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RICHARD LAPOINTE *v.* COMMISSIONER
OF CORRECTION
(SC 19079)

Rogers, C. J., and Palmer, Zarella, Eveleigh, McDonald and Espinosa, Js.

*Argued September 17, 2013—officially released March 31, 2015**

Timothy J. Sugrue, assistant state's attorney, with whom, on the brief, were *Kevin T. Kane*, chief state's attorney, *Jo Anne Sulik*, supervisory assistant state's attorney, and *Michael E. O'Hare*, former senior assistant state's attorney, for the appellant (respondent).

Paul Casteleiro, pro hac vice, with whom was *W. James Cousins*, for the appellee (petitioner).

Opinion

PALMER, J. This certified appeal by the respondent, the Commissioner of Correction, requires us to decide whether the Appellate Court correctly concluded, contrary to the determination of the habeas court, that the petitioner, Richard Lapointe, is entitled to a new trial on the charges underlying his 1992 conviction of capital felony and other offenses because prior habeas counsel (first habeas counsel) rendered ineffective assistance in failing to demonstrate that the state withheld certain exculpatory evidence prior to trial in violation of *Brady v. Maryland*, 373 U.S. 83, 83 S. Ct. 1194, 10 L. Ed. 2d 215 (1963), and its progeny, the disclosure of which would have supported an alibi defense. We agree with the petitioner both that he was deprived of a fair trial because his rights under *Brady* were violated and that his first habeas counsel's representation was constitutionally deficient in that counsel failed to establish that violation. We therefore affirm the judgment of the Appellate Court.

The respondent's appeal arises out of events that have their origin in the early evening hours of Sunday, March 8, 1987, when the victim, eighty-eight year old Bernice Martin, was raped, bound and murdered in her Manchester apartment, which her killer thereafter set ablaze in an apparent effort to destroy all evidence of the crime. The case remained unsolved until early 1989, when police focused their suspicions on the petitioner, the then forty-two year old mentally impaired husband of the victim's granddaughter, Karen Martin (Martin), with whom the petitioner resided along with their eight year old son. Until then, the petitioner was not a suspect: he had no criminal record or history of violence of any kind, and he seemed physically, mentally and temperamentally incapable of the brutal crime. Nevertheless, on July 4, 1989, over the course of a nine hour stationhouse interrogation by the Manchester police that lasted until the early morning hours of July 5, the petitioner gave three written statements in which he purported to take responsibility for the victim's murder. The petitioner repeatedly told the police, however, that he had no recollection of killing the victim and that he was confessing only because they wanted him to do so.

On the basis of these statements, the police obtained a warrant for the petitioner's arrest, and he ultimately was charged with capital felony and arson murder, among other offenses. Following a jury trial, he was convicted as charged¹ and sentenced to life imprisonment without the possibility of release.² After this court affirmed his conviction; *State v. Lapointe*, 237 Conn. 694, 739, 678 A.2d 942, cert. denied, 519 U.S. 994, 117 S. Ct. 484, 136 L. Ed. 2d 378 (1996); the petitioner sought a writ of habeas corpus, claiming, inter alia, that his due process rights were violated because the state had failed to disclose a note, authored by Detective Michael

Ludlow of the Manchester Police Department (Ludlow note), containing details concerning the length of time that the fire burned inside the victim's apartment prior to being discovered. The petitioner claimed that the note was both exculpatory and material under *Brady*³ because it purported to identify the time frame within which the fire was set, and Martin would testify that the petitioner was home, with her and their son, during that entire period, thereby providing the petitioner with a complete alibi. First habeas counsel, however, failed to pursue the claim, and, consequently, the first habeas court, *Freed, J.*, rejected that claim as abandoned, as well as the petitioner's other claims on the merits. On appeal, the Appellate Court affirmed the judgment of the first habeas court. *Lapointe v. Commissioner of Correction*, 67 Conn. App. 674, 681, 789 A.2d 491, cert. denied, 259 Conn. 932, 793 A.2d 1084 (2002).

The petitioner subsequently filed the habeas petition that is the subject of this appeal, alleging, inter alia, that the state's failure to disclose the Ludlow note deprived him of due process of law and that his first habeas counsel had rendered ineffective assistance under *Strickland v. Washington*, 466 U.S. 668, 104 S. Ct. 2052, 80 L. Ed. 2d 674 (1984),⁴ by failing to pursue and prove that claim. The second habeas court, *Fuger, J.*, dismissed the claim, concluding, inter alia, that the petitioner had not established a prima facie basis for the exculpatory nature of the Ludlow note because, despite its existence, he could not account for his whereabouts for the entire window of time within which the victim was murdered. The petitioner appealed to the Appellate Court, which reversed in part the second habeas court's judgment and remanded the case for further proceedings. *Lapointe v. Commissioner of Correction*, 113 Conn. App. 378, 404, 966 A.2d 780 (2009). The Appellate Court's decision was predicated on its determination that the Ludlow note, when viewed in the light most favorable to the petitioner and considered together with certain statements from Martin as to when the petitioner was home with her, was exculpatory because it tended to support a finding that he could not have committed the crime in the requisite time frame. See id., 392.

At the proceeding following the Appellate Court's remand of the case to the habeas court, the sole issue with respect to the Ludlow note was whether it was material. In support of his claim that the note was material, the petitioner presented expert testimony concerning the length of time the fire burned in the victim's apartment. Based on the burn time estimates of the petitioner's two experts, which were consistent with the notation that had been made in the Ludlow note, the fire was set in a relatively narrow window of time. The petitioner also presented evidence establishing that, if the state had disclosed the Ludlow note as required, his trial counsel would have called Martin as

a witness, and Martin would have testified that the petitioner was home with her during the time frame within which, according to the petitioner's burn time experts, the fire was set. The respondent also presented expert testimony concerning the likely burn time of the fire. Under the far longer burn time estimate proffered by the respondent's expert, the petitioner could not establish, even with Martin's testimony, that he was home during that entire period. At the conclusion of the trial, the third habeas court, *Nazzaro, J.*, rejected the petitioner's claim that his first habeas counsel was ineffective for failing to pursue a *Brady* claim on the basis of the state's nondisclosure of the Ludlow note. In particular, the third habeas court found that the testimony of the respondent's expert was far more persuasive than the testimony of the petitioner's experts and that it was not reasonably probable that, if the jury at the petitioner's criminal trial had heard the testimony of the petitioner's experts, it would have credited that testimony and reached a different result.

On appeal to the Appellate Court from the judgment of the third habeas court, the petitioner argued, inter alia, that, contrary to the finding of the third habeas court, he is entitled to a new criminal trial at which the jury would decide how much weight to assign to the testimony of the petitioner's experts. The Appellate Court agreed, concluding that the determination of which expert or experts were most persuasive was an issue to be decided by the jury at a new trial. See *Lapointe v. Commissioner of Correction*, 138 Conn. App. 454, 476–77 and n.17, 53 A.3d 257 (2012). Accordingly, the Appellate Court reversed in part⁵ the judgment of the third habeas court and remanded the case with direction to grant the petition for a writ of habeas corpus and for a new trial. *Id.*, 480.

We then granted the respondent's petition for certification to appeal, limited to the following issue: "Did the Appellate Court properly determine that the [petitioner's] first habeas counsel was ineffective for failing to pursue a claim that the state had suppressed evidence in violation of *Brady v. Maryland*, [supra, 373 U.S. 83]?" *Lapointe v. Commissioner of Correction*, 307 Conn. 940, 941, 56 A.3d 948 (2012). We answer the certified question in the affirmative because the testimony of the petitioner's experts was more than sufficient to call into question the reliability of the petitioner's conviction. Indeed, even if that expert testimony only tended to support the petitioner's claim that he could not have murdered the victim, in view of the tenuous nature of the state's case against the petitioner—based as it was on his suspect admissions—the state's *Brady* violation would warrant a new trial because, as the United States Supreme Court has recognized, exculpatory evidence of even "minor importance" may well be "sufficient to create a reasonable doubt" when, as in the present case, "the [guilty] verdict is already of questionable validity

. . . .” *United States v. Agurs*, 427 U.S. 97, 113, 96 S. Ct. 2392, 49 L. Ed. 2d 342 (1976). Accordingly, we affirm the judgment of the Appellate Court reversing in part the judgment of the third habeas court and ordering a new trial.

I

FACTS AND PROCEDURAL HISTORY

Our resolution of the issue presented by this appeal requires an extended discussion of the long and vexing history of the petitioner’s case.⁶ At all times relevant to this appeal, the petitioner, his wife, Martin, and their son resided in the town of Manchester, within walking distance of the apartment of the victim, whom they visited every Sunday. On Sunday, March 8, 1987, the family followed their usual routine, attending church in the morning and then stopping for breakfast at My Brother’s Place, a nearby restaurant where the petitioner was employed. When the restaurant closed at 2 p.m., they walked across the street to the victim’s apartment, where they stayed for approximately two hours, watching television with the victim. At about 4 p.m., the petitioner and Martin, neither of whom had a driver’s license, and their son took the ten minute walk home. After they arrived home, Martin, who has cerebral palsy and is slightly paralyzed, prepared dinner, and the petitioner, who has certain physical and mental impairments as the result of Dandy-Walker syndrome,⁷ took the family dog out for a walk. The petitioner was gone for around twenty minutes. Upon his return, at approximately 5 or 5:15 p.m., the family sat down for dinner.

At or about 5:45 p.m., the victim’s daughter, Nathalie Howard, and her husband drove past the victim’s apartment and saw the victim outside emptying her trash. At the time, the victim appeared fine, and the couple continued on their way. At approximately 7:55 p.m., Howard called the victim to check on her, as she did every evening, but the victim did not answer her telephone. Howard tried calling again at 8:05 p.m. When the victim still did not answer, Howard called her niece, Martin, to inquire whether Martin’s father, who resided in New York, had come to visit the victim and had taken her out to dinner. When Martin told Howard that her father was not in town that day, Howard asked if the petitioner would walk over to the victim’s apartment to make sure that nothing was wrong. Howard also requested that the petitioner call her as soon as he got to the victim’s apartment to let Howard know that everything was alright.

According to Howard, the petitioner called her right back from the home of Jeannette King, the victim’s neighbor. He told Howard that the doors to the victim’s apartment were locked and that the victim must be sleeping because there were no lights on inside the

apartment. Howard told the petitioner that the victim never went to bed at that hour and that she was heading right over to the victim's apartment. The petitioner also called Martin, who told him to go back to the victim's apartment immediately and to try to get inside because the victim might have fallen and injured herself. A few minutes later, the petitioner returned, out of breath, to King's apartment and told her that there was smoke coming from the victim's apartment. The petitioner dialed 911 from King's apartment at 8:27 p.m.

The first firefighter on the scene, Michael Tomkunas, who was off duty and arrived within moments of the 911 call, saw the petitioner standing in front of the building, motioning him in the direction of the victim's apartment. Tomkunas could see smoke coming from the apartment, and the front door was hot to the touch. Tomkunas immediately kicked in the front door and tried to enter the apartment, but the smoke and heat were too intense, and he was forced out. By then, other firefighters were arriving on the scene. One of them, Douglas Boland, ran to the back of the building and opened a set of sliding glass doors. The cross-ventilation dissipated enough of the smoke and heat to allow the firefighters to enter. When they did, they discovered the victim lying on the living room floor, six to eight feet from the burning couch. She was naked except for two pieces of fabric, one of which was tied so tightly around her neck that Tomkunas had trouble removing it; the other piece bound her hands and midsection. The firefighters carried the victim to the front lawn and performed cardiopulmonary resuscitation until paramedics arrived. Howard arrived just as rescue personnel were carrying her mother from the building. The drive from her home had taken approximately ten minutes. The victim subsequently was transported to Manchester Memorial Hospital, where she was pronounced dead.

The associate medical examiner, Arkady Katsnelson, performed an autopsy on the victim and determined that her cause of death was a combination of asphyxia by strangulation and smoke inhalation. He concluded that the victim was not manually strangled but was asphyxiated by pressure to the right side of her neck from a blunt object. The victim also suffered a three inch stab wound to her abdomen, ten less severe stab wounds to her back, extensive hemorrhaging and contusions and lacerations to the vaginal area, as well as first and second degree burns to various parts of her body. Katsnelson opined that the contusions and lacerations to the vaginal area were caused by a blunt object rather than by sexual intercourse.

The police recovered several items of potential evidentiary value from the victim's apartment, including a pair of men's gloves containing strands of the victim's hair and a semen stain from the bedspread belonging

to a person with type A blood who also was a secretor.⁸ The petitioner is a secretor with type A blood, as is approximately one third of the male population.⁹ The police also recovered a pubic hair from the victim's clothing, but DNA tests were not then available.¹⁰ Buttons from the victim's blouse were found strewn about the bedroom floor, indicating that the perpetrator had forcibly removed the victim's clothing. The police also found a pool of the victim's blood on top of the bed, indicating that she was stabbed in that location.

The police investigation into the victim's homicide remained open for more than two years. In March, 1989, the case was reassigned to Detective Paul Lombardo of the Manchester Police Department.¹¹ At that time, Lombardo decided to reinterview individuals who previously had been questioned by the police. On June 8, 1989, Lombardo interviewed the petitioner and took a saliva sample from him.

On July 4, 1989, Lombardo asked the petitioner to come to the police station for questioning. By that time, Lombardo had become convinced of the petitioner's guilt because of his blood type, his peculiar nature and mannerisms, and his repeated questions to the police about whether he was a suspect in the victim's murder. According to Joseph J. Brooks, Lombardo's commanding officer, the purpose of the interview was to elicit a confession from the petitioner. When the petitioner arrived at the police station, Lombardo informed him that there was incontrovertible evidence of his guilt. Although the petitioner initially denied any involvement in the victim's murder, after Lombardo told him that a person could commit a crime and not remember doing so, the petitioner signed two statements in which he acknowledged his involvement in the murder. In the first, one sentence statement, the petitioner purported to accept responsibility for the victim's death, but stated only that "it was an accident, my mind went blank." In the second statement, the petitioner stated that he had no memory of killing the victim but that, if the evidence showed that he was there and that he killed her, then he must be guilty. Because the first two statements were devoid of any detail corroborating the petitioner's equivocal admission that he had killed the victim, Lombardo asked another Manchester police officer involved in the investigation, Detective Michael Morrissey, to take over the interrogation and to try to obtain more specific information from the petitioner. Several hours later, under questioning by Morrissey, the petitioner signed a third statement that was largely inconsistent with the crime scene evidence¹² but that also contained three details about the crime that, presumably, would have been known only to the police and the killer.¹³ After signing the third statement, the petitioner was told to go home. Before leaving the station at 1:30 a.m. on July 5, however, the petitioner spoke to Brooks and again expressed uncertainty about his role in the

victim's murder. Brooks asked him why he had he signed the three statements confessing to the murder. The petitioner responded that he simply had repeated what the officers had told him to say.

At the petitioner's criminal trial, the petitioner's counsel presented evidence to demonstrate that the petitioner was physically, mentally and emotionally incapable of committing, much less concealing, such a brutal and cold-blooded murder, as evidenced by the testimony of numerous psychologists and other witnesses who had known the petitioner at various stages in his life, including childhood friends, employers, fellow parishioners, and other members of the community. According to these witnesses, the petitioner's cognitive and motor skills are impaired, apparently the result of Dandy-Walker syndrome, and, as a consequence, he is slow-witted, easily confused, child-like and gullible—his mother-in-law described him as having the mentality of an eight year old—as well as physically awkward and uncoordinated. In addition, the petitioner was extremely close to the victim and her family, and he had no conceivable reason or motive to harm her, let alone to sexually assault and kill her. With respect to the petitioner's admissions, counsel argued that they were the product of a highly manipulative interrogation of an extremely vulnerable and impaired man, who had spent his entire life accommodating and agreeing with others in an effort to gain favor and to avoid conflict.

Focusing principally on the petitioner's third incriminating statement, the state argued that the statement was freely given, and that it was powerful evidence of guilt because it contained information about the murder that only the killer would know. The state also argued that the petitioner was not nearly as compromised intellectually as defense witnesses had made him out to be because he had an intelligence quotient (IQ) of 92, which, the state asserted, was "nowhere close to being [even] slightly retarded." The state also emphasized that the petitioner's blood type and secretor status were consistent with the seminal stain on the victim's bedspread. Finally, the state referred to certain conduct by the petitioner in the days and weeks following the murder that, in the state's view, suggested that the petitioner was the murderer: on several occasions, the petitioner had asked the police whether he was a suspect in the crime; he had told a neighbor that the victim was sexually assaulted before that information was known publically; and, on the night of the murder, he had gone to King's front door to ask to use her telephone, even though the back door was closer to the victim's apartment.¹⁴ On June 30, 1992, a jury found the petitioner guilty of all charges, and, after a penalty phase hearing, the trial court sentenced him to a term of life imprisonment without the possibility of release.

On direct appeal to this court, the petitioner claimed,

inter alia, that the trial court improperly had denied his motion to suppress the oral and written statements that he had given to the police on July 4 and 5, 1989,¹⁵ and improperly concluded that the state constitution did not require the police to record his confession electronically. See *State v. Lapointe*, surpa, 237 Conn. 696. We rejected those claims and affirmed the petitioner's conviction.¹⁶ Id., 703, 735, 739. Thereafter, on May 30, 1997, the petitioner filed his first writ of habeas corpus, alleging, inter alia, prosecutorial impropriety predicated on the state's failure to disclose certain exculpatory evidence, including the Ludlow note. At the first habeas trial, however, first habeas counsel presented no evidence to support a claim that the state had suppressed the Ludlow note, and, therefore, the first habeas court deemed the claim abandoned. The first habeas court rejected the petitioner's other claims,¹⁷ and the petitioner appealed to the Appellate Court, which affirmed the judgment of the first habeas court. *Lapointe v. Commissioner of Correction*, supra, 67 Conn. App. 681.

On August 2, 2002, the petitioner filed a second habeas petition, alleging, inter alia, that his first habeas counsel rendered ineffective assistance by failing to pursue a claim that the state improperly had suppressed the Ludlow note. The following relevant facts relating to the Ludlow note are set forth in the decision of the Appellate Court in *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 454. "At the time of the victim's homicide, Ludlow was . . . assigned as the evidence officer for the crime scene. He subsequently assumed the position of case officer, which meant that he was responsible for the entire criminal investigation. A few days after the homicide, Ludlow had conversations with two state fire marshals who were assisting with the investigation. Ludlow took notes and wrote 'CSP,' which stood for Connecticut State Police, and 'Steve Igoe' and 'Joe Roy,' the names of the state fire marshals. Underneath those notations [in] the Ludlow note, the words '30-40 mins. Poss.' were written. The numbers '30' and '40' were underscored twice. Ludlow testified that the notation '[P]oss.' meant 'possible' and that the times represented the minimum amount of time that the fire could have been burning before the first responding firefighters arrived at the victim's apartment. At the time of the second habeas trial, Ludlow stated that he could not remember who gave him the burn time information. He admitted, however, that he was not an expert on fires and that he would not have made that estimate on his own. He testified that he would have asked one of the experts for the burn time if he was trying to determine a window of time within which the fire could have been started. Ludlow also acknowledged that, at the time of the first habeas proceeding, he testified that he had obtained the information as to a possible burn time from either Igoe or Roy.

"The Ludlow note was first disclosed to [the petition-

er's] counsel in 1999, after the petition for [a writ of] habeas corpus had been filed in the first habeas action. [The petitioner's trial counsel, Patrick] Culligan and [Christopher] Cosgrove both testified that they had not seen the Ludlow note prior to the petitioner's criminal trial in 1992. . . . [A]fter receiving the Ludlow note and other materials, [first habeas counsel] amended the petition to allege the state's failure to disclose or to produce the Ludlow note as *Brady* material, as required by the [federal and state] constitutions He did not, however, pursue that issue during the first habeas trial. The first habeas court, in its memorandum of decision, did not address the claim regarding the Ludlow note because it deemed that claim to [be] abandoned.

“[The petitioner alleged in a second habeas proceeding that his first habeas counsel's] failure to pursue the claim that the state suppressed the Ludlow note was . . . ineffective assistance of counsel During the second habeas trial, [the petitioner's first habeas counsel] testified that he had not pursued that claim because he did not believe [that] the notation as to burn time in the Ludlow note [was] exculpatory. Culligan and Cosgrove, in their testimony before the second habeas court, opined that the Ludlow note was exculpatory and that the information could have been used by [them] at the criminal trial to buttress the petitioner's alibi defense. Culligan and Cosgrove further testified that if the Ludlow note had been disclosed to [them] prior to the [petitioner's criminal] trial, their strategy would have changed.

“[Martin] was not called as a witness in the petitioner's criminal trial. Culligan stated that Martin and the petitioner were divorced by that time and that the working relationship between her and the defense was no longer a good one. Although [Culligan] discovered prior to trial that [Detective] Morrissey had interviewed [Martin] on July 4, 1989, and that she had expressed her support for the petitioner at that time, and although [Culligan] knew that [Martin] had testified at the suppression hearing that the only time the petitioner was out of her sight on the night of the homicide was when she bathed their son between 6:15 [or 6:30] p.m. and 7 p.m., Culligan decided not to compel her testimony. He testified that he was concerned about her attitude toward the petitioner. Further, he was unaware of the existence of the Ludlow note and the importance of the start time of the fire to support the petitioner's alibi defense. Culligan testified that, if he had known that Igoe, the state's fire expert, gave a burn time of thirty to forty minutes, he would have called [Martin] as a witness because her testimony would have established that the petitioner was home when the fire was set. He also [testified] that [if] he . . . had . . . known of the information in the Ludlow note [he would have been prompted to hire an expert to testify about the fire's

burn time for the purpose of demonstrating that the petitioner could not have started the fire because he was home when it was set].”¹⁸ (Footnotes omitted.) *Id.*, 468–71.

At the close of the petitioner’s evidence at the second habeas trial, the respondent moved to dismiss the petition on the ground that the petitioner had failed to make out a prima facie case with respect to any of his claims. On August 2, 2007, the second habeas court granted the motion, concluding, with respect to the petitioner’s claim predicated on the nondisclosure of the Ludlow note, that the note was not exculpatory. The court reasoned that, although the note arguably supported a finding that the minimum burn time was thirty to forty minutes—a period of time for which the petitioner could account for his whereabouts through Martin’s testimony—the note said nothing about the maximum possible burn time, and the petitioner could not establish his whereabouts for a longer time period.

The petitioner appealed from the judgment of the second habeas court to the Appellate Court, which reversed in part the second habeas court’s judgment as it related to the Ludlow note and remanded the case for further proceedings. *Lapointe v. Commissioner of Correction*, supra, 113 Conn. App. 404. In reversing that portion of the second habeas court’s judgment pertaining to the Ludlow note, the Appellate Court observed that “the record reveals . . . that the victim was last seen outside of her apartment by Howard at about 5:45 p.m. The petitioner’s former wife, [Martin], testified at a suppression hearing that she prepared dinner at the petitioner’s home and that they ate dinner at about 5:15 p.m. or 5:30 p.m. Prior to sitting down for dinner, the petitioner . . . walked the family dog for approximately twenty minutes. Therefore, according to her testimony, the petitioner had returned from his walk before the time that the victim was last seen outside of her apartment. . . . Martin . . . further testified that [the petitioner] did not leave their house again until she received a telephone call from Howard, who requested that the petitioner walk over to the victim’s house to check on [the victim]. According to Howard, this telephone call was placed a little after 8 p.m.” *Id.*, 391. The Appellate Court further noted that, although the state had adduced testimony from Martin acknowledging that the petitioner was out of her sight from approximately 6:15 or 6:30 p.m. until 7 p.m., when she was upstairs bathing their son, Martin also testified that, “while she was upstairs, it was possible to hear someone downstairs”; *id.*; and, in addition, that, from 7 p.m. until the time the petitioner left to check on the victim, she and the petitioner were watching television with their son. See *id.*, 391–92.

Viewing this evidence in the light most favorable to the petitioner,¹⁹ the Appellate Court concluded that “the

thirty to forty minute minimum burn time, if credited as an accurate estimation, establishes that the fire was set at or before 7:50 p.m. The petitioner submitted evidence that, if credited, can account for his whereabouts, albeit tenuously, for the full window of time encompassing the last time the victim was seen alive outside her apartment to the time her body was discovered. Evidence that tends to prove his temporal inability to have committed the crime satisfies the definition of exculpatory and, therefore, is sufficient to establish the first prima facie element of a *Brady* claim.”²⁰ *Id.*, 392.

On remand, the case was assigned to the third habeas court, *Nazzaro, J.*,²¹ and the case proceeded to trial. At trial, the petitioner sought to demonstrate the materiality of the expert burn time testimony that the petitioner’s trial counsel, Culligan and Cosgrove, would have presented, along with the testimony of Martin, to establish an alibi defense, if the state had timely disclosed the Ludlow note. In support of this claim, the petitioner presented the testimony of two fire experts, Gerard Kelder, Jr., and John DeHaan;²² the respondent presented expert fire testimony from Robert Corry for the purpose of rebutting the testimony of DeHaan and Kelder. All three experts had been provided with the same materials to review in connection with their investigations, including photographs of the damage to the victim’s apartment caused by the fire, blueprints of the victim’s apartment, the trial testimony of firefighters who responded to the fire, the state fire marshal’s report on the fire, a video-recorded narration depicting the aftermath of the fire, and the other experts’ reports on the fire. All three experts were highly experienced fire investigators. A review of their testimony reveals, moreover, that they all agreed that the fire began on the living room couch, that it burned intensely for a short period of time, and that it was quickly extinguished or reduced to a smoldering fire due to decreasing levels of oxygen in the victim’s small, relatively airtight apartment. The principal distinction between the testimony of DeHaan and Kelder, on the one hand, and Corry, on the other, concerned the fire’s maximum burn time.

Primarily on the basis of the smoke and fire damage to the apartment, Kelder concluded that the fire burned for approximately forty-five minutes to one hour. Under this estimate, the fire was set no earlier than 7:30 p.m. Because Martin could account for the petitioner’s whereabouts from at least 7 p.m. until he left his house to check on the victim, Kelder’s testimony, together with Martin’s testimony, established that the petitioner was not at the victim’s home when she was sexually assaulted and killed.

DeHaan’s testimony also supported the petitioner’s alibi. In his view, in light of the smoke and heat conditions that Tomkunas had encountered when he arrived on the scene, the fire could have been set as late as 8

p.m. or 8:05 p.m. He further concluded, however, on the basis of the damage to the apartment and the dynamics of the fire, that it was set no earlier than 7:30 p.m. Like Kelder's estimate, DeHaan's burn time estimate was favorable to the petitioner because Martin could account for the petitioner's whereabouts from 7:30 p.m. until 8:05 p.m.

Corry thereafter testified that the fire could have been set anytime from 5:45 p.m., when the victim was last seen alive, until she failed to answer her telephone at around 8 p.m. Under this estimate of the fire's possible burn time, Martin did not provide the petitioner with a complete alibi because she could not positively account for the petitioner's whereabouts from 6:15 or 6:30 p.m. until 7 p.m.—when she was upstairs getting her son ready for bed—a time period within which, according to Corry, the fire could have been set.

On direct examination, Corry also was asked whether he had been present in the courtroom for DeHaan's testimony, two months earlier, and, if so, whether he agreed with DeHaan's conclusions regarding the fire. Corry responded that he had been present for DeHaan's testimony and that he disagreed with several of DeHaan's findings. In particular, Corry characterized DeHaan as having testified that the fire was a "high energy" fire. Corry then explained that, if the fire actually had been a high energy fire, there would have been more damage to the apartment. Specifically, Corry stated that a high energy fire "would have destroyed the wall behind [the couch], it would have destroyed the ceiling over it, and it would have probably brought this room to flash over." When asked what may have caused DeHaan to overestimate the fire's energy level, Corry opined that DeHaan likely did not consider the probability that there was some kind of object, possibly a blanket, on the couch, which is where the fire began, and that the blanket or other object had interfered with and retarded the spread and intensity of the fire. Corry also characterized DeHaan as having testified that the apartment was 400 degrees²³ at floor level when Tomkunas and the other firefighters entered the apartment.²⁴ Corry disagreed with this testimony, as well, explaining that, if the temperature had been 400 degrees, as DeHaan stated, all of the firefighters would have been burned. According to Corry, the fact that they were not burned indicated that the entry level temperature was considerably lower than DeHaan had believed, which, in turn, indicated that the fire must have been started earlier than DeHaan had indicated because, by the time the firefighters entered the apartment, it had cooled to the point that it was safe for them to do so.

Following the trial, the third habeas court issued a memorandum of decision in which it rejected the petitioner's claim that the petitioner's first habeas counsel provided ineffective assistance by failing to pursue, as

a claim in the first habeas proceeding, the state's suppression of the Ludlow note. For purposes of its analysis, the third habeas court treated the Ludlow note as "potentially exculpatory" and assumed that the state had inadvertently failed to disclose the note.²⁵ The third habeas court concluded, however, that the note did not support the petitioner's alibi defense and, therefore, that the note was not material. In reaching its determination, the third habeas court concluded that Corry's burn time estimate, which did not support the petitioner's alibi defense, was more persuasive than the estimates that DeHaan and Kelder had provided. In support of this finding, the third habeas court made several subordinate findings. With respect to DeHaan, the third habeas court found that Corry had convincingly refuted DeHaan's testimony that (1) the fire was a high energy fire, (2) the fire's "peak temperature" reached 400 degrees,²⁶ and (3) the temperature inside the apartment was 400 degrees when firefighters entered.

With respect to the latter finding, the third habeas court stated: "The fact that Tomkunas was not burned contradicts any opinion that the temperature was 400 degrees. At 400 degrees, Corry cogently explained, one would expect Tomkunas to suffer injury to the back of his neck and his hands at a minimum. In addition, the photographs of the fire damage, or lack thereof, [to] materials in the apartment . . . do not support . . . DeHaan's testimony that temperatures reached 400 degrees." The third habeas court further noted that Corry had "also criticized the validity of . . . DeHaan's opinions regarding temperatures as not taking into account the material in the room [that] helped to slow the fire's burning, such as a blanket and poly foam cushions on the couch, [which was] thought to be one of three . . . points of origin [of the fire]." Finally, the third habeas court found that Corry also had convincingly refuted Kelder's testimony that (1) the fire was a high energy fire, and (2) the fire's peak temperature reached 1800 degrees at ceiling level.²⁷

In light of these findings, the third habeas court stated: "Considerable and extensive testimony by arson experts/investigators was presented by both the petitioner and the respondent in their efforts to determine the burn time." This "testimony amount[ed] to a contest among experts . . . [Nevertheless] [t]he court, as the finder of fact in this proceeding, assigns far more credit or weight to the testimony of . . . Corry . . . than [that of] . . . Kelder or . . . DeHaan regarding estimation of the burn time." The third habeas court also observed that "[w]hat is clear from all the evidence in the record, the original trial testimony, crime scene photographs, reports, and the expert testimony presented to [the] court on the fire, is that the precise time the fire was set cannot be determined. At best, a range is established that includes that time period of [6:15 to 7 p.m.] . . . when . . . Martin cannot account for the

petitioner's whereabouts, and [this] does not provide an alibi for him." With respect to this point, the court further explained that, because Martin was upstairs giving her son a bath from 6:15 to 7 p.m., she could not have known whether the petitioner was at home, downstairs, during that time frame, and, consequently, her testimony, standing alone, did not provide "the petitioner with anything that remotely amounts to an alibi" for that forty-five minute period.

The third habeas court concluded that, "[g]iven all of the foregoing, the court simply cannot conclude that the nondisclosure of the Ludlow note, assuming it is potentially exculpatory and was inadvertently not disclosed by the state, supported the petitioner's 'alibi' defense. The inability to precisely determine the start time of the fire, coupled with . . . Martin's testimony that she [could not] account for the petitioner's whereabouts from [6:15 to 7] p.m., leads [the] court to conclude that the petitioner has failed to [satisfy] both the third prong of *Brady*²⁸ and the second *Strickland* prong.²⁹ That is, the petitioner has failed to show how the Ludlow note and the '30-40 min [P]oss' reference, if disclosed to [the petitioner's trial] counsel, reasonably would have led the jury to conclude [that] there was reasonable doubt in light of all the evidence presented to the jury.³⁰

"Accordingly . . . the court concludes that the petitioner has failed to show that [his first habeas counsel] rendered ineffective assistance of counsel The court is unable to conclude that [first habeas counsel's] failure to have an arson/fire expert testify in the first habeas [proceeding] would have resulted in anything different [from the present] habeas [case]: a prototypical battle of the experts resulting in diverging opinions. . . . [T]he court finds more persuasive the testimony presented by the [respondent's expert, Corry], rather than either of the petitioner's two experts, [Kelder] and . . . DeHaan." (Footnote added.)

The petitioner appealed from the judgment of the third habeas court to the Appellate Court, claiming, inter alia, that the third habeas court incorrectly concluded that the petitioner's evidence regarding the fire's burn time was not material and, consequently, that the petitioner's first habeas counsel did not render ineffective assistance in failing to pursue the claim that the state's suppression of the Ludlow note deprived the petitioner of a fair trial. *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 468. The Appellate Court agreed with the petitioner. See *id.*, 476-80. After setting forth the legal principles and standard of review that govern claims under *Strickland* and *Brady*; *id.*, 474-76; see also footnotes 3 and 4 of this opinion; the Appellate Court stated in relevant part: "[T]he state's suppression of the Ludlow note, and [first habeas counsel's] failure to pursue that claim, warrants a new trial

for the petitioner. [The court] reach[es] that conclusion for the following reasons. Culligan and Cosgrove testified that had the burn time information in the Ludlow note been disclosed prior to the petitioner's criminal trial, their trial strategy would have changed. They stated that they would have used the thirty to forty minute estimate to buttress the petitioner's alibi defense, particularly because the estimate came from one of the state's fire marshals assigned to the investigation. As Culligan testified, [he and Cosgrove] would have retained the services of an arson expert. At the . . . habeas trial, the two experts called by the petitioner testified that the fire could not have been set any earlier than 7:30 p.m. If that testimony had been presented at the [petitioner's] criminal trial, and credited by the jury, the petitioner's whereabouts at and after 7:30 p.m. would have been critical to his defense.

"For that reason, as both trial counsel testified, they would have called . . . Martin as a witness at the criminal trial. She consistently had maintained that the petitioner was in their home with her and their son the entire evening of the victim's homicide. During her testimony at the suppression hearing, [Martin] stated that the only time that the petitioner was not in her sight was between 6:15 p.m. and 7 p.m., when she was bathing their son. If the jury credited . . . Martin's testimony, it could have concluded that the petitioner was at home watching television with [Martin] and their son when the fire had been set.

"[In addition], if . . . Martin had testified and the jury believed her testimony, the jury could have concluded that the petitioner had, at most, a forty-five minute window of time within which to commit the crimes. This would mean that between 6:15 p.m. and 7 p.m., on the night of the homicide, the petitioner: (1) walked the distance between his home and the victim's apartment;³¹ (2) had a cup of coffee with the victim while they were chatting on the couch; (3) used the victim's bathroom, located close to the victim's bedroom; (4) emerged from the bathroom, saw the victim combing her hair and decided to sexually assault her; (5) undressed himself, then tore the clothes off the victim; (6) sexually assaulted the victim; (7) retrieved a knife from the kitchen; (8) stabbed the victim ten times in the back and once in the abdomen; (9) used strips of cloth to tie them as a ligature so tightly around the victim's neck that the responding firefighters had difficulty removing the cloth; (10) loosely tied bindings around the victim's wrists and stomach area; (11) removed the victim from the bed and placed her on or near the couch; (12) washed any blood from his body and dressed himself; (13) set fires in three separate locations in the victim's apartment; and (14) walked the distance from the victim's apartment back to his home. According to . . . Martin's recorded statements to Morrissey on July 4, 1989, and her testimony at the

suppression hearing, which the jury did not hear, the petitioner was sitting in the living room when she came downstairs from bathing their son, and there were no signs of exertion or excitement. She noticed nothing out of the ordinary in his behavior that evening.” (Footnotes altered.) *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 476–78.

“[T]here is a reasonable probability that the result of [the petitioner’s] criminal trial would have been different had the Ludlow note been disclosed to Culligan and Cosgrove prior to trial. Nondisclosure prior to trial of the portion of the Ludlow note describing the possible burn time affected the overall fairness of the trial and was so unfair as to undermine [the court’s] confidence in the jury’s verdict. With the burn time estimate provided by one of the state’s fire marshals, trial counsel testified that they would have retained the services of an arson expert and that . . . Martin would have testified as to the petitioner’s whereabouts during the critical times of that evening. That evidence, if believed by the jury, could have resulted in the jury’s finding that it was temporally impossible for the petitioner to have committed the crimes [of] which he was convicted. The Ludlow note was exculpatory and material in these circumstances. [First habeas counsel’s] performance was deficient [in that] he failed to pursue that issue at the first habeas proceeding, and the petitioner was prejudiced by his failure to do so. The petitioner has demonstrated that had there been effective representation by [first habeas counsel], there is a reasonable probability that the first habeas court would have found that the petitioner was entitled to . . . a new trial.”³² (Footnote omitted.) *Id.*, 478–80. Accordingly, the Appellate Court reversed in part the judgment of the third habeas court and remanded the case with direction to grant the petition for a writ of habeas as to the petitioner’s claim alleging ineffective assistance of counsel with respect to the *Brady* violation and to order a new criminal trial.³³ *Id.*, 480. Although the Appellate Court did not expressly say so, it appears, as the parties agree, that the Appellate Court accorded no deference to the determination of the third habeas court that there was no reasonable probability that a jury would credit the testimony of the petitioner’s experts. Instead, the Appellate Court exercised its own judgment with respect to whether a jury reasonably could credit the testimony of the petitioner’s experts.

We granted the respondent’s petition for certification to appeal, limited to the issue of whether the Appellate Court properly reversed the judgment of the third habeas court and concluded that the petitioner is entitled to a new trial on the ground that first habeas counsel’s representation of the petitioner during the first habeas trial was ineffective due to his failure to pursue a claim that the state had suppressed the Ludlow note. See *Lapointe v. Commissioner of Correction*, supra,

307 Conn. 941. On appeal, the respondent asserts that the Appellate Court applied an incorrect standard of review in evaluating the petitioner's *Brady* claim, and, as a result, it improperly concluded that a new trial is required. In particular, the respondent contends that the Appellate Court improperly failed to afford due deference to the third habeas court's determination that the petitioner's expert burn time testimony would have had no effect on the outcome of his criminal trial, and that, if the Appellate Court had accorded such deference to that determination, it would have concluded, like the third habeas court, that first habeas counsel's failure to pursue a claim predicated on the state's suppression of the Ludlow note did not constitute ineffective assistance of counsel under *Strickland*. The petitioner, on the other hand, maintains that the Appellate Court correctly determined that the testimony of his burn time experts reasonably could have been credited by the original jury, and, if the jury did credit that testimony, it undoubtedly would have concluded that the petitioner could not possibly have committed the crimes with which he was charged. As a result, the petitioner contends that first habeas counsel's failure to raise a *Brady* claim predicated on the state's suppression of the Ludlow note rendered counsel's representation of the petitioner constitutionally deficient.

We agree with the petitioner that, notwithstanding the findings of the third habeas court, there is, at the very least, a reasonable likelihood that a jury, upon hearing the testimony of the petitioner's burn time experts and Martin in light of the other trial evidence, would harbor a reasonable doubt as to whether the petitioner sexually assaulted and murdered the victim, and then set her apartment on fire. As we explain more fully hereinafter, because the materiality issue ultimately presents a question of law for this court, and because we are not bound by the third habeas court's appraisal of the scientific underpinnings of the parties' expert testimony, we exercise plenary review over those issues. On the basis of that review, it is clear that the question presented by this appeal must be resolved in favor of the petitioner: because the state deprived the petitioner of the opportunity to avail himself of highly relevant alibi evidence—evidence that, as the petitioner contends, the original jury readily could have credited—fundamental fairness requires that the petitioner be afforded the opportunity to have a second jury consider that exonerating testimony. Our conclusion takes due account of the fact that the state's case against the petitioner was relatively weak, founded as it was on highly questionable admissions. Accordingly, the Appellate Court properly concluded that the judgment of the third habeas court must be reversed in part and that the petitioner was entitled to a new trial.

GOVERNING LEGAL PRINCIPLES

A

Brady and Strickland

“In *Brady*, the United States Supreme Court held that the suppression by the prosecution of evidence favorable to an accused upon request violates due process [when] the evidence is material either [as] to guilt or to punishment, irrespective of the good faith or bad faith of the prosecution. . . . In *Strickler v. Greene*, 527 U.S. 263, [281–82] 119 S. Ct. 1936, 144 L. Ed. 2d 286 (1999), the United States Supreme Court identified the three essential components of a *Brady* claim, all of which must be established to warrant a new trial: The evidence at issue must be favorable to the accused, either because it is exculpatory, or because it is impeaching;³⁴ that evidence must have been suppressed by the [s]tate, either [wilfully] or inadvertently; and prejudice must have ensued. . . . Under the last *Brady* prong, the prejudice that the defendant suffered as a result of the impropriety must have been material to the case” (Footnote added; internal quotation marks omitted.) *State v. Ortiz*, 280 Conn. 686, 717, 911 A.2d 1055 (2006). “[T]he evidence will be deemed material only if there would be a reasonable probability of a different result if the evidence had been disclosed.” (Internal quotation marks omitted.) *State v. Jordan*, 314 Conn. 354, 370, 102 A.3d 1 (2014). This standard is met if “the favorable evidence could reasonably be taken to put the whole case in such a different light as to undermine confidence in the verdict.” (Internal quotation marks omitted.) *State v. Ortiz*, *supra*, 717.

Furthermore, with “respect to *Brady*’s third prong, a showing of materiality does not require demonstration by a preponderance [of the evidence] that disclosure of the suppressed evidence would have resulted ultimately in the defendant’s acquittal. . . . The question is not whether the defendant would more likely than not have received a different verdict with the evidence, but whether in its absence he received a fair trial, understood as a trial resulting in a verdict worthy of confidence. . . . The United States Supreme Court [has] emphasized that the [relevant test under *United States v. Bagley*, 473 U.S. 667, 682, 105 S. Ct. 3375, 87 L. Ed. 2d 481 (1985)] is not a sufficiency of the evidence test. . . . A defendant need not demonstrate that after discounting the inculpatory evidence in light of the undisclosed evidence, there would not have been enough left to convict. . . . One does not show a *Brady* violation by demonstrating that some of the inculpatory evidence should have been excluded, but by showing that the favorable evidence could reasonably be taken to put the whole case in such a different light as to undermine confidence in the verdict. . . . Accordingly, the focus is not whether, based [on] a threshold standard, the

result of the trial would have been different if the evidence had been admitted. We instead concentrate on the overall fairness of the trial and whether nondisclosure of the evidence was so unfair as to undermine our confidence in the jury's verdict." (Internal quotation marks omitted.) *State v. Ortiz*, supra, 280 Conn. 717–18. Put differently, materiality is established if the withheld evidence is of sufficient import or significance in relation to the original trial evidence that it reasonably might give rise to a reasonable doubt about the petitioner's guilt. See *United States v. Agurs*, supra, 427 U.S. 112. Additionally, "a trial court's determination as to materiality under *Brady* presents a mixed question of law and fact subject to plenary review, with the underlying historical facts subject to review for clear error."³⁵ (Internal quotation marks omitted.) *State v. Ortiz*, supra, 720. Finally, in the present case, we conduct the required "independent review" of the record; *id.*, 721; mindful of the fact that this court's "duty to search for constitutional error with painstaking care is never more exacting than it is in a capital case" ³⁶ (Internal quotation marks omitted.) *Kyles v. Whitley*, 514 U.S. 419, 422, 115 S. Ct. 1555, 131 L. Ed. 2d 490 (1995).

Under *Strickland*, "[a] claim of ineffective assistance of counsel consists of two components: a performance prong and a prejudice prong. To satisfy the performance prong . . . the petitioner must demonstrate that his attorney's representation was not reasonably competent or within the range of competence displayed by lawyers with ordinary training and skill in the criminal law. . . . To satisfy the prejudice prong, [the petitioner] must demonstrate that there is a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different." (Internal quotation marks omitted.) *Janulawicz v. Commissioner of Correction*, 310 Conn. 265, 268 n.1, 77 A.3d 113 (2013). "A reasonable probability is a probability sufficient to undermine confidence in the outcome." *Strickland v. Washington*, supra, 466 U.S. 694. As in the case of an alleged *Brady* violation, "[i]n order to demonstrate such a fundamental unfairness or miscarriage of justice, the petitioner should be required to show that he is burdened by an unreliable conviction." (Internal quotation marks omitted.) *Michael T. v. Commissioner of Correction*, 307 Conn. 84, 102, 52 A.3d 655 (2012). Finally, the respective roles of the habeas court and the reviewing court are also the same under *Strickland* as they are under *Brady*. As a general matter, "the underlying historical facts found by the habeas court may not be disturbed unless they were clearly erroneous [W]hether those facts constituted a violation of the petitioner's rights under the sixth amendment [however] is a mixed determination of law and fact that requires the application of legal principles to the historical facts of [the] case. . . . As such, that question requires plenary review by this court unfet-

tered by the clearly erroneous standard.” (Internal quotation marks omitted.) *Gonzalez v. Commissioner of Correction*, 308 Conn. 463, 469–70, 68 A.3d 624, cert. denied sub nom. *Dzurenda v. Gonzalez*, U.S. , 134 S. Ct. 639, 187 L. Ed. 2d 445 (2013).

In the present case, the petitioner’s claim of a constitutional violation under *Strickland* and *Brady* implicates yet another constitutional protection, namely, the right to present a defense. “[T]he federal constitution require[s] that criminal defendants be afforded a meaningful opportunity to present a complete defense.” (Internal quotation marks omitted.) *State v. Santana*, 313 Conn. 461, 470, 97 A.3d 963 (2014). This right affords a defendant the opportunity to present his or her version of the facts, along with that of the prosecution, “so that [the jury] may decide where the truth lies”; (internal quotation marks omitted) *id.*; and includes the right to present an alibi defense. E.g., *State v. Bryant*, 202 Conn. 676, 704, 523 A.2d 451 (1987). Finally, it bears emphasis that, if the petitioner had been able to raise an alibi defense at his criminal trial based on the testimony of DeHaan, Kelder and Martin, the state would have been required to disprove that defense beyond a reasonable doubt. See, e.g., *State v. Milardo*, 224 Conn. 397, 407, 618 A.2d 1347 (1993).

B

The Principles of *Brady* and *Strickland* in Relation to the Facts of the Present Case

For purposes of the present habeas petition, the petitioner was required to establish, under *Strickland*, that first habeas counsel’s failure to pursue the *Brady* claim concerning the state’s suppression of the Ludlow note fell below the performance standard expected of competent habeas counsel and that the petitioner was prejudiced thereby. To make the necessary showing of prejudice, the burden was on the petitioner to demonstrate that the Ludlow note had been withheld by the state and was both exculpatory and material. In view of the fact that the third habeas court treated the note as exculpatory and assumed that it had been suppressed by the state,³⁷ the petitioner was required to establish only that the note was material, a standard that is met upon a showing that, if the note had been disclosed before the petitioner’s criminal trial, there is a probability of a different outcome sufficient to undermine confidence in the outcome of that trial. Because the test for materiality under *Brady* and the test for prejudice under *Strickland* are the same—with respect to both, the petitioner must demonstrate that the alleged constitutional impropriety gives rise to a loss of confidence in the original outcome—the petitioner is entitled to a new trial if he can demonstrate that first habeas counsel’s failure to pursue a *Brady* claim predicated on the state’s suppression of the Ludlow note was sufficiently harmful to satisfy that standard. Because it has been determined

that the state's failure to disclose the Ludlow note deprived the petitioner of information that would have led him to obtain expert burn time testimony demonstrating that the fire was set at a time when, according to Martin, the petitioner was home with her, the success of the petitioner's *Brady* claim depends on whether the original jury reasonably could have credited that expert testimony.³⁸

As we previously noted, the third habeas court found that the testimony of both parties' burn time experts was thorough and extensive. Indeed, the third habeas court characterized that testimony as "a prototypical battle of . . . experts" who are highly qualified in their field. Nevertheless, the third habeas court concluded that the testimony of the petitioner's experts, when viewed in the light of Corry's testimony, was not sufficiently credible to give rise to a reasonable probability of a different result at the original trial, that is, it was not persuasive enough such that the jury reasonably might have credited it.³⁹ The Appellate Court disagreed, however, concluding that the petitioner's expert testimony was of sufficient import and credibility that the petitioner is entitled to a new trial at which the jury will evaluate that testimony.

We therefore must decide whether the Appellate Court properly determined that the third habeas court was incorrect in concluding that the jury reasonably could not have credited the testimony of the petitioner's burn time experts. As a reviewing court, we ordinarily accord deference to credibility determinations that are "made on the basis of [the] firsthand observation of [a witness'] conduct, demeanor and attitude."⁴⁰ (Internal quotation marks omitted.) *State v. Kendrick*, 314 Conn. 212, 223, 100 A.3d 821 (2014). In the present case, however, the third habeas court's assessment of the testimony of DeHaan and Kelder was not predicated on their demeanor or conduct on the witness stand, nor was it related to anything else that would reflect adversely on their credibility, such as untruthfulness, bias, poor memory or substandard powers of observation. That assessment also was not dependent on any underlying factual findings requiring the trial court's firsthand observation and determination of the credibility or reliability of other witnesses. Rather, the third habeas court rejected the opinions of DeHaan and Kelder solely because, in its view, those opinions lacked an adequate foundation, first, because they were premised on facts that were contrary to the record in the case, as reported by Corry, and, second, because the court did not credit the scientific underpinnings of those opinions. In such circumstances, when the habeas court's assessment of the expert testimony has nothing to do with the personal credibility of the expert witness but instead is based entirely on the court's evaluation of the foundational soundness of the witness' professional opinion, this court is as well situated as the habeas

court to assess that testimony for *Brady* purposes.

The Indiana Court of Appeals recently addressed this precise issue in a case that is factually and procedurally indistinguishable in any material respect from this one. In *Bunch v. State*, 964 N.E.2d 274 (Ind. App.), trans. denied, 971 N.E.2d 1215 (Ind. 2012), the defendant, Kristine Bunch, who had been convicted of murder in the arson-related death of her son, sought a new trial based on newly discovered evidence concerning the place of origin of the fire that she was found to have set. *Id.*, 279–80. As in the present case, one of the issues in *Bunch* was the materiality of expert testimony concerning the fire; see *id.*, 290; and the Court of Appeals was called on to review the trial court’s finding that the testimony of Bunch’s expert was not sufficiently worthy of credit to warrant a new trial. See *id.*, 283–85, 293. In reversing the judgment of the trial court on that issue; *id.*, 297, 304; the Court of Appeals reviewed that expert testimony without affording any deference to the trial court’s finding that the testimony lacked persuasive force and, therefore, did not support Bunch’s new trial claim. See *id.*, 292–93. Because we agree fully with the well reasoned analysis of the Court of Appeals, we repeat it in relevant part here: “In general, [w]hether a [witness’] testimony at a [postconviction] hearing is worthy of credit is a factual determination to be made by the trial judge who has the opportunity to see and hear the witness testify. . . . It is not within the province of [an] appellate court to replace a trial judge’s assessment of witness credibility with its own. . . . Thus, if the [trial] court expressly finds that the testimony of a fact witness is or is not worthy of credit, we must accept that determination. . . .

“However . . . the [trial] court did not find [that the] testimony [of Bunch’s fire expert] was not worthy of credit because it doubted her credibility or veracity based [on] a firsthand evaluation of her demeanor; the [trial] court found her testimony not worthy of credit because it was in conflict with trial evidence In other words, the [trial] court did not find [the expert] unworthy of credit on the basis of her demeanor; it found her *expert opinion* unworthy of credit on the basis of its foundation. Under these circumstances, we do not think it [is] necessary or appropriate to impute a personal credibility determination to which we must defer to the [trial] court. To do so would virtually eviscerate appellate review of [postconviction] denials because we would have to speculate in every instance that the [trial] court *could have* concluded [that] the witness was not credible based on his or her demeanor.

“Thus, although we would defer to the [trial] court’s assessment of fact witnesses—for instance, a trial witness now recanting trial testimony or a new witness offering never-before-heard exculpatory testimony—we will not defer in this case to the [trial] court’s assess-

ment of an expert's scientific evidence. We have the ability to assess [the expert's] testimony ourselves because her credentials and the basis for her opinion are part of the record. The [trial] court found [that the expert's] testimony was not reliable because she did not establish the scientific principles for her conclusion and because [her] conclusions contradicted [the] undisputed evidence and eyewitness testimony from the trial. In making such a determination, the [trial] court did not rely on her demeanor . . . but rather on the stated bases for her opinion and review of the trial record. We have the same information before us, and therefore are able to independently assess whether [the expert's] testimony is worthy of credit without invading the province of the [trial] court." (Citations omitted; emphasis altered; internal quotation marks omitted.) *Id.*; see also *State v. Behn*, 375 N.J. Super. 409, 431–33, 868 A.2d 329 (App. Div.), cert. denied, 183 N.J. 591, 874 A.2d 1108 (2005).⁴¹

This case presents the same exceptional factual and procedural scenario as *Bunch* presents. Therefore, we, like the Appellate Court, see no reason to defer to the third habeas court's predictive or probabilistic judgment as to whether the original jury reasonably might have credited the testimony of the petitioner's experts.⁴² This is particularly true because, as we explain in part III A of this opinion, the record does not support *any* of the reasons that the third habeas court provided in substantiation of its conclusion that the jury reasonably could not have credited the testimony of the petitioner's experts. In fact, our review of the record reveals nothing to support the third habeas court's conclusion. On the contrary, there is strong reason to believe that the jury might well have found the testimony of the petitioner's experts persuasive, especially in light of their unquestioned qualifications and experience.⁴³

In light of this determination, we finally must decide whether the testimony of the petitioner's experts nevertheless is insufficient, when considered together with the original trial evidence, to call into question the outcome of the petitioner's criminal trial. We conclude that there is a very high probability that that testimony, if credited, along with Martin's testimony, would give rise to a reasonable doubt as to whether the petitioner committed the crimes of which he was convicted. Having demonstrated, therefore, that there is a real and substantial probability that the testimony of DeHaan, Kelder and Martin will result in the petitioner's acquittal, the petitioner is entitled to a new criminal trial at which he will have the benefit of that highly exculpatory evidence.

III

THE ISSUES

A

Whether a Jury Reasonably Could Credit the Testimony of DeHaan and Kelder

We first address the respondent's claim that the Appellate Court improperly rejected the third habeas court's conclusion that DeHaan's and Kelder's testimony is not sufficiently credible to give rise to a reasonable doubt about the petitioner's guilt. We disagree with the respondent's contention because the record belies the third habeas court's determination that, in all probability, the original jury would have reached the same result even if it had heard that testimony.⁴⁴

We begin with the credentials of the petitioner's experts. As the third habeas court observed, both DeHaan and Kelder are highly experienced fire investigators, and they have worked in that field for a combined total of more than sixty years. DeHaan's resume is particularly impressive. In addition to his years of service as a fire investigator for the Federal Bureau of Alcohol, Tobacco and Firearms, and the California Department of Justice, he has authored or coauthored close to seventy-five scholarly articles or professional papers and a college level treatise entitled, "Kirk's Fire Investigation," which is presently in its seventh edition. DeHaan's treatise is utilized not only by students but also by investigators in the field. In fact, the record reflects that Corry himself relied on that treatise in preparing his report on the fire at issue, as counsel for the respondent did in connection with his cross-examination of Kelder. The record also reveals that DeHaan has taught fire investigation for approximately thirty years, and, at the time of the third habeas trial, in the graduate forensic sciences program at the University of California, Davis. Because these factors alone support the conclusion that a jury reasonably could credit DeHaan's and Kelder's testimony, we turn to the third habeas court's reasons for reaching the opposite conclusion.

As we noted previously, the third habeas court, in concluding that Corry was so much more persuasive than DeHaan and Kelder that no jury reasonably could credit DeHaan's and Kelder's testimony, relied on three threshold or subordinate findings: (1) DeHaan and Kelder mischaracterized the fire's energy level; (2) DeHaan and Kelder overestimated the fire's "peak" temperature; and (3) DeHaan overestimated the temperature of the fire when Tomkunas entered the victim's apartment. With respect to the first two findings, the third habeas court stated: "In contrast to . . . DeHaan and Kelder, Corry opined credibly that 'this was not a high energy fire.' He disputed DeHaan's and Kelder's estimate[s] of peak temperature. . . . Corry testified credibly that . . . DeHaan overstated the amount of heat generated by [the] fire. . . . In addition, the photographs of the fire damage, or lack thereof, [to] materials in the apartment . . . do not support . . . DeHaan's

testimony that temperatures reached 400 degrees. . . . When compared with Corry's reasonable and measured analysis, Kelder's estimate of temperature at 1800 degrees appears wildly exaggerated." With respect to the third finding, the third habeas court stated: "Corry noted that Tomkunas first responded to the call and found [that] the door to the apartment was 'hot,' but he did not burn himself. He sustained no injury to his hands, his exposed ears or any other body part. These facts, Corry pointed out, contradict . . . DeHaan's estimate that the temperature upon entry was 400 degrees. . . . Corry noted that Tomkunas had dropped to his knees upon entering the apartment. Corry opined [that] the temperature at that time was more likely 150 to 190 degrees. The fact that Tomkunas was not burned contradicts any opinion that the temperature was 400 degrees. At 400 degrees, Corry cogently explained, one would expect Tomkunas to [have] suffer[ed] injur[ies] to the back of his neck and his hands at a minimum."

A review of the record reveals that the third habeas court's critique of the testimony of DeHaan and Kelder is comprised of factually unfounded assertions. First, contrary to the court's finding, DeHaan and Kelder never testified that the fire was a high energy fire. To the contrary, DeHaan emphasized throughout his testimony that the limited damage to the apartment was evidence that the fire was *not* a high energy fire. He described it as a "very limited scale fire," no different from "an average fireplace fire."⁴⁵ When Kelder was asked whether he would characterize the fire as high or low energy, he similarly responded, "low energy," which he also believed was evidenced by the fact that the apartment was not seriously damaged. Thus, although the third habeas court found that Corry had persuasively rebutted DeHaan's and Kelder's testimony that the fire was a high energy fire, the record is clear that DeHaan and Kelder never provided the testimony that Corry attributed to them. Indeed, when questioned about the fire's energy level, DeHaan and Kelder both expressly characterized it as a low energy fire.

With respect to the third habeas court's statement that Corry had convincingly "disputed DeHaan's and Kelder's estimate[s] of peak temperature," the petitioner correctly observes that, as between Corry and DeHaan, it was *Corry* who provided the higher estimate of the fire's peak temperature. On cross-examination, the petitioner's counsel asked Corry to comment on several photographs that were taken inside the victim's apartment after the fire, one of which depicts a stack of charred newspapers. Corry testified that all of the papers in the photograph reveal "evidence of edge burning" and "a heating to the . . . preignition point." When asked whether the temperature must have been 600 degrees for the papers to begin to char, as depicted in the photographs, Corry agreed and stated "[o]r more." In contrast, DeHaan opined that temperatures inside

the apartment *never exceeded* 400 to 450 degrees. Thus, the court's reliance on Corry's testimony to reject DeHaan's opinion that temperatures reached a peak of 450 degrees is misplaced because Corry himself testified that temperatures reached at least 600 degrees. Indeed, on cross-examination, Corry agreed that the temperature inside the victim's apartment could have been as high as 400 degrees even when firefighters entered the building. His only point, he explained, was that it could not have been 400 degrees *at floor level* because none of the firefighters, all of whom entered on their hands and knees within seconds of one another, was burned.

Similarly unfounded is the third habeas court's assertion that, "[w]hen compared with Corry's reasonable and measured analysis, Kelder's estimate of temperature at 1800 degrees appears wildly exaggerated." On cross-examination, counsel for the respondent asked Kelder his opinion as to "the maximum heat . . . that was reached in the apartment" Kelder responded: "The maximum, I would say, would be . . . about 1800 degrees *at ceiling level*." (Emphasis added.) When asked what he had based this estimate on, Kelder responded, "scientific proof. . . . [A]ny of the . . . fire books that I've read and the schools that I [have] attended [say] it's 1800 to 2000 degrees at ceiling level [for] any fire. . . . That's the normal ceiling [temperature]." Kelder then explained that temperatures are always much hotter at ceiling level. Corry never disputed this testimony. To the contrary, although he was never questioned about ceiling level temperatures, Corry stated that they necessarily would have been "hotter because the temperature rises as you go up, for sure." He also stated that "heat stratifies. The highest temperatures are always found at the ceiling or close to the ceiling, and, as you go down, they get less, which is why little children are taught in schools to crawl in fires, because you're generally underneath a smoke layer, and there's more oxygen there and you can survive and actually escape a fire in many cases by crawling, [whereas] if you stood up, you might be killed or seriously burned." Finally, as we previously indicated, Corry testified that temperatures would have to have reached at least 600 degrees to bring the newspapers to their preignition point, as depicted in some of the crime scene photographs. In view of this testimony, there simply is no factual basis for the third habeas court's finding that Kelder's estimate of ceiling temperatures was "wildly exaggerated" and, therefore, that his burn time estimate was unreliable.

In light of the foregoing, it is readily apparent that the third habeas court's first two assertions—that Corry disputed DeHaan's and Kelder's testimony regarding peak temperature, and that, "[i]n contrast to . . . DeHaan and Kelder, Corry opined credibly that 'this was not a high energy fire'"—are not supported by the

record. In fact, we can discern no disagreement among the experts with respect to the fire's peak temperature or energy level. It is not surprising, therefore, that the respondent makes no attempt to defend the third habeas court's assertion that there was a material difference in the testimony of the parties' experts with respect to the energy level of the fire and its peak temperature.

The third reason why the third habeas court found Corry's burn time estimate to be more persuasive than DeHaan's estimate was DeHaan's purported testimony that the floor level temperature inside the victim's apartment was 400 degrees when Tomkunas entered the apartment. Relying on Corry's testimony, the third habeas court reasoned that the temperature could not have been 400 degrees because, if the temperature had been that high, Tomkunas would have been injured, and he was not. Relying on Corry's characterization of DeHaan's testimony about the temperature at the time of entry, the respondent contends that, because DeHaan's burn time estimate rested in large measure on his assessment of entry level temperatures, "Tomkunas' lack of injury . . . knocked [the] principal underpinnings of DeHaan's opinion out from under it." As the petitioner notes, however, DeHaan never stated that the floor level temperature inside the apartment was 400 degrees when Tomkunas entered. He testified, rather, that the temperature inside the hot gas layer was likely between 300 or 400 degrees when Tomkunas entered the apartment. DeHaan explained that this estimate was based, in part, on Tomkunas' testimony at the petitioner's criminal trial that, when he arrived at the victim's apartment, the outside of the front door was hot to the touch, and "the temperatures and . . . hot gases he encountered at near floor level were untenable, and *he couldn't go in, even though he suspected there was a victim inside.*" (Emphasis added.) When asked whether he was able to determine what the temperature was at that time, DeHaan responded: "Only very approximately, [on the basis of Tomkunas' testimony] that, when he opened the door, there was smoke down very low, and he got on his hands and knees and he had no protective equipment on, and . . . when he tried to crawl in, it was unpleasantly hot to his skin . . . as well as smoky, and, at that point, he backed out knowing he couldn't go any further [S]hort exposure like that, that's probably going to be temperatures in the range of say [300] or 400 degrees [T]hat's enough to make most people not . . . go in any further [with] . . . bare skin. . . . [That level of temperature would cause second degree burns upon] prolonged contact"

Later, during cross-examination, DeHaan clarified that his estimate of entry level temperatures referred to the temperature inside "the hot gas layer" of the fire. DeHaan explained that, in his experience, if the

temperature had been much lower than 300 to 400 degrees, Tomkunas would not have been deterred from entering the victim's apartment, and, if the temperature had been much higher, there would have been more damage to the apartment. DeHaan also testified that studies have shown that the average person will not attempt to enter a room if the temperature is 250 degrees or higher, unless he has no option but to do so. Finally, DeHaan opined that, although an experienced firefighter might be willing to brave slightly higher temperatures, the fact that Tomkunas was hindered in his efforts to enter the victim's apartment suggests that the temperature in the hot gas layer of the fire was in the range of 300 to 400 degrees.

Notably, at the petitioner's criminal trial, Tomkunas testified that, when he first arrived on the scene, he tried to enter the victim's apartment on his own but was forced back by the substantial heat and "[h]eavy smoke condition." Specifically, Tomkunas stated that, after he kicked in the front door, there "was a lot of heat, so [he] dropped to [his] knees . . . to stay below [the] smoke and heat." Tomkunas testified that he crawled several feet into the room but immediately had to retreat because "[i]t was too hot and smoky." According to Tomkunas, after his initial, unsuccessful attempt to enter the apartment, he told the firefighters who arrived after him that they had to "vent" the building "to remove the heat and smoke and hot gases." One of those firefighters, Boland, ran to the back of the building and opened a set of sliding glass doors. According to Boland, "once [he] opened the [sliding glass] door[s] . . . [the apartment] cross vented, because the front door was open and the [sliding glass] door[s] [were] open, so it started to clear." Both Tomkunas and Boland testified that, after the apartment was vented, they were able to enter and locate the victim. Consistent with Tomkunas' and Boland's trial testimony, DeHaan also testified at the petitioner's habeas trial that, once "conditions [inside the apartment] were changed by the responding firefighters . . . Tomkunas' opening the front door and [Boland's] . . . opening the slid[ing] [glass doors] at the rear, that allowed . . . some of the accumulated smoke to leave *and allowed entry for the firefighters.*"⁴⁶ (Emphasis added.)

Although it is perfectly clear that both DeHaan and Kelder were aware that firefighters vented the victim's apartment prior to entry, and that Tomkunas had tried unsuccessfully to gain entry into the apartment by himself prior to the arrival of the other firefighters, Corry either was unaware of these facts or refused to accept them. Corry maintained, throughout his testimony, that there was only one entry into the apartment by firefighters, which was not preceded by a venting. On direct examination, Corry was asked on several occasions whether he agreed with DeHaan's estimate of entry level temperatures. The first time he was asked this

question, he responded: “[T]he fact that, [on] the night of the fire, all . . . of the firefighters: [Tomkunas], William Boland . . . William Parker and Douglas Boland, who were [all] in [the apartment] at basically the same time from different angles—none of them described high temperature on entry. They described heavy smoke. None of them talked about temperature. And, more importantly, none of them [was] injured in any way. And they would have been if the temperature had been anywhere close [to] 400 degrees, as . . . DeHaan said. . . . They would have been burned.” Counsel for the respondent then asked Corry whether he had “reach[ed] a conclusion regarding the temperatures that Tomkunas and the other firefighters encountered when they entered the apartment” Corry responded: “Safe to say, it was elevated 120, 130 [degrees], something like that.” Thereafter, the following exchange between counsel for the respondent and Corry ensued:

“Q. Do you recall reading . . . DeHaan’s report?

“A. Yes.

“Q. And you heard his testimony?

“A. I did.

“Q. Do you recall what temperature he opined . . . Tomkunas encountered when he entered the apartment?

“A. 400 degrees.

“Q. Based on your research, is that possible?

“A. It is not possible.

“Q. Would an individual who was not wearing protective clothing and entered [an apartment] with temperatures of 400 degrees be injured?

“A. Yes. Couldn’t help it.

“Q. And would they be able to tolerate remaining in that environment?

“A. No. Well . . . it all depends [on] how much they wanted to be burned, but they would be burned, and they’d be in substantial pain. And these were men who were, number one, on their hands and knees, which would expose the nape of their neck [and] the back of their ears, which are the most sensitive parts of our bodies, to temperature, and none of them described any burns or even mentioned heat in their original statements taken [on] the night of the fire.”

Thus, it is evident that Corry attributed to DeHaan testimony that he never gave, namely, that the floor level temperature inside the victim’s apartment when the firefighters entered was 400 degrees. It also is evident that the third habeas court accepted Corry’s characterization of DeHaan’s testimony without verifying whether DeHaan actually had opined in the manner attributed to him by Corry. In fact, DeHaan never was

questioned about the temperature inside the apartment *after* it was vented and all of the firefighters were able to enter. Nor did he express an opinion with respect to the floor level temperature when Tomkunas first entered the apartment on his own and was turned back. DeHaan simply stated that the temperature inside the hot gas layer was likely in the range of 300 to 400 degrees when Tomkunas made his first attempt to enter, before the arrival of the other firefighters.⁴⁷ DeHaan also opined that the hot gas layer did not radiate much heat downward toward the floor because there was no damage to the apartment's synthetic carpet, which would have melted even at much lower temperatures.⁴⁸

Corry's testimony regarding the effects of heat on human skin, in particular, his statements that the "thermal tolerance data for unprotected skin of humans at rest would suggest a limit of about 248 degrees" and that the "upper level limit of survivability in terms of breathing [is] 300 degrees," supports rather than contradicts DeHaan's testimony that the temperature inside the apartment was approximately 300 to 400 degrees when Tomkunas arrived. If the temperature had been much lower, an experienced firefighter like Tomkunas would not have been deterred from entering. As we have indicated, DeHaan testified that Tomkunas would have sustained second degree burns upon prolonged exposure to such temperatures. As DeHaan also testified, however, this explained why Tomkunas was unable to proceed farther into the apartment when he first arrived, even though he knew that there might be someone inside. As DeHaan stated, "it was hot enough to dissuade [Tomkunas from] entering . . . the room."

Moreover, it is difficult to fathom Corry's response when, on cross-examination, the petitioner's counsel pointed out to him that Tomkunas had testified at the petitioner's criminal trial that the heat and smoke *prevented* him from entering the apartment when, unaccompanied by other firefighters, he first attempted to do so: Corry's response was simply to refuse to accept Tomkunas' testimony. Specifically, when the petitioner's counsel asked Corry why Tomkunas' testimony that the smoke and heat forced him out of the building was inconsistent with DeHaan's testimony that the temperature was likely 300 to 400 degrees in the hot gas layer at that stage of the fire, Corry responded: "That's what [Tomkunas] said at the trial, not what he said in his initial statement." In support of this response, Corry explained that all of the firefighters gave statements to the police on the night of the fire, and, although those statements are contained in a police report that never was entered into evidence, Corry read them in preparing to testify. According to Corry, the report does not mention that any of the firefighters either were injured or forced out of the apartment by the heat. Corry stated that, as far as he was concerned, the police report was a more reliable gauge of the conditions that Tomkunas

had encountered on the night in question, more so than “what [Tomkunas] said under oath in [a] capital [felony] trial,” because, “in general, witnesses closer to the time of the incident will give a better recollection.”

Without the benefit of the report to which Corry was referring, we can only surmise its contents. It is unlikely, however, that the investigating officer who prepared the report questioned Tomkunas and his fellow firefighters in minute detail about their entry into the apartment. But even if we assume that the officer had thought to ask the firefighters about entry level temperatures, no doubt none of them reported extremely high temperatures inside the apartment because, as both Tomkunas and Douglas Boland testified, they vented the apartment before entering together as a group to extinguish the fire and to search for the victim. The fact that Corry felt free to disregard Tomkunas’ sworn testimony on this issue, on the basis of what he himself conceded was nothing more than “a report written by a police officer [on the night of the fire] as to what somebody told him”—or did not tell him, as the case may be—is perplexing, to say the least. In any event, insofar as the third habeas court’s determination that a jury reasonably could not credit the expert opinions of DeHaan and Kelder was predicated on Corry’s mischaracterization of their testimony regarding the energy level and peak temperature of the fire, and entry level temperatures, that determination lacks support in the record.

It bears noting that the third habeas court also found that DeHaan’s and Kelder’s burn time estimates were “totally contradicted by the historical and physical evidence marshaled by Corry.” Because the respondent elected not to place Corry’s written report in evidence, the only basis for this finding was Corry’s trial testimony.⁴⁹ When asked to explain why DeHaan’s burn time estimate was unreliable, however, Corry could point only to DeHaan’s testimony concerning the 400 degree temperature that the firefighters confronted upon entry—testimony that, as we have explained, DeHaan never gave. Corry explained that, if DeHaan was wrong that the floor level temperature was 400 degrees, “then he’s wrong . . . his assumptions are . . . incorrect on the longevity of the fire” Corry also stated that it was “clear that the fire occurred at an earlier time than what [DeHaan was] saying [because the fire] dropp[ed] in temperature enough . . . so that Tomkunas and the other firefighters were not injured.” Because Corry’s assessment of DeHaan’s opinion concerning the burn time of the fire was predicated on a misconception of DeHaan’s testimony about the entry level temperature, Corry’s criticism of DeHaan’s burn time estimate is similarly baseless.

Significantly, Corry’s description of the fire and the variables that affected it was otherwise identical to DeHaan’s and Kelder’s analysis of the fire. Indeed, on

cross-examination, Corry even conceded, consistent with DeHaan's testimony, that the temperature "might very well have been 400 degrees somewhere in that room" when Tomkunas entered the apartment. His point, he explained, was simply that it could not have been 400 degrees at floor level because none of the firefighters was burned when the firefighters entered and made their way into the interior of the apartment. Like DeHaan and Kelder, Corry testified that the fire burned out quickly due to the apartment's heavy insulation and lack of ventilation. Corry likened the apartment to a "thermos" and stated that the fire was "substantial" but burned only "for a brief period of time" due to "decreasing levels of oxygen" On the basis of the photographs, Corry also opined that there might have been a blanket or some other object on the couch that prevented the fire from exhausting its main fuel source, which, according to Corry, was the couch cushions, and that that the blanket or object prevented the fire from becoming much larger. Apart from expressing the view that the firefighters were not injured when they entered the apartment, however, Corry offered no scientific reason for his conclusion that the fire could have been set considerably earlier than DeHaan and Kelder hypothesized.⁵⁰ Rather, when asked whether he had reached a conclusion regarding the earliest time that the fire could have been set, Corry merely cited witness accounts of the victim's whereabouts on the day of the murder.⁵¹

Above and beyond our determination that the third habeas court's stated reasons for discrediting the burn time estimates of DeHaan and Kelder are baseless, our examination of the entire record reveals no other apparent reason why a jury would be apt to discredit their testimony. As we have indicated, their credentials certainly provide no such reason. Furthermore, although there is nothing in the record that would lead to the conclusion that a jury necessarily would credit Corry's burn time estimate over those of DeHaan and Kelder, there are several reasons why a jury might well be inclined to discredit that estimate. First, as we previously discussed, Corry's opinion is based on a police report that purportedly contains certain statements that firefighters gave to the police on the night of the fire but that never was introduced into evidence. In particular, Corry based his conclusions on inferences drawn from what Tomkunas did *not* say in those statements and elected to ignore Tomkunas' sworn trial testimony that directly contradicted the strained inferences Corry gleaned from the report not in evidence. Second, although counsel for the respondent opted not to introduce Corry's written report into evidence, the petitioner's counsel read extensively from it during his cross-examination of Corry. At the time, the petitioner's counsel accused Corry of having altered his conclusions about the fire after listening to DeHaan's testimony in

an effort to create an opportunity for the respondent's counsel to argue that the fire could have been started earlier than DeHaan had determined. Although Corry denied the accusation, insisting that his testimony was wholly consistent with the findings in his report, he admitted that, after listening to DeHaan's testimony, he felt the need to reexamine the available evidence for the purpose of discrediting DeHaan's findings. He also acknowledged that of the more than ninety-five criminal cases he had worked on, he never had testified on behalf of a criminal defendant and would be "hesitant" ever to do so. Although there is nothing inherently untrustworthy about Corry's preference for working for the prosecution, certain portions of his testimony reasonably might be viewed as tending to support the petitioner's counsel's portrayal of him as someone more concerned with assisting the respondent than with seeking to establish the truth.

For example, on direct examination, Corry was asked a series of questions designed to elicit criticism of DeHaan's and Kelder's findings. With respect to Kelder, the questions focused on the information that he had relied on in formulating his burn time estimate, in particular, the fact that he had assumed, for purposes of his analysis, that the cushions on the victim's couch were made of latex foam. DeHaan had concluded that the cushions were made of polyurethane foam, a different material, and Corry had agreed with that conclusion at trial. In an effort to discredit Kelder's burn time estimate, counsel for the respondent asked Corry: "Would you be able to properly analyze this fire if you didn't know the difference between latex foam rubber and polyurethane foam?" Corry responded, "[n]o." The next day, however, on cross-examination, it was revealed that Corry also had assumed that the cushions were made of latex foam for purposes of *his* analysis. Following that revelation, Corry provided a very different answer to the question, posed by the petitioner's counsel, of whether one could properly analyze the fire if he did not know that the couch cushions were made of polyurethane foam:

"Q. But, in your report, you have that . . . the material was latex rubber Correct?"

"A. Right.

"Q. Which is not what you're saying now?"

"A. Well, there's a reason for that. This couch closely resembles couches that I've seen manufactured in the 1970s . . . that did contain foam rubber. That was the principal foam material up [until] the time that polyurethane began to replace foam rubber, but it's really a matter of six of one, half dozen of another, since both of them perform in a similar manner in fires. . . . [Foam] rubber and foam plastics have similar heat release rates, fire propagation rates, ignition tempera-

tures, and so forth.” These contradictory answers by Corry hardly instill confidence in his testimony.

Corry’s testimony is replete with similar inconsistencies. Sometimes, he contradicted himself for no apparent reason, such as when he denied ever calling the fire a low energy fire. As we previously noted, at trial, the respondent’s counsel focused on the fire’s energy level and how it may have affected the fire’s development, so much so that the third habeas court, in its memorandum of decision, included a finding that, “[i]n contrast to . . . DeHaan and Kelder, Corry opined credibly that ‘this was not a high energy fire.’” As we explained, however, this finding lacks support in the record because both DeHaan and Kelder opined that the fire was a low energy fire. Nevertheless, on direct examination, Corry repeatedly characterized the fire as a “low energy” fire, on one occasion describing it as “*a very low energy fire*” and asserting, at another point, that there was “abundant evidence that clearly shows . . . that this fire was low energy” (Emphasis added.)

On cross-examination, however, Corry denied ever characterizing the fire in terms of low energy. During one heated exchange with the petitioner’s counsel, Corry was asked: “Now, as I understand your testimony . . . [you said] that there’s a low energy fire set in this couch, and this low energy fire kind of really becomes a smoldering fire, right?” Corry responded: “I didn’t say it was a low energy fire. It’s lower than it could have been.” The petitioner’s counsel then asked Corry: “Well, I thought that’s exactly what you said . . . in your testimony on direct examination. That’s exactly what you said; it was a low energy fire.” Corry responded, in part: “I don’t believe I said anything like that.”

Needless to say, it is not the role of this court to make credibility determinations, and we therefore express no opinion as to whether Corry is a more persuasive or convincing witness than DeHaan or Kelder. Our sole purpose in drawing attention to the inconsistencies in Corry’s testimony is merely to underscore why, contrary to the conclusion of the third habeas court, the original jury might well have credited the burn time opinions of DeHaan and Kelder, and why it might well have rejected Corry’s estimate. Of course, on retrial, it is possible that the jury will not find the testimony of DeHaan and Kelder persuasive; like all witnesses, they will be subject to impeachment, and, at that new trial, the state may be able to present an expert or experts who, in contrast to Corry, provide testimony explaining why the burn time opinions of the petitioner’s experts lack persuasive force. Or the jury might conclude, like the third habeas court did, that it simply is not possible to determine the burn time of a fire, even within relatively broad parameters, with any degree of confidence or exactitude. But, for purposes of the present case,

which involves the suppression of exculpatory evidence by the state, our task is not to determine whether the jury more likely than not *would* have credited their testimony, such that the petitioner *would* have prevailed at a new trial. Cf. *Shabazz v. State*, 259 Conn. 811, 827–28, 792 A.2d 797 (2002) (in resolving merits of petition for new trial based on newly discovered evidence, trial court must determine whether petitioner has established that new trial will produce different result). The question, rather, is whether the jury reasonably *could* have credited the testimony of the petitioner’s witnesses. On the record before us, there simply is no legitimate basis for concluding that the jury reasonably could not have credited the testimony of DeHaan and Kelder, both of whom are well credentialed and highly experienced experts in their field, and whose testimony, when coupled with that of Martin’s, supports the petitioner’s contention that he could not possibly have sexually assaulted and killed the victim.

This observation, however, does not end our inquiry. We still must determine whether, if the original jury had considered the original trial evidence together with DeHaan’s and Kelder’s testimony that the fire was set no earlier than 7:30 p.m., as well as Martin’s unwavering testimony that the petitioner was home with her and their son watching television at that time, there is a probability of a different result sufficient to undermine confidence in the jury’s verdict. For the reasons set forth in part III C of this opinion, this standard has been met. Indeed, the state’s less than compelling case against the petitioner was such that any new evidence tending to cast doubt on the petitioner’s responsibility for the charged crimes could well have lead to an acquittal, and the petitioner’s expert testimony concerning the burn time of the fire, coupled with Martin’s testimony, certainly raises doubts about the reliability of the petitioner’s conviction.

Before turning to a discussion of the original trial evidence, however, we first address the three contentions raised by Justice Zarella in his dissenting opinion: (1) we have treated the respondent unfairly by deciding a claim that the parties have not raised; (2) we incorrectly have concluded that the Appellate Court properly exercised de novo review of the third habeas court’s determination as to whether a jury reasonably could credit the testimony of the petitioner’s experts; and (3) the record establishes, as the third habeas court determined, that the petitioner’s expert testimony is not worthy of credit. We reject each of these claims.

B

Justice Zarella’s Arguments

Justice Zarella contends that, in concluding that the third habeas court’s materiality determination is not

entitled to deference, we have “summon[ed] down [our] deus ex machina” and decided an issue that the parties never raised, thereby “silencing” the respondent, inflicting “acute” harm on the state and “undermin[ing] the fairness of our judicial process.” Justice Zarella’s rhetoric may make for entertaining reading, but the facts categorically refute his accusations.

Some brief background is necessary in order to fully understand why Justice Zarella’s argument is both unfaithful to the record and baseless. It is undisputed that the Appellate Court accorded no deference to the third habeas court’s findings with respect to the credibility of the parties’ burn time experts. See *Lapointe v. Commissioner of Correction*, supra, 138 Conn. 476–79. According to Justice Zarella, however, the Appellate Court did not evaluate the testimony of the petitioner’s experts, as *Brady* requires, to ascertain the materiality of the Ludlow note in light of the record as a whole but, rather, concluded that neither the Appellate Court nor the third habeas court *had any role whatsoever* in assessing the expert testimony. In other words, as Justice Zarella indicates, the Appellate Court never undertook an analysis of the testimony and, instead, merely “hypothesiz[ed]” what a jury could find if it credited the testimony and, on the basis of that “speculation,” concluded that “a new *jury*, and not the *habeas court*,” should evaluate it. (Emphasis in original.) In Justice Zarella’s view, because this approach obviously is improper, and because, according to Justice Zarella, the petitioner’s only claim is that we should approve the Appellate Court’s use of such a methodology, our analysis begins and ends there: the respondent prevails on appeal, the judgment of the Appellate Court is reversed, and the judgment of the third habeas court denying the habeas petition is reinstated. Proceeding any farther, Justice Zarella asserts, would take us beyond the scope of the claims raised in this appeal.⁵²

Justice Zarella’s assertion to the contrary notwithstanding, there is absolutely no basis for presuming that the Appellate Court concluded that neither it nor the third habeas court had a role in evaluating the credibility of the parties’ expert testimony and that those courts’ sole responsibility, instead, was to speculate as to what the original jury might have concluded if it had credited the petitioner’s expert testimony. Under this approach, any defendant who makes a claim under *Brady*—no matter how preposterous or outlandish the testimony that provides the basis for that claim—automatically would be entitled to a new trial if, *assuming* that a jury believed it, that jury *might* find the defendant not guilty. No one, let alone a court of law, ever would advocate for such a ludicrous standard, as it is perfectly obvious that a defendant cannot be entitled to a new trial under *Brady* when an objective assessment of the testimony on which the defendant’s claim is based reveals that it is incredible or unworthy of belief. Because there is no

support in the law of this or any other jurisdiction for the bizarre proposition that our courts play no part in evaluating the credibility of evidence presented to establish a *Brady* claim—and because common sense dictates that that approach cannot possibly be correct—it verges on insulting to presume that the Appellate Court employed such a patently improper and utterly unworkable approach.

Moreover, a review of the Appellate Court’s decision positively belies any such presumption. First, the Appellate Court discussed the facts of the case at length; *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 456–58, 462–63, 468–73; and summarized the parties’ expert burn time testimony in the context of the relevant facts. *Id.*, 472–73. The Appellate Court also explained the decision and factual findings of the third habeas court; *id.*, 472–74; and observed that the third habeas court had found that the petitioner’s experts provided thorough and extensive testimony concerning the fire’s burn time. *Id.*, 473. The Appellate Court then properly set forth the standard of review and governing legal principles under *Brady* and *Strickland*; *id.*, 474–76; and, in so doing, quoted from this court’s decision in *State v. Ortiz*, supra, 280 Conn. 720, in which we explained that, on appeal, the issue of materiality presents a mixed question of law and fact, with the trial court serving as the fact finder. *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 475. Ultimately, on the basis of the testimony of the parties’ experts, the Appellate Court concluded that the petitioner is entitled to a new trial, and, as Justice Zarella acknowledges, it did so without affording any deference to the third habeas court’s contrary findings. See *id.*, 476–79. Because, under our law—and so far as we know, the law of every other jurisdiction—the only alternative to deferential appellate review is *de novo* appellate review, it is apparent that the Appellate Court engaged in that latter form of review. As we have explained, that is the correct standard of review in the present case.

Finally, in defending his interpretation of the Appellate Court’s decision, Justice Zarella asserts that there is no indication in that decision that the Appellate Court evaluated the petitioner’s expert testimony to determine whether a jury reasonably could credit it. Justice Zarella argues, rather, that the Appellate Court simply concluded “that assessing the credibility of the expert witnesses was a task best left to a jury,” without any assessment of their testimony either by the trial court or by the Appellate Court. In support of his assertion that the Appellate Court concluded that no judicial review of the parties’ expert testimony was the proper approach, Justice Zarella quotes the following language from a footnote in the Appellate Court’s decision: “If the Ludlow note had been disclosed to trial counsel, however, it would have been the responsibility of the

jury and not the court to weigh the credibility of the arson experts. Whether the burn time evidence, which was so critical in buttressing [the petitioner's] alibi defense, raised a reasonable doubt as to the petitioner's guilt would best be a determination left to the jury and not [to] a habeas court." (Emphasis omitted; internal quotation marks omitted.) Part II of Justice Zarella's dissenting opinion, quoting *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 476–77 n.17. The portion of the Appellate Court's decision that Justice Zarella fails to mention—the portion that places the language on which Justice Zarella relies in its proper context—leaves no doubt that the Appellate Court reached its conclusion that the petitioner is entitled to a new trial under *Brady* only after undertaking an independent review of the parties' expert testimony.

More specifically, after stating that the testimony of the petitioner's two experts would have been critical to establishing an alibi, the Appellate Court "*conclude[d] that there is a reasonable probability that the result of [the petitioner's] criminal trial would have been different had the Ludlow note been disclosed to [the petitioner's trial counsel] prior to [his criminal] trial. Nondisclosure prior to trial of the portion of the Ludlow note describing the possible burn time affected the overall fairness of the trial and was so unfair as to undermine our confidence in the jury's verdict.* With the burn time estimate provided by one of the state's fire marshals, trial counsel testified that they would have retained the services of an arson expert and that . . . Martin would have testified as to the petitioner's whereabouts during the critical times of that evening. That evidence, if believed by the jury, could have resulted in the jury's finding that it was temporally impossible for the petitioner to have committed the crimes [of] which he was convicted. *The Ludlow note was exculpatory and material in these circumstances. [First habeas counsel's] performance was deficient when he failed to pursue that issue at the first habeas proceeding, and the petitioner was prejudiced by his failure to do so. The petitioner has demonstrated that had there been effective representation by [first habeas counsel], there is a reasonable probability that the first habeas court would have found that the petitioner was entitled to [the] reversal of [his] conviction and a new trial.*" (Emphasis added; footnote omitted.) *Id.*, 478–80.

It is simply impossible to read this passage and conclude that the Appellate Court did not undertake a substantive and independent review of the petitioner's expert testimony. Only by evaluating the substance of the testimony and concluding that it was sufficiently credible could the Appellate Court have concluded, as it did, that the petitioner's inability to use it at trial adversely "affected the overall fairness of [the petitioner's criminal] trial and was so unfair as to undermine [the Appellate Court's] confidence in the jury's verdict."

Id., 478–79. In other words, unless the Appellate Court actually examined and assessed the evidence, there is no way that the Appellate Court could have determined that, if the expert testimony had been available to the petitioner at his criminal trial, there is a reasonable probability of a different verdict, as *Brady* requires.⁵³

Not surprisingly, the respondent does not claim that the Appellate Court concluded that neither it nor the third habeas court was obligated to review the expert testimony but, rather, was to merely assume that such testimony was credible.⁵⁴ In fact, the respondent expressly recognizes that the Appellate Court *did* review the parties' expert testimony. For example, the respondent claims that, “[a]s for the testimony of Martin, Kelder and DeHaan, the *Appellate Court's conclusion that this evidence would have supported the [petitioner's] alibi defense is not sustainable.*” (Emphasis added.) The respondent also claims that the Appellate Court “failed to consider the [state's] compelling evidence of guilt” in *conducting its review* of the testimony of DeHaan, Kelder and Martin. At no time has the respondent ever suggested that the Appellate Court viewed itself and the third habeas court as having no role in evaluating the credibility of the parties' expert testimony. Nor has the respondent ever claimed that the Appellate Court did not conduct a substantive, de novo review of that testimony. He argues, rather, that the Appellate Court improperly failed to defer to the determination of the third habeas court in concluding that a jury reasonably might credit the petitioner's experts.⁵⁵ Consistent with this contention, the respondent's brief contains a thoroughgoing discussion of why the Appellate Court's review of the expert testimony should have been tempered by deference to the findings of the third habeas court. Because the respondent *himself* claims that the Appellate Court should have deferred to the conclusion of the third habeas court, rather than conducting a de novo review, it defies credulity to assert that the respondent was not on notice that we would decide the claim, as Justice Zarella asserts.⁵⁶ Ironically, then, it is Justice Zarella who would decide this appeal on the basis of a claim that has not been raised or briefed by the parties, that is, the propriety of the Appellate Court's purported determination that a *Brady* violation automatically entitles a defendant to a new trial, without any judicial evaluation of the credibility of the testimony that supports a finding of that violation.⁵⁷

Having asserted, wrongly, that the respondent lacked notice that we would decide whether the third habeas court's determination was subject to deferential or de novo review, Justice Zarella compounds his error by alleging that the respondent also could not have known that we might decide that issue against him and, if we did, that we then would proceed to the issue of whether the Appellate Court properly concluded that the third

habeas court had resolved the issue incorrectly. This argument fails, of course, because it is based on a false premise. Because the respondent asked us to decide the proper standard of review, it hardly could be clearer that he was on notice that, if we disagreed with his contention that the Appellate Court improperly employed a de novo standard of review, we also would decide whether the Appellate Court, having applied that standard, reached the correct conclusion in reversing the judgment of the third habeas court. Otherwise, we would be unable to determine whether the judgment of the Appellate Court should be affirmed or reversed. See *State v. Fausel*, 295 Conn. 785, 793, 993 A.2d 455 (2010) (“in a certified appeal, the focus of [this court’s] review is . . . [on] the actions of the Appellate Court” [internal quotation marks omitted]). We therefore reject Justice Zarella’s manufactured allegation that we have “silenc[ed]” the respondent by “denying [him] notice and a chance to brief the issue”⁵⁸

In light of the foregoing, it is apparent that we have not decided an issue that the parties have not raised. On the contrary, the respondent himself raised the issue about which Justice Zarella complains and then fully briefed it. Clearly, Justice Zarella’s assertion that it is somehow unfair of us to decide the respondent’s claim against him fails because it is against all logic and common sense. As we have explained, in arguing that the judgment of the Appellate Court should be reversed because that court merely assumed the credibility of the petitioner’s expert testimony without evaluating that testimony, it is Justice Zarella who would resolve this appeal on the basis of a claim that has not been raised. *That* would be unfair.

2

Justice Zarella also challenges our determination that the Appellate Court properly exercised de novo review over the third habeas court’s predictive judgment as to whether a jury reasonably could have credited the petitioner’s experts. He contends that our conclusion is foreclosed by our case law, that we have improperly usurped the function of the third habeas court in reviewing its findings de novo because that court necessarily was in a better position to assess credibility than we are, and that employing that standard of review in the present case violates the state constitutional prohibition against fact-finding by an appellate tribunal. We disagree.⁵⁹

With respect to Justice Zarella’s first claim, we have explained, in part II of this opinion, why, like the courts in *Bunch v. State*, supra, 964 N.E.2d 292–93, and *State v. Behn*, supra, 375 N.J. Super. 431–33, we are convinced that the Appellate Court properly exercised de novo review over the third habeas court’s conclusion concerning the likelihood that a jury would credit the petitioner’s experts, and we need not belabor our reasoning

here. Suffice it to say that this case presents a highly unusual scenario: the third habeas court's probabilistic assessment was predicated solely on the scientific opinions of highly qualified experts whose character, reliability and veracity never have been questioned, and the third habeas court's ability to evaluate their credibility firsthand, on the basis of their performance on the witness stand, had no bearing on that court's judgment. The court's decision, rather, was based solely on its view that the foundation of the opinion expressed by the respondent's expert was sounder than the opinions of the petitioner's experts.⁶⁰ In such circumstances, we are in as good a position as the third habeas court to gauge whether a jury reasonably could credit the opinions of the petitioner's experts. Although we agree fully with Justice Zarella that the general rule is one of deference, even in cases involving claims under *Brady*, this case represents a limited exception to that rule because, as we previously discussed; see footnotes 42 and 43 of this opinion and accompanying text; there is no justification for deferring to the third habeas court's findings and compelling reason not to do so. Justice Zarella's observation that we cannot cite an appellate case from this state in which we have applied such an exception proves only one thing: we previously have not had a case on all fours with this one.⁶¹ The fact that such a case is so uncommon, moreover, is a complete answer to Justice Zarella's "the sky is falling" contention that we have opened the floodgates to future litigants, for only in the rare case that a litigant can establish that his case is materially similar to this one will he be entitled to de novo review of the lower court's materiality determination.

Justice Zarella accuses us of improperly usurping the fact-finding role of the third habeas court because, in his view, "[e]valuating the credibility of a witness' oral testimony is a complex process that *always* entails consideration of subjective factors like the attitude, candor and demeanor of the witness, and this assessment *cannot* be based solely on objective factors reflected in the printed record." (Emphasis in original.) We disagree that the assessment of testimony, in particular, the evaluation of expert testimony by the court, necessarily and invariably involves consideration of the subjective factors that Justice Zarella identifies. This is a case in point. As we have explained, there is nothing in the record to suggest that the decision of the third habeas court was predicated on the court's subjective view of the credibility of the parties' experts, and the court's explanation of its decision demonstrates convincingly that subjective considerations did not cause the court to credit the respondent's expert, Corry, over the petitioner's experts, DeHaan and Kelder. Rather, as the third habeas court expressly stated, it was persuaded by the soundness of Corry's scientific opinion and by Corry's critique of the testimony of DeHaan and

Kelder. In view of the objective reasons that the third habeas court gave for its conclusion, and in the absence of any indication, expressed or otherwise, that the court relied on purely subjective factors in discrediting the petitioner's experts, we will not presume that it did so. This conclusion is reinforced by the fact that, at oral argument before this court, the respondent's appellate counsel acknowledged that the third habeas court had "to *fully articulate* its reasons for making a credibility determination" and, further, that "we have a habeas court here making a credibility determination and *assigning very specific reasons* for why [it] did that." (Emphasis added.)

With respect to *Bunch v. State*, supra, 964 N.E.2d 274, Justice Zarella makes three arguments in an attempt to discredit our reliance on the reasoning of that case. None of those arguments undermines the validity of that reasoning to even the slightest degree. First, he suggests that *Bunch* is distinguishable because it involves a petition for a new trial based on newly discovered evidence, whereas the present case involves a claim founded on *Brady* and *Strickland*. Justice Zarella further asserts that Indiana applies a different standard for determining the merits of new trial petitions than we do in this state. These are classic distinctions without any difference. The fact that the court in *Bunch* addressed a claim based on newly discovered evidence is wholly irrelevant because that claim requires exactly the same analysis as claims under *Brady* and *Strickland*, as they entail the same considerations.⁶² With respect to the argument that the elements of a new trial claim based on newly discovered evidence differ in Indiana and Connecticut, this, too, is irrelevant because the precise nature of those elements has absolutely nothing to do with the separate and distinct issue of whether the findings of either state's trial courts are entitled to deference in those cases.

Justice Zarella next argues that *Bunch* is inconsistent with this state's jurisprudence because our cases reveal that we have erected an absolute bar to de novo review of findings by a trial court, no matter what the circumstances. This is simply not true. When there is sound reason not to defer to the trial court—that is, when we are in as good a position as the trial court to decide the issue—we need not, and will not, do so.⁶³ Like *Bunch*,⁶⁴ this is such a case, and Justice Zarella has failed to identify any flaw in the reasoning of *Bunch* that would warrant a contrary conclusion.

Justice Zarella's third and final contention is that engaging in de novo review of the third habeas court's materiality determination runs afoul of the state constitutional ban on fact-finding by an appellate tribunal. See, e.g., *Styles v. Tyler*, 64 Conn. 432, 461, 30 A. 165 (1894). The respondent has not raised a constitutional objection to the Appellate Court's allegedly improper

failure to defer to the findings of the third habeas court, and it therefore is not proper for Justice Zarella to do so. Because Justice Zarella addresses it, however, we also will do so. Review of the claim makes clear why the state did not raise it: it is devoid of merit.

In *Styles*, this court discussed the division of authority between trial courts and appellate courts as contemplated by the state constitution, and explained that “pure issues of fact” fall outside the authority of the latter. *Id.* In other words, appellate courts do not try cases or retry cases on appeal. As the court in *Styles* made clear, however, the fact-finding that is constitutionally prohibited does not include appellate review of facts found by the trial court. See *id.*, 459. Furthermore, “[a]mong the questions of law belonging to the jurisdiction of this court . . . are . . . questions of legal conclusion when law and fact are so intermingled that the main fact is not a pure question of fact but a question of the legal conclusion to be drawn from subordinate facts and also questions whether particular subordinate facts constitute the basis for a conclusion of fact or a conclusion of law” *Id.* As we have explained, materiality under *Brady* and *Strickland* is a mixed question of law and fact.

In the present case, de novo appellate review of the third habeas court’s materiality decision does not impermissibly intrude on that court’s fact-finding function because it does not require appellate fact-finding at all. Our review of the testimony of the parties’ experts does not require us to disturb the third habeas court’s relative credibility judgment, that is, its determination that the respondent’s expert was more credible than the petitioner’s experts. Nor does it deprive the third habeas court of its responsibility to evaluate that expert testimony on the basis of its firsthand assessment of the parties’ experts, because the court’s ultimate conclusion with respect to the credibility or persuasiveness of the experts’ opinions was not based on its superior position to evaluate them. This is so because the third habeas court made no factual findings that derived from its ability to assess the credibility of the experts in light of their conduct and demeanor on the witness stand. Indeed, the third habeas court’s assessment did not require any findings at all with respect to disputed issues of historical fact. Rather, the third habeas court’s probabilistic judgment was predicated on its belief, based solely on the foundational underpinnings of the various expert opinions, that the opinion of the respondent’s expert was sounder, and therefore more deserving of credit, than those of the petitioner’s experts. Because we are in as good a position as the third habeas court to evaluate the substance of those opinions, we are also as well positioned to decide whether a jury reasonably might credit them. For that reason, our de novo review of the third habeas court’s predictive judgment does not usurp the role of that court in any way,

and, consequently, there is no reason for us to defer to it. In such circumstances, the issue gives rise to a question of law, and there is no constitutional violation.

Although the foregoing discussion resolves Justice Zarella's constitutional claim, it bears noting that Justice Zarella has a very broad view of the scope of the constitutional ban on appellate fact-finding. This view, however, ignores the fact that our appellate authority extends to actions that implicate the fact-finding function to a far greater degree than the *de novo* review that we exercise in the present case. For example, under the second prong of the clearly erroneous standard, we may substitute our view for that of the fact finder when, although there is sufficient evidence in the record to support a particular finding, the reviewing court nevertheless "is left with the definite and firm conviction that a mistake has been committed." (Internal quotation marks omitted.) *State v. Maurice M.*, 303 Conn. 18, 27, 31 A.3d 1063 (2011); see also *id.*, 37, 44 (reversing conviction of defendant, despite evidentiary support for jury's finding of guilt, because this court had definite and firm conviction that mistake had been made).

Another such example is *State v. Kitchens*, 299 Conn. 447, 10 A.3d 942 (2011), in which we concluded that defense counsel's failure to raise a constitutional challenge to the trial court's jury instructions may, depending on the circumstances, constitute a waiver of the defendant's right to raise such a claim on appeal. See *id.*, 482–83. As we explained in *Kitchens*, because such a waiver is implied rather than express, it "arises from an inference that the defendant knowingly and voluntarily relinquished the right in question." (Emphasis omitted.) *Id.*, 483. As this court also has observed, the decision whether to draw an inference in any given set of circumstances is a quintessential "question of fact, to be answered by a fact finder." *State v. Diaz*, 226 Conn. 514, 526 n.8, 628 A.2d 567 (1993); see also *id.* ("The process of making a legal determination of whether a particular inference drawn by a fact finder is reasonable, as opposed to the process of determining whether to draw such an inference, is particularly familiar to a reviewing court. That is the essence of the difference between a question of law, to be answered by a reviewing court, and a question of fact, to be answered by a fact finder."). Despite the fact intensive nature of this inquiry—as we explained in *Kitchens*, whether to draw an inference of waiver "must be based on a close examination of the record and the particular facts and circumstances of each case"; *State v. Kitchens*, *supra*, 483—this court, and not the trial court in which the alleged waiver occurred, is responsible for deciding, as a matter of fact, whether counsel waived the claim. See *id.* Nevertheless, this decision is considered a question of law over which we exercise plenary review. E.g., *State v. Davis*, 311 Conn. 468, 477, 88 A.3d 445 (2014). It simply cannot be that the constitution

permits the kind of fact bound determinations that are required under the second prong of the clearly erroneous test and under our *Kitchens* waiver methodology but bars plenary review in the present case, as Justice Zarella maintains.⁶⁵

3

Justice Zarella argues that, notwithstanding the myriad factual errors contained in the third habeas court's memorandum of decision, the record nevertheless supports the conclusion that no jury reasonably could credit the petitioner's experts. To this end, Justice Zarella makes three primary arguments in an effort to demonstrate why the testimony of the petitioner's experts "simply is not reliable" They are: (1) the fact that Tomkunas was not burned upon entering the victim's apartment renders DeHaan's burn time estimate unreliable; (2) DeHaan mistakenly believed that the temperature inside the victim's apartment prevented Tomkunas from entering the apartment when he first arrived; and (3) DeHaan's testimony was internally inconsistent and therefore unreliable. None of these arguments, however, is supported by the record.

First, Justice Zarella argues that, because Tomkunas crawled several feet into the victim's apartment when he first arrived, and remained inside for as long as fifteen to twenty seconds before being forced to retreat, the fact that Tomkunas was not burned "completely contradicts DeHaan's claim that the [victim's] apartment was close to 400 degrees when Tomkunas first kicked in the door." Justice Zarella's argument is predicated on the same fundamental misunderstanding of DeHaan's testimony that led the third habeas court so far astray, namely, that DeHaan testified that floor level temperatures were 400 degrees when Tomkunas entered the building. As we have explained, DeHaan never was asked about floor level temperatures. More importantly, he made it clear that, when he spoke of entry level temperatures in the 300 to 400 degree range, he was referring to temperatures in the hot gas layer of the fire, not floor level temperatures. See footnote 47 of this opinion and accompanying text. Indeed, DeHaan was of the view that not even the hot gas layer temperature reached higher than 450 degrees at the fire's peak, and that it radiated very little heat downward toward the floor because the victim's synthetic rug was not damaged in any way. See footnote 48 of this opinion. DeHaan explained that, "even under fairly low radiant heat intensities, synthetic fabrics like carpets tend to start to melt, and, when they do, they get kind of crispy to the touch," which did not happen to the victim's carpet.

Despite the clarity of DeHaan's testimony with respect to the meaning of "entry level temperatures," Justice Zarella insists that "DeHaan estimated that Tomkunas would have experienced temperatures near 400

degrees ‘to the bare skin,’” and, therefore, the third habeas court properly discredited his burn time estimate. Only by taking a handful of DeHaan’s words out of context and ignoring the remainder of his testimony is it possible for Justice Zarella to attribute to DeHaan the view that floor level temperatures were 400 degrees when Tomkunas entered the building, *or at any other time*. The testimony that Justice Zarella relies on to support this argument is the last four words of DeHaan’s response to the questions of whether, in the course of his investigation, he was able to determine entry level temperatures, and what bearing those temperatures had on his estimate of the fire’s burn time. With respect to whether he was able to determine entry level temperatures, DeHaan responded: “Only very approximately, [on the basis of Tomkunas’ testimony] that when he opened the door, there was smoke down very low, and he got on his hands and knees and he had no protective equipment on, and . . . when he tried to crawl in, it was unpleasantly hot to his skin . . . as well as smoky, and, at that point, he backed out knowing he couldn’t go any further [S]hort exposure like that, that’s probably going to be temperatures in the range of say [300] or 400 degrees [T]hat’s enough to make most people not . . . go in any further [with] . . . bare skin.” We do not understand DeHaan to be saying that Tomkunas’ bare skin was exposed to 400 degree temperatures. To the extent that there may be ambiguity in this portion of DeHaan’s testimony, however, it is entirely dispelled by the remainder of his testimony. As we previously indicated; see footnote 47 of this opinion; on cross-examination, the respondent’s counsel asked DeHaan exactly what he meant when he “estimated that the temperature in the apartment when . . . Tomkunas entered was 300 [to 400] degrees” DeHaan responded, “I’m talking about the hot gas layer temperature” DeHaan then explained that, in his view, the hot gas layer never was much hotter than 400 degrees because there was so little damage to the rug, which would have melted at much lower temperatures. Moreover, it does not take an expert in fire forensics to realize that a person would be severely burned from any kind of prolonged exposure to 400 degree temperatures. To suggest that a person of DeHaan’s professional standing and expertise was unaware of this fact is patently unreasonable.⁶⁶

Accordingly, contrary to Justice Zarella’s assertions, it is not in the least surprising that Tomkunas was not burned when he first crawled into the apartment, particularly in light of his testimony that he was on his hands and knees the entire time, intentionally staying below the hot gas layer. As Corry himself stated, temperatures are always much hotter the higher up you go in a room, which is why children are told to crawl on their hands and knees in a fire. In this way, Corry explained, they may avoid injury, even in situations where, if they were

to stand up, they could be severely burned or killed.

Indeed, the entire issue of whether it was 400 degrees at floor level when Tomkunas entered the victim's apartment seems little more than a construct, inserted into the proceedings by Corry two months after DeHaan had testified. As we previously indicated, Corry stated that, after listening to DeHaan's testimony, he went back to the drawing board in an effort to refute it. What he came up with, it appears, was the notion that DeHaan had stated that it was 400 degrees at floor level when the firefighters entered the apartment, and that the temperature obviously could not have been that high because none of the firefighters was burned. Specifically, Corry stated that "DeHaan said [it was] 400 degrees. That's what we were investigating." Corry further stated that, "if it was 400 degrees at the floor, [the fire] would have burned [the firefighters], and it didn't." Notably, on cross-examination, Corry admitted that it could very well have been 400 degrees in the hot gas layer when Tomkunas entered the apartment. Corry explained that his only point was that it could not have been 400 degrees at floor level because none of the firefighters was burned. Indeed, it bears emphasis that Corry's acknowledgment that the temperature in the hot gas layer could have been 400 degrees when Tomkunas arrived fully supports DeHaan's estimate of the fire's burn time, which, as we previously discussed, was predicated on hot gas layer temperatures being in the range of 300 to 400 degrees.

In a similar vein, Justice Zarella asserts that DeHaan's burn time estimate is unworthy of credit because it is predicated on DeHaan's mistaken belief that the heat prevented Tomkunas from crossing the threshold of the victim's apartment when he first arrived. Specifically, Justice Zarella argues that DeHaan appears not to have been aware that Tomkunas was able to crawl several feet into the apartment before being forced out by the heat, which likely affected DeHaan's calculation of the entry level temperature. We disagree with Justice Zarella's view of the record, which clearly reflects the fact that DeHaan read all of Tomkunas' trial testimony and was fully aware that Tomkunas entered the victim's apartment briefly, on his hands and knees, before being forced out by the heat. In fact, not only did DeHaan testify that Tomkunas entered the apartment on his hands and knees before being forced out, his written report on the fire, which was entered into evidence as a full exhibit, provides in relevant part: "[Tomkunas] kicked the door open to find heavy smoke and considerable heat within. Without protective equipment, *he crawled on hands and knees into the front entry far enough to see flaming fire on the couch against the left wall but was forced out by the conditions.*" (Emphasis added.) In light of this evidence, Justice Zarella's assertion that DeHaan was unaware that Tomkunas actually proceeded a short distance into the apartment when

he first arrived is simply wrong.

We are also perplexed by Justice Zarella's insistence that, "[a]t no time during his [trial] testimony did [Tomkunas] say that he was prevented from even entering the apartment as a result of the heat." Justice Zarella contends that, after his initial entry, Tomkunas left the apartment only because "the heat and smoke conditions convinced him that rescue efforts would be 'a lot easier' if the apartment was vented," not because it was too hot to remain inside. As with Justice Zarella's other factual arguments, this contention is contradicted by the record. When initially asked whether he was able to remain in the apartment after kicking in the front door, Tomkunas responded: "No, I was not. . . . It was too hot and smoky. I had to go . . . out." He also stated that the heat and the smoke, which he described as "very, very dangerous," "forced [him] to retreat" Tomkunas further stated that, before attempting a second entry, it was necessary to "smash a window . . . to remove the heat and smoke and hot gasses from the building." In arguing that the heat was not so great as to prevent Tomkunas from remaining in the building, Justice Zarella relies on a single statement by Tomkunas: "If I could get somebody to vent, it was a lot easier." The broader context of that statement, however, as reflected in the following colloquy between the state and Tomkunas, which Justice Zarella has omitted from his dissenting opinion, leaves no doubt that Tomkunas, upon his arrival at the scene, was forced from the apartment due to the high heat and dangerous smoke conditions inside the apartment:

"Q. Now, with respect to the volume of smoke, how would you characterize that when you first entered—what [was] the volume of smoke . . . in the apartment?"

"A. If I could use a technical term, 'well charged.'

"Q. And is that a term of significance as far as fire-fighting is concerned?"

"A. Yes it is.

"Q. And how would you explain it to us?"

"A. A building that's well charged with smoke is so full, there's no—there's actually little to no oxygen left in the building, and it's a very, very dangerous situation.

"Q. Dangerous to whom . . . ?"

"A. It would be dangerous to anybody in there and anybody who attempted to get in without proper precautions.

"Q. And you've indicated that the heat and the smoke forced you to retreat after some fifteen to twenty seconds. Is that correct?"

"A. That's correct.

* * *

“Q. Can you tell us why you retreated?”

“A. It was just too hot and too smoky. If I could get somebody to vent, it was a lot easier.”

Justice Zarella also argues that DeHaan’s testimony “that entry level temperatures were too high for Tomkunas even to enter the apartment conflicts with DeHaan’s own testimony about the fire’s energy level” because “DeHaan testified that the fire would have produced a relatively small amount of heat and would have been approachable, even at its maximum intensity. DeHaan explained that the fire’s intensity ‘would probably be about the same as an average fireplace fire. It would be pumping a lot of heat into this room, but not so much that you couldn’t—you couldn’t approach it, for instance, to try to extinguish it’” (Emphasis omitted.) For reasons that we previously discussed, we reject Justice Zarella’s assertion that DeHaan testified that entry level temperatures prevented Tomkunas from entering the apartment at all when he first arrived. We also do not perceive any conflict between DeHaan’s testimony regarding the fire’s energy level and his estimate of entry level temperature. When DeHaan likened the fire’s energy level to that of an average fireplace fire, it was solely in an attempt to explain why there was so little damage to the victim’s apartment. DeHaan attributed the lack of damage in the apartment to the heat release rate of the fire, which he estimated never exceeded 250 to 350 kilowatts. DeHaan explained that a 350 kilowatt fire will produce temperatures in the range of 400 degrees. DeHaan further explained that, if there had been more ventilation inside the apartment, “a love seat like [the one in the victim’s apartment] is capable of generating [a] maximum heat release rate . . . in the order of 2000 kilowatts. In other words, it would have been six times [as] big [of a] fire; the fire would have basically reached the ceiling, actually spread across the ceiling, and it might have actually brought this whole room to involvement.” If this had occurred, DeHaan testified, it would not have been possible for a firefighter simply to walk up to the fire and extinguish it. In contrast, a firefighter easily could have approached the fire on the victim’s couch, assuming, of course, that he or she was wearing appropriate attire, because the fire’s heat release rate never exceeded 350 kilowatts, and the fire never spread beyond the couch to other materials in the room. Indeed, it was undisputed that, with proper clothing and breathing equipment, which Tomkunas did not have with him when he arrived, he would have had no difficulty approaching and extinguishing the fire upon his initial entry.⁶⁷

In addition to his primary arguments, Justice Zarella also asserts that the testimony of Igoe, Roy and Christopher Marvin, three fire investigators who were at the

crime scene on the night of the murder, supports the third habeas court's determination that it was not possible to ascertain the fire's approximate burn time. We disagree with Justice Zarella's interpretation of the testimony of these witnesses, all of whom stated unequivocally that they did not perform the type of investigation that would have enabled them to estimate when the fire started. For example, one of the witnesses, Roy, testified that he had no recollection of the events of that evening and that his role at the time was limited to moving furniture, sweeping the floor, and the like. Although we also dispute the remainder of Justice Zarella's factual contentions, we need not belabor the matter further because, even if we were to assume that a jury reasonably could find Corry's testimony more persuasive than that of DeHaan and Kelder, that would not alter our conclusion that the third habeas court's materiality determination was incorrect as a matter of law. This is so because, as we have indicated, there is absolutely nothing in DeHaan's or Kelder's testimony, or anywhere else in the record, that would permit the conclusion that a jury reasonably could not credit their testimony.⁶⁸

Having addressed Justice Zarella's claims, we now turn our attention to the second component of the test for materiality under *Brady* and *Strickland*, that is, consideration of the petitioner's expert testimony in light of the original trial evidence, for the purpose of determining whether our confidence in the verdict is undermined by that expert testimony.⁶⁹ As we explain, the answer to that question is most certainly "yes."

C

Original Trial Evidence

It is beyond dispute that the state's case against the petitioner rested almost entirely on his incriminating statements, without which the state would have been unable to obtain a warrant based on probable cause, let alone a conviction of capital felony.⁷⁰ There was no physical evidence connecting the petitioner to the crime, except for the fact that, along with approximately one third of the male population, including another suspect in the present case,⁷¹ the petitioner is a secretor with type A blood, the same blood type as the person who left a semen stain on the victim's bedspread.⁷² The state also sought to link the petitioner to the victim's murder because he previously had undergone a vasectomy, and no sperm were found in the semen stain. At trial, however, Beryl Novitch, the lead criminalist at the state forensic laboratory who examined the stain at issue, testified that it was not at all unusual to obtain a semen sample containing no sperm even though the donor's semen contains sperm.⁷³

With respect to the petitioner's statements, the petitioner alleged in his first habeas petition that his confes-

sion was false, and, in furtherance of this claim, he maintained that he was unable to knowingly, intelligently and voluntarily participate in the police interrogation because of his mental impairment. The first habeas court dismissed this claim upon concluding, inter alia, that, because “[t]he petitioner’s real argument . . . is that his statements were involuntary [and therefore inadmissible] under the federal constitution”; *Lapointe v. Warden*, Superior Court, judicial district of Hartford, Docket No. CV-97-0571161 (September 6, 2000) (*Freed, J.*); the claim was barred by this court’s determination, in connection with the petitioner’s direct appeal from the judgment of conviction, that the trial court reasonably had concluded that the petitioner’s admissions were voluntary. *State v. Lapointe*, supra, 237 Conn. 703; see footnote 16 of this opinion. For purposes of evaluating the strength of the state’s case against the petitioner, however, the issue is not the *voluntariness* of the petitioner’s admissions—a threshold issue that concerns the admissibility of his statements—but, rather, whether a jury would find those statements *trustworthy* or *reliable* because they constitute a true and accurate reflection of the petitioner’s involvement in the victim’s murder.

Relatively little was known about false confessions at the time of the petitioner’s criminal trial. See, e.g., *State v. Perea*, 322 P.3d 624, 641 (Utah 2013) (observing that, “[i]n the 1990s, little research had been conducted on the phenomenon of false confessions”). Significantly, since then, an abundance of social science research about the phenomenon has been conducted,⁷⁴ and, due largely to advances in DNA testing, scores of false confessions have been identified. These developments prompted the United States Supreme Court recently to observe: “By its very nature, custodial police interrogation entails inherently compelling pressures.⁷⁵ . . . Indeed, the pressure of custodial interrogation is so immense that it can induce a frighteningly high percentage of people to confess to crimes they never committed.⁷⁶ *Corley v. United States*, 556 U.S. 303, 321, 129 S. Ct. 1558, 173 L. Ed. 2d 443 (2009)” (Citations omitted; footnotes added; internal quotation marks omitted.) *J. D. B. v. North Carolina*, U.S. , 131 S. Ct. 2394, 2401, 180 L. Ed. 2d 310 (2011). Moreover, it is now “well established that people with mental illness and mental deficiencies are more prone than others to confess falsely, either because of an inordinate desire to accommodate and agree with authority figures or because they are unable to cope with the psychological intensity of the police interrogation, which frequently includes the use of sophisticated ploys and techniques designed to weaken the suspect’s resolve.” *State v. Edwards*, 299 Conn. 419, 446, 11 A.3d 116 (2011) (*Palmer, J.*, concurring); see also, e.g., B. Garrett, *Convicting the Innocent: Where Criminal Prosecutions Go Wrong* (2011) p. 38 (noting that of forty DNA exonera-

tions discussed, 76 percent of exonerees who falsely confessed were either juveniles—33 percent—or mentally disabled—43 percent).

One cannot evaluate the strength of the state's evidence against the petitioner in the present case incognizant of the fact that our awareness of the phenomenon of false confessions has increased vastly in the nearly twenty-five years since the petitioner's conviction. One also cannot read the petitioner's statements to the police, particularly in light of the testimony of the officers who elicited them, and not be left with serious concerns about their reliability.

First, as we previously indicated, the record reveals that the petitioner suffers from a mental impairment. Although the state argued at his criminal trial that he was not "retarded" in a technical sense, it did not dispute that Dandy-Walker syndrome, a congenital malformation of the skull, had left the petitioner with such serious cognitive deficits that many people who knew him simply assumed that he *was* "retarded" ⁷⁷ According to his school records, the petitioner was eighteen years of age when he finally completed the eighth grade, which was as far as he progressed in school. ⁷⁸ Among other deficits, Dandy-Walker syndrome probably caused the petitioner to be slow and unsteady on his feet, and he also was severely visually impaired from a young age, and later became hearing impaired.

In an effort to demonstrate the severity of the petitioner's mental impairment, his trial counsel called numerous witnesses to testify at the petitioner's criminal trial and at a hearing on his motion to suppress. Without exception, they described the petitioner as a quirky, gullible and childlike man whose funny appearance and simplemindedness made him the constant butt of jokes. ⁷⁹

Following his arrest, the petitioner also was examined by a number of psychiatrists and psychologists, ⁸⁰ all of whom testified at the petitioner's trial and described him in remarkably similar terms: slow-witted; childlike; compliant; genial; guileless; talkative; and very concrete and inflexible in his reasoning. None of them observed any signs of psychosis or mood disorder. All of them seemed to agree, however, that, because of the nature of his cognitive impairment, the petitioner was quite capable of confessing to a murder that he did not commit. Donald R. Grayson, a psychiatrist, wrote in one report that the petitioner "reportedly signed a confession . . . in an attempt to extricate himself from a stressful situation and to be able to go to the bathroom and get water. Hearing this explanation from the average person would not have seemed believable to [me]. However, after spending a few hours with [the petitioner], [I] could not help but find his explanation quite believable, in view of his concrete approach to life and his apparent[ly] limited intellectual capacity." ⁸¹

According to Anne M. Phillips, a clinical psychologist in private practice, the petitioner presents “considerably younger than his chronological age” and has a “[f]ull [s]cale IQ [of] 92,” which puts him in the “lower end of the average range of intelligence” Phillips concluded that neurological damage from Dandy-Walker syndrome, however, prevented the petitioner from fully accessing his intelligence. According to Phillips, the petitioner’s “expressive vocabulary is . . . fairly weak, which may reflect an aphasic difficulty related to his historical neurological problems. His limited vocabulary may also contribute to the interpersonal impression of much lower overall intellectual ability which [he] creates. He is not good at expressing his thoughts or feelings and is apt to be awkward and rather childlike in his expression. [The petitioner] also appears limited in receptive language, partially due to acuity problems, and partially to comprehension limitations. As a result, he is inclined to sometimes respond arbitrarily to conversation or questions [that] he does not fully understand. [The petitioner also] tends to be quite concrete and inflexible in his reasoning, understanding situations in a narrow and set way, and having considerable difficulty adopting alternative interpretations of events, or even making sense of unfamiliar events.” At trial, Phillips testified that “interpersonally, [the petitioner] comes across as a funny little guy, kind of odd, and, when he responds to questions in a very literal fashion—[such as] when you ask him who his mother is, [and] he says, ‘Mrs. Lapointe,’ or when you ask him about his childhood, and he says, ‘I was a boy’—there is a sense of ‘H[uh]?’ ”⁸²

With respect to the statements to the police, although the nine hour interrogation was not recorded, the testimony of the three officers who conducted it provides significant insight into the tactics that were used and the petitioner’s state of mind during questioning. Upon his arrival at the Manchester police station, the petitioner initially was questioned by Lombardo. According to Lombardo, as soon as the petitioner entered the interrogation room, Lombardo told the petitioner that there was no question in his mind that the petitioner was responsible for the victim’s murder. Lombardo testified that the petitioner did not react to the accusation as Lombardo had expected, that is, with a strong or loud objection; instead, the petitioner just sat there passively, shaking his head and quietly saying, “[n]o”⁸³ Lombardo stated that the petitioner immediately asked him “if it would be possible for someone to commit a crime and then not remember it” According to Lombardo, approximately one hour into the interrogation, the petitioner slumped in his seat, breathed heavily, and said, “I killed her.” The petitioner then asked Lombardo whether it was possible “that he committed the crime, and then . . . blacked out and just [did not] remember it.” Although Lombardo told

the petitioner that it was possible, he thought the petitioner's question was "just another ploy" to avoid telling the truth. According to Lombardo, after he told the petitioner that a person could commit a crime and not remember it, the petitioner gave the first of three sworn statements confessing to the victim's murder. In it, he stated: "On March 8, 1987, I was responsible for [the victim's] death and it was an accident. My mind went blank."

After the first statement was signed and notarized, Lombardo allowed the petitioner to go to the bathroom. At this point, Lombardo was aware that he did not have enough evidence to charge the petitioner with any crime. When the petitioner returned to the interrogation room, Lombardo told him that he needed to provide more details about the crime. According to Lombardo, the petitioner stated, "[s]he wouldn't cooperate with me so I killed her," but then immediately "denied that he had committed the crime and told [Lombardo] that the only reason . . . he had given [the earlier] statement was because he [thought Lombardo] wouldn't let him go to the bathroom unless he [did]" Lombardo then began to put more pressure on the petitioner. For example, he told the petitioner that a witness had seen him walking his dog near the victim's apartment one hour before the fire was reported⁸⁴ and that the police had found his fingerprints on the murder weapon, neither of which was true. According to Lombardo, the petitioner "became quiet and kind of slumped down in his chair when confronted . . . with that information." Immediately thereafter, the petitioner gave a second sworn statement, in which he admitted to the following: "On March 8, 1987, I went to visit [the victim] with my wife and son. We left the apartment in the late afternoon and went home. I left my house sometime after that to take the dog for a walk. I was at [the victim's] apartment with the dog. We were both there together and the time was right. I probably made a pass at her and she said no. So I hit her and I strangled her. If the evidence shows that I was there, and that I killed her, then I killed her, but I don't remember being there. I made a pass at [the victim] because she was a nice person and I thought[t] that I could get somewhere with her. She was like a grandmother to me, that I never had."

Following this second statement, the petitioner became visibly despondent. According to Lombardo, when he pressed him for more details about the crime, the petitioner stated, "[i]f I tell you everything, then the whole town's going to find out and know that I am a sex fiend." He also told Lombardo that Martin and their son were the only family that he had and that, if Martin found out that he had killed her grandmother, she would leave him. According to Lombardo, the petitioner stated that "he couldn't bear the thought of losing his family and that, if his family did leave him, he might as well be dead." Thereafter, Lombardo left the room to speak

to Morrissey, who had just returned from interviewing Martin. At this time, Lombardo decided that it would be best for Morrissey to continue the interrogation, which he did.

According to Morrissey, his job was “to get more information” from the petitioner about the murder. Toward that end, he began the interview by informing the petitioner that he had just come from speaking to Martin, that she had been informed of his role in the victim’s death, and that Martin wanted him to cooperate with the police. The petitioner again denied any involvement in the murder, stating repeatedly that he must have “black[ed] out” because he simply had no memory of the crime. In an effort to “refresh his memory of what happened,” Morrissey repeatedly led the petitioner through the entire “sequence of events,” a process that, according to Morrissey, took several hours and considerable coaxing. When they were finished, Morrissey prepared a written statement for the petitioner to sign. In that statement, the third and final statement, the petitioner provided a more detailed account of his involvement in the murder: “[O]n Sunday March something I was at [the victim’s] apartment with my son . . . and my wife [Martin]. We visited from about [2 until 4] p.m. and then walked home. After being home [a while] I left to walk the dog. I then walked back up to [the victim’s] apartment and she invited me in. We each had a cup of coffee (I think [the victim] had tea) and I sat on the couch. I recall having my matches and my smoking pipe in my jacket pocket.

“After my coffee I went into the bathroom (which is located off the bedroom). When I came out [the victim] was in the bedroom combing her hair. She was wearing a pink house coat type of outer wear with no bra. (I could see her breasts when she bent over). I grabbed her with my hand around her waist area. When I did that she pushed me. I threw her on the bed and took off her underwear because I wanted to have intercourse with her. I got my penis inside her for a few strokes and then pulled out and masturbated. I did [ejaculate] on the bed spread when I was finished. I had already thrown her underwear on the right side of the bed. After the sex she said she was going to tell my wife I then went to the kitchen and got a steak knife with a hard plastic brown handle and stabbed [the victim] in the stomach while she was [lying] on the couch. The rest of the incident I do not recall although I admit to having strangled her.” According to Morrissey, the petitioner indicated that he strangled the victim by placing both of his hands around her neck.

The petitioner signed his third statement at approximately 12:30 a.m. on July 5, 1989. At that time, Morrissey and Lombardo asked Brooks, their commanding officer, to speak to the petitioner because the petitioner continued “to vacillate, and they wanted to see whether . . .

[Brooks] could get him to [stop] doing that.” According to Brooks, the petitioner “would give a statement to [his officers], sign it, and then claim that he was only . . . giving back information that was given to him, only saying what he thought [the officers] wanted to hear” Brooks testified that the petitioner’s “recanting behavior had continued right to [the] end of [the interrogation],” and that Lombardo and Morrissey enlisted Brooks to speak to the petitioner because Brooks and the petitioner had a prior relationship, and the officers thought that Brooks could get the petitioner “to perhaps take a stand one way or the other.” When Brooks went into the interrogation room and spoke with the petitioner, the petitioner continued to vacillate and appeared extremely agitated. At approximately 1:20 a.m., the petitioner was instructed to go home, and he did so. The petitioner would later testify that he does not know why he confessed except that he had to go to the bathroom, and because he wanted to go home. The petitioner also testified that Morrissey had told him that, if he did not cooperate with the police, Martin, his wife, could be charged with a crime, and their son would become a ward of the state, accusations that Morrissey has denied.⁸⁵

It is difficult to read the officers’ account of the petitioner’s statements in light of the other trial evidence without experiencing the sinking discomfort that comes with the realization that an injustice may have occurred. Indeed, no fair-minded person who is familiar with the evidence in the present case can read the petitioner’s statements and feel confident that they represent a true and accurate account of the victim’s murder by the person responsible for her death. The first statement—“I was responsible for [the victim’s] death and it was an accident” and “[m]y mind went blank”—is totally devoid of incriminating detail. The second statement—“I probably made a pass at her and she said no,” and, “[i]f the evidence shows that I was there, and that I killed her, then I killed her, but I don’t remember being there”—sounds more like the statement of a man who, having just been told by someone he trusts that there is incontrovertible proof that he sexually assaulted and murdered his wife’s grandmother, is trying to understand how he could have no memory of such a horrific event. Although the third statement is more specific, most of the details bear little resemblance to the actual crime scene evidence; see footnote 12 of this opinion; and those that do, in particular, the facts that presumably only the killer would know, have the ring of someone *confirming* information (“I did [ejaculate] on the bed spread when I was finished” and “I had already thrown her underwear on the right side of the bed”) rather than conveying it.⁸⁶

The respondent raises several arguments why there would be no reasonable probability of a different result at a new trial notwithstanding the testimony of Martin

and the petitioner's burn time experts. We do not find the respondent's arguments persuasive. For example, the respondent argues that a jury would be unlikely to credit Martin's testimony because she did not inform the police, until she was questioned by Morrissey two years after the murder, that the petitioner had walked their dog on the day of the murder. The record reveals, however, that the petitioner did not become a suspect in the victim's murder until two years after the murder, at which time Martin was interviewed for the first time about the petitioner's whereabouts on the day in question. Indeed, the audio recording of Martin's interview reveals, contrary to the respondent's contentions, that a jury readily could conclude that, until that moment, it had never crossed Martin's mind that her husband had any role in the victim's murder.⁸⁷

The respondent also refers to certain facts that the state relied on at the petitioner's criminal trial, most of which are set forth in this court's decision in *State v. Lapointe*, supra, 237 Conn. 696–702, in which we rejected the petitioner's claims on direct appeal, to support the contention that there is no reasonable probability of a different result even if a jury were to consider the testimony of DeHaan, Kelder and Martin.⁸⁸ For example, the respondent argues that, "before any information regarding a possible sexual assault became known to the police or the public, the [petitioner] stated in a conversation with . . . a friend of the Lapointe family . . . that 'it was a shame they killed an old lady, but they didn't have to rape her, too.'" Id., 699. At trial, the petitioner testified that, on the night of the murder, he overheard someone at the hospital discussing the fact that the victim had been sexually assaulted. This is a perfectly plausible explanation as to how he knew about the sexual assault because Marvin, a Manchester volunteer fire marshal, testified that he also had heard hospital personnel speaking openly about the sexual assault. In addition, Elizabeth Martin, the victim's daughter-in-law, testified that, on the morning after the murder, she called the Manchester Police Department and was informed by Brooks that the victim had been sexually assaulted. Elizabeth Martin stated that she immediately conveyed this information to Karen Martin and to her brother with instructions not to tell their father, the victim's son, because she was afraid the news would make him emotionally distraught. Finally, within days of the victim's murder, there was speculation in the newspaper that the victim had been sexually assaulted and that Frederick Merrill, a recently released convict who had committed a similar home invasion and sexual assault of a fifty-five year old woman just three days after the victim's murder and three miles from the victim's apartment, also had sexually assaulted and killed the victim.⁸⁹

The respondent further argues that DeHaan's and Kelder's testimony would not have made a difference

at the petitioner's criminal trial because it is duplicative of the testimony of Marvin, who, according to the respondent, "assisted [the state fire marshal] in the investigation, and offered his own burn time estimate for the defense" Marvin's estimate, the respondent maintains, "differed in no meaningful way" from the estimates provided by DeHaan and Kelder. In reliance on these assertions, the respondent contends that Marvin's testimony, coupled with the petitioner's testimony at trial that he was at home with his family between the hours of 7 and 8 p.m., compels the conclusion that the jury considered and rejected an alibi defense based on the probable burn time of the fire. This claim is wholly without merit. Marvin was not a professional firefighter much less a forensic fire expert; he was a *volunteer* firefighter who was called by the petitioner to testify that, on the night of the murder, he overheard hospital personnel discussing the fact that the victim had been sexually assaulted. It is true that, when asked on direct examination how long it might have taken for the fire to reach its maximum temperature, Marvin estimated that the fire started about fifteen to twenty minutes prior to reaching its peak temperature at around 8:10 p.m. Marvin qualified his answer, however, by stating that it was "extremely rough" and "real hypothetical," undoubtedly because he was not a professional fire investigator. Indeed, on cross-examination, Marvin admitted that he really had "no idea when the fire was set" and that his estimate of the fire's maximum temperature was just "a guess" More important, however, the petitioner *did not rely on Marvin's estimate* to support an alibi defense based on the fire's burn time, or for any other purpose. In fact, to the extent that the petitioner sought to establish that he could not have murdered the victim because he was at home when the murder occurred, the petitioner never contended that his claim was supported by *any* burn time evidence. In light of the foregoing, it strains credulity to believe that the jury—entirely on its own, without any argument by the petitioner's trial counsel or guidance from the trial court—would have considered an alibi defense based on Marvin's rough and inexperienced testimony concerning the time that it took for the fire to reach its maximum temperature.

The respondent also relies on the testimony of Jean Strimike, the petitioner's former neighbor, who testified that, after the petitioner became president of their four member condominium association, he memorized all of the association's complex rules and bylaws, and was a stickler about enforcing the rules. Strimike stated that she and the petitioner got into a heated dispute over nonconforming flowers that she had planted in front of their building, and, after she refused to remove them, the petitioner stomped them into the ground. The most we can say about this evidence, which very much typifies the kind and quality of evidence that the state pre-

sented at the petitioner's criminal trial,⁹⁰ is that it reveals that the petitioner is someone who could behave poorly on occasion. It clearly does not give rise to a reasonable inference that the petitioner was capable of cold blooded murder.⁹¹ Of course, the state will be free to seek to introduce this evidence at a new trial and, to the extent it is admissible, to rely on whatever probative value it may have.

IV

CONCLUSION

The petitioner was forty-two years old when he allegedly committed one of the most brutal crimes in our state's history—the rape, torture and murder of a defenseless eighty-eight year old woman, a person who, by all accounts, was like a grandmother to him. Although there is abundant evidence in the record concerning the petitioner's simplemindedness, his peculiarities and his very rigid way of thinking, one searches the record in vain for evidence that he ever was physically violent, that he suffered from a mood disorder, psychosis, drug addiction or anything else that could explain why, after visiting the victim every Sunday for years, he suddenly went back to her apartment on the Sunday in question and brutally murdered her, without his wife noticing either that he had left their house or any change in his demeanor or appearance upon his return. Furthermore, at the petitioner's criminal trial, the state was not required to commit to any particular time frame for the murder, arguing only that it occurred sometime between 5:45 p.m., when the victim was last seen alive by Howard, her daughter, and 8:05 p.m., when she failed to answer Howard's telephone calls. If, however, the original jury were to have heard and credited DeHaan's and Kelder's testimony that the fire was set between 7:30 and 8:05 p.m., and if that jury also were to have heard and credited Martin's testimony that the petitioner was at home with her watching television at that time, there is not just a reasonable probability of a different result, there is a near certainty of one. And, as we have explained, there simply is no reason why the jury reasonably could not have credited that testimony. The petitioner therefore has established, under *Strickland*, that his first habeas counsel's representation of him was constitutionally deficient due to counsel's failure to pursue a *Brady* claim founded on the state's suppression of the Ludlow note because that nondisclosure deprived the petitioner of evidence establishing a complete and potentially compelling alibi, thereby gravely undermining the reliability of the verdict against him. Because the record demonstrates convincingly that the petitioner is burdened by an unreliable conviction, he is entitled to a new criminal trial.

The judgment of the Appellate Court is affirmed.

In this opinion ROGERS, C. J., and EVELEIGH and

McDONALD, Js., concurred.

* March 31, 2015, the date that this decision was released as a slip opinion, is the operative date for all substantive and procedural purposes.

¹ The petitioner was convicted of capital felony, arson murder, felony murder, murder, arson in the first degree, assault in the first degree, sexual assault in the first degree, sexual assault in the third degree, and kidnapping in the first degree. See *State v. Lapointe*, 237 Conn. 694, 695, 678 A.2d 942, cert. denied, 519 U.S. 994, 117 S. Ct. 484, 136 L. Ed. 2d 378 (1996). His convictions of arson murder, felony murder, murder, sexual assault in the first degree, and sexual assault in the third degree were combined with his capital felony conviction for sentencing purposes “to comport with constitutional double jeopardy protections.” *Id.*, 695 n.1.

² Because the state sought the death penalty in connection with the capital felony charge, a penalty phase hearing was conducted in accordance with General Statutes (Rev. to 1987) § 53a-46a. The jury found the existence of a mitigating factor, and, pursuant to § 53a-46a (f), the petitioner received a sentence of life imprisonment without the possibility of release.

³ To establish that a new trial is required because of a *Brady* violation, a defendant must establish, first, that the state failed to disclose evidence, second, that that evidence is exculpatory, that is, it is favorable to the defendant, and, third, that the evidence is material. See, e.g., *Adams v. Commissioner of Correction*, 309 Conn. 359, 369, 71 A.3d 512 (2013). To establish materiality, the defendant must demonstrate that there is a reasonable probability that, if the jury had considered the evidence, the result of the trial would have been different. See *id.*, 370. In this context, a reasonable probability is a probability sufficient to undermine confidence in the outcome of the original trial. *Id.*, 370–71. Ultimately, materiality is a mixed question of law and fact that is subject to this court’s plenary review. E.g., *State v. Ortiz*, 280 Conn. 686, 720, 911 A.2d 1055 (2006). We discuss these requirements more fully in part II of this opinion.

⁴ As we discuss more fully hereinafter, under *Strickland*, a defendant can prevail on a claim of ineffective assistance of counsel only if he can establish both that counsel’s performance fell below an objective standard of reasonableness and that the deficient performance prejudiced the defendant because there is a reasonable probability that, but for counsel’s substandard performance, the result of the proceeding would have been different. See, e.g., *Johnson v. Commissioner of Correction*, 288 Conn. 53, 63, 951 A.2d 520 (2008). A reasonable probability is a probability sufficient to undermine confidence in the outcome. See, e.g., *Adams v. Commissioner of Correction*, 309 Conn. 359, 370–71, 71 A.3d 512 (2013).

⁵ The Appellate Court affirmed the judgment of the third habeas court in part, upholding that court’s denial of the petitioner’s claim of actual innocence. See *Lapointe v. Commissioner of Correction*, *supra*, 138 Conn. App. 468, 480. The Appellate Court also dismissed in part the petitioner’s appeal. See *id.*, 480.

⁶ The procedural background and the vast majority of the historical facts that follow are not disputed. To the extent that additional facts are relevant to our disposition of the parties’ claims, we identify them in part III of this opinion.

⁷ Dandy-Walker syndrome is a congenital brain malformation known to cause poor motor skills and, in most cases, cognitive impairment. See generally *Lapointe v. Warden*, Superior Court, judicial district of Hartford, Docket No. CV-97-0571161 (September 6, 2000) (*Freed, J.*).

⁸ A secretor is a person who secretes blood type antigens into his bodily fluids. See *Stedman’s Medical Dictionary* (28th Ed. 2006) p. 1739.

⁹ Evidence adduced at the petitioner’s criminal trial established that 41 percent of the population have type A blood and that 80 percent of the population are secretors.

¹⁰ Postconviction DNA testing revealed, however, that the pubic hair contained mitochondrial DNA that did not match that of the victim or the petitioner and that the gloves also contained DNA that did not match that of the victim or the petitioner.

¹¹ Originally, Ludlow was the lead investigator in the case.

¹² For example, the petitioner stated that he had stabbed the victim once in the stomach while she was lying on the couch; in fact, the killer stabbed the victim eleven times while she lay on her bed, and all but one of the stab wounds were to the victim’s back. Although the petitioner told Morrissey that he had strangled the victim manually, the evidence indicated that she had been asphyxiated by pressure to the right side of her neck from a blunt object. The petitioner also stated that the victim was wearing a pink

nightgown that exposed her breasts, but no such article of clothing was recovered from the crime scene. Rather, the evidence indicated that, at the time of the attack, the victim was wearing pants, a blouse and a blue sweater, which the perpetrator forcibly removed. In addition, in the affidavit in support of the warrant for the petitioner's arrest, Lombardo noted that the petitioner also "was inconsistent when talking about the ligatures that were tied around [the victim's] neck and arms." According to Lombardo, the petitioner "first said that he had bound [the victim] with rope that he had brought . . . from home. The evidence showed that [the victim] had been bound with articles of clothing from her closet. [The] [p]etitioner did, however, recant his statement about the rope later in the interview."

¹³ These details were: (1) a semen stain was recovered from the victim's bedspread; (2) the victim's underwear had been thrown to the right side of the bed; and (3) the victim was stabbed with a steak knife with a hard plastic handle.

¹⁴ The state argued at trial that the petitioner conducted himself in that manner because he was stalling for time before summoning help.

¹⁵ In support of his motion to suppress the incriminating statements, the petitioner claimed, first, that he never was advised of his rights under *Miranda v. Arizona*, 384 U.S. 436, 86 S. Ct. 1602, 16 L. Ed. 2d 694 (1966), even though he was in police custody when he made the statements and, second, that the statements were involuntary because they were the product of police coercion. See *Lapointe v. Commissioner of Correction*, supra, 237 Conn. 702–703. The trial court found that the petitioner was not in custody when he was questioned, and, consequently, *Miranda* warnings were not required. *Id.*, 703. The trial court further found that, in fact, the petitioner had been advised of his rights in accordance with *Miranda* and that he knowingly and intentionally waived those rights. *Id.* The trial court also found that the petitioner's statements were made voluntarily and were not the product of police pressure. *Id.*

¹⁶ This court agreed with the state that the trial court properly had determined that the petitioner was not in custody when he made the statements and that the statements were made voluntarily. *Lapointe v. Commissioner of Correction*, supra, 237 Conn. 703.

¹⁷ The petitioner also had alleged: "(1) actual innocence premised on [his] inability . . . physically and intellectually to carry out and to conceal the crimes [of] which he had been convicted; (2) prosecutorial impropriety [stemming from the suppression of] a notebook that contained Lombardo's notes from the homicide investigation; (3) discrimination by the state on the basis of the petitioner's physical and mental disabilities; [and] (4) ineffective assistance of trial counsel . . . for their failure, inter alia, to procure the Lombardo notebook, to retain appropriate experts for the defense at trial and to argue that men's gloves and certain hairs of unknown origin that had been found at the crime scene demonstrated that the petitioner was innocent of the charged crimes . . ." *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 459. The petitioner further alleged ineffective assistance of trial counsel on the basis of their failure to present a third-party culpability defense predicated on the testimony of witnesses who, on the night of the murder, saw a man, bearing no resemblance to the petitioner, flee from the crime scene area in a disheveled condition at approximately 8 p.m., shortly before the fire was reported.

¹⁸ In accordance with this testimony, the petitioner claimed in his second habeas petition that the Ludlow note was exculpatory both for the substance of the information that it contained about the minimum possible burn time *and* because that information would have prompted the petitioner's trial counsel to consult a burn time expert and to employ a different trial strategy. According to the petitioner, this strategy would have prompted trial counsel to call Martin as a witness and to focus on an alibi defense predicated on her testimony and the testimony of a burn time expert as to how long the fire burned.

¹⁹ The Appellate Court viewed the evidence in the light most favorable to the petitioner because the second habeas court had dismissed the habeas petition inasmuch as the petitioner "failed to establish the prima facie elements of his claims." *Lapointe v. Commissioner of Correction*, supra, 113 Conn. App. 388.

²⁰ It would appear that, under the Appellate Court's assessment of the evidence, Martin's testimony alone was exculpatory because, considering that testimony most favorably to the petitioner, she placed him at home during the entire period within which the victim's murder could have been committed. It also appears, however, that, in the view of the Appellate Court, the minimum burn time reflected in the Ludlow note buttressed that alibi

evidence. See *Lapointe v. Commissioner of Correction*, supra, 113 Conn. App. 392.

We note, in addition, that the Appellate Court also agreed with the petitioner that the second habeas court improperly concluded, albeit without explanation, that the petitioner had not made a prima facie showing that first habeas counsel's representation of the petitioner was constitutionally deficient on the basis of his failure to allege ineffective assistance of the petitioner's trial counsel as a result of their failure to utilize certain evidence to prove the unreliability of the petitioner's confessions. See *id.*, 402. In particular, the petitioner had maintained in his second habeas petition that first habeas counsel's representation of the petitioner was ineffective in that he failed to allege that, in closing argument, trial counsel improperly failed (1) to argue that the petitioner's statement describing the clothes that the victim was wearing at the time of the attack did not match the crime scene evidence, (2) to argue that a pubic hair recovered from the victim's sweater, which presumably was left by the actual killer, could not be linked to the petitioner, (3) to argue that a pair of men's gloves recovered from the crime scene, which had no connection to the petitioner or the victim, was likely left by the actual killer, (4) to emphasize that the petitioner's statement that he manually strangled the victim was inconsistent with the actual method of strangulation, namely, asphyxiation by pressure to the right side of the victim's neck with a blunt object, and (5) to emphasize that the petitioner's statement that he had stabbed the victim on the couch did not correlate to the physical evidence indicating that the victim had been stabbed on the bed. *Id.*, 399–401. The Appellate Court concluded, contrary to the determination of the second habeas court, that these claims, taken together, were sufficient to establish a prima facie case of ineffective assistance of trial counsel, and, therefore, the court remanded the case to the habeas court for further proceedings on that claim, as well. See *id.*, 402, 404.

²¹ The third habeas court permitted the petitioner to amend his second habeas petition to include a claim of actual innocence based on newly discovered DNA evidence. “The [resulting] operative three count complaint set forth the following three claims: (1) [First habeas counsel] provided ineffective assistance . . . by failing to raise as an issue the state's suppression of its arson expert's opinion that the burn time of the fire set in the victim's apartment was between ‘30–40 mins. Poss.’; (2) [First habeas counsel] provided ineffective assistance . . . by failing to prove that Culligan and Cosgrove, the petitioner's trial counsel, provided ineffective assistance . . . by failing to utilize available evidence to demonstrate the factual unreliability of the petitioner's inculpatory statements to the police; and (3) the petitioner was actually innocent of the crimes [of] which he was convicted as evidenced by DNA testing on gloves and a pubic hair collected at the crime scene.” *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 462.

²² The petitioner also called Martin as a witness at the third habeas trial. Although she had considerable difficulty recalling with any degree of accuracy events that had occurred on the day of the victim's murder some twenty-three years earlier, she stated in no uncertain terms that all of the statements that she had made about the matter during that time period, including her 1987 statement immediately following the murder, her 1989 tape-recorded statement to Morrissey, and her 1992 suppression hearing testimony, were completely truthful. Those statements make clear that, on the night of the murder, the petitioner was at home with Martin and their son from 7 p.m. until approximately 8 p.m., when Howard asked the petitioner to go to the victim's home to check on the victim.

²³ All references to temperature in this opinion are to the Fahrenheit scale.

²⁴ As we explain more fully in part III A of this opinion, the record reveals that, contrary to Corry's assertions, DeHaan did *not* testify either that the fire was a high energy fire or that the floor temperature inside the victim's apartment was 400 degrees when firefighters entered.

²⁵ The third habeas court described the Ludlow note as “potentially” exculpatory in light of the Appellate Court's conclusion that, contrary to the determination of the second habeas court, the petitioner had indeed made out a prima facie case that the note was exculpatory for purposes of *Brady*. See *Lapointe v. Commissioner of Correction*, supra, 113 Conn. App. 392. Nevertheless, in light of the Appellate Court's conclusion, it appears that the respondent was entitled, on remand to the third habeas court, to present evidence demonstrating why, in his view, the note was *not* exculpatory, even though the petitioner established a prima facie basis for his claim. See, e.g., *Adams v. Commissioner of Correction*, 309 Conn. 359, 369–70, 71 A.3d 512 (2013) (to prove *Brady* violation, defendant must establish that state's withholding of information was both exculpatory and material). The

third habeas court observed, however, that the Appellate Court “concluded that the petitioner has established the exculpatory nature of the Ludlow note and [therefore] satisfied the first prong of the *Brady* analysis.” Considering itself bound by this determination, the third habeas court treated the Ludlow note as exculpatory.

With respect to the issue of whether the state improperly had failed to disclose the Ludlow note, the third habeas court observed that there was “no indication or evidence that the . . . note was wilfully suppressed” by the state. The third habeas court did not decide whether the note nevertheless had been suppressed inadvertently by the state; instead, for purposes of its analysis, the third habeas court assumed, without deciding, that the state unwittingly had failed to disclose it to the petitioner prior to his criminal trial. The respondent has not raised either ground in its appeal from the Appellate Court’s judgment.

²⁶ As we explain more fully in part III A of this opinion, contrary to the third habeas court’s finding, Corry did not dispute DeHaan’s estimate of the peak temperature.

²⁷ As we explain more fully in part III A of this opinion, Corry did not dispute Kelder’s testimony either with respect to the fire’s energy level or with respect to the fire’s peak temperature.

²⁸ See footnote 3 of this opinion.

²⁹ See footnote 4 of this opinion.

³⁰ The third habeas court also rejected the petitioner’s claim of actual innocence based on DNA testing of the gloves and the pubic hair recovered from the crime scene, as well as the claim that first habeas counsel’s representation of the petitioner was constitutionally deficient on the basis of his failure to demonstrate ineffective assistance of trial counsel as a result of their failure to utilize available evidence to demonstrate the unreliability of his confessions. As to the first claim, “[a]lthough the [third habeas] court found that the petitioner had presented newly discovered evidence with respect to DNA analysis, it concluded that the results were unreliable, particularly as to the pair of gloves, because of contaminated or potentially contaminated DNA samples. With respect to the pubic hair, the [third habeas] court stated that it could not be determined with any degree of certainty how the hair came to rest on the [victim’s] blue sweater. Although the DNA analysis excluded the petitioner as a donor, the [third habeas] court reasoned that the hair could have come from the perpetrator or it could have been transferred to the crime scene in a manner unassociated with the attack on the victim.” *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 463. With respect to the second claim, the third habeas court concluded that, although trial counsel could have done more to highlight the various ways in which the petitioner’s statements were inconsistent with the evidence, those discrepancies were otherwise readily discernible to the jury, and, consequently, the petitioner was not prejudiced by trial counsel’s failure to emphasize the inconsistencies.

³¹ “The record contains testimony that it took the petitioner approximately ten to fifteen minutes to walk from his home to the victim’s apartment. There also is testimony that because the petitioner has Dandy-Walker [s]yndrome, he is slow and unsteady on his feet.” *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 477 n.19. Thus, it would have taken the petitioner at least twenty minutes to walk to and from the victim’s apartment, and it likely would have taken him longer if he had his small dog with him, as he asserted in his statements to the police.

³² In support of its conclusion, the Appellate Court also stated: “The petitioner exercised his sixth amendment right to a trial by an impartial jury. If the Ludlow note had been disclosed to trial counsel, however, it would have been the responsibility of the jury and not the court to weigh the credibility of the arson experts. Whether the burn time evidence, which was so critical in buttressing [the petitioner’s] alibi defense, raised a reasonable doubt as to the petitioner’s guilt would best be a determination left to the jury and not a habeas court.” *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 476–77 n.17.

³³ We note that, on appeal to the Appellate Court, the petitioner also claimed that the third habeas court improperly had rejected his actual innocence claim and his claim that first habeas counsel’s representation was constitutionally deficient on the basis of his failure to establish that trial counsel had rendered ineffective assistance by not utilizing the available evidence—in particular, the many inaccuracies in the petitioner’s statements about the how the crime was committed—to demonstrate that his admissions were unreliable. See *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 464, 468. The Appellate Court rejected the first claim; id.,

468; and declined to reach the second claim in light of its determination that the petitioner was entitled to a new trial due to the state's suppression of the Ludlow note in violation of *Brady* and first habeas counsel's deficient performance under *Strickland* owing to his failure to pursue that claim competently. See *id.*, 479–80 n.22.

In addition, the respondent claimed in the Appellate Court that the state had not suppressed the Ludlow note. *Id.*, 472 n.16. With respect to this issue, the Appellate Court acknowledged that the third habeas court had assumed without deciding that the note was inadvertently suppressed by the state; *id.*, 472; and then stated: “On appeal, the respondent argues that the Ludlow note was not suppressed because it was preliminary and speculative, and the petitioner’s trial counsel knew of its essential facts. The [third] habeas court did not address those claims. In its memorandum of decision, the [third habeas] court stated: ‘There is no indication or evidence that the Ludlow note was [wilfully] suppressed, so this court will assume, without deciding, solely for purposes of addressing the petitioner’s claim, that the Ludlow note was inadvertently suppressed.’ . . . Without any further analysis by the [third habeas] court, the record is inadequate . . . to address this argument of the respondent.” *Id.*, 472 n.16. Because, however, the respondent had prevailed in the third habeas court, he had no reason to seek a determination with respect to his claim that the Ludlow note had not been suppressed. Consequently, the record was inadequate for review of the issue through no fault of the respondent, and the Appellate Court therefore should have remanded the case to the habeas court for a resolution of the issue. On appeal to this court, however, the respondent has not challenged the decision of the Appellate Court with respect to this issue, and, therefore, the respondent has waived any such claim. We do note, however, that, even if the respondent had preserved the issue, and sought a remand to resolve it, there is a substantial likelihood that he would not prevail, albeit for an entirely different reason than that given by the Appellate Court. Specifically, if, contrary to the assumption of the third habeas court, the Ludlow note had not been suppressed by the state, the petitioner likely would be able to establish in his habeas proceeding, first, that first habeas counsel should have recognized the exculpatory nature of the note and, second, that his failure to pursue a claim predicated on the note constituted ineffective assistance of counsel, thereby entitling the petitioner to a new trial, which the Appellate Court ordered in any event.

Finally, the respondent raised no claim in the Appellate Court with respect to issue of whether the Ludlow note was exculpatory. Consequently, the respondent has abandoned any such claim.

³⁴ The state’s “obligations under *Brady* to disclose such information [do] not depend on whether the information to be disclosed is admissible as evidence in its present form. The objectives of fairness to the defendant, as well as the legal system’s objective of convicting the guilty rather than the innocent, require that the prosecution make the defense aware of material information potentially leading to admissible evidence favorable to the defense.” *United States v. Rodriguez*, 496 F.3d 221, 226 (2d Cir. 2007).

³⁵ Such error occurs “when there is no evidence in the record to support [the court’s finding of fact],” or when, although there is evidence to support the factual finding, the reviewing court, upon consideration of the entire record, “is left with a definite and firm conviction that a mistake has been committed.” (Internal quotation marks omitted.) *State v. Benjamin*, 299 Conn. 223, 236, 9 A.3d 338 (2010).

³⁶ With respect to the materiality of withheld evidence, we have stated that we will give weight to the determination of the trial judge deciding that issue, even though our review is plenary, if that same judge also presided over the defendant’s criminal trial. See *State v. Ortiz*, *supra*, 280 Conn. 721–22. We do so because, in that circumstance, the judge had the opportunity to observe the trial proceedings firsthand and, as a consequence, is well positioned to assess the strength of the original trial evidence in relation to the evidence withheld by the state. See *id.*, 721. In the present case, however, no such respect is due because the third habeas court, *Nazzaro, J.*, did not preside over the petitioner’s criminal trial.

³⁷ As we have explained; see footnote 33 of this opinion; the respondent has abandoned any claim that he may have had with respect to whether, first, the Ludlow note was, in fact, exculpatory and, second, the state did, in fact, suppress the note.

³⁸ Thus, we do not ask whether the jury *conceivably* could have credited the expert testimony. The standard, rather, is whether there is a reasonable probability of the jury having credited the expert testimony, thereby giving rise to a probability of a different verdict sufficient to undermine confidence in the outcome.

³⁹ We note that, on several occasions, the third habeas court cast its materiality analysis in terms of whether the outcome of the petitioner's criminal trial reasonably *would* have been different if he had had the benefit of the expert burn time testimony for purposes of that trial. See *Lapointe v. Commissioner of Correction*, Superior Court, judicial district of Tolland, Docket No. CV-02-0818542-S (April 15, 2011) (concluding that petitioner had failed to show “how [the expert burn time testimony] reasonably *would have led* the jury to conclude [that] there was reasonable doubt in light of all the evidence presented to the jury” [emphasis added]); see also *id.* (“[t]he court is unable to conclude that [first habeas counsel’s] failure to have an arson/fire expert testify in the first habeas [proceeding] *would have resulted* in anything different [from the present] habeas [case]: a prototypical battle of the experts resulting in diverging opinions” [emphasis added]). The third habeas court did correctly state, however, that, under *Brady*, the petitioner must establish that the withheld evidence “could reasonably be taken to put the whole case in such a different light as to undermine confidence in the verdict,” and that, “if the [withheld] evidence creates a reasonable doubt [regarding the petitioner’s guilt] that does not otherwise exist, constitutional error has been committed.” (Internal quotation marks omitted.) For purposes of this appeal, we may presume that the third habeas court applied the proper legal standard because, as we explain more fully hereinafter, due to the nature of the testimony that is the subject of the petitioner’s *Brady* claim, we review that testimony *de novo*.

⁴⁰ When the issue of materiality gives rise to a disputed factual issue the resolution of which requires credibility findings by the trial court, we will give appropriate deference to those findings if they are supported by the record. We emphasize, however, that, because the predictive judgment of whether a jury reasonably might credit the *Brady* material, such that the jury reasonably might find the defendant not guilty, gives rise to a question of law, our deference to the trial court’s fact-finding is always tempered by an independent and searching examination of the record.

⁴¹ In *Behn*, which also involved a petition for a new trial based on newly discovered scientific evidence; see *State v. Behn*, *supra*, 375 N.J. Super. 413–14; the Appellate Division of the New Jersey Superior Court similarly declined to defer to the trial court’s finding that the expert scientific evidence did not warrant a new trial. See *id.*, 431–33. In that case, the trial court denied the new trial petition without a hearing in light of its determination that the newly discovered evidence, which was presented to that court in the form of comprehensive affidavits from the expert witnesses for the defense, was not “of the sort that would probably change the jury’s verdict if a new trial were granted.” (Internal quotation marks omitted.) *Id.*, 432. The Appellate Division reversed the judgment of the trial court and ordered that the defendant, Chael S. Behn, be granted a new trial; *id.*, 434; explaining that it was not necessary to remand the case for an evidentiary hearing, at which the trial court could hear live testimony from the expert witnesses, because the affidavits provided a sufficient basis for relief. See *id.* The Appellate Division observed that the trial court, “not having presided over [Behn’s criminal] trial, was in no better position to [perform the requisite] analysis than [the Appellate Division]. . . . [T]he [materiality question] presents a mixed question of law and fact, requiring that [the Appellate Division] give deference to supported factual findings of the trial court . . . but review *de novo* the [trial] court’s application of any legal rules to such factual findings. . . . In this instance, the [trial] judge’s conclusion on the [materiality] prong [does] not involve any underlying factual findings but only a legal conclusion, [namely] whether the newly discovered evidence probably would have affected the jury’s verdict. As such, [the Appellate Division] exercise[s] *de novo* review.” (Citations omitted; internal quotation marks omitted.) *Id.*, 432–33. In granting a new trial without remanding the case for an evidentiary hearing on the reliability of the expert testimony, the Appellate Division necessarily concluded that the persuasive force of the proffered expert testimony was sufficient to warrant a new trial without any finding by the trial court as to the personal credibility of the experts.

⁴² Our conclusion in this regard is limited to the kind of fact-finding that is implicated in the *Brady* context. In cases involving claims under *Brady*, the function of the habeas court is to determine whether the evidence withheld by the state is sufficiently credible that a jury reasonably could credit it and, if so, whether the evidence also is sufficiently pertinent to an issue in the case that it reasonably could lead to a different result. This predictive evaluation of the evidence is different from the ordinary case, in which the fact finder is responsible for the ultimate assessment of credibility.

Thus, as the Pennsylvania Supreme Court recently explained, “[a]ssessing credibility for purposes of [*Brady*] prejudice is not necessarily the same thing as assessing credibility at a trial.” *Commonwealth v. Johnson*, 600 Pa. 329, 359, 966 A.2d 523 (2009). After observing that its research had revealed no case that “specifically sets forth a standard for credibility determinations” in that context, the court in *Johnson* explained that “[l]ogically, however, credibility assessments [for purposes of *Brady*] are not absolutes, but must be made with an eye to the governing standard of a ‘reasonable probability’ that the outcome of the trial would have been different.” *Id.* Because, in addressing a claim under *Brady*, a habeas court’s credibility determination is not an “absolute” finding, as the factual findings of the ultimate finder of fact are, but merely is a threshold evidentiary assessment required for the purpose of determining whether the ultimate finder of fact reasonably could credit the evidence, the principle that reviewing courts typically defer to credibility findings in the *Brady* context has its sole basis in the fact that the habeas court is ordinarily in a better position to judge credibility, and is not based on the general prohibition against appellate fact-finding. Consequently, when this court is in as good a position as the habeas court to assess credibility for the purpose of reviewing a claim under *Brady*, reviewing the habeas court’s credibility assessment de novo does not place this court in the improper role of finding ultimate facts but merely allows this court to carry out its proper role of determining the legal question of materiality under *Brady*. Indeed, because we ultimately must decide whether the state violated the petitioner’s due process rights by withholding exculpatory evidence, and because the superior position of the third habeas court to view firsthand the testimony of the parties’ experts had nothing to do with its credibility findings on that issue, we would be abdicating our responsibility with respect to the issue of materiality if we did not review those findings de novo.

⁴³ In addition, as this court recently explained in clarifying the standard of review for *Brady* claims, the issue of materiality is subject to plenary appellate review, but deference is to be afforded the trial court’s findings with respect to the “underlying historical facts” *State v. Ortiz*, supra, 280 Conn. 720. The present case, however, does not require any such findings, and the third habeas court made none. Moreover, the third habeas court’s probabilistic assessment as to whether a jury reasonably might credit the exculpatory testimony of the petitioner’s experts was based solely on the court’s perception of the strength of those opinions and not on anything having to do with the experts’ experience, qualifications, character, veracity or demeanor during their testimony.

⁴⁴ In support of this contention, the respondent claims that the Appellate Court improperly (1) failed to defer to the credibility findings of the third habeas court, (2) failed to consider the petitioner’s expert testimony “in the context of the entirety of the evidence of record,” in particular, the evidence adduced at the petitioner’s criminal trial, and (3) applied an incorrect test with respect to the materiality of the petitioner’s expert testimony. We reject the respondent’s first claim because, as we have explained; see part II B of this opinion; see also part III B 2 of this opinion; under the circumstances presented, the Appellate Court properly conducted a de novo review of the third habeas court’s credibility findings. We reject the respondent’s second claim for the reasons set forth in part III C of this opinion.

We also reject the respondent’s third claim, which is predicated on the assertion that the Appellate Court, in determining that the petitioner’s expert testimony satisfied the *Brady* materiality test, “improperly based [its decision on] that which it independently deemed to be conceivable, not [on] that which was reasonably probable in light of the [third] habeas court’s finding regarding credibility and the entirety of the evidence of record.” In support of this argument, the respondent relies on the statement of the Appellate Court that the testimony of the petitioner’s experts, “if believed by the jury, could have resulted in the jury’s finding that it was temporally impossible for the petitioner to have committed the crimes [of] which he was convicted.” *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 479. According to the respondent, this language indicates “that the Appellate Court only paid lip service to *Brady*’s ‘reasonable probability’ standard, while, in actuality . . . it reached its own materiality determination speculating on the basis of what ‘could have’ happened ‘if’ certain evidence had been believed.” We do not agree that the Appellate Court resorted to speculation and conjecture in deciding the issue of materiality. The Appellate Court expressly stated that a *Brady* violation may be established only “by showing that the favorable evidence could *reasonably* be

taken to put the whole case in such a different light as to undermine confidence in the verdict. . . . [E]vidence is material only if there is a *reasonable* probability that, had the evidence been disclosed to the defense, the result of the proceeding would have been different. A reasonable probability is a probability *sufficient to undermine confidence in the outcome*.” (Citation omitted; emphasis added; internal quotation marks omitted.) *Lapointe v. Commissioner of Correction*, supra, 138 Conn. App. 476. We have no doubt that the Appellate Court, having *recited* the correct standard for materiality—one that requires a *reasonable* likelihood that the result of the original trial would have been different—also *applied* that standard. Indeed, we cannot conceive how the Appellate Court possibly could have concluded, as it did, that the unavailability of the expert burn time testimony “affected the overall fairness of the trial and was so unfair as to undermine [its] confidence in the jury’s verdict”; id., 478–79; if it had determined only that that testimony provided a remote or speculative possibility of a different result. As the respondent himself acknowledges, “[i]t is well established that [m]ere conjecture and speculation are not enough to support a showing of prejudice” in this context. (Internal quotation marks omitted.) *Sinchak v. Commissioner of Correction*, 126 Conn. App. 670, 678, 14 A.3d 348, cert. denied, 301 Conn. 901, 17 A.3d 1045 (2011). Therefore, we review the Appellate Court’s use of the term “if” as properly reflecting its engagement in a probabilistic assessment of the effect of the *Brady* material on the jury’s assessment of the evidence. Accordingly, there is no merit to the respondent’s contention that the Appellate Court relied on an improper test to determine materiality.

⁴⁵ Specifically, DeHaan testified that “the fire never got much more than—well, it was in the order of 250 to 350 kilowatts at its maximum. . . . In plain language . . . [that] would probably be about the same as an average fireplace fire.” He further explained that, in the event that there had been more ventilation—for example, if a door or window had been open during the fire—“a love seat like [the one in the victim’s apartment] is capable of generating [a] maximum heat release rate . . . in the order of 2000 kilowatts. In other words, it would have been six times [as] big [of a] fire; the fire would have basically reached the ceiling, actually spread across the ceiling, and it might have actually brought this whole room to involvement.”

⁴⁶ The respondent argues that Kelder also opined that the ground level temperature in the apartment at the time the firefighters entered was 400 degrees or more, a temperature at which the firefighters concededly would have been burned. On the contrary, Kelder testified that, once Boland opened the sliding door, “the heat became lesser right away. It . . . vent[ed] itself right out the door,” which allowed the firefighters to enter. Indeed, according to Kelder, “there was not a lot of heat in that room at the time they entered.”

We note that, on cross-examination, Kelder was asked whether, on the basis of the firefighters’ trial testimony, he could estimate the temperature inside the apartment when the firefighters entered. Kelder responded that it was probably 600 to 800 degrees at floor level when Tomkunas touched the outside of the front door, at which point, as far as Kelder could recall, another firefighter opened the sliding glass doors, “dissipating the smoke and heat . . . right out the door.” Kelder further stated, however, that he would have to review the transcript of the trial testimony of the firefighters a second time to formulate a more precise estimate of what the temperature was when they arrived and that, in any event, his analysis of the fire was dependent on factors other than entry level temperatures.

⁴⁷ DeHaan testified as follows on cross-examination:

“Q. Now, in your testimony, you indicated that you estimated that the temperature in the apartment when . . . Tomkunas entered was 300 degrees?”

“A. No, I think I said 400 degrees.

“Q. Did you say 400 degrees?”

“A. I believe I did, yes. I talked about a lot of temperatures. . . .

“Q. Well . . . what exactly do you mean by that?”

“A. I’m talking about the hot gas layer temperature, because it wouldn’t have been much hotter than that and still left so much . . . relatively undamaged in the structure. If it had been much over 400 degrees . . . then there would have been more thermal damage to materials in the structure, in the smoke layer. If [it had] been much lower than that, then . . . Tomkunas would not have necessarily been dissuaded from entering.”

⁴⁸ When asked whether it was “significant that the rug in the apartment hadn’t burned in any way,” DeHaan stated: “Yes, that shows that the temperature of the hot smoke layer never got above a certain threshold because

the hotter that smoke layer is, the more intense the radiant heat is, and the lack of damage to the . . . synthetic fiber rug indicates that the radiating heat was very limited [be]cause what happens is that, even under fairly low radiant heat intensities, synthetic fabrics, like carpets, tend to start to melt, and, when they do, they get kind of crispy to the touch; once they cool off again, they're kind of—you can actually rub your hand across [them] and detect that thermal effect . . . but there was no reported melting or ignition, even close to ignition [of the victim's carpet], and that . . . set a limit for just how hot that hot smoke layer was [at its peak].”

⁴⁹ In contrast, both DeHaan's report and Kelder's report were introduced as full exhibits.

⁵⁰ Accordingly, the third habeas court's conclusory—and factually unsupported—assertion that DeHaan's burn time estimate was inconsistent with the “historical and physical evidence marshaled by Corry” is puzzling. As we have indicated, all three experts were provided with the same information and materials about the fire. Although Kelder and Corry visited the victim's apartment complex as part of their review of the evidence, DeHaan was provided with a set of architectural drawings, and his testimony indicates that he assumed for purposes of his analysis the same conditions that Kelder and Corry observed firsthand, namely, an airtight compartment with a high insulation factor. DeHaan testified that visiting the apartment twenty-three years after the fire would have served no useful purpose because the fire was a contents fire, and the contents were no longer available for inspection. Indeed, there was no material difference in the underlying testimony of the three experts; their testimony differed only with regard to their ultimate opinion as to the estimated burn time.

⁵¹ Specifically, Corry testified as follows:

“A. Based on the evidence from witnesses and so forth, I would say 5:45 [p.m.], based on the fact that . . . Howard, the [victim's] daughter, drove by and said she saw [the victim] outside emptying trash between 5:30 and 5:45 [p.m.], and probably 7:55 [p.m.], which is when . . . Howard claimed she called [the victim] and there was no answer on the [tele]phone.

“Q. And what is the basis of your conclusion based on those facts?”

“A. Well, [the victim] was in the apartment and she didn't answer the [tele]phone, so she had already been assaulted and was probably incapacitated at that point.

“Q. So . . . with regard to the earlier time, when she was viewed outside the apartment, that was clearly before the fire was set?”

“A. Right.

“Q. So . . . in your opinion, the fire could have been set at any time within that time frame?”

“A. I think so, yes. I believe that's when it was set.”

Along the same lines, Corry predicated certain other conclusions about the fire's burn time on facts or assumptions unrelated to the dynamics of the fire itself. For example, Corry opined that the ignition point of the fire was “on the bottom of the back of the couch.” When asked why, he stated: “Only because it would [require] . . . a match, and that's what [the petitioner] said in his [third statement to the police, namely] . . . that he had a match.”

⁵² Justice Zarella's view of this case, then, is very simple. He asserts that the Appellate Court “removed any requirement that the petitioner make a credibility showing” under *Brady*, and, “[a]s a result, the Appellate Court analyzed the petitioner's claim by hypothesizing what a jury *could* find, *if* it credited the new evidence. . . . The Appellate Court granted the petitioner a new trial on the basis of the results of this speculation. . . . The issue presented to this court is whether the Appellate Court properly concluded as it did.” (Citations omitted; emphasis in original.) Of course, the only possible answer to this question is “no,” and Justice Zarella supplies it. As we explain hereinafter, however, in characterizing the issue as he does, Justice Zarella sets up, and then demolishes, the flimsiest of straw men.

⁵³ Thus, there simply is no justification for Justice Zarella to attribute to the Appellate Court an absurd standard of review. But, even if there were some question as to whether the Appellate Court had engaged in plenary review of the credibility of the parties' expert testimony or, as Justice Zarella argues, no review at all, we would not accept Justice Zarella's contention because it is well established that we would read any such ambiguity to support rather than to undermine the Appellate Court's judgment. See, e.g., *Water Street Associates Ltd. Partnership v. Innopak Plastics Corp.*, 230 Conn. 764, 773, 646 A.2d 790 (1994).

⁵⁴ What *would* be surprising is if the respondent *had* argued that the Appellate Court simply assumed the credibility of that testimony and, further, that the habeas court likewise has no role in assessing the testimony. Indeed,

the absurdity of attributing such a position to the Appellate Court is reflected in Justice Zarella's characterization of the issue of law that, he claims, is presented by this appeal, namely, whether the petitioner has the "burden to establish the credibility of new evidence in order to prove *Strickland/Brady* prejudice and the [third] habeas court's role in determining whether the petitioner has met that burden." Because it is axiomatic that the petitioner bears such a burden—in other words, because the credibility of evidence presented to establish a *Brady* claim most certainly *cannot* be assumed—to ask the question that Justice Zarella poses is to answer it.

⁵⁵ As we have explained, the respondent also claims that the Appellate Court misapplied the reasonable probability standard for ascertaining materiality under *Brady* by improperly speculating as to what a jury might find on the basis of that testimony rather than determining whether the testimony gave rise to a reasonable prospect of a different outcome. See footnote 44 of this opinion. Of course, that claim is entirely different from the claim that Justice Zarella raises *sua sponte*.

⁵⁶ We therefore reject Justice Zarella's contention that our decision in the present case is somehow inconsistent with *Blumberg Associates Worldwide, Inc. v. Brown & Brown of Connecticut, Inc.*, 311 Conn. 123, 84 A.3d 840 (2014) (*Blumberg*), in which we limited the discretion of this court and the Appellate Court to identify and address claims not raised by the parties in recognition of the fact that "our system is an adversarial one in which the burden ordinarily is on the parties to frame the issues, and the presumption is that issues not raised by the parties are deemed waived." *Id.*, 164. Because we are addressing and resolving the claim that the respondent has raised, the principles underlying *Blumberg* simply are not implicated.

⁵⁷ For his part, the petitioner argues that the Appellate Court correctly concluded that his experts were worthy of belief and that he was entitled to have a jury make the ultimate determination of whether to credit their testimony or that of the respondent's expert. Indeed, the petitioner argues that the judgment of the Appellate Court should be affirmed because "[t]he point is all the experts, as made clear by the [third] habeas court, offered credible evidence as to the fire's burn time, all of which established that the suppression of the burn time was an important and significant issue going to the heart of the prosecution. It was not for the [third] habeas court, in what it concedes was a 'contest among experts,' to determine materiality based on which expert it found the most credible." To the extent that Justice Zarella recites various arguments that the petitioner has not made, those arguments are beside the point. Because the respondent is the appellant in this appeal, we focus on whether the respondent's arguments are sufficiently persuasive to warrant reversal of the Appellate Court's judgment.

⁵⁸ Justice Zarella also contends that, "[b]ecause neither party has claimed, either in this court or the Appellate Court, that an appellate tribunal can properly make its own credibility assessments . . . we have no briefing from the parties on [this issue]" Once again, the record flatly contradicts Justice Zarella's contention. The respondent's brief contains an extensive discussion of why, in the respondent's view, the third habeas court properly resolved the materiality question as it did. Indeed, as we discuss subsequently in this opinion; see part III C of this opinion; Justice Zarella's arguments concerning the evidentiary underpinnings of the third habeas court's conclusions regarding the burn time evidence mirror the respondent's arguments in all respects—arguments that, according to Justice Zarella, the respondent was deprived of the opportunity to make, thus forcing Justice Zarella to make them on his own.

⁵⁹ We also note that, according to Justice Zarella, the third habeas court concluded that the petitioner's burn time testimony "likely would not be admissible" because it "would not be helpful to a jury" Footnote 23 of Justice Zarella's dissenting opinion. In support of this assertion, Justice Zarella relies on the following italicized language in the third habeas court's memorandum of decision: "The expert testimony on the fire and its estimated total burn time would not be in the ordinary knowledge and experience of the typical juror. While it may be relatively easy to conclude that expert testimony such as what was presented to [the third habeas] court could have been presented to the jury, the use of such experts *would not have assisted the jury in knowing precisely when the fire was set.*" (Emphasis added.) Contrary to Justice Zarella's assertion, it is perfectly clear that, in using this language, the third habeas court in no way was suggesting that the testimony of DeHaan and Kelder—two highly experienced and qualified experts in the science of fire reconstruction who, in the words of the third habeas court, were embroiled with Corry in "a prototypical battle of the

experts”—would have been inadmissible at the petitioner’s criminal trial. Rather, the court was merely explaining why, in its view, a jury would not be persuaded by that testimony, that is, because it was not sufficiently definite or precise as to when the fire was set. The third habeas court expressly stated that its rejection of the petitioner’s claim was predicated on its determination that Corry’s testimony was entitled to “more credit or weight” than the testimony of DeHaan and Kelder, and not, as Justice Zarella claims, that the testimony of DeHaan and Kelder was inadmissible. In fact, the third habeas court would have been incorrect as a matter of law if it had reached the conclusion that Justice Zarella attributes to it because it is undisputed that the testimony of the petitioner’s experts, if credited along with Martin’s testimony, would provide the petitioner with a complete alibi.

⁶⁰ As we previously noted, the third habeas court’s credibility determination was not predicated on any underlying findings that required a firsthand assessment of witness credibility. Justice Zarella, however, asserts that the third habeas court “necessarily depended on” the testimony of Igoe, a witness at both the petitioner’s criminal trial and the third habeas trial, in crediting the opinion of Corry over the opinion of DeHaan. In support of this assertion, Justice Zarella observes that Igoe, whom the petitioner called as a witness, tested a small portion of the foam from inside the couch many hours after the fire was extinguished and indicated that it burned slowly, whereas DeHaan testified that, in his view, the couch itself had burned rapidly. Justice Zarella’s assertion that the third habeas court relied on this testimony in crediting Corry’s opinion is incorrect. Igoe further testified that he never sought to determine the burn time of the fire and never rendered an opinion about how long the fire burned. In fact, as the respondent states in his brief to this court, “Igoe . . . made [it] abundantly clear when he testified at the [third habeas] trial that he could opine only that it may have taken anywhere from ‘several minutes to several hours’ for the fire to ‘get rolling,’” depending on the conditions in the house. In other words, Igoe did not know whether the fire consumed the couch in moments or hours. This testimony explains why the third habeas court did not include Igoe’s testimony as one of the several reasons why he credited Corry over DeHaan: whatever Igoe may have meant when he stated that the portion of the couch that he tested had burned slowly, there is nothing in that testimony that would cast doubt on DeHaan’s opinion regarding the burn time of the fire.

Moreover, Igoe’s testimony about the couch foam did not support Corry’s analysis over DeHaan’s or Kelder’s because, as we previously have explained, all three experts were in complete agreement about the dynamics of the fire and burn properties of the materials comprising the couch. Specifically, they all agreed that the materials, including the foam inside the couch cushions, were highly flammable and could support a powerful (high energy) fire if there had been more oxygen in the victim’s apartment. They also agreed that the fire, which was set *on the back of the couch, not the couch cushions*, burned out before it could involve the couch cushions. Photographs of the crime scene reveal that the couch cushions were relatively intact in comparison to the back of the couch, which was completely destroyed, and Corry himself believed that something must have been lying across the couch to prevent the fire from spreading to the cushions. Consequently, Igoe’s testimony at the third habeas trial could have had no bearing on the third habeas court’s evaluation of the parties’ expert testimony.

⁶¹ In none of the cases on which Justice Zarella relies to support his contention; see, e.g., *Sanchez v. Commissioner of Correction*, 314 Conn. 585, 611–12, 103 A.3d 954 (2014); *Anderson v. Commissioner of Correction*, 313 Conn. 360, 375, 98 A.3d 23 (2014), cert. denied sub nom. *Anderson v. Semple*, U.S. (83 U.S.L.W. 3678, February 23, 2015); did we have occasion to address the exceptional situation, presented here, in which this court is in as good a position as the trial court to judge credibility for purposes of the *Brady* materiality determination. Consequently, there is nothing in any of those cases that forecloses our de novo review of the credibility findings of the third habeas court in the present case.

⁶² Of course, a defendant seeking a new trial on the basis of newly discovered evidence bears a significantly higher burden of establishing the materiality of the evidence at issue than a defendant raising a claim under *Brady* or *Strickland*. This is so, of course, because *Brady* and *Strickland* seek to vindicate the defendant’s fair trial rights, whereas a new trial petition based on newly discovered evidence does not.

⁶³ In fact, the second step of the materiality analysis in this very case provides such an example. Under *Brady* and *Strickland*, it must be determined whether the evidence at issue, when considered in the context of

the original trial, is of sufficient import relative to that original trial evidence to undermine confidence in the verdict. As in all such cases, our review of that determination is de novo because we are as well situated as the habeas court to make that decision.

⁶⁴ Justice Zarella also asserts that “[s]ubsequent cases from the Indiana Court of Appeals appear to have limited, if not overruled, the holding in *Bunch*.” Footnote 21 of Justice Zarella’s dissenting opinion. Our review of the cases that Justice Zarella cites reveals otherwise. On the contrary, those cases uniformly underscore the court’s continued support of *Bunch*. See, e.g., *White v. State*, 978 N.E.2d 475, 481 (Ind. App. 2012) (agreeing with court in *Bunch* that reviewing court should not defer to threshold admissibility finding of postconviction court when that finding did not involve credibility determination because, in such circumstances, reviewing court is “in the same position as the trial court and therefore [is] able to independently assess the evidence . . . without invading the province of the trial court” [internal quotation marks omitted]), trans. denied, 982 N.E.2d 1016 (Ind. 2013); see also *Cardinal Ritter High School, Inc. v. Bullock*, 17 N.E.3d 281, 291 (Ind. App. 2014) (citing *Bunch* approvingly for proposition that it is not necessary for reviewing court to defer to postconviction court’s assessment of expert’s scientific evidence when “the assessment was not based on demeanor but on evidence that was also in front of the [reviewing] court”).

⁶⁵ Justice Zarella accuses us of posing these two examples in an attempt to “distract” the reader from our “constitutional transgression” in the present case. Footnote 17 of Justice Zarella’s dissenting opinion. On the contrary, we pose them to highlight the flaws in Justice Zarella’s constitutional analysis. Justice Zarella further explains that these “two undisputed propositions” merely present “mixed questions of law and fact” that this court previously has acknowledged are subject to de novo review. *Id.* To the extent that we understand Justice Zarella’s argument, it proves our point, first, because neither the clearly erroneous standard nor our *Kitchens* waiver inquiry represents a mixed question of law and fact, whereas the *Brady* materiality standard *is* properly characterized in that manner. E.g., *State v. Ortiz*, supra, 280 Conn. 720. Furthermore, although we have labeled the second prong of the clearly erroneous standard and the *Kitchens* waiver test as posing questions of law—because they are to be decided by the reviewing court, without regard to any findings by the trial court—they undeniably involve fact-finding of the most basic kind, and Justice Zarella makes no attempt to demonstrate otherwise. Of course, we are not now questioning our authority to make the kind of findings required in those two examples; we note them, rather, because they are manifestly inconsistent with Justice Zarella’s insistence that our exercise of de novo review in the present case is somehow unconstitutional.

⁶⁶ Such a claim is also belied by the record because DeHaan actually testified that exposure to 300 or 400 degree temperatures for any period of time “would . . . give you second, third degree burns”

⁶⁷ Justice Zarella asserts that “[t]he majority attempts to reconcile DeHaan’s testimony on this point by claiming that DeHaan, in stating that one could have approached the fire and extinguished it, meant that one could have approached the fire if one were wearing proper protective equipment. Curiously, however, no such qualification appears in DeHaan’s testimony on this point—the majority has simply made this up out of whole cloth.” Footnote 27 of Justice Zarella’s dissenting opinion. Although it certainly is true that no such qualification appears in DeHaan’s testimony, this is only because none was sought by the parties, presumably because they did not perceive the need for one. We also do not believe that an explanation is required because, unlike Justice Zarella, we do not read DeHaan’s testimony concerning the fire’s energy level in isolation so as to render it nonsensical or absurd. Rather, we read it in the context of DeHaan’s entire testimony, including his testimony that Tomkunas was unable to enter the victim’s apartment because he lacked the proper attire and breathing equipment, and *not* because the fire was of such magnitude as to preclude entry by a properly equipped firefighter. Indeed, it was undisputed among the experts that the fire never spread beyond the couch and was reduced to a smoldering fire quickly due to decreasing levels of oxygen.

⁶⁸ We note that Justice Zarella also argues that the third habeas court “was fully justified in concluding that Kelder’s opinion would be excluded from a criminal trial altogether” because “[t]he petitioner did not provide any evidence to show that Kelder used scientifically valid methods to investigate the fire, rendering his testimony not credible and inadmissible.” For the reasons that we previously discussed; see footnote 59 of this opinion;

we reject Justice Zarella's contention that the third habeas court concluded that Kelder's testimony was inadmissible. Nor is there any support in the record for Justice Zarella's contention concerning the admissibility of Kelder's testimony. Even if Justice Zarella is correct, a jury only would have to credit one of the petitioner's experts to conclude that it was temporally impossible for the petitioner to have committed the crimes with which he was charged.

⁶⁹ Justice Espinosa also has issued a dissenting opinion. To the extent that her opinion purports to raise any relevant points of law, they are identical to those raised by Justice Zarella, whose dissenting opinion we already have addressed. Thus, no substantive response to Justice Espinosa is called for. We are constrained, however, to make the following brief observation. It often has been repeated and long understood that the principal purpose of the "great writ" of habeas corpus, which traces its origins to the Magna Carta, is "to serve as a bulwark against convictions that violate fundamental fairness." (Internal quotation marks omitted.) *Luuritsema v. Commissioner of Correction*, 299 Conn. 740, 757, 758, 12 A.3d 817 (2011). "Because the writ is intended to safeguard individual freedom against arbitrary and lawless state action, it must be administered with the initiative and flexibility essential to [e]nsure that miscarriages of justice within its reach are surfaced and corrected." (Internal quotation marks omitted.) *Id.*, 757–58. Today, a majority of this court, applying those venerable legal principles following a scrupulous and objective review of the trial record, upholds the decision of a unanimous panel of the Appellate Court in concluding simply that the state's *Brady* violation, and the failure of the petitioner's habeas counsel to recognize that violation, entitles the petitioner to a new trial.

Justice Espinosa reaches a different conclusion, which, of course, is her right. Rather than support her opinion with legal analysis and authority, however, she chooses, for reasons we cannot fathom, to dress her argument in language so derisive that it is unbecoming an opinion of this state's highest court. Perhaps worse, her interest lies only in launching groundless ad hominem attacks and in claiming to be able to divine the (allegedly improper) personal motivations of the majority. We will not respond in kind to Justice Espinosa's offensive accusations; we are content, instead, to rely on the merits of our analysis of the issues presented by this appeal. Unfortunately, in taking a different path, Justice Espinosa dishonors this court.

⁷⁰ This court has long recognized that "confessions represent the most damaging evidence of guilt *State v. Ruth*, 181 Conn. 187, 199, 435 A.2d 3 (1980); see also *State v. Patterson*, 276 Conn. 452, 473, 886 A.2d 777 (2005) (evidence regarding an accused's admission of guilt generally is extremely important to the state and damaging to the accused); *Commonwealth v. DiGiambattista*, 442 Mass. 423, 446, 813 N.E.2d 516 (2004) ([t]here is no dispute that the evidence of a defendant's alleged statement or confession is one of the most significant pieces of evidence in any criminal trial)." (Citation omitted; internal quotation marks omitted.) *State v. Lockhart*, 298 Conn. 537, 596, 4 A.3d 1176 (2010); see also *Colorado v. Connelly*, 479 U.S. 157, 182, 107 S. Ct. 515, 93 L. Ed. 2d 473 (1986) ("[t]riers of fact accord confessions such heavy weight in their determinations that the introduction of a confession makes the other aspects of a trial in court superfluous, and the real trial, for all practical purposes, occurs when the confession is obtained" [internal quotation marks omitted]); *Ex parte Soffar*, Texas Court of Criminal Appeals, Docket Nos. WR-29 980-03, WR-29 980-04 (Tex. Crim. App. October 3, 2012) ("Juries routinely accept the notion that an innocent person would never confess to a crime he didn't commit; therefore, if a person has confessed, he must be guilty. . . . Unfortunately, that common-sense position is not necessarily accurate. Legal literature is littered with cases in which innocent people confess to crimes that they have not committed. . . . [O]nce a confession is introduced into evidence against a suspect at trial, it almost inevitably leads to a suspect's conviction. [Indeed] . . . [s]tudies show that individuals who falsely confessed and chose to take their cases to trial were [found guilty] by juries [73 to 81 percent] of the time before having their innocence proven." [Footnotes omitted; internal quotation marks omitted.]); M. Berger, "False Confessions—Three Tales from New York," 37 Sw. U. L. Rev. 1065, 1067 (2008) ("No one doubts that confessions have an enormous impact. Once jurors hear the defendant confessed, the result is likely to be a guilty verdict regardless of [the] defendant's attempted explanation. The notion that an innocent suspect will admit to committing a crime is deeply counter to most persons' assumptions about how they would respond if falsely accused. . . . [F]ew, if any phenom-

ena of human behavior . . . are less intuitive than that of false confessions.” [Footnote omitted; internal quotation marks omitted.]

⁷¹ Shortly after Lombardo took over the investigation of the murder and sexual assault of the victim, he obtained a saliva sample from Brad Thomas, a suspect in another sexual assault case. Test results revealed that Thomas, like the petitioner, also was a secretor with type A blood. According to Lombardo, Thomas was eliminated as a suspect because there were sperm in the semen sample from the sex crime kit in the other sexual assault case in which he had been charged. This fact might not eliminate Thomas as a source of the semen at the crime scene. See footnote 73 of this opinion.

⁷² Although there is no evidence in the record concerning the age of the stain, it always has been assumed that it was left by the killer and, therefore, that the killer is a secretor with type A blood.

⁷³ Novitch testified that “[a]n ejaculation is not a homogeneous mixture,” and because “the sperm cells [that contain DNA] are heavy,” they frequently do not combine with the other components of the semen. As a result, Novitch further explained: “[V]ery often, when I find a seminal stain, there isn’t any sperm in that . . . stain,” even though the donor’s semen does, in fact, contain sperm.

In addition, John Coleman, a forensic scientist employed by Life Codes Corporation, also examined the semen stain from the victim’s bedspread. Testifying on behalf of the state, he explained that heat will degrade the DNA in semen such that, “at 100 degrees, [it] would certainly affect the DNA molecule.” As we previously indicated, the parties’ fire experts testified at the third habeas trial that temperatures inside the victim’s apartment likely reached 400 to 600 degrees during the fire.

⁷⁴ See, e.g., *State v. Perea*, supra, 322 P.3d 642–44 and nn.10–18 (discussing some of extensive literature on false confessions and factors likely to produce them); B. Garrett, “The Substance of False Confessions,” 62 Stan. L. Rev. 1051, 1060 (2010) (“Over the past two decades, scholars, social scientists, and writers have identified at least 250 cases in which they determined that people likely falsely confessed to crimes. New cases are regularly identified.”); D. Harkins, “Revisiting *Colorado v. Connelly*: The Problem of False Confessions in the Twenty-First Century,” 37 S. Ill. U. L.J. 319, 320 (2013) (“[T]he advent of DNA testing has provided a powerful new way to conclusively demonstrate that false confessions occur much more frequently than was previously understood. . . . In fact, recent studies have illustrated that roughly one-fourth of all DNA exonerations involved a false admission of guilt—a staggering figure that is indicative of the power of confession evidence.”).

⁷⁵ Although the trial court found that the petitioner was not actually in police custody when he made his statements, the interrogation, which took place at the station house at the request of the police, lasted nine hours, and the petitioner did not leave until he was told to do so in the early morning hours of the following day. These circumstances, coupled with the petitioner’s mental impairment, gave rise to a scenario that, in many respects, was akin to custodial interrogation. See, e.g., *State v. Mangual*, 311 Conn. 182, 193, 85 A.3d 627 (2014) (“[a]s used in . . . *Miranda* [and its progeny], ‘custody’ is a term of art that specifies circumstances that are thought generally to present a serious danger of coercion” [internal quotation marks omitted]); see also *In re Kevin K.*, 299 Conn. 107, 127, 7 A.3d 898 (2010) (explaining that “[a] person is in custody . . . if, in view of all the surrounding circumstances, a reasonable person would have believed [that] he was not free to leave” [internal quotation marks omitted]).

⁷⁶ Significantly, in 2011, our legislature sought to address the growing concern over false and coerced confessions by enacting Public Acts 2011, No. 11-174, § 1 (P.A. 11-174), codified at General Statutes § 54-1o, which mandates that all custodial interrogations of persons suspected of committing certain enumerated felonies be electronically recorded. Public Act 11-174, § 1, became effective January 1, 2014.

⁷⁷ Brooks, Lombardo’s commanding officer, testified that, prior to their interrogation of the petitioner, he and his officers had heard “from a number of people” that the petitioner “was slightly retarded” According to Brooks, the petitioner was always “friendly” and “talkative” but did not “impress [him] . . . as being an intellectually bright individual” He was, according to Brooks, “different” When asked to explain in what way the petitioner was different, Brooks responded: “One primary factor is that [he] did not drive a car. [There is] [n]o law against that, but [it is] highly unusual in our society today.” Brooks also noted that the petitioner “moved from job to job, and they were primarily low paying, low skilled

type of jobs.”

⁷⁸ The petitioner was fifteen years old when he developed a condition, related to Dandy-Walker syndrome, that required him to undergo five surgeries to relieve intercranial pressure.

⁷⁹ For example, Thomas Moriarty, an attorney from Manchester, testified that the petitioner and Martin, his wife, were regular customers at the supermarket Moriarty managed during law school. According to Moriarty, the petitioner was “very simple,” “more like a child inside a man’s body.” Moriarty testified that the petitioner was “really a jolly little . . . guy, you know. He was kind, and he was courteous. But . . . he was very simple. And his wife, frankly, came across the same way.” Moriarty testified that the petitioner was so gullible that, when he told him that the bananas sold in the store were grown on trees located behind the store, the petitioner asked repeatedly if Moriarty would show him the trees.

According to Robert Russo, a priest at Saint Bridget Church in Manchester, it was “readily apparent” to anyone who knew the petitioner that his “mental capacity was not up to par.” Russo stated that, although people teased the petitioner quite a bit about it, he “took [it] in a very [kind] way. He would laugh about it [and] joke about it. . . . [People] obviously knew he was slow, and they would try to engage him in conversation that was far above his mental abilities. And [the petitioner] would always try to respond. But, of course, he couldn’t do it. And so they would laugh at that, make jokes about it.”

Michael Andreo, the owner of a supermarket at which the petitioner worked for several years, testified that the petitioner was “[m]entally . . . incapable” of running a cash register or even stocking shelves. “He tried to stock shelves,” but he would “get mixed up” and put things in the wrong place.

Elizabeth Martin, the petitioner’s mother-in-law, testified that both the petitioner and his wife had the mentality of “eight year old[s]” When asked how they were able to function at home if this were the case, Elizabeth Martin responded: “Well, I hate to hurt [the petitioner’s] feelings, but not great. . . . [The petitioner’s wife] couldn’t really do housework [because of her physical disability]. So, it was . . . left to [the petitioner]. And most things . . . my husband [had] to [do for them]. A lot of the things [in the house] . . . were broken [The petitioner] was awkward. He wasn’t well coordinated.”

⁸⁰ The petitioner was evaluated by the following mental health professionals and physicians: Kenneth M. Selig, a forensic psychiatrist in private practice; Anne M. Phillips, a clinical psychologist in private practice; Walter M. Phillips, chief of psychology at Waterbury Hospital and a member of the faculty at Yale University; Geraldine R. Cassens, a neuropsychologist at the Institute of Living in the city of Hartford; Gus Anderson, a neurologist in private practice; and Donald R. Grayson, a psychiatrist in private practice. Reports were obtained from all of these experts and introduced at various stages of the proceedings.

⁸¹ At trial, Grayson testified that the petitioner’s higher than expected IQ score on a test administered by Anne M. Phillips was the result of the petitioner’s ability to “[memorize] a great deal of ‘ice cream knowledge,’” such as state capitals, information that makes him appear more intelligent than he really is but does little to help him navigate or function in the day-to-day world.

⁸² As this court explained in its decision in the petitioner’s direct appeal from the judgment of conviction, “[i]n order to counter the [petitioner’s] experts’ opinions concerning the [petitioner’s] possible inability to assert himself and their testimony that the [petitioner] might be meek and highly suggestible, the state presented several witnesses, both at the suppression hearing and during rebuttal at trial, who testified that, in view of their personal experiences with the [petitioner], they found him to be extremely independent, assertive, argumentative and even hot tempered.” *State v. Lapointe*, supra, 237 Conn. 723. Upon review of the aforementioned testimony, however, it is clear that only one of the witnesses, the petitioner’s former neighbor, described the petitioner as argumentative and hot tempered. On appeal, the respondent relies on the testimony of this witness—who claims that the petitioner once stomped her flowers into the ground in a fit of pique because the flowers were planted in violation of their condominium association’s rules—in support of the argument that, even if the original jury had considered the original trial evidence together with the new alibi evidence, there is no reasonable probability that the result would have been different. As we explain more fully hereinafter, the testi-

mony of the petitioner's neighbor, like the testimony of the state's other rebuttal witnesses, most of whom were members of the victim's family, does not instill confidence in the verdict. To the contrary, most of it strongly reinforced the testimony of defense witnesses that the petitioner is a socially odd and childlike man, with a very rigid approach to life.

⁸³ Lombardo testified at length regarding the petitioner's body language during the interrogation. Lombardo told the jury that, in his experience, the petitioner's passivity and failure to object loudly, as well as the way he sat in "a runner's position" and wrung his hands, was indicative of "someone who [was] being deceptive or trying to hide something." It bears mention, however, that, at the petitioner's first habeas trial, Richard Leo, a leading authority on police interrogation methods and false confessions, testified that the commonly held belief among police officers that deception can be determined merely by observing someone's body language is "totally pseudoscientific [I]f somebody is slumped over, if somebody is passive, if somebody utters quiet denials, if somebody is in a runner's position, somebody is sweating, evasive or nervous, that is not necessarily indicative of guilt" Leo's observation that the police officers make poor lie detectors has been confirmed in a number of recent studies. See, e.g., G. Gudjonsson, "False Confessions and Correcting Injustices," 46 *New Eng. L. Rev.* 689, 696 (2012) ("[c]oncerns have been raised that the [Reid behavioral analysis interview] indicators represent little more than common-sense beliefs about deception that are contradicted by scientific studies and place innocent . . . suspects at risk of being misclassified and giving a false confession"); R. Leo, "False Confessions: Causes, Consequences, and Implications," 37 *J. Am. Acad. Psychiatry L.* 332, 334 (2009) ("[S]ocial scientific studies have repeatedly demonstrated across a variety of contexts that people are poor human lie detectors and thus are highly prone to error in their judgment about whether an individual is lying or telling the truth. Most people get it right at rates that are no better than chance [that is, 50 percent] or the flip of a coin. Moreover, specific studies of police interrogators have found that they cannot reliably distinguish between truthful and false denials of guilt at levels greater than chance; indeed, they routinely make erroneous judgments. The method of behavior analysis taught by [one well established] police training firm . . . has been found empirically to lower judgment accuracy, leading [two researchers] to conclude that the [foregoing method of behavior analysis] may not be effective—and, indeed, may be counterproductive—as a method of distinguishing truth and deception" [Citation omitted; footnotes omitted; internal quotation marks omitted.]); J. Masip et al., "Is the Behaviour Analysis Interview Just Common Sense?," 25 *Applied Cognitive Psychol.* 593, 595 (2011) ("[T]he behavioural indicators of deception [established by earlier research] do not coincide with the scientific evidence accumulated over several decades of [more recent] empirical research. . . . [More recent research reveals] that observers' accuracy in judging the veracity of truthful and deceptive [video-recorded] statements was *lower* if the observers had previously been trained to detect deception using . . . cues [established by that earlier research] than if they had not been trained." [Emphasis in original.]). We acknowledge Leo's testimony and the foregoing related scholarly articles merely to point out that any testimony by Lombardo at a new trial concerning the petitioner's purportedly incriminating body language may well be subject to substantial impeachment, thereby minimizing or even eliminating whatever adverse effect that testimony might have had on the petitioner at his criminal trial.

⁸⁴ As we discuss more fully in footnote 91 of this opinion, the witness to whom Lombardo was referring, King, the victim's next door neighbor, testified at the petitioner's criminal trial that she never told Lombardo or anyone else that she had seen the petitioner walking his dog near the victim's apartment on the evening of the victim's murder.

⁸⁵ As the petitioner contends, a secretly recorded interview of Martin by Morrissey, which came to light after Morrissey had testified at the hearing on the petitioner's motion to suppress, provides strong support for the petitioner's account of his own interrogation. Specifically, the audio recording demonstrates that Morrissey threatened Martin with arrest and repeatedly told her that she could lose custody of her son if she did not provide Morrissey with incriminating information about the petitioner. Because the recording came to light while the suppression hearing was ongoing, the trial court, *Barry, J.*, permitted the petitioner's trial counsel to recall Morrissey to be questioned about the recording and the discrepancies between it and Morrissey's earlier testimony regarding his interview of Martin. At that time, Morrissey acknowledged that, when he first appeared as a witness, and in the affidavit that was filed in support of the application

for the petitioner's arrest warrant, Morrissey provided inaccurate and misleading testimony concerning his interview of Martin and the statements she gave during that interview. Indeed, we have reviewed the suppression hearing testimony that Morrissey provided both before and after the disclosure of the recording, as well as the recording itself, and we are compelled to observe that the numerous discrepancies between Morrissey's original account of his interview with Martin and what actually transpired during that interview as reflected in the recording are very troubling and call into serious question the credibility of one of the state's key witnesses. In his amended habeas petition, the petitioner alleged that his trial counsel provided ineffective assistance by failing to present the recording to the jury to impeach Morrissey's testimony and to establish that the petitioner's confession was coerced and false. The third habeas court rejected this claim, concluding, *inter alia*, that, although the recording was "laden with implicit threats" to Martin, trial counsel's failure to use it at trial was a "tactical decision" that did not rise to the level of ineffective assistance of counsel, a determination that the petitioner challenged on appeal to the Appellate Court. The Appellate Court did not reach this issue, however, in light of its determination that the petitioner was entitled to a new trial on the basis of the state's suppression of the Ludlow note. See *Lapointe v. Commissioner of Correction*, *supra*, 138 Conn. App. 479–80 n.22. On appeal to this court following our granting of certification, the petitioner raises as an issue his trial counsel's failure to present the recording of Morrissey's interview of Martin as an alternative ground for affirmance. Like the Appellate Court, we need not reach this issue in light of our determination that the petitioner is entitled to a new trial due to the state's suppression of the Ludlow note. We agree with the Appellate Court, however, that it is difficult to discern why trial counsel would not have presented this evidence to the jury "when the stated trial strategy was to demonstrate the falsity of the petitioner's statements"; *id.*, 480 n.22; and when the evidence bore so directly on the credibility of Morrissey, the officer who had elicited the most incriminating statement from the petitioner and whose truthfulness and reliability regarding the circumstances under which that statement was elicited were critical to the state's case.

Furthermore, notwithstanding the third habeas court's ruling, we have little doubt that the petitioner's counsel will make effective use of the recording at a new trial, if the state elects to retry the petitioner, both to impeach Morrissey's credibility and to bolster the petitioner's claim that the burn time estimates provided by DeHaan and Kelder prove that it was temporally impossible for the petitioner to have committed the crimes of which he was convicted because the testimony of DeHaan, Kelder and Martin provides him with a complete and compelling alibi.

⁸⁶ For present purposes, our focus, of course, is the import of the burn time evidence relative to the strength of the case that the state presented against the petitioner; see, e.g., *Rocha v. Thaler*, 619 F.3d 387, 396 (5th Cir. 2010) ("[t]he materiality of *Brady* material depends almost entirely on the value of the evidence relative to the other evidence mustered by the state" [internal quotation marks omitted]), *cert. denied*, U.S. , 132 S. Ct. 397, 181 L. Ed. 2d 255 (2011); a case that, as we have explained, was predicated largely on his statements to the police. As we also have explained, a real concern arises over the reliability of the petitioner's admissions in light of his physical and mental impairments, the nature and substance of his admissions, and the manner in which they were obtained. Indeed, this commonsense concern has been substantiated by numerous articles and studies on false confessions that have been published in the more than two decades that have passed since the petitioner's criminal trial. We also acknowledge the testimony of Richard Leo, a much published and frequently cited expert on false confessions—his research on false confessions has been cited by numerous courts, including the United States Supreme Court—who testified at the petitioner's first habeas trial in support of the petitioner's claim of actual innocence. Following a hearing at which the first habeas court determined that Leo's proffered testimony was both reliable and relevant, Leo testified that false confessions have certain telltale signs. For example, he noted that a classic interrogation tactic is "to suggest to the suspect that it was merely an accident, because it lowers the level of culpability. . . . It gives the suspect a way to believe that they're either not going to get punished or they [will] get a lesser level of punishment. [The] police are trained in this technique. It's one of the most common techniques." Leo explained that, whenever a suspect confesses to a crime by claiming that it was an accident, as the petitioner did in the present case, it is safe to assume that the interrogator put the idea into the suspect's head. Leo further testified that the petitioner's repeated reference to having no memory of the crime and statements to the effect that his mind must have gone blank are other strong indicators of a false confession. In most false confession cases, Leo explained, a suspect gets to a point at which he "stop[s] challeng-

ing the evidence and . . . come[s] to doubt the reliability of [his] memory, and [he] come[s] to make statements like, ‘well, maybe I was blacking out’ [He tries] to understand [how] it’s possible that [he] could have done this with [no] recollection or memory of having done it, and [he will] say things like [the petitioner said in the present case]: ‘Maybe my mind went blank; maybe that’s what happened’” Leo also was troubled by the highly equivocal nature of the petitioner’s statements: “[The petitioner states in the second statement], ‘I probably made a pass at her and she said no.’ People who come to doubt their memory because of the [false] evidence ploy, because they’re gullible, because they’re naive and believe [that the] police wouldn’t lie to them [about the evidence] . . . talk in conditional and ambivalent language: I probably did this; I could have done that; I must have done this; I would have done that. They express uncertainty in how they describe or admit to something, and that uncertainty essentially demonstrates their absence of actual knowledge. They’re speculating about something.” Leo also observed: “The next line is, ‘if the evidence shows I was there and that I killed her, then I killed her, but I don’t remember being there.’ Again, this is the kind of reasoning someone goes through when [he] come[s] to doubt [his] memory. I don’t remember doing it, but, if the evidence is there, I must have done it.” According to Leo, “this is how innocent false confessors who lack the actual knowledge of how the crime occurred [confess]. They talk in conditional language”

Leo further noted that all three of the petitioner’s statements “contained factual errors that shouldn’t be there if it’s a confession of a truthful person. . . . [The petitioner] says that he strangled her manually, but, apparently, she was not strangled manually. He [says] that he physically raped her, but . . . there was no penile rape. These are errors. He says he tied her up with rope initially, but she was not tied up with rope. These are the kinds of errors that guilty people don’t make. . . . Conversely, when one looks at false confession cases, these are exactly the kind of errors that innocent false confessors make because they demonstrate a lack of actual knowledge. They communicate ignorance. In the typical false confession case, [in which] something like this occurs, the false confessor is guessing. They’re trying to infer what occurred, they’re trying to feed back the information that they have ascertained, or they’re just making it up, and they get it wrong.” In this regard, we deem it noteworthy that, when Lombardo was asked how the petitioner responded when Lombardo confronted him with the fact that a witness purportedly had seen him walking his dog near the victim’s apartment at 7 p.m., Lombardo stated that the petitioner had simply “agreed” that the information that the witness provided was accurate, even though, as we explained in footnotes 84 and 91 of this opinion, *no such witness existed*.

Of course, Leo did not testify at the petitioner’s criminal trial. Thus, we do not rely on his habeas testimony in evaluating the strength of the state’s case at the petitioner’s criminal trial. We recite that testimony, rather, only to underscore our conclusion, which is predicated on the nature of the petitioner’s admissions and the circumstances under which they were obtained, that his admissions are unreliable, a claim that the petitioner’s trial counsel raised at his criminal trial.

⁸⁷ The respondent also argues that a jury likely would discount the petitioner’s alibi in light of Martin’s suppression hearing testimony that she could not account for the petitioner’s whereabouts between 6:15 and 7 p.m. Specifically, the respondent argues that “Martin’s account changed every time she officially spoke about [the] petitioner’s whereabouts,” which will “[reflect] poorly [on] her credibility.” We reject this argument because it ignores the context in which Martin’s testimony was elicited. At the hearing, Martin was asked by the state, “from the time you began to get your son ready for bed, until the time you came down with your son to watch [television], did you see your husband at all?” Martin responded, “No. I did not.” The state then asked Martin whether she knew “where he was” during that time. Martin responded: “He was downstairs.” The following colloquy then took place.

“Q. Do you know he was inside the house during the whole time or not?”

“A. I don’t know, I guess.

“Q. . . . So, if he’d been outside of the house during that time, you wouldn’t have known it, is that fair to say?

“A. Yes.

“Q. . . . And you have no way of knowing whether he stayed in the house during that time or whether he left? Is that fair to say?

“A. I guess. . . . That’s fair, so yes.

* * *

“Q. . . . And I take it that’s not something that occurred to you when you talked to [Detective Morrissey], that [the petitioner] might have left [while you were upstairs] . . . ?

“A. No. . . . I didn’t even think of that.

“Q. . . . So, you just assumed he was home because you didn’t . . . know any different?

“A. [Yes].

“Q. . . . But you didn’t see him at all during that bedtime procedure with your son . . . ?

“A. No. I did not. . . . I assumed he was home.

“Q. . . . And you wouldn’t know, one way or the other?”

“A. No.”

Contrary to the respondent’s contention, we believe that a jury readily could conclude that it had never had occurred to Martin, until the state presented the idea to her at the suppression hearing, that the petitioner had slipped out of the house and, while Martin was upstairs getting their son ready for bed, walked to the victim’s apartment, sexually assaulted and murdered her, and set her apartment on fire, and then returned home before Martin came downstairs, looking and acting no differently than when she had seen him thirty to forty-five minutes earlier.

⁸⁸ We note that, in support of his contention that the state’s case against the petitioner was founded on “compelling evidence of guilt,” the respondent quotes extensively from our statement of the facts in *State v. Lapointe*, supra, 237 Conn. 696–702, in which we recited the facts that the jury reasonably could have found. It is apparent from even a cursory review of that factual recitation that we set forth those facts in the light most favorable to the state, even though the petitioner had made no claim of evidentiary insufficiency. The petitioner’s direct appeal afforded us no opportunity to assess the strength of the state’s case; because our current task is to determine the importance of the suppressed evidence in relation to the strength of the state’s evidence at the petitioner’s criminal trial, we examine that evidence objectively rather than in the light most favorable to the state. See, e.g., *Kyles v. Whitley*, supra, 514 U.S. 441–54 (affording no deference to government’s theory of guilt when reviewing original trial evidence to determine materiality of *Brady* material); *Tice v. Johnson*, 647 F.3d 87, 110 (4th Cir. 2011) (“[the court is] not bound . . . to view the facts in the light most favorable to the prosecution”).

⁸⁹ At the petitioner’s criminal trial, the court allowed the petitioner to introduce into evidence numerous articles from *The Hartford Courant* and *The Journal Inquirer*, a Manchester newspaper, for the limited purpose of establishing that, contrary to the state’s contentions, it was widely known that, within days of the victim’s murder, the victim had been sexually assaulted. Some of the articles contain information concerning a sexual assault in the town of South Windsor and the similarities between that crime and the victim’s murder. Merrill, a career criminal who was released from prison one month before the victim’s murder, was immediately arrested for the South Windsor sexual assault. In one of the articles, Merrill was described by Edward Daily, a lieutenant and spokesperson for the Connecticut State Police, as “‘one of the most evil men’” that Daily ever had encountered. S. Jensen, “Police: ‘Peanut Butter Bandit’ No Joke,” *Journal Inquirer*, March 13, 1987, p. 18. According to the same article, Merrill was questioned in connection with the victim’s murder because of the similarities between the two crimes and their close proximity to one another. See *id.*

We note, in addition, that, in his first habeas petition; see footnote 17 of this opinion; the petitioner alleged ineffective assistance of trial counsel on the basis of their failure to utilize available evidence to raise a third-party culpability defense. In support of this claim, the petitioner presented the testimony of Paulette DeRocco, a Manchester resident, who stated that, on March 9, 1987, the day after the murder, she contacted the police to inform them that, at approximately 8 p.m. the night before, she and her two teenaged children were driving past the victim’s apartment complex on their way home when they saw a man running from the complex “like he was being chased by a pack of dogs.” DeRocco had to slam on her brakes to avoid hitting him. According to DeRocco, the man was wearing “dark . . . maintenance worker’s type clothes” and appeared “disheveled with [his] shirttail partially out.” DeRocco told the police that she and her children watched the man running down the street until he disappeared behind a building. DeRocco contacted the police as soon as she heard about the victim’s murder because she thought that there might be a connection between the crime and the man she had seen fleeing the immediate vicinity of the crime scene. According to DeRocco, when she and her children arrived home on the night of the victim’s murder, “the sirens were going off” in town, and she remembered thinking that it was strange that they would go off right after she had observed someone so suspicious. The description that DeRocco gave of the man she saw running from the victim’s apartment complex bore no resemblance to the petitioner. DeRocco testified that the police took her statement and asked her to review photographs of possible suspects,

but she was unable to identify anyone. The first habeas court rejected the petitioner's claim concerning his trial counsel's failure to raise a third-party culpability defense on the ground that DeRocco's testimony was insufficient to link the unidentified person to the victim's murder. See *Lapointe v. Warden*, supra, Superior Court, Docket No. CV-97-0571161. The petitioner did not challenge this determination or any of the first habeas court's other determinations concerning the claims alleged in the first habeas petition on appeal. We express no view with respect to the admissibility of this third-party culpability evidence at a new trial.

⁹⁰ The respondent identifies a litany of other purportedly unusual and suspicious conduct by the petitioner that the state argued at trial was evidence of his guilt, including the following: (1) the petitioner used King's front door rather than her back door when he went to use her telephone, even though King's back door was closer to the victim's apartment; (2) when the petitioner first used King's telephone, he called Martin and Howard rather than the fire department, even though, following the victim's murder, he told a police officer that he thought he smelled smoke while on his way over to the victim's apartment and that the door was warm to the touch; (3) the petitioner told Howard that the back door was locked when he arrived at the victim's apartment, even though firefighters found it unlocked; (4) the petitioner did not inform the first firefighter on the scene that the apartment was "occupied by an elderly and sickly relation" but, instead, yelled, "[t]his is it; this is the place"; (5) over the years, the petitioner peppered the police with questions about the status of the investigation and whether he was a suspect in the case; and (6) the petitioner testified that he may have walked his dog a second time on the day of the murder and allegedly told a family friend that he visited the victim several times on the day of the murder. Suffice it to say that we do not believe that a jury would necessarily find any of this conduct particularly odd or suspicious, even for the average person, and would likely find it much less so for the petitioner, a person who, by all accounts, is easily confused and does not perceive or respond to things in the ordinary way.

⁹¹ The weakness of the state's case is further demonstrated by the respondent's reliance on the testimony of King, the victim's neighbor, who, the respondent argues, "testified that she had seen the petitioner walking his dog near the victim's apartment shortly after 7 p.m. on the day [of the victim's murder]." A review of the record reveals, however, that King did not testify that she saw the petitioner walking his dog near the victim's apartment at 7 p.m. Rather, *Lombardo* testified that King *told him*, two years after the murder, that she had seen the petitioner walking his dog at 7 p.m. King, however, at both the hearing on the petitioner's motion to suppress and at the petitioner's criminal trial, strenuously denied ever telling Lombardo any such thing. King stated that the only time she saw the petitioner on the day of the murder was when he came to her apartment to use the telephone, first to call Martin and Howard, and then, a few minutes later, to call the fire department.

The respondent's reliance on such purported facts does not end with King's testimony. For example, the respondent contends that "the jury had evidence, in the form of the results of psychological testing, that the petitioner may have been a person who: was overly sensitive to criticism; reacted to even minor problems with anger and hostility; tended to externalize blame; bore grudges and worked to get even with those he perceived to have wronged him; and exhibited sexual deviation." In support of this contention, the respondent cites the testimony of Anne M. Phillips, one of the psychologists who examined the petitioner following his arrest. See footnote 80 of this opinion. A review of Phillips' testimony, however, reveals that it provides no support for the respondent's assertions. According to Phillips, the test results at issue were the petitioner's raw scores on the Minnesota Multiphasic Personality Inventory (MMPI) test, an examination consisting of 567 true or false questions that she administered to the petitioner following his arrest. Phillips explained that the computer program that scores the test is designed to flag any potential areas of concern, regardless of whether they are applicable to the test taker, and that it is the clinician who ultimately determines their applicability. Phillips explained that the test does not take into account the individual circumstances of the test taker, which bear heavily on how the test results are interpreted by the test administrator. For example, Phillips explained that a patient may score high on the depression scale, but, if the clinician knows that the test taker's mother recently died, the score is interpreted in light of the test taker's grief related to that loss. With respect to the petitioner, Phillips explained that it would be highly

unusual for a person, incarcerated for a crime that he says he did not commit and facing a possible death sentence, not to score high on the anger or paranoia scales. As for sexual deviancy, Phillips further explained that there is only one question on the MMPI test that relates to sexuality, and the answer is recorded under a category labeled "Sexual Concern and Deviation." The question is: "I wish I [was] not bothered by thoughts of sex." Because the petitioner answered "true" to this question, sexual concern or deviation was flagged as a potential area of concern. Phillips stated that, on the basis her follow-up discussions with the petitioner, she ruled out any problems relating to sexual deviancy. Indeed, according to Phillips, the Megargee typology section of the MMPI test, "a system developed for classifying incarcerated inmates according to their degree of psychological disturbance, their adjustment to incarceration, their propensity for impulsive and dangerous behavior, and the most appropriate form of incarceration and treatment," classified the petitioner "as . . . Type I . . . which is . . . considered to be the most stable and most benign of the ten Megargee profiles." Phillips explained that "it's a profile that is an essentially normal one . . . [I]ndividuals matching [this] . . . profile tend . . . not to be convicted [of] crimes of an impulsively hedonistic nature, and their problems do not appear to stem from difficulties in interpersonal adjustment or from psychopathology. Offenders matching this type tend to have a more 'benign' record than other convicted felons. . . . There appears to be no pressing need for psychological treatment and restrictive administrative management Research supports the view that Type I inmates tend to adjust well to prison and present few disciplinary problems." According to Phillips, prison officials rely on a prisoner's Megargee typology in determining his or her status as an inmate.