

FOR PUBLICATION
UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

MARC CLAYTON MEROLILLO, <i>Petitioner-Appellant,</i> v. JAMES YATES, Warden PVSP, <i>Respondent-Appellee.</i>

No. 08-56952
D.C. No.
5:05-cv-00197-
RGK-FMO
OPINION

Appeal from the United States District Court
for the Central District of California
R. Gary Klausner, District Judge, Presiding

Argued and Submitted
September 1, 2011—Pasadena, California

Filed December 12, 2011

Before: Mary M. Schroeder and Ronald M. Gould,
Circuit Judges, and Gloria M. Navarro, District Judge.*

Opinion by Judge Navarro

*The Honorable Gloria M. Navarro, United States District Judge for the District Court of Nevada, sitting by designation.

COUNSEL

Tony F. Farmani, Esquire, San Diego, California, for the petitioner-appellant.

Teresa Torreblanca, Deputy Attorney General, Attorney General of California, San Diego, California, for the respondent-appellee.

Christopher P. Beesley, Deputy Attorney General, Attorney General of California, San Diego, California, for the respondent-appellee.

OPINION

NAVARRO, District Judge:

Marc Clayton Merolillo appeals the district court's denial of his federal habeas petition. Merolillo was convicted in Cal-

ifornia state court of first degree murder. At trial, the key issue of whether Merolillo contributed to the victim's death from a ruptured dissecting aortic aneurysm was disputed by three expert witnesses.

Merolillo challenges the admission at trial of the non-testifying autopsy pathologist's opinion, claiming violations of his Sixth Amendment right to confront witnesses against him. Because we find that Merolillo suffered actual prejudice from the erroneous admission of the opinion testimony, we reverse the district court's denial of Merolillo's habeas petition.

I.

On August 29, 1997, Merolillo commandeered a car occupied by an elderly couple, the Chromys, as they waited in a drug store parking lot for a medical prescription to be filled. Merolillo struggled with Mr. Chromy and ultimately pushed him out of the car. Mrs. Chromy, who was sitting in the back seat, tried to exit but became entangled in the seat belt. She was dragged along the ground while Merolillo drove, her head and body striking the pavement and curb. About a quarter of a mile later, Mrs. Chromy fell free of the car. After a high-speed chase, the police apprehended Merolillo. Mrs. Chromy died about one month later at age 78.

The autopsy pathologist, Dr. Garber, testified for the prosecution at a preliminary hearing in March 1998. Two months later, in May 1998, Dr. Herrmann was called to testify for the defense. Merolillo filed a motion under California Penal Code section 995. At the August 1999 hearing on that motion, defense counsel indicated the inconsistencies in Dr. Garber's testimony for the prosecution, but the motion was denied.¹

¹Section 995, California Penal Code, provides for a motion to set aside the information or indictment for lack of reasonable or probable cause.

Dr. Garber's testimony at the preliminary hearing was inconsistent and conclusory. He deflected some questions for his lack of expertise, suggesting that they would be better directed to "a neurologist or perhaps a neurosurgeon or an ER physician, because that's their areas of expertise, and this is not mine." When asked to expand on the mechanism by which brain injury is fatal, Dr. Garber offered the conclusory assertion that "it just is." The preliminary hearing judge said he was "disappointed" in the quality of Dr. Garber's testimony and noted that it "could not withstand the light of day beyond a reasonable doubt."

At trial in January 2001, Dr. Garber was not called to testify. Rather, the prosecution called two other pathologists to testify — Dr. Cohen, the head pathologist from the coroner's office, and Dr. Bloor, a professor of medicine and pathology from the University of California, San Diego. The defense again called Dr. Herrmann.

Dr. Garber was not called to testify² nor was his autopsy report admitted into evidence. Nevertheless, over defense counsel's repeated objections, Dr. Garber's opinion was elicited by the prosecution during cross-examination of the defense expert, Dr. Herrmann. Dr. Herrmann was asked to explain his disagreement with Dr. Garber's opinion that head trauma contributed to Mrs. Chromy's death. In response, Dr. Herrmann testified that he believed Mrs. Chromy's pre-existing medical conditions likely contributed to the cause of death, but that neither head trauma nor torso trauma contributed to her death. Earlier in the trial, the two experts called by the prosecution had not adopted Dr. Garber's opinion. Dr. Cohen had testified that torso trauma may have contributed to the cause of death, but gave conflicting testimony as to whether head trauma may have contributed to her death or to the cause of death. Dr. Bloor testified that torso trauma con-

²At the time of trial, Dr. Garber was no longer employed by the county coroner's office.

tributed to the cause of death, but that head trauma did not. Therefore, Dr. Garber's inadmissible opinion was the only expert opinion provided to the jury that head trauma definitely contributed to Mrs. Chromy's death.

All the pathologists agreed that the immediate cause of Mrs. Chromy's death was a dissecting aortic aneurysm, also called an acute aortic dissection. But they disagreed on whether the aneurysm was caused by the trauma inflicted during the carjacking or whether it developed later, caused by other factors. The experts testified that an aneurysm can be caused by long-standing hypertension, atherosclerosis, various syndromes, and trauma. Mrs. Chromy had heart disease, hypertension and severe atherosclerosis, as well as a prior history of strokes.

Key issues in the medical testimony were: (1) whether Mrs. Chromy's brain trauma contributed to the aortic dissection; (2) whether Mrs. Chromy's torso trauma contributed to the aortic dissection; and (3) the significance of the autopsy evidence of bleeding and/or healing — i.e., whether the aortic tear began thirty days prior to her death as a result of the carjacking trauma, or instead developed later as a natural result of Mrs. Chromy's pre-existing conditions.

Therefore, both the existence of a Confrontation Clause violation and the degree of prejudice caused by the admission of Dr. Garber's opinion must be determined. We begin with a discussion of the experts' testimony, counsel's closing arguments, the jury deliberations, and the appellate history of the case.

A. Expert's Testimony

DR. COHEN

The prosecution's first expert, Dr. Cohen, testified first as to Mrs. Chromy's head and brain injuries. Then, he clarified

that the immediate cause of Mrs. Chromy's death was a ruptured aneurysm near her heart in the aorta. His exact testimony was as follows:

[Prosecutor]: And let's step back to the trauma from the brain.

[Cohen]: Okay.

[Prosecutor]: It is not what ultimately killed her?

[Cohen]: This trauma (indicating)?

[Prosecutor]: Yes.

[Cohen]: It may have contributed. I can't be certain. It may certainly have. Are you talking about the brain injury itself?

[Prosecutor]: Yes.

[Cohen]: It's possible that it contributed to some extent. Whether it was 2 percent or 5 percent or 40 percent. It is possible. I don't know the answer to it.

Aided by a photo of Mrs. Chromy's preserved heart, Dr. Cohen described the physical mechanism of the aortic aneurysm. He stated at one point that he agreed with Dr. Garber's conclusion that the immediate cause of Mrs. Chromy's death was a dissecting aortic aneurysm, a tear in the aorta. When asked how such a tear happens, he listed more than one possible cause. However, he prefaced this by explaining that the most common cause of an aortic tear overall is long-standing hypertension. Another cause he described as fairly common is plaque and atherosclerosis on the inner surface of the aorta, which causes the wall to weaken. This weakness predisposes a person to having a rupture or a break in the blood vessel. Finally, he listed other less common causes, such as trauma

and certain syndromes. At this point, the prosecutor asked him to confirm that Mrs. Chromy had a history of hypertension and atherosclerosis, which he did.

Next, the prosecutor attempted to elicit from Dr. Cohen an opinion as to whether the trauma Mrs. Chromy suffered during the carjacking contributed to the aortic tear. His testimony was as follows:

[Prosecutor]: Now, in this particular case, what about the trauma that she suffered, the — the beating she took bouncing on the road? What did that contribute to this tear?

[Cohen]: Well, again, that's debatable. The trauma that she sustained 30 days prior clearly did not help her. And if she had a weakness like this already from her atherosclerosis — which she did have severe atherosclerosis and she did have hypertension. So she already had enough to explain a weakness in this wall. And the trauma certainly did not help her. It could only have hurt her.

[Prosecutor]: Okay. So is your opinion, then, this trauma hurt her or aggravated —

[Cohen]: I can't answer that. I wish I could. I can't answer for sure if this trauma actually contributed. It absolutely did not help her. It could only have hurt her. And the fact that it's in relatively close proximity to her injury, I'm very suspicious of it. And I'm very concerned that it did contribute. Whether it was a percent or 5 percent or 40 or 80 percent, I don't know. I don't know the answer to that.

In the preserved heart, Dr. Cohen also observed signs of bleeding into the inner wall lining of the aorta, which he opined had existed for days, weeks or even two months before

death. However, he also acknowledged that the bleeding could have started minutes before death. In his opinion, this bleeding was what ultimately dissected the aortic tissue, causing Mrs. Chromy's death.

The prosecution concluded Dr. Cohen's testimony with a description of how high blood pressure could exacerbate a person's propensity for these types of tears, and how blunt-force injury to the torso causes the tissues to react. When asked by the prosecution whether significant forces to the torso, transmitted to the tissues, would cause or start a tear, Dr. Cohen opined that "[t]hey certainly would not help it, and they could hurt it."

The defense opened cross-examination with a recitation of the admissible findings within Dr. Garber's autopsy report, particularly the fact that Mrs. Chromy's heart exhibited hypertrophy consistent with long-standing hypertension and severe atherosclerosis of the aorta. Upon questioning, Dr. Cohen admitted that 80 or 90 percent of people who suffer a dissecting aortic aneurysm tend to be hypertensive. He also testified that Dr. Garber's autopsy report identified an enlarged heart, a condition that results from the hypertrophy that comes with long-standing hypertension.

Defense counsel then cross-examined Dr. Cohen regarding Mrs. Chromy's brain injuries. When asked about any correlation or connection between these types of brain injuries and a dissecting aortic aneurysm, he admitted that he wasn't aware of any other cases with such a correlation. When asked whether he had not just provided an opinion that such a connection did exist in this case, Dr. Cohen then clarified his testimony and retracted his opinion:

[Defense counsel]: Well, you have testified, have you not, that there is a connection between Miss Chromy's brain damage, the subdural, subarachnoid hematomas, and the dissecting aortic aneurysm?

[Cohen]: I don't believe I have today. Between the pos — the possibility of the trauma to the torso, the chest trauma, and the dissection, I think I've partially addressed that. But not head trauma and dissection.

[Defense counsel]: So just to clarify, you have not expressed an opinion today as to whether or not the head trauma that Miss Chromy experienced was a contributing factor in her dissecting aortic aneurysm?

[Cohen]: I don't think I have today, no.

Throughout the rest of Dr. Cohen's cross-examination, defense counsel continued to question Dr. Cohen only as to the admissible factual findings of the autopsy report.

DR. BLOOR

The prosecution's second expert, Dr. Bloor, agreed that the immediate cause of Mrs. Chromy's death was acute aortic dissection. When asked about Mrs. Chromy's thoracic trauma, he responded, "I consider the trauma to be a contributory factor to the aortic dissection that was the immediate cause of death." He testified that although it is rare for a person to die of an aortic dissection thirty days after bodily trauma, it has been noted in medical literature. However, when asked on cross-examination about the head trauma, he opined that Mrs. Chromy's brain injury was not a contributing factor to the aortic dissection:

[Defense]: So the short answer to my question is that the injury to her brain did not — was not a contributing factor to her — in — as a cause of death?

[Bloor]: It was not a contributing factor to what I consider to be the immediate cause of death, namely, the dissection through the aortic wall.

Dr. Bloor testified at length about whether the bleeding observed from Dr. Garber's autopsy report was recent or longstanding. He explained that the actual tear all the way through the aortic wall was sudden and probably took place within the last twelve to twenty-four hours of Mrs. Chromy's life. However, he believed that the tear probably began at an earlier stage, and was related to the time of the trauma. Finally, he testified that Mrs. Chromy's heart rate was high and that her blood pressure went through fluctuations in the period between the carjacking and her death. He concluded that these fluctuations, combined with Mrs. Chromy's pre-existing hypertension, also could have exacerbated the aortic tear.

DR. HERRMANN

The defense pathologist, Dr. Herrmann, gave his opinion that Mrs. Chromy died from a spontaneous rupture of a dissecting aneurysm of the aorta. He found no connection with her previous injuries from the carjacking. Dr. Herrmann did observe that Mrs. Chromy's high blood pressure predisposed her to the rupture of the inner lining of the aorta, and that she had "pretty severe" arteriosclerosis of the ascending aorta.³ He expressed his opinion that dissecting aneurysms of the aorta rupture more frequently in the presence of arteriosclerosis, and certainly more frequently with people who have high blood pressure.

Dr. Herrmann disagreed with Dr. Cohen's observation of an older hemorrhage. He explained that if it were older, it would then display physical evidence of healing but that instead, "all of the bleeding is very fresh, and [there is] no evidence of healing." "So," he concluded, "[the tear was] probably well within 4 days" of Mrs. Chromy's death. He also

³Atherosclerosis is the most common form of arteriosclerosis. Stedman's Medical Dictionary 162 (27th ed. 2000).

stated explicitly that the injuries Mrs. Chromy suffered to her head had no causal relation to her death.

On cross-examination, despite repeated defense objections, the court permitted the prosecution to elicit testimony from Dr. Herrmann about Dr. Garber's opinion of the cause of death. Dr. Herrmann disagreed with Dr. Garber's opinion that head injuries contributed to Mrs. Chromy's death from an aortic aneurysm. He also disagreed with Dr. Cohen's opinion that bodily trauma contributed to the aneurysm.

Specifically, the following exchange took place:

[Prosecutor]: You're aware that [Dr. Garber's] opinion was that this trauma caused to [Mrs. Chromy] did contribute to her death and cause[d] her death? You're aware of that?

[Herrmann]: I believe he said that the head injuries, in his opinion, contributed to her death. Yes.

[Defense]: Your Honor, I object. Hearsay because Dr. Garber has not testified. The findings in his report are relied upon by experts, but the opinion itself is a matter of his testimony which has not been presented by the People. We're not —

[Court]: Overruled.

[Defense]: — in a position to cross-examine Dr. Garber here.

[Court]: Overruled.

[Prosecutor]: So your opinion — you differ with Dr. Garber's opinion about the cause of death in this case?

[Herrmann]: Well, let's see what his — how he actually states his cause of death. I — it's been a while since I looked at it. His conclusion was that death was caused by ruptured dissecting aortic aneurysm. And then under "other conditions," whether he means that this contributes or not, it's — he just says other conditions is blunt-force trauma to the head. That's what it says in his autopsy.

[Prosecutor]: Okay. And then on the later page, page 3, the basis of the autopsy findings itself: "Evidence that the 78-year-old woman suffered from ruptured dissecting aortic aneurysm which resulted in her demise. In addition, blunt-force trauma to the head also contributed to her death."

[Defense]: May I have a continuing objection, Your Honor?

[Court]: Sure. Yes.

[Prosecutor]: Is that correct?

[Herrmann]: Shall I —

[Court]: Yes. You can answer. I'm sorry.

[Herrmann]: Yes. That's what he says. "In addition, blunt-force trauma to the head also contributed to her death."

[Defense]: Your Honor, may I — may I have a constitutional objection on Sixth Amendment grounds?

[Court]: Sure.

[Defense]: Thank you.

[Prosecutor]: Now — so your opinion differs with his?

[Herrmann]: Yes. I don't think the blunt-force trauma to her head contributed to her death.

[Prosecutor]: And he's the person who performed the autopsy?

[Herrmann]: He is.

[Prosecutor]: And he testified at [the] preliminary hearing that the blunt-force trauma also contributed — to her body contributed to her death; is that correct?

[Herrmann]: Yes, he did.

[Prosecutor]: And you differ with that opinion as well?

[Herrmann]: Yes. Particularly his testimony I would — I would disagree with.

After this exchange, the prosecutor went on to cross-examine Dr. Herrmann with the preliminary hearing testimony from 1998. At one point Dr. Herrmann appeared to contradict his prior testimony, though he attempted to explain the apparent discrepancy. Defense counsel also revisited the prior testimony on re-direct. Dr. Herrmann stated that where a patient had pre-existing hypertension, a sudden rise in blood pressure “could be the last thing to push a person over the edge,” and that if pushed over the edge, “you would expect the person to die at that time, to rupture their aneurysm.” Finally, on further redirect examination, Dr. Herrmann clarified his opinion for the jury:

[Defense]: In your opinion, Doctor, did Helen Chromy suffer a tear to her aorta when she suffered these other injuries to her body?

[Herrmann]: No. She didn't. There's no evidence that that tear took place at that time.

B. Closing Arguments

During closing arguments, the prosecution twice referred to Dr. Garber's opinion that head trauma was a cause of death:

[Prosecutor]: [Dr. Garber] had some opinions. And you're aware of the opinions indirectly from the witnesses. And I can't remember which attorney asked it. It was incidental to what he had done. But his opinion was basically that he took it from a different approach. He took it from the approach that the head injuries caused this. This is the way he saw it. He had a different expertise, a different way of looking at it. And we don't know much more about it.

* * * *

[Prosecutor]: And the doctors did give you some strong opinions. Dr. Garber was, a cause was the injury to her head. Dr. Cohen, a cause was the trauma to her body. And he didn't go to the head. That wasn't how he looked at it. He looked to the heart, the aorta. Dr. Cohen, however, conceded — he conceded, "Hey. I didn't investigate the head. But I'll tell you this. It couldn't have helped." I can't say if there's — and I can't remember. I thought it was 5, 10, or 40 percent contribution making, it a cause at 5 percent. And I frankly can't remember. You can always check that out. But he agreed in that sense with Dr. Garber.

C. Jury Deliberations

During deliberations, jurors requested to have the medical testimony of Drs. Cohen, Bloor, and Herrmann read back, “particularly their medical conclusions contributing to Helen Chromy’s death.” They also asked the following:

You have instructed us to reach a verdict on murder or assault & battery; are we forbidden from considering any other lesser charge, such as vehicular manslaughter or 2nd degree murder.

After receiving the court’s answer in the affirmative, the jury returned a guilty verdict for first degree murder.

D. Procedural Appellate History of Case

Merolillo appealed to the California Court of Appeal, which issued an unpublished opinion affirming Merolillo’s murder conviction, filed on November 12, 2002. The Court of Appeal held that “[t]he court erred in allowing Garber’s opinion to be introduced during the cross-examination of Hermann [sic] the defense witness. But the evidentiary error relating to causation was harmless under the *Watson* or *Chapman* standard of review.”⁴ Merolillo then filed a petition for review in the California Supreme Court, which was denied, without comment or citation to authority, on January 29, 2003.

⁴Referring to *Chapman v. California*, 386 U.S. 18, 24 (1967) and *People v. Watson*, 46 Cal. 2d 818, 836 (1956). The *Watson* harmless error standard is the standard applied by California appellate courts in reviewing non-constitutional magnitude trial errors by determining whether “it is reasonably probable that a result more favorable to the appealing party would have been reached in the absence of the error.” 46 Cal. 2d at 836. The *Chapman* standard provides that a federal constitutional error is not harmless unless the court determines that the error was “harmless beyond a reasonable doubt.” 386 U.S. at 24.

Merolillo filed a habeas petition in federal court. The magistrate judge issued a report and recommendation holding the trial court erred in admitting Dr. Garber's opinion, but that the error was harmless. The district court adopted the findings, conclusions and recommendations of the magistrate judge on November 3, 2008, dismissing the petition with prejudice. The district court judge issued an order granting a certificate of appealability with respect to one of Merolillo's claims: "Whether petitioner was prejudiced by the admission of hearsay evidence that the victim's death was caused by brain trauma."

II.

The district court's decision on a petition for a writ of habeas corpus is reviewed *de novo*. *Lambert v. Blodgett*, 393 F.3d 943, 964 (9th Cir. 2004). However, the district court's factual findings and credibility determinations in the context of granting or denying the petition are reviewed for clear error. *Id.* We may affirm the district court's decision on any ground supported by the record, even if it differs from the district court's rationale. *Id.* at 965; *Paradis v. Arave*, 240 F.3d 1169, 1175-76 (9th Cir. 2001).

A.

The Antiterrorism and Effective Death Penalty Act of 1996 (AEDPA) governs the extent of federal review for habeas petitions such as Merolillo's that were filed after April 24, 1996. *Woodford v. Garceau*, 538 U.S. 202, 204 (2003). AEDPA establishes a highly deferential standard for reviewing state court determinations for constitutional error. *Woodford v. Visciotti*, 537 U.S. 19, 24-25 (2002) (per curiam); *Williams v. Taylor*, 529 U.S. 362, 386 (2000); *Lambert*, 393 F.3d at 965. A court is required to deny habeas relief unless a petitioner shows that the state court decision "was contrary to, or involved an unreasonable application of, clearly established Federal law, as determined by the Supreme Court of

the United States” or “was based on an unreasonable determination of the facts in light of the evidence presented in the State court proceeding.” 28 U.S.C. § 2254(d)(1)-(2); *Kennedy v. Lockyer*, 379 F.3d 1041, 1046 (9th Cir. 2004). The state court’s factual findings are entitled to a presumption of correctness unless the petitioner rebuts the presumption with clear and convincing evidence. 28 U.S.C. § 2254(e)(1); *Miller-El v. Cockrell*, 537 U.S. 322, 340 (2003).

A federal court looks “to the last reasoned decision of the state court as the basis of the state court’s judgment.” *Womack v. Del Papa*, 497 F.3d 998, 1002 (9th Cir. 2007) (internal quotation marks omitted). “Where there has been one reasoned state judgment rejecting a federal claim, later unexplained orders upholding that judgment or rejecting the same claim rest upon the same ground.” *Ylst v. Nunnemaker*, 501 U.S. 797, 803 (1991). Here, the last reasoned state judgment was that of the California Court of Appeal.

[1] The Sixth Amendment provides that “[i]n all criminal prosecutions, the accused shall enjoy the right . . . to be confronted with the witnesses against him.” Admission of an out-of-court hearsay statement at trial does not violate the Confrontation Clause if the statement possessed “adequate indicia of reliability.” *Ohio v. Roberts*, 448 U.S. 56, 65-66 (1980), *abrogated by Crawford v. Washington*, 541 U.S. 36 (2004).⁵ In the usual case, the prosecution must demonstrate that the witness is unavailable. *Roberts*, 448 U.S. at 65 & n.7. “[A] witness is not ‘unavailable’ for purposes of the foregoing exception to the confrontation requirement unless the prosecutorial authorities have made a good-faith effort to obtain his presence at trial.” *Barber v. Page*, 390 U.S. 719, 724-25 (1968).

⁵*Crawford* is not controlling here. Because Merolillo did not file a petition for certiorari, his conviction became final on April 29, 2003, ninety days after the California Supreme Court denied his habeas petition. See 28 U.S.C. § 2101(c). *Crawford* is not retroactively applied to cases on collateral review. *Whorton v. Bockting*, 549 U.S. 406, 421 (2007).

[2] There is no evidence in the record that an effort was made to obtain Dr. Garber's presence at trial. At the time of trial, Dr. Garber no longer worked for the county coroner's office, but the record provides no reason why Dr. Garber's presence could not be obtained nonetheless. He was therefore not shown to have been "unavailable" for trial. *See id.* His conflicting and unsupported testimony at the preliminary hearing formed the very basis for Merolillo's counsel to object at the section 995 hearing.

[3] The California Court of Appeal held that the trial court erred in admitting Dr. Garber's opinion testimony. Neither the district court nor the government has seriously challenged the finding that Merolillo's right to confront witnesses against him was violated by the admission of Dr. Garber's opinion testimony. Though the state court and the district court held the error to be harmless, both found that the trial court erred in allowing Dr. Garber's opinion to be introduced. We agree that the trial court erred in admitting Dr. Garber's opinion.

B.

Even where constitutional error is found, "in § 2254 proceedings a court must [also] assess the prejudicial impact of constitutional error" under the *Brecht* standard. *Fry v. Pliler*, 551 U.S. 112, 121-22 (2007) (citing *Brecht v. Abrahamson*, 507 U.S. 619 (1993)); *Bains v. Cambra*, 204 F.3d 964, 977 (9th Cir. 2000). Habeas relief is warranted only if the error had a "substantial and injurious effect or influence in determining the jury's verdict." *Brecht*, 507 U.S. at 637-38 (invoking the harmless error test in *Kotteakos v. United States*, 328 U.S. 750 (1946)) (internal quotation marks omitted); *DePetrìs v. Kuykendall*, 239 F.3d 1057, 1061 (9th Cir. 2001). The Supreme Court has explained:

[I]f one cannot say, with fair assurance, after pondering all that happened without stripping the erroneous action from the whole, that the judgment was not

substantially swayed by the error, it is impossible to conclude that substantial rights were not affected. The inquiry cannot be merely whether there was enough to support the result, apart from the phase affected by the error. It is rather, even so, whether the error itself had substantial influence.

Kotteakos, 328 U.S. at 765. Where the record is so evenly balanced that a judge “feels himself in virtual equipoise as to the harmlessness of the error” and has “‘grave doubt’ about whether an error affected a jury [substantially and injuriously], the judge must treat the error as if it did so.” *O’Neal v. McAninch*, 513 U.S. 432, 435, 437-38 (1995) (quoting *Kotteakos*, 328 U.S. at 765).

The government argues that the appropriate standard of review for harmless error is instead derived from this court’s holding in *Inthavong v. Lamarque*, 420 F.3d 1055, 1059 (9th Cir. 2005), which analyzed the Supreme Court’s ruling in *Mitchell v. Esparza*, 540 U.S. 12, 17-18 (2003). *Inthavong* required, “(1) that the state court’s decision was ‘contrary to’ or an ‘unreasonable application’ of Supreme Court harmless error precedent, and (2) that the petitioner suffered prejudice under *Brecht* from the constitutional error.” 420 F.3d at 1059 (emphasis added).

In *Fry v. Pliler*, however, the Supreme Court squarely addressed the harmless error standard to be applied by a federal habeas court and held that *Brecht* is the applicable test. 551 U.S. at 121. In *Pulido v. Chrones*, we reaffirmed that under *Fry*, “we need not conduct an analysis under AEDPA of whether the state court’s harmlessness determination on direct review . . . was contrary to or an unreasonable application of clearly established federal law,” and held that “we apply the *Brecht* test without regard for the state court’s harmlessness determination.” 629 F.3d 1007, 1012 (9th Cir. 2010) (citing *Fry*, 551 U.S. at 119-22). In light of *Fry* and *Pliler*, we hold that the *Brecht* “substantial and injurious effect” standard

governs our harmless error review in this case. For the reasons discussed below, we conclude that under the *Brecht* standard, Merolillo is entitled to habeas relief. We further conclude that even if Merolillo were also required to satisfy the AEDPA/*Chapman* standard, he would, as the state court's determination that the error was harmless beyond a reasonable doubt was an objectively unreasonable application of *Chapman*.

C.

[4] Having reached the conclusion that Merolillo's Confrontation Clause rights were violated, we now consider the degree to which this violation harmed Merolillo. To guide an analysis of "substantial and injurious effect," this court has applied the five non-exclusive factors propagated by the Supreme Court in *Delaware v. Van Arsdall*, 475 U.S. 673, 684 (1986).⁶ See, e.g., *Ocampo v. Vail*, 649 F.3d 1098, 1114 (9th Cir. 2011); *Fowler v. Sacramento Cnty. Sheriff's Dep't*, 421 F.3d 1027, 1041-42 (9th Cir. 2005); *Whelchel v. Washington*, 232 F.3d 1197, 1206 (9th Cir. 2000). The *Van Arsdall* factors are: (1) the importance of the witness' testimony in the prosecution's case; (2) whether the testimony was cumulative; (3) the presence or absence of evidence corroborating or contradicting the testimony of the witness on material points; (4) the extent of cross-examination otherwise permitted; and (5) the overall strength of the prosecution's case. 475 U.S. at 684.

Applying these factors, we conclude that the admission of Dr. Garber's opinion testimony had a substantial and injurious effect or influence in determining the jury's verdict.

⁶As the court recognized in *Whelchel v. Washington*, the appeal in *Van Arsdall* was direct rather than habeas corpus, and was subject to the "harmless beyond a reasonable doubt" standard. 232 F.3d 1197, 1206 (9th Cir. 2000). "Nevertheless, there is nothing in the opinion or logic of *Van Arsdall* that limits the use of these factors to direct review." *Id.*

[5] First, we evaluate the importance of the witness' testimony in the prosecution's case. Dr. Garber's opinion goes straight to the heart of the case against Merolillo, since causation was the issue most argued by both counsel. Likewise, the jury appeared to be focusing on the issue of causation as the most dispositive element of the criminal charge when it requested the read back of the expert's testimony and questioned whether it was allowed to return a verdict of guilty to a lesser charge. Dr. Garber's opinion was also likely given more weight than an ordinary witness as he was a doctor, the actual pathologist who conducted the autopsy, and an apparent peer of the testifying experts. *See Jinro Am. Inc. v. Secure Invs., Inc.*, 266 F.3d 993, 1004 (9th Cir. 2001) (recognizing that expert statements are "likely to carry special weight with the jury"). The prosecution's emphasis on Dr. Garber's opinion during closing arguments reiterated his "expertise" and seemed to be offered by the prosecution to break the apparent three-way tie between the testifying experts. The prosecution argued that Dr. Cohen could be seen as agreeing with Dr. Garber's opinion.

Next, we determine whether the testimony was cumulative. In *Brecht*, habeas relief was not warranted where the state's references to inadmissible evidence were infrequent and cumulative of admissible evidence, "evidence of guilt was, if not overwhelming, certainly weighty," and other circumstantial evidence also pointed to petitioner's guilt. 507 U.S. at 639. Error was also held to be harmless in *United States v. Lane*, "[i]n the face of overwhelming evidence of guilt." 474 U.S. 438, 450 (1986) (noting that "the threshold of overwhelming evidence is far higher than mere sufficiency to uphold conviction"). *Brecht* and *Lane* can be distinguished from the instant case. In *Brecht*, the state's improper references "comprised less than two pages of a 900 page transcript, or a few minutes in a four day trial in which twenty-five witnesses testified." 507 U.S. at 626 (internal quotation marks omitted). Here, although the record doesn't show how long the trial lasted or how many witnesses testified, the

impact of Dr. Garber's opinion is nevertheless inadequately measured in pages or minutes. As the only pathologist who performed the autopsy, and whose opinion was used by the prosecution in an attempt to impeach the lone defense expert, the jury's focus was likely riveted on what Dr. Garber said in his report.

[6] Furthermore, Merolillo's guilt as to murder was not weighty, much less overwhelming, since the chain of medical events causing death was clearly disputed and difficult to verify. Even the two experts called by the prosecution did not agree with each other regarding the most relevant issues. Only Dr. Garber's opinion uniquely supported the prosecution's head trauma causation argument, therefore it could not be cumulative. In *Moses v. Payne*, this court held that there was no substantial and injurious effect where references to inadmissible evidence were cumulative of admissible evidence, and there was "overwhelming" evidence of guilt. 555 F.3d 742, 755 (9th Cir. 2009). Here, however, and as discussed above, evidence of Merolillo's guilt as to causation was far from overwhelming. Dr. Garber's opinion, as the only definitive attribution of head trauma, was not cumulative. Although Dr. Cohen appeared to testify on direct examination that Mrs. Chromy's head injury could have contributed to the aortic dissection, he later clarified on cross-examination that he had not given any opinion as to that form of causation. Drs. Bloor and Herrmann both denied that the head injury contributed to Mrs. Chromy's death. As introduced by the prosecutor and verified by Dr. Herrmann, Dr. Garber stated definitively that "blunt-force trauma to the head also contributed to her death." The closest any of the other experts came to saying this was Dr. Cohen, who allowed, at most, that "[i]t's possible that [head trauma] contributed to some extent [to Mrs. Chromy's death]."

[7] Third, Dr. Garber's opinion was not corroborated by the testimony of the other experts. Dr. Cohen only appeared to allow for the possibility of head trauma as a contributing

factor in his direct examination but then clarified on cross that he had not actually provided an opinion on that, thereby not providing much support for Dr. Garber's definitive opinion. Nor did any of the experts explicitly contradict Dr. Garber's opinion by testifying as to the impossibility of Mrs. Chromy's brain injuries contributing to the aortic dissection. Drs. Bloor and Herrmann simply denied that the brain trauma contributed.

Dr. Garber's opinion was likely tempting evidence for the jury to consider in support of the prosecution's argument because of its certainty and simplicity. Dr. Cohen didn't definitely state that the torso trauma or the head trauma contributed to Mrs. Chromy's death. Dr. Bloor testified that he considered the torso trauma to be a contributing factor to the aortic dissection and denied that head trauma contributed. Dr. Herrmann denied both head trauma and torso trauma as contributing factors to Mrs. Chromy's death. Even though the connection between head trauma and an aortic tear required a logical leap, the jury clearly struggled to make sense of the voluminous medical testimony.

[8] Fourth, cross-examination of Dr. Garber at trial was nonexistent because he was never called as a witness and there is no mention in the record of any efforts to obtain his presence. His testimony in the preliminary hearing does not in itself satisfy the objectives of the Confrontation Clause under pre-Crawford law. See *Wilson v. Bowie*, 408 F.2d 1105, 1107 (9th Cir. 1969) (citing *Barber v. Page*, 390 U.S. 719, 725-26 (1968) to reject the contention that "[defendant]'s right of confrontation was not infringed because his counsel cross-examined [the witness] at the preliminary hearing").

[9] Fifth, and finally, the strength of the prosecution's case certainly turned on the issue of causation. The thirty-day delay between the incident and Mrs. Chromy's death was the weak link in the prosecution's case. Additionally, the jury's request for a read back of expert testimony illustrates the dif-

ficulty presented by the experts' labyrinthine medical testimony. See *United States v. Blueford*, 312 F.3d 962, 976 (9th Cir. 2002) (pointing out that "the jury asked for readbacks of [witnesses'] testimony while it was deliberating, so it evidently did not regard the case as an easy one"). The ultimate cause of death was not simple to convey, and the mechanism of an aortic dissection required elaborate detail. Connecting the aortic dissection to both Mrs. Chromy's pre-existing conditions and to the injuries she suffered was a complicated task for the experts who could not even agree among themselves. It was patently more difficult for the jury. The jury even asked whether they were forbidden from considering a lesser charge.

Not only did the experts' opinions differ as to the effect of the head trauma and torso trauma as contributing factors to the aortic dissection, but the explanatory testimony of the experts defied easy comprehension as well. The attorneys and experts both demonstrated difficulty in setting forth the autopsy findings regarding bleeding and healing. It is doubtful that the jury comprehended the significance of the different presentations of the blood and how that related to causation.

None of the experts denied that Mrs. Chromy also suffered from hypertension and severe atherosclerosis, which could also lead to a natural cause of death by aortic dissection. However, even descriptions of the effects of hypertension and atherosclerosis were often muddled by the experts' use of alternating medical vocabulary — arteriosclerosis versus atherosclerosis, hypertension and high blood pressure, cardiomegaly and enlarged heart, hemorrhage and hematoma, torso and thoracic, dissection and tear, and ventricles in the brain versus ventricles in the heart, etc. Also, the disputed significance of the various types of bleeding (e.g., subarachnoid, subdural, clotted, brown, intimal) and healing did little to untangle the asserted chains of causation.

Whether Mrs. Chromy's aorta began to tear only as a result of the carjacking trauma or tore spontaneously merely

because of her pre-existing conditions such as hypertension, the jury could not have reached a degree of certainty beyond what the testifying experts declared. Not only did the experts differ in their explanation of when the tear began, they differed in their interpretation of the autopsy findings and the significance to be attached to each manifestation of Mrs. Chromy's injuries.

[10] With all of these evidentiary challenges, there is little question that at least some jurors likely resorted to shortcuts in parsing the testimony. The jurors had several shortcuts to choose from in determining causation, and each had a contested degree of certainty. Dr. Bloor stated with certainty that torso trauma contributed to the aortic dissection, however Dr. Cohen stated that only the aortic dissection was certain, and Dr. Herrmann stated with certainty that neither trauma contributed to the aortic dissection. Dr. Garber's opinion, then, offered the sole certainty that head trauma contributed to Mrs. Chromy's death.

[11] Therefore, we have "grave doubt" that the error in admitting Dr. Garber's opinion was harmless, and hold that Merolillo suffered prejudice under *Brecht* from the Confrontation Clause violation.

D.

[12] Though our conclusion that the *Brecht* standard is met is alone sufficient to warrant habeas relief in this case, we note that the error would also warrant relief under the government's proposed test, because the state court's application of *Chapman* was an objectively unreasonable application of the Supreme Court's *Chapman* standard. Under *Chapman*, "before a federal constitutional error can be held harmless, the court must be able to declare a belief that it was harmless beyond a reasonable doubt." 386 U.S. at 24. For the same reasons discussed above, we cannot say that the admission of Dr. Garber's opinion was harmless beyond a reasonable doubt. In

fact, as discussed above, we have “grave doubt” that the error was harmless. As in *Chapman*, it is impossible to say that the State demonstrated, beyond a reasonable doubt, that Dr. Garber’s opinion did not contribute to Merolillo’s conviction. Because of the inherent weaknesses of the case, the complex nature of the evidence relevant to the cause of death, and the inconsistent expert opinions, “honest, fair-minded jurors might very well have brought in not-guilty verdicts” if Dr. Garber’s opinion had not been discussed. *See Chapman*, 386 U.S. at 26.

[13] Even more compelling, however, is the possibility that jurors might have rendered not-guilty verdicts after hearing cross-examination of Dr. Garber’s testimony. As shown in the preliminary hearing and recognized by the section 995 hearing court, Dr. Garber’s opinion was not likely to withstand scrutiny beyond a reasonable doubt. When presented with inconsistencies in Dr. Garber’s preliminary hearing testimony, the hearing court judge stated that he was “disappointed as to how Dr. Garber approached his task, and that the testimony “could not withstand the light of day beyond a reasonable doubt.” Dr. Garber’s preliminary hearing testimony included statements such as: “It just is” when asked how direct injury to the brain can be fatal; “I think you would probably be wiser asking a neurologist or perhaps a neurosurgeon or an ER physician, because that’s their areas of expertise, and this is not mine” when asked about outward symptoms that could be caused by brain hemorrhage; and “you may want to ask a neurologist” when asked if there could have been a seizure because of the brain hemorrhage. Therefore, we conclude that the state court’s decision was contrary to or an objectively unreasonable application of the Supreme Court’s *Chapman* harmless error precedent.

III.

The medical evidence presented in Merolillo’s trial was voluminous, technical, and often unclear. The ignorance of

laymen and even esteemed jurists as to medical evidence compounds the difficulty encountered by the jury, attorneys and courts in sorting out the experts' testimony. The key question in Merolillo's case was whether his actions contributed to Mrs. Chromy's death. Because the chain of causation began as tenuous, continued to be disputed and was described inconsistently by the experts, the erroneous admission of the autopsy pathologist's non-cumulative opinion testimony likely had a substantial and injurious effect on the jury's verdict. Furthermore, it is impossible to say beyond a reasonable doubt that the admission of Dr. Garber's opinion did not contribute to Merolillo's conviction.

[14] The California Court of Appeal unreasonably applied clearly established Supreme Court Confrontation Clause jurisprudence to the facts of this case. The error was prejudicial because Dr. Garber's opinion provided the only definite statement of head trauma as a contributing factor, he was presented as an expert authority based on his status as the sole autopsy pathologist, and the prosecution's case was uncertain on the issue of causation. For the reasons stated, the judgment of the district court is REVERSED, and the case is REMANDED to it with direction to vacate the murder conviction and issue the writ.

REVERSED and REMANDED.