as established by the placard evidence measurements. It appears the detectives were not properly trained in making those measurements as indicated by the above.

Footprints in the Road

An effort by the criminalists to track the foot prints of the deceased was made. There are numerous non-numbered red placards in the shooting scene images which mark the footprints of Owen, Light and Leird from Valle Vista Road to the front of 4554 Begonia Road. A diagram of the tracks and the identity of who made them are provided. Unfortunately, measurements are not provided for these tracks in a scaled drawing (Fig. 11A). I had to use the aerial images of the non numbered placards to estimate the track measurements. With the scene measurements made on April 13, 2011, I constructed a scaled drawing (Fig. 11B) of the probable locations of the tracks of the decedents to the rocky area in front to the driveway.

According to witness Telliano, Owen was stationary on the other side of the dirt road and

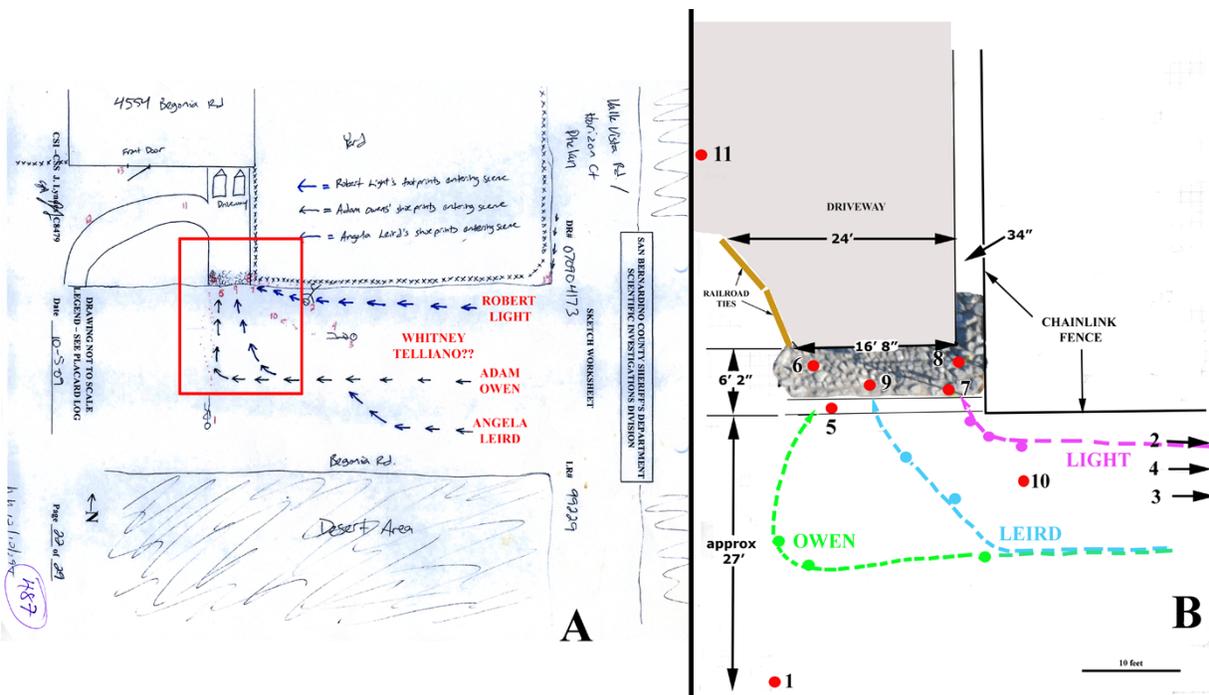


Figure 11. Decedent foot tracks in the dirt road. **A.** Color image from the discovery in a non-scaled drawing roughly showing the foot trails of the three decedents. The identities (in red) of the tracks are provided by the author and are based on an interpretation of the key (upper center of the drawing). The red rectangle outlines the area of interest in the scene and is detailed in **B.** **B.** Scaled drawing of the shooting scene (area of interest) created for this report. The red dots are the placard measurements. The trails of the deceased are estimated from the approximate locations of the non-numbered placards (derived from the aerial images) and the numbered placards 5, 7 and 9. The green dots are the locations of the non numbered placards for the shoe tracks of Owen. Blue dots, same as Owen, but for Leird. Pink, same as Owen, but the barefoot tracks of Light. Shoe prints of witness Telliano, despite her being at the scene twice (police reports, and interview transcript, October 5, 2009) were not recorded.

arguing with Flechtner when she, Light and Leird approached the driveway to “bring” Owen back. However, this does not explain why Leird’s shoe prints are on the south side of Begonia Road (Fig. 11A) while Light’s foot prints are on the north side if they were supposedly walking together. There is no mention in the discovery or indication in the foot trail (Fig. 11A) of Owen becoming stationary (i.e., leaving multiple foot prints at one location) before he changed direction from walking west to north when he began his approach to the driveway.

Incredibly, despite witness Telliano being at the scene twice, there were no placards for her tracks on Begonia Road. Telliano’s tennis shoe prints were mentioned on Begonia Road west of placard 14, but there is no indication where her foot prints were on Begonia Road. Her involvement in the shooting certainly would have justified a diagram of her shoe prints such as diagrammed in the discovery for the three decedents (Fig. 11A).

From the tracks of the three decedents as portrayed in Fig. 11, it would appear that the three decedents attempted to “corner” Flechtner at the end of his driveway. Telliano’s interview indicates this was perhaps not the initial intent of Light and Leird, although in the heat of the confrontation which apparently developed according to Telliano, it appears an actual physical fight would have occurred, if it weren’t for Flechtner having a revolver.

The foot prints from the three decedents do show that all were on the rocky entry to the driveway prior to being shot. It is at this point where the bloodstains on the rocky entry to the driveway need to be examined.

Bloodstains on the Rocky Entry to the Driveway

Both Owen and Light, after their shootings, dripped blood on the rocks of the entry to the driveway. Leird did not start dripping blood until well into her retreat from the driveway.

Adam Owen retreated from the driveway after being shot following nearly the same track as his entry but going to the far south side of the road and collapsing, which was marked by placard 1 (Fig. 11B). The track he took is documented by the blood trail he left on the rocks of the driveway as well as on the dirt road. Owen’s bloodstains on the rocks near placard 6 are shown in Fig. 12.

The autopsy report noted significant bullet damage to Owen’s heart. Owen’s chest wound was similar to that sustained by Christopher St. Louis (Burnett, 2010). St. Louis was also dressed in a shirt with fabric similar to Owen’s. The circumstance of that homicide allowed for an estimate of the time from his wounding to the start of blood dripping as 2 to 3 seconds.

Robert Light’s retreat from the location of his shooting is also documented by the bloodstains on the rocks at the entry to the concrete driveway. No blood was noted on the concrete driveway from Light. The bloodstains start near the southeast corner of the driveway and show he was traveling east toward the chain link fence (Figs. 13A and 14A). It appears Light’s route

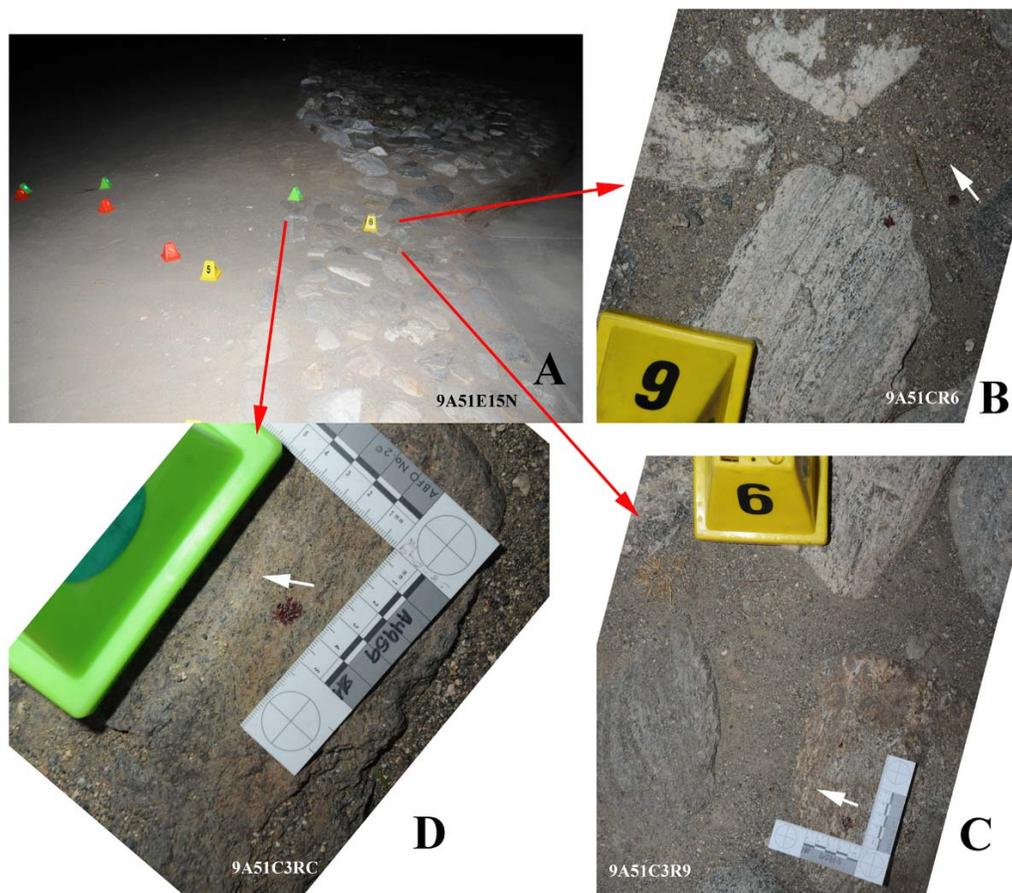


Figure 12. Adam Owen's blood trail. **A.** the blood trails attributed to Adam Owen which were deposited during Owen's retreat from the shooting site. The image is looking west with the concrete driveway on the right. Red arrows indicate the origin of the images B, C and D. **B.** Bloodstain on rock and dirt. White arrow indicates the horizontal direction the blood drop was traveling prior to hitting the rock. This is determined by the form of the bloodstain. The bloodstain that shows such directionality when deposited indicates Owen was traveling south toward the location where he collapsed and died (at placard 1). **C.** As in B. **D.** As in B.

to the fence was somewhat curved (Fig. 14A) as shown by the bloodstains. Telliano notes, "And he shot Robert. Robert bent over like this, fell into the fence..." (Telliano interview transcript, Oct 5, 2009, p.22). Light did impact the fence with some force in that blood was projected beyond the chain links of the fence (Fig. 14B).

Robert Light was dressed in a manner similar to Owen, wearing only a t-shirt with shorts. However, his chest wound apparently did not breach the integrity of the heart (except for possibly the left atrium) and its associated major vessels. Without the direct motivating force of the heart projecting blood outside the chest, bleeding would not start to drip from Light as quickly as it did for Owen. The dripping likely started after 3 seconds but no more than 7 seconds from his wounding; enough time for Light to complete his rotation from facing



Figure 13. The blood trail on the rock entry to the driveway attributed to Robert Light. **A.** Image taken facing east showing the blood trail on the rocks. Arrow heads point to these first bloodstains. **B.** Image of the region in A, but closer view. Arrow heads point to the small bloodstains just off the driveway.



Figure 14. **A.** Same area as depicted in A, but with a direction of movement (red dashed line and arrow) that Light took after being shot. This is verified with the examination of the bloodstains on the rocks. The white arrows indicate where images B and C were taken. **B.** blood on the rocks on the east side of the chain link fence. Yellow arrows show the horizontal vector direction that was on the blood before impact on the rocks. This is shown by spines which emanate from the main body of the bloodstain. **C.** Same as B, but bloodstains on the rocks near and on the west side of the fence.

Flechtner and travel a short distance on the concrete driveway in the direction of the chain link fence bordering the driveway. Light just entered the rocky part of the driveway when he started to drip blood.

Leird also had a bra to soak up blood as well as two layers of fabric over her wounds, both front and back. Leird did not start to drip blood until well into her retreat from the driveway. The first Leird bloodstain location was in the road at placard 10 (Fig. 11B).

Whitney Telliano: Witness to the Shooting

The effect of witnessing a traumatic event is often equally as traumatic for the witness as the victim who survives. Witnesses are usually confused in their accounts. Telliano's interview account (Telliano interview transcript, Oct 5, 2009) was no exception. She was not only confused but also likely tired since the interview was started at 2:25 in the morning, approximately 6.5 hours after the shooting. Haag (2006, p. 11) notes,

“A strong skepticism and distrust of eyewitness accounts is both justified and encouraged. It is quite common for individuals with *no* reason or motive to favor one side or the other to be in error in one or more respects regarding their recollection of a shooting incident. Guns that never were there are ‘seen’ and were often ‘fired.’ ... The number of shots recalled is often incorrect. The timing of events, the sequence of events, positions and movements of the participants, the distances involved are often not supported by physical evidence. Shooters, victims, and witnesses frequently suffer temporal and auditory distortions when shootings occur. It is more often the exception than the rule that the physical evidence squares with the accounts of eye or ear witnesses in every respect.”

Indeed, my work on the St. Louis case (Burnett, 2010) where there were a number of witnesses supports Haag's observations. In addition, with a number of my other unpublished cases where eye witnesses were involve in mind, I will even go a step further from Haag and say witnesses to a traumatic event are never able to accurately describe it in its entirety. (Perhaps an exception will occur in a future case?) Witnesses consciously or unconsciously reorganize and distort to accommodate bias as noted by Haag. They fill in gaps and distort their memory to make a complete "sensible" scenario in their minds. So, I put more weight on a few of Telliano's pre-event descriptions to the shooting than her account of the shooting itself. There is one observation after the shooting which stands out and is verified by the physical evidence.

It must be noted that without any evidence of Telliano's shoe prints near the driveway, she could have witnessed the shooting from the southeast corner of the property (at placard 14), the only place where her shoe print was recorded. It is quite distant from the shooting, but her account of the shooting (Telliano interview transcript, Oct 5, 2009) obviously puts her in close proximity to the event.

Importantly, Telliano's account does not have Flechtner acting physically aggressively - she says (p. 19), "The guy might have been scared..." She also essentially describes Flechtner as being stationary for the three shots, likely stepping back as the three decedents approached him and producing his revolver. Other than indicating where she was possibly standing when the shots were fired, there is little else credible about her account of the shooting. I put Telliano in the reconstruction, near the corner of the chain link fences at the entrance to the driveway (Fig. 15).

The credible/supportive of the physical evidence stated in the interview of Telliano:

1. pp13-14. **“Robert and that lady started to pass the fence [later identified as the chain link fence] and come towards the driveway, and Adam moved in closer too. ...they were still in the dirt, and they moved, they just moved in a little closer, ...”** All three decedents moved together onto the rocky entry to the driveway. The footprints from all three (at placards 5, 7 and 9) show they all entered the rocky area of the driveway.
2. p. 18. **“[Flechtner’s] ... feet were almost, like kind of in the dirt, an at the edge of the concrete.”** Indicates the position of Flechtner just prior to the shooting. He stepped back when the shots occurred.
3. p. 18. Reference to Light’s position to Flechtner when shot: **“Three or four feet.”** This distance estimated is supported by GSR evidence.
4. p. 18. Reference to Leird’s position to Flechtner when shot: **“ ... she was probably like maybe five or six feet.”** This distance estimate is supported by the GSR evidence.
5. p. 22. **“And he shot Robert. Robert bent over like this, fell into the fence, and said run. ...”** The bloodstains to the east of the chain link fence indicate that Light fell/hit the fence hard enough to project blood beyond the fence (Fig. 14B). Thus, Light saying to Telliano to “run” could have occurred. The rest of her statement in this paragraph could not have happened in this sequence. However, Telliano could have been close enough to the bullet that passed through Leird, and perhaps Light that one or both could have been tumbling so that she heard one or both “whizz” by her.

Telliano left the scene prior to the mortally wounded Leird stumbling past her location (Fig. 15) moving east, down the center of the road. Same goes for Light, as he was moving east along the chain link fence bordering Begonia Road. Telliano could not have witnessed Leird fall prior to where she finally fell. If Leird had fallen previous to Telliano leaving the scene, Leird’s flashlight and beer bottle would have been dropped at that location. In addition, she could not have been aware of the status (dead or dying) of Angela Leird when she returned to the Leird house to call 911.

Reconstruction

The purpose of this report is to bring together all the evidence and derive a reconstruction of the shooting scene. Considered are:

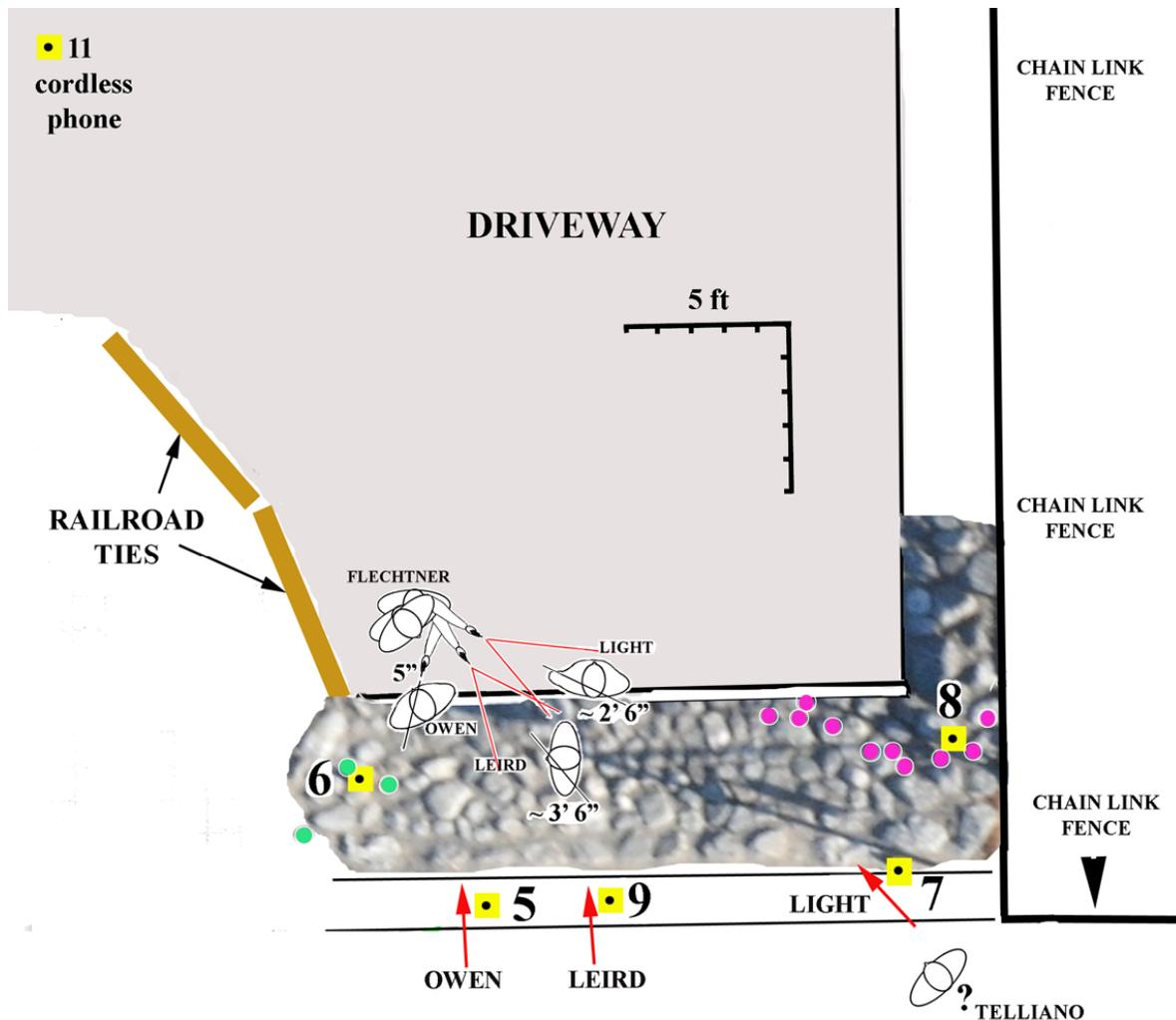


Figure 15. The shooting scene reconstruction. The yellow dotted squares are the placards with associated numbers. Placard 9 was position according to the shooting scene images. For Owen, who received the first shot, the estimated distance from the muzzle to his chest is 5 inches. For Leird, the estimated distance from the muzzle to her right hand is 3 feet 6 inches. For Light, the estimated distance from the muzzle to his left hand is 2 feet 6 inches. The order of shots to Light and Leird is equivocal. Green dots: approximate locations of the bloodstains from Owen. Pink dots: approximate locations of bloodstains from Light. The drawing displays a timeline for the shooting that starts with the shooting of Owen and finishes with Leird or Light (depending who was shot last). The time covers not more than 2.5 seconds, more likely on the order of 2 seconds. The bloodstains then trace the routes taken by Owen and Light from the shooting. Owen, because his heart was perforated by the bullet, would likely have started dripping blood 2-3 seconds after the shot. Light's heart or major vessels to the heart were undamaged - he would have taken slightly longer to start dripping blood, probably on the order of 5 to 6 seconds. Leird's blood shedding would have taken even longer than Light, where she was on the road before she started to drip blood.

1. Where the first bloodstains from Owen occur on the rocks of the driveway entry. Blood dripping started 2 to 3 seconds after being shot.
2. Where the first bloodstains from Light occur on the rocks of the driveway entry. Blood dripping started 3 to 7 seconds after being shot.

The nature of the injuries as described in the autopsy results from all three of the decedents as well as the clothing they were wearing provide estimates of when the decedents started dripping blood. This determination is based on my observations in another shooting (Burnett, 2010) and experience with other cases.

3. The distance of the muzzle to the chest of Owen was 5 inches. This was done by test shots from the .357 revolver with the same ammunition used in the shootings and measuring the deposition of powder on Benchkote targets, with and without fabric covers.
4. Using the GSR analysis results, in a quantitative interpretation from the samplers from Light to determine the approximate distance of his hands from the .357 muzzle. Considering the position of Light's bullet wound to his left arm, his hand was probably near his side when the shot occurred. His left hand was likely within 3 to 4 feet from the muzzle.
5. Using the GSR analysis results in a quantitative interpretation from the samplers from Leird to determine the approximate distance of her hands from the .357 muzzle. The position of Leird's left hand was probably at her side holding the flashlight— her body blocking GSR deposition; her right hand was also at her side holding a beer bottle. Her right hand was approximately 4 to 5 feet from the .357 muzzle.
6. Placards 5, 7 and 9 mark where all three decedents entered the rocky area of the driveway and support the relative positions of the decedents at the shooting. The bloodstains also position Flechtner, Owen and Light on the concrete driveway.
7. The few credible observations by witness Telliano (see above).

The reconstruction of the shooting scene is shown in Fig. 15. There is, of course, variability implicit in the estimates of the distances of the three decedents from the muzzle of the .357. For Owen it is 5 inches \pm 1 inch. For Leird and Light the given measurements of the muzzle to the hands for the GSR where the GSR samples were made are rough with a variability on the order of 1 foot, perhaps slightly more due to a wind from the northwest. This GSR concentration drop-off is exponential so the position of either Leird or Light could not be more distant from the muzzle than these values and still have these concentrations.

The wind of about 5 to 9 mph was from behind Flechtner which would move the GSR cloud from the cylinder gap of the .357 revolver away from him. (The cylinder gap GSR contribution to the burdens of Light and Leird is small compared to the GSR from the muzzle.) In addition, GSR could have rubbed off Flechtner's hands while he was handcuffed in the back of the patrol car or GSR could have rubbed off his left hand when he had put the revolver in his pocket, all three factors could contribute to a relatively small amount of GSR on his hands despite firing

the three shots.

The basis for placing Flechtner, Owen, Light and Leird at their respective positions on the driveway and rocky area of the driveway is the bloodstains. By estimating, based on the nature of the injuries of Owen and Light, when they would start dripping blood their positions were triangulate by the bloodstains to the part of the driveway shown in Fig. 15. From there, the position of Leird can be placed between Owen and Light due to her entry position onto the driveway rocks and her distance from Flechtner based on the GSR burden on Leird's right hand. Owen was on the concrete driveway, near its southwest edge; Light was on the concrete driveway approaching Flechtner from the east, and Leird remained on the rocky entry to the driveway.

All three of the deceased were rotating when they were shot. Owen was the least amount (approximately 30 degrees) from facing Flechtner and by his proximity to the muzzle of the revolver when he was shot and the location of his bloodstains, he received the first shot. Owen saw Flechtner produce the revolver and began his rotation. Light either responded to seeing the revolver before it fired the first time or he responded to Owen being shot. Either way, Light was able to rotate approximately 70 degrees from facing Flechtner before being shot - he also had enough time to have stepped back from Flechtner. The estimated distance of Light's left hand from the muzzle of the revolver is approximately 3 to 4 feet, based on the GSR burden of his left hand which would place his body approximately 5 to 6 feet from Flechtner at the shot. This distance could be slightly more since the wind and its direction could have carried the muzzle GSR farther than it would normally go without the wind.

Leird was able to rotate approximately 40 degrees before being shot. The amount of her rotation depended on when she saw the revolver or witnessed Owen being shot and whether Leird started to rotate at seeing the production of the revolver or the shot to Owen. She could also have stepped back away from Flechtner. It is equivocal whether Leird received the second or third shot after Owen. The distance of Leird from the muzzle of the revolver is roughly estimated to be 4 to 5 feet. Given the wind and its direction, GSR could have been carried somewhat further producing the concentration of GSR estimated on Leird's right hand. In this proposed reconstruction, Leird was standing at 6 to 7 feet from Flechtner when she was shot. It is unlikely she was standing beyond the southern border of the rocky entry to the driveway.

Interestingly, the estimated distance given by witness Telliano (Telliano interview transcript, Oct 5, 200, p.18) for both Light and Leird from Flechtner (allowing for Flechtner's arm being fully extended) when they were shot fall within my estimates.

Soon after the jury after got the case, they requested more information as to how to deal with evidence associated with Angela Leird's death. The Court instructed the jury to come to a decision with what they received during trial. The apparent sticking point with them was that Angela Leird had a flash light in her left hand and a bottle of beer in her right hand. It initially

appeared to the jury she was not an aggressor, but a spectator. Her close proximity to Flechtner apparently suggested to the jury otherwise.

On August 19, 2011, after deliberating almost a full day, the jury found Dennis Flechtner not guilty on all three of the murder-one counts.

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