SJC-12124

COMMONWEALTH v. WILLIE WILKERSON.

Norfolk. January 10, 2020. - November 4, 2020.

Present: Gants, C.J., Gaziano, Budd, Cypher, & Kafker, JJ.[1]

Homicide. Subornation of Perjury. Perjury. Cellular Telephone. Constitutional Law, Search and seizure, Probable cause. Search and Seizure, Warrant, Affidavit, Probable cause. Probable Cause. Witness, Expert. Evidence, Expert opinion, Joint venturer. Practice, Criminal, Capital case, Motion to suppress, Warrant, Affidavit, Trial of indictments together, Instructions to jury, Argument by prosecutor.

Indictments found and returned in the Superior Court Department on December 27, 2012, and August 2, 2013.

A pretrial motion to suppress evidence was heard by Kenneth J. Fishman, J.; the cases were tried before Douglas H. Wilkins, J., and a motion for a new trial, filed on October 14, 2016, was considered by him.

Elizabeth Caddick for the defendant.
Stephanie Martin Glennon, Assistant District Attorney, for the Commonwealth.

[1] Chief Justice Gants participated in the deliberation on this case prior to his death.

GAZIANO, J. The defendant was convicted of murder in the first degree in the shooting death of twenty-three year old Kristopher Rosa, a long-time rival of one of the defendant's high school friends.[2] The defendant's participation in the shooting came to light almost two years after the event, when his then girlfriend contacted police. On appeal, the defendant argues that the evidence was insufficient to support his conviction. He also claims error in the denial of a motion to suppress cell site location data (CSLI) and the admission of that data at trial,[3] error in the introduction of hearsay statements by his alleged coventurer and in the exclusion of other evidence concerning that coventurer, misjoinder of charges, abuse of discretion in the judge's decision not to provide certain jury instructions, and improprieties in the prosecutor's closing argument. In addition, the defendant asks us to use our authority under G. L. c. 278, § 33E, to order a new trial. We affirm the convictions and decline to exercise

[2] The defendant also was convicted of attempting to suborn perjury.

[3] "Cell[] site location information (CSLI) refers to a cellular telephone service record or records that contain information identifying the base station towers and sectors that receive transmissions from a [cellular] telephone." (quotations and citation omitted). Commonwealth v. Estabrook, 472 Mass. 852, 853 n.2 (2015).

our authority to reduce the verdict or order a new trial pursuant to G. L. c. 278, § 33E.

Background. We recite the facts the jury could have found, viewing them in the light most favorable to the Commonwealth.

1. Coconspirator's dispute with victim. The victim's death arose from a long-running antagonism between him and Rhandisyn Lawrence, a high school friend of the defendant and his brother, Keith. This conflict began in high school and appears to have centered on Lawrence's and the victim's relationships with Davina Mendes. At different times while they were high school students, Mendes dated both Lawrence and the victim; she later settled into a relationship with the victim and they had a child together.

Conflict between the victim and Lawrence devolved into physical violence on at least three occasions during and after their high school years. The last of these incidents took place in April of 2011, five months before the shooting, when the victim was twenty-three years old. Mendes recounted how she, the victim, and a friend drove to Lawrence's home. The victim and the friend went into the house while she waited in the vehicle. Approximately thirty minutes later, Lawrence came outside with a bloody face and a broken jaw. He apologized to her through the window of the vehicle; Mendes did not know the reason for the apology.

Later that summer, Mendes had unpleasant exchanges with Lawrence through an Internet messaging application and in an in-person encounter at the store where he worked. The first time she told the victim about the encounter, he did not appear to react; the second time she told the victim about the encounter, he threw a rock through the rear window of Lawrence's gray Volvo. The police were called, but Lawrence refused to speak with them when they arrived to see the smashed window and other damage to the body of the vehicle. This incident took place approximately six days before the shooting.

2. The shooting. On September 19, 2011, at approximately 9:15 P.M., two Avon firefighters saw a gray Volvo parked on the side of the road with its lights off, not far from the victim's home. In the driver's seat, they saw a man speaking on his cellular telephone; they could see the side of his face from the light of the telephone on his cheek.

At around the same time, the victim and Mendes left the victim's house. They were on their way to the victim's mother's house for dinner. They left their infant son with the victim's father. In the driveway, the victim saw something that made him demand the keys to the vehicle from Mendes; he told her to hurry into the vehicle and he went to the driver's side.

Mendes then noticed Lawrence's gray Volvo, which she recognized from the time when she had dated him, drive by and

then make a U-turn. The victim made a U-turn in order to follow the Volvo. The victim and Mendes came upon the Volvo backed into a driveway with its lights off. Having just passed it, they made another U-turn and parked diagonally, facing Lawrence's vehicle. Mendes saw Lawrence smirk as he pulled into the road in front of them.

As the victim again began to follow the Volvo, shots from behind shattered the back window. Mendes ducked her head, as the victim urged her to do, but saw the victim look in the rearview mirror and curse. She heard a second volley of shots, this time from the driver's side of the vehicle, and saw the victim bleeding from his mouth. Because his foot was still on the accelerator, she had to seize the wheel to maneuver the vehicle around the gray Volvo, which appeared to be braking. Climbing onto the victim's lap, she drove to the local hospital. That night, the victim was pronounced dead from a gunshot wound to his chest.

3. The investigation. At the scene, police recovered six shell casings from the road, spread over a distance of approximately seventy yards. The next morning, police interviewed Lawrence, seized the Volvo, and obtained his permission to view information from his cellular telephone. That evening, they interviewed the defendant at the home he shared with his girlfriend, Amanda Burgess. He told them that

he had been at his apartment the previous evening taking care of her two year old son. He said that he had been using a telephone registered to Burgess, and that Lawrence had been to his apartment for approximately fifteen minutes that evening at around 8:30 P.M. He agreed that he also spoke by telephone with Lawrence at least twice that evening, once at approximately 8 P.M. and again shortly after 9 P.M.

4. Burgess's statements and testimony. Initially, Burgess told police she and the defendant had been together the entire evening of the shooting. In the weeks after the shooting, she received a subpoena to testify before the grand jury. The defendant told her to repeat what she had told the police. Prior to her testimony, police confronted Burgess with records from her cellular telephone service provider tending to show the defendant had left their apartment on the evening of the shooting, and Burgess conceded to the police, and to the grand jury, that she and the defendant had not been together throughout the evening.

In early 2013, Burgess was charged with misleading the police. She was incarcerated prior to trial for approximately seventy days, while she was pregnant with her second child, because she was unable to pay the bail. Her bail was posted one week before she gave birth. At that point, she had ended her romantic relationship with the defendant because she believed he

had cheated on her with another woman. After entering into an immunity agreement, she testified at the defendant's trial to the following.

Lawrence began visiting the defendant's and her apartment more frequently shortly before the shooting. On September 19, 2011, the night of the shooting, the defendant told her that he could not pick her up from work as planned, because but had to go with Lawrence "to take care of something." Her coworker, Heather Farris, drove her to the defendant's mother's house, where the defendant had left her son. She was driving home with Farris, while talking on the telephone with the defendant, when Burgess saw him drive by in the front passenger seat of a gray Volvo going the opposite direction. Lawrence was driving. She believed that they "beeped" at them as the Volvo continued in the opposite direction, towards Avon.

After she picked up her son, Burgess repeatedly tried to call the defendant; sometimes she spoke with him, and some of her calls went unanswered. When she reached the defendant at some point after 9:30 P.M., he told her that "he took care of what he had to take care of" and "did what he had to do." The defendant's sister drove Burgess home; as Burgess arrived at her apartment, she saw the defendant sitting on the front stairs and Lawrence's Volvo driving away. After the defendant's sister left, she saw the defendant take a black gun from his waistband

and put it under the mattress. He said again that he "did what [he] had to do." Sometime later, he told her that he "wasn't sure if he killed [the victim] or not because the car was still rolling" after he approached it and shot through the rear and side windows.

The next morning, Burgess noticed the defendant searching the Internet for news about a shooting in Avon. Forensic analysis of the laptop computer later revealed searches for "Avon shooting," and "Avon man dead." Burgess called her aunt, who brought a vehicle and dropped off the defendant at his father's home in the Dorchester section of Boston. Before the defendant left, Burgess saw him retrieve the gun from under the mattress and place it in a backpack, which he took with him. Burgess never saw the gun again. When the defendant returned from his father's home later that night, he had changed clothes. He explained that he had changed because he got gasoline on his shirt, which "gets rid of the gunpowder." He told Burgess to tell anyone who asked that they had been together all evening on the evening the victim was killed.

5. CSLI evidence. Pursuant to 18 U.S.C. § 2703(d), the Commonwealth requested forty-eight hours of CSLI for the cellular telephone that the defendant was using; the prosecutor received data for a thirty-four hour period. Before trial, the defendant moved to suppress the CSLI evidence; the trial judge

ordered suppressed all of the CSLI evidence from the defendant's telephone except for a three-hour period between 8 P.M. and 11 P.M on September 19, 2011, covering the period approximately ninety minutes before and ninety minutes after the shooting. The Commonwealth also introduced CSLI evidence from Lawrence's cellular telephone.

a. CSLI data. Between 8:23 P.M. and 8:30 P.M. on September 19, 2011, the defendant's cellular telephone[4] connected four times to a cellular tower in Taunton, the city where the defendant and Burgess lived. At 8:43 P.M., the CLSI records showed a thirty-nine second call that began by connecting to a cellular tower in Taunton, and ended while connected to a tower in Raynham. Raynham is north of Taunton, in the general direction that the defendant would have been traveling if he had been driving from Taunton toward Avon.

Between 9:18 P.M. and 9:39 P.M., the defendant's cellular telephone connected eight times to a cellular tower near Avon. The Commonwealth's expert introduced maps showing that this tower was near the scene of the shooting, and that the specific antenna that connected to the defendant's telephone generally

[4] As mentioned, this cellular telephone was registered to Burgess, but it is not disputed that the defendant used it often and was in possession of it on the evening of the shooting.

pointed from the tower toward the scene.[5] Among the calls that connected to the Avon tower was a twelve-minute call to Lawrence, beginning at 9:19 P.M. That call was twice interrupted by incoming but unanswered calls from Burgess, consistent with her testimony that she had been unable to reach the defendant for a period of time while she was driving with the defendant's sister.

The CLSI records show a 9:47 P.M. call that connected to a tower in Bridgewater, and a 9:56 P.M. call that connected to a tower in Raynham. As both Bridgewater and Raynham lie between Avon and Taunton, these calls are consistent with the Commonwealth's theory that the defendant was returning from Avon to his home in Taunton. After 10:08 P.M., the CSLI records indicate that the defendant's telephone connected three times to the same cellular tower in Taunton as did the first calls in the record introduced at trial.

In sum, the CSLI data is consistent with a round trip drive from the defendant's apartment in Taunton to the scene of the shooting in Avon -- at the time of the shooting -- and back to Taunton.

---

[5] Within this same period, the defendant's telephone also connected once with a different tower in Avon. While it was further away, that tower connection nonetheless essentially was consistent with the defendant being at or near the scene of the shooting in Avon.

b. CSLI from Lawrence's telephone. The Commonwealth also introduced CSLI call records from Lawrence's cellular telephone. Between 4:30 P.M. and 7 P.M. on September 19, 2011, Lawrence called the defendant four times; each of these calls connected to a cellular tower in Taunton. At 9:18 P.M. and 9:19 P.M., Lawrence's telephone records show a nineteen-second call and a twelve-minute call from the defendant. Both connected to towers just south of the scene of the shooting, and to antennae that pointed from the respective towers toward the scene. A 9:53 P.M. call connected between Lawrence's telephone and a tower in Raynham, and a 10:08 P.M. call connected between Lawrence's telephone and a tower in Taunton. Thus, CSLI data from Lawrence's cellular telephone, as with information from the defendant's telephone, is consistent with a round trip drive from Taunton to Avon and back.

6. Prior proceedings. The defendant was convicted of murder in the first degree on a theory of deliberate premeditation and an attempt to suborn perjury.[6] He timely filed a notice of appeal. While his appeal was pending before this court, he was allowed a stay so that he could pursue a motion

[6] At a separate trial, Lawrence had been acquitted of charges of murder in the first degree on a theory of joint venture.

for a new trial in the Superior Court. The denial of that motion has been consolidated with his direct appeal.

Discussion. 1. Admission of CSLI. Collecting more than six hours of CSLI data invades a defendant's reasonable expectation of privacy, and, therefore, under the Fourth Amendment to the United States Constitution and art. 14 of the Massachusetts Declaration of Rights, requires a warrant supported by a showing of probable cause. See Carpenter v. United States, 138 S. Ct. 2206, 2221 (2018); Commonwealth v. Estabrook, 472 Mass. 852, 858 (2015).

When we first imposed the warrant requirement for CSLI data, we determined that the imposition constituted a new rule under the Teague-Bray framework. Commonwealth v. Augustine, 467 Mass. 230, 257 (2014) (Augustine I), S.C., 470 Mass. 837 (2015) and 472 Mass. 448 (2015). See Commonwealth v. Bray, 407 Mass. 296, 301 (1990) (adopting retroactivity analysis announced in Teague v. Lane, 489 U.S. 288, 301 [1989]). Thus, the warrant requirement applied both to new cases and also to those cases, like this one, that were pending on direct appeal when Augustine I, supra, was decided. For cases on direct review, the Commonwealth already had been required, pursuant to 18 U.S.C. § 2703(d), to make a lesser showing to obtain CSLI data.[7]

[7] Under 18 U.S.C. § 2703(d), "A court order for disclosure . . . may be issued by any court that is a court of

Therefore, we retroactively have examined the supporting affidavit to determine whether it also might support a determination of probable cause. See, e.g., Commonwealth v. Hobbs, 482 Mass. 538, 543–544 (2019); Commonwealth v. Augustine, 472 Mass. 448, 453 (2015) (Augustine II), citing Augustine I, 467 Mass. at 256.

The defendant claims that the judge's decision to permit the admission of CSLI data was erroneous for three reasons. First, he argues that if unreliable hearsay is excised properly from the underlying affidavit, no period of CSLI data was supported by probable cause. Second, he argues that if there was not probable cause to search the entire thirty-four hours of CSLI data, it was error for the judge to allow introduction of the three-hour period surrounding the shooting, because the proper measure of the constitutional intrusion is the entirety of the data collected by the government. Finally, the defendant contends that the CSLI should not have been admitted absent a Daubert-Lanigan hearing in order to test the reliability of the CSLI data and to qualify the testifying witness as an expert.

---

competent jurisdiction and shall issue only if the governmental entity offers specific and articulable facts showing that there are reasonable grounds to believe that the . . .records or other information sought, are relevant and material to an ongoing criminal investigation" (emphasis omitted). Commonwealth v. Augustine, 467 Mass. 230, 236 (2014), S.C., 470 Mass. 837 (2015) and 472 Mass. 448 (2015) (standard under 18 U.S.C. § 2703[d] is less than probable cause).

See Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 593-595(1993); Commonwealth v. Lanigan, 419 Mass. 15, 25-26 (1994). Examining these arguments, we conclude that there was no error in the introduction of the CSLI evidence in this case.

a. Severance. We first address the defendant's argument against severance of the three-hour period. The defendant argues that because a search, and hence a potential constitutional violation, occurs when the government receives the data, if there was not probable cause for the whole period, the entirety of the CSLI should have been suppressed.

In reviewing a motion to suppress, we "accept the judge's subsidiary findings of fact absent clear error but conduct an independent review of his [or her] ultimate findings and conclusions of law." Hobbs, 482 Mass. at 543, quoting Commonwealth v. White, 475 Mass. 583, 587 (2016). We make an "independent determination of the correctness of the judge's application of constitutional principles to the facts as found." Hobbs, supra, quoting White, supra.

The collection of extended CSLI data raises significant constitutional concerns. Hobbs, 482 Mass. at 549, citing Carpenter, 138 S. Ct. at 2217, and Augustine I, 467 Mass. at 248-249. We have recognized that determining the precise time period for which CSLI data is supported by probable cause is a difficult and fact-intensive inquiry. Hobbs, supra. Under the

warrant requirement imposed by Augustine I, judges should permit introduction of only that period of time for which there is probable cause to believe "that a particularly described offense has been, is being, or is about to be committed, and that the [CSLI being sought] will produce evidence of such offense or will aid in the apprehension of a person who the applicant has probable cause to believe has committed, is committing, or is about to commit such offense." Augustine I, 467 Mass. at 256, quoting Commonwealth v. Connolly, 454 Mass. 808, 825 (2009). Where there is little question that an offense has been committed and the whereabouts of the suspect are known, the critical question often will be whether "there is a sufficient nexus between the criminal activity for which probable cause has been established and the physical location of the cell phone recorded by the CSLI . . . at least for the time and place of the criminal activity." See Hobbs, 482 Mass. at 547.

In Hobbs, supra at 549-550, we addressed the question raised by the defendant here: where only a portion of the period of the data received by the government is supported by probable cause, should the entirety of the CSLI data obtained through an order pursuant to 18 U.S.C. § 2703(d) be suppressed? On the facts of that case, we answered that complete suppression was not necessary. "[W]here the requisite nexus for probable cause clearly exists for a reasonable period of time

encompassing the commission of and flight from the crime, as well as the defendant's immediate apprehension, the CSLI for this period of time need not be suppressed so long as the CSLI for which there is not the requisite nexus to the crime is not relied on or otherwise exploited by the Commonwealth at trial" [footnote omitted]. Id. at 550.

In reaching this decision, we relied on Commonwealth v. Holley, 478 Mass. 508, 524-525 (2017), a case in which we sanctioned the admission of certain relevant text messages, notwithstanding an insufficiently particular warrant. Both Hobbs and Holley are consistent with analogs from the physical world, which allow severance of the valid portion of a search warrant where a part of the warrant is insufficiently particular or not supported by probable cause. See Commonwealth v. Lett, 393 Mass. 141, 144–145 (1984), quoting United States v. Fitzgerald, 724 F.2d 633, 637 (8th Cir. 1983), cert. denied, 466 U.S. 950 (1984) ("the infirmity of part of a warrant requires the suppression of evidence seized pursuant to that part of the warrant . . . but does not require the suppression of anything described in the valid portions of the warrant"); Lett, supra at 145 ("The partial suppression remedy for a partially invalid warrant, we believe, effects a pragmatic balance between the deterrent effect of suppression and the cost to society of excluding probative evidence"). See also Aday v. Superior Court

of Alameda County, 55 Cal. 2d 789, 797 (1961) (seminal case on severance); 2 W.R. LaFave, Search and Seizure § 4.6(f), at 814-815 (5th ed. 2012 & Supp. 2019) (endorsing Aday rule).

Importantly, this severance doctrine is not without limits. "It is beyond doubt that all evidence seized pursuant to a general warrant must be suppressed. The cost to society of sanctioning the use of general warrants -- abhorrence for which gave birth to the Fourth Amendment -- is intolerable by any measure." Lett, 393 Mass. at 145-146, quoting United States v. Christine, 687 F.2d 749, 758 (3d Cir. 1982). This is equally true in the context of digital location tracking. "Just as police are not permitted to rummage unrestrained through one's home, so too constitutional safeguards prevent warrantless rummaging through the complex digital trails and location records created by merely participating in modern society." Commonwealth v. McCarthy, 484 Mass. 493, 499 (2020). Thus, where a warrant so lacks particularity or is so overbroad that it begins to resemble a general warrant, total suppression is required. See Lett, supra; LaFave, supra at § 4.6(f), at 816.

We need not decide here how overbroad a request for CSLI must be in order for total suppression to be appropriate. The forty-eight hours requested, and the thirty-four hours obtained here, are not so overbroad on the facts of this case so as to be akin to a general warrant. In addition, nothing in the record

suggests that the Commonwealth relied upon or exploited the CSLI data that was not admitted. See Hobbs, 482 Mass. at 550. Indeed, the round-trip journey between Taunton and Avon revealed by the CSLI fits squarely within the language used in Hobbs; it represents "a reasonable period of time encompassing the commission of and flight from the crime." Id. Because those three hours were severable, we discern no abuse of discretion in their admission.

The defendant is correct that, when determining whether a search has occurred, the relevant inquiry is the amount of data that the government receives, not that which it ultimately seeks to introduce at trial. McCarthy, 484 Mass. at 499; Estabrook, 472 Mass. at 858-859 ("in terms of reasonable expectation of privacy, the salient consideration is the length of time for which a person's CSLI is requested, not the time covered by the person's CSLI that the Commonwealth ultimately seeks to use as evidence at trial"). See Carpenter, 138 S. Ct. at 2217 (evaluating 127 days of CSLI data, not four days that were admitted at trial, in determining that government access to CSLI data constituted search in constitutional sense).

Here, however, the proper inquiry is not whether a search occurred; our holding in Estabrook, 472 Mass. at 858, makes clear that one did. Rather, the proper question is whether that search was supported by probable cause and was reasonable under

the circumstances. Where the Commonwealth followed the applicable law at the time of this pre-Augustine search, if the three-hour period admitted at trial was supported by probable clause, there was no error.

b. Probable cause. Having determined that the three-hour period admitted against the defendant is severable, we still must ensure that a search of those three hours was supported by probable cause. Our inquiry is confined to the four corners of the affidavit submitted in support of the motion for an order under 18 U.S.C. § 2703(d). See Hobbs, 482 Mass. at 544; Robertson, 480 Mass. 383, 386 (2018). Review of such an affidavit is de novo, and we consider it "as a whole and in a commonsense and realistic fashion; inferences drawn from the affidavit need only be reasonable, not required." Augustine II, 472 Mass. at 455, quoting Connolly, 454 Mass. at 813.

The defendant contends that the judge did not excise unreliable hearsay from the affidavit. Individuals supplying information to the affiant for a search warrant must meet the strictures of the two-part Aguilar-Spinelli test; the affidavit must demonstrate both that his or her information is grounded in a basis of knowledge, and also that it is reliable. See Commonwealth v. Upton, 394 Mass. 363, 374-375 (1985). See also Spinelli v. United States, 393 U.S. 410, 415 (1969); Aguilar v. Texas, 378 U.S. 108, 114 (1964); J.A. Grasso, Jr., & C.M.

McEvoy, Suppression Matters Under Massachusetts Law § 10-3 (2017). When a witness, victim, or officer is identified by name in an affidavit, that fact weighs towards the witness's reliability. See Commonwealth v. Ferreira, 481 Mass. 641, 657 (2019); Commonwealth v. Beliard, 443 Mass. 79, 85 (2004); Commonwealth, v. Alvarez, 422 Mass. 198, 203 (1996). See also Grasso & McEvoy, supra at § 10-5[a][1], collecting cases ("Named informants or concerned citizens are presumed to be reliable and the information they provide credible").

The affidavit here supplied the following facts. Mendes gave an account of the shooting essentially consistent with her trial testimony, described supra. She was an eyewitness to these events, thus satisfying the basis-of-knowledge requirement. She is named and the narrative is sufficiently detailed so as to support her veracity. Her account included seeing Lawrence drive by the victim's home, the victim's decision to follow him in their vehicle, Lawrence "laugh[ing] at them" as he pulled his vehicle out of the driveway in front of the victim's house, and the subsequent shooting. This sequence of events gives rise to the reasonable inference that the attack was coordinated between Lawrence and the shooter.

Mendes also told officers that, prior to the shooting, the victim had been receiving threatening calls from the defendant and his brother, including a statement that they were not "just

going to beat him up like he did to [Lawrence]." Mendes's dating relationship with the victim is, by reasonable inference, the basis of this knowledge. It is reasonable to assume either that he relayed these conversations to her or that she was present for them.[8] Again, the fact that she is named and the specificity of the information she supplied supports her credibility. The threatening telephone calls are properly considered in the probable cause analysis.[9]

The affiant interviewed two named firefighters, who described seeing a Hispanic male sitting in a Volvo near the victim's residence fifteen minutes before the shooting. The vehicle's lights were off, and the man was talking on his cellular telephone. These observations also properly are considered.

---

[8] Part of the defendant's argument is that these statements were relayed in a chain of hearsay. In such circumstances, "each link must be tested and found reliable under Aguilar-Spinelli." Commonwealth v. Zorn, 66 Mass. App. Ct. 228, 233 (2006). The victim had an adequate basis for the content of the calls, as they were directed to him, and his identity is known, making him presumptively reliable.

[9] These specific statements, made by a specific named witness, with an inferable basis of knowledge, are readily distinguishable from the vague statement in the affidavit that "witnesses have told investigators that they do not believe that . . . Lawrence knows anyone who would be willing to threaten or harm anyone on his behalf other than [the defendant] and Keith Wilkerson." This later statement does not meet the threshold for either basis of knowledge or reliability, and we do not consider it.

Finally, Lawrence gave an interview to police in which he confirmed that a twelve-minute call in the call log of his cellar telephone, at 9:19 P.M., was to the defendant.[10] The affidavit submitted in support of the motion for a 18 U.S.C. § 2703(d) order states that the police had received a call for "shots fired" at approximately 9:40 P.M. Thus, Lawrence was on the telephone with the defendant between ten and twenty minutes prior to the shooting.

Limited to these facts, we examine the search warrant application to determine whether it was supported by probable cause for the relevant three-hour period. Doing so involves a two-part inquiry. We ask whether "(1) the magistrate had a substantial basis to conclude that a particularly described offense has been, is being, or is about to be committed; and (2) the CSLI being sought will produce evidence of such offense or will aid in the apprehension of a person who the applicant has probable cause to believe has committed . . . such offense." Robertson, 480 Mass. at 387, citing Estabrook, 472 Mass. at 870.

Here, there is no question that an offense was committed; the affidavit describes the shooting in detail. The more difficult question is whether the affidavit establishes probable cause to believe that the defendant's CSLI would produce

[10] The affidavit says the call log referenced 9:19 P.M., but does not say whether the call started or ended at that time.

evidence of that offense. "[T]he location of a suspect's cell phone at the time of the criminal activity provides evidence directly related to his or her participation, or lack thereof, in the criminal activity, and the location of the cell phone at that time can reasonably be expected to be found in the CSLI records requested." Hobbs, 482 Mass. at 547. Therefore, for the CSLI to produce evidence of the offense, the affidavit must show probable cause that the defendant was directly involved in the shooting, either as the shooter or as some type of accomplice.

Taken together, we conclude that the element of coordination inherent in the shooting as described, the defendant's previous threats to the victim, and the telephone call to the defendant from Lawrence minutes before the coordinated attack -- made while Lawrence was stopped on the side of the road near the victim's home -- establishes probable cause to believe that the defendant was the shooter or otherwise involved in the commission of the crime. Therefore, there was no error in the introduction of the three hours of CSLI at trial, because the three-hour period of CSLI data admitted was supported by probable cause.

c. Expert testimony. The defendant argues that the judge erred in not conducting, sua sponte, a Daubert-Lanigan hearing to test the scientific validity and reliability of the CSLI

evidence before it was introduced. While the defendant did move to exclude the CSLI and testimony about it through motions in limine that raised the issue of its scientific reliability, he did not request an evidentiary hearing on the matter. Where a defendant does not request a Daubert-Lanigan hearing to challenge the general scientific reliability of the methodology prior to trial, the issue is waived on appeal. See Commonwealth v. Cole, 473 Mass. 317, 328 (2015), overruled on other grounds by Commonwealth v. Wardsworth, 482 Mass. 454 (2019) ("Because the defendant failed to request a Daubert–Lanigan hearing to establish the reliability of the methodology underlying [the expert's] testimony, we do not consider the matter further"). See also Commonwealth v. Fritz, 472 Mass. 341, 349 (2015).

Nonetheless, regardless of whether such a hearing is held, a trial judge has an important responsibility as the gatekeeper of the evidence; before a witness may testify as an expert, the judge must make "the threshold determination that the expert opinion is sufficiently reliable to go before the jury." Commonwealth v. Hoose, 467 Mass. 395, 417 (2014), citing Commonwealth v. Shanley, 455 Mass. 752, 761–762 (2010). "Reliability may be established either by demonstrating that the principles and methods generally are accepted in the relevant scientific community or by applying the factors set forth in the United States Supreme Court's decision in Daubert," 509 U.S. at

592-594. Hoose, supra at 416-417, citing Commonwealth v. Patterson, 445 Mass. 626, 640-641 (2005).

On appeal, the defendant also challenges the qualifications of the Commonwealth's CSLI experts, Raymond MacDonald and Trooper Brian Tully. A judge need not explicitly qualify an expert as such in open court, and the better practice is not to do so. See Commonwealth v. Richardson, 423 Mass. 180, 184 (1996). Wherever the hearing is conducted, "[t]he crucial issue in determining whether a witness is qualified to give an expert opinion, is whether the witness has sufficient education, training, experience and familiarity with the subject matter of the testimony" (quotations and citation omitted). Commonwealth v. Rice, 441 Mass. 291, 298 (2004).

Ruling on the defendant's motion in limine, the judge likely allowed testimony, as set forth in the affidavit, that CSLI data "could identify which tower(s) were used during a call, the location of those towers, and the fact that a phone must be within the coverage area of a tower in order to connect with that tower."[11] He allowed defense counsel on cross-

[11] The defendant's motion to exclude CSLI testimony was endorsed with the statement "Denied, except as stated in open court." Unfortunately, the hearing was not recorded. The approximate contours of the judge's evidentiary ruling are based on a reconstruction of the record. We emphasize that, particularly in cases of serious crimes, a contemporaneous record of the proceedings must be made.

examination to elicit scientific evidence tending to cast doubt on the precision of any locational inference to be drawn from a particular tower connection. This delineation essentially is consistent with the way in which the judge ruled on objections at trial.

We discern no abuse of discretion in the expert opinion testimony given in this case. Tully testified to his extensive training in applying CSLI records to criminal investigations. Raymond similarly testified to fourteen years of experience and technical training in wireless cellular telephone technology. This training was adequate to support the limited scope of the experts' opinion testimony. It was not an abuse of discretion to allow them to testify to the well-established facts that cellular telephones connect to towers via radio signals, that CSLI records indicate the tower to which a particular cellular telephone connected for a particular call, and that the device must be within the coverage area of the tower in order to connect. See Augustine I, 467 Mass. at 237-239 (describing this basic functionality).

2. Lawrence's statements as coventurer. The defendant also challenges part of Burgess's testimony in which she relayed statements made by Lawrence a few days prior to the shooting. On the first day that the prosecutor attempted to introduce the statements, the judge sustained the defendant's objection

because there was insufficient evidence of a joint venture. After a sidebar discussion the following day, the judge determined that a sufficient foundation had been established, and allowed these statements to be admitted under the hearsay exception for statements by joint venturers. Before they were introduced, the judge properly instructed the jury, as the defendant requested, regarding the findings that they would be required to make before they could consider the statements against the defendant; the judge gave a more detailed instruction on statements by joint venturers in his final charge.

According to Burgess, Lawrence came to the house she shared with the defendant and told the defendant that the victim had beaten him and had smashed the window of his vehicle, and that he and the defendant "needed to take care of what they needed to take care of and handle it." Sometime later (prior to the shooting), Burgess was present for a telephone call between Lawrence and the defendant. While she could hear only the defendant's side of the conversation, she gathered that Lawrence was going to pick him up and that they were going to "take care of what they needed to do." After a second call between the defendant and Lawrence, the defendant told Burgess that "he shouldn't do it. And he didn't want to do it." She thought

that "[h]e didn't seem like he wanted to do it," and told him that he "shouldn't do it" and "should stay out of it."

Generally, "[o]ut-of-court statements by joint venturers are admissible against the others if the statements are made during the pendency of the criminal enterprise and in furtherance of it." Commonwealth v. Winquist, 474 Mass. 517, 520–521 (2016), quoting Commonwealth v. Carriere, 470 Mass. 1, 8 (2014). In order for such statements to be admissible, "the judge must make a preliminary determination, based on a preponderance of the evidence, other than the out-of-court statement itself, that a joint venture existed between the declarant and the defendant and that the statement was made in furtherance of that venture." Commonwealth v. Rakes, 478 Mass. 22, 37 (2017), citing Commonwealth v. Bright, 463 Mass. 421, 426 (2012).

If the judge determines that it is admissible, and after the evidence is introduced, before they may consider the statement, the jury "first [must] make their own independent determination, again based on a preponderance of the evidence other than the statement itself, that a joint venture existed and that the statement was made in furtherance thereof." Rakes, supra. "We view the evidence presented to support the existence of a joint venture in the light most favorable to the Commonwealth, recognizing also that the venture may be proved by

circumstantial evidence" (quotations and citation omitted). Winquist, 474 Mass. at 521. We review the judge's decision for an abuse of discretion. Rakes, supra at 37; Winquist, supra.

While, ordinarily, a coventurer's statements must be made during an existing conspiracy or joint venture, "[s]tatements made prior to the formation of a joint venture may be admissible if they were made in furtherance of a joint venture that formed thereafter." Carriere, 470 Mass. at 10–11. See Rakes, 478 Mass. at 38–39 ("statements probative of the declarant's intent to enter into a joint venture with the defendant to commit a crime may be admitted under the joint venture exception"); Commonwealth v. McLaughlin, 431 Mass. 241, 248 (2000) ("Matters surrounding the history of the conspiracy, including statements of coconspirators, may be admissible even if they predate the conspiracy"); Commonwealth v. Rankins, 429 Mass. 470, 474 (1999) ("The date on which a conspiracy allegedly began is not an absolute bar to looking at earlier events that have a bearing on the existence of the conspiracy").

Lawrence's statements, although vague, tended to show that he was trying to recruit the defendant, and therefore were made "in furtherance of a joint venture that formed thereafter." Carriere, 470 Mass. at 11. The defendant's hesitance, which tends to indicate a lack of agreement at the time of the telephone calls, is not dispositive as to whether the statements

were admissible. Rather, we conclude that they fall within the exception, delineated supra, for the admission of relevant statements that predate the formation of a joint venture. See Carriere, 470 Mass. at 10–11; McLaughlin, 431 Mass. at 248. Accordingly, the judge did not abuse his discretion in allowing these statements to be presented to the jury.

3. Joinder of suborning perjury charge. The defendant argues that the judge erred by allowing the charges against him -- murder and suborning perjury -- to be joined for trial pursuant to Mass. R. Crim. P. 9 (a) (3), 378 Mass. 859 (1979). By rule, joinder "is appropriate where offenses are related, unless joinder 'is not in the best interests of justice.'" Commonwealth v. Mendez, 476 Mass. 512, 519 (2017), quoting Mass. R. Crim. P. 9 (a) (3). For the purposes of joinder, offenses are related "if they are based on the same criminal conduct or series of criminal episodes connected together or constituting parts of a single scheme or plan." Mendez, supra, quoting Commonwealth v. Hernandez, 473 Mass. 379, 393 (2015). In making a determination whether offenses are related, we consider "factual similarities, closeness of time and space, and 'whether evidence of the other offenses would be admissible in separate trials on each offense.'" Hernandez, supra, quoting Commonwealth v. Pillai, 445 Mass. 175, 180 (2005).

On appeal, "[t]he defendant bears the burden of demonstrating that the offenses were unrelated, and that prejudice from joinder was so compelling that it prevented him from obtaining a fair trial." Commonwealth v. Gaynor, 443 Mass. 245, 260 (2005), citing Commonwealth v. Wilson, 427 Mass. 336, 346 (1998). We review for an abuse of discretion. Hernandez, 473 Mass. at 393.

Here, the charges were adequately connected such that the judge did not abuse his discretion in allowing them to be joined. There is an inherent connection between an offense committed and statements made in an effort to cover up the commission of the crime. A significant portion of the evidence introduced, which would have been needed to convict the defendant in separate trials, would have been admissible at both trials. See Commonwealth v. Allison, 434 Mass. 670, 680 (2001) (joinder was proper where evidence of perjury would be admissible in murder trial to show consciousness of guilt, and evidence of involvement in murder was admissible on perjury charge to show materiality). Because we cannot say that any prejudice from the joinder was so great that the defendant was prevented from obtaining a fair trial, he has not met his burden to establish an abuse of discretion in the judge's decision to allow the joinder.

4. "Missing witness" and Bowden instructions. The defendant argues prejudicial error in the judge's decisions not to give "missing witness" and Bowden instructions. See Commonwealth v. Bowden, 379 Mass. 472, 485-486 (1980).

a. "Missing witness" instruction. The defense maintains that the Commonwealth's failure to call Heather Farris, who drove Burgess home from work on the day of the shooting, warranted a "missing witness" instruction. Farris's testimony, presumably, either would have corroborated or undercut Burgess's testimony that she saw the defendant and Lawrence together in the gray Volvo, driving toward the scene of the shooting.

A missing witness instruction permits the jury, if they think it reasonable under the circumstances, to infer that the uncalled witness would have given testimony unfavorable to the party that could have, but did not, call that witness. Commonwealth v. Williams, 475 Mass. 705, 720 (2016). This instruction is appropriately given "when a party 'has knowledge of a person who can be located and brought forward, who is friendly to, or at least not hostilely disposed toward, the party, and who can be expected to give testimony of distinct importance to the case,' and the party without explanation, fails to call the person as a witness." Id. at 720-721, quoting Commonwealth v. Saletino, 449 Mass. 657, 667 (2007). Because such an instruction can be a powerful influence on the jury, a

missing witness instruction should be provided "only in clear cases, and with caution." Williams, supra at 721, quoting Salentino, supra at 668.

The decision whether to give a missing witness instruction is committed to the "discretion of the trial judge, and will not be reversed unless the decision was manifestly unreasonable." Saletino, 449 Mass. at 667, citing Commonwealth v. Thomas, 429 Mass. 146, 151 (1999).

There is a critical distinction between instances where a judge gives a proper missing witness instruction and then allows counsel to argue for an adverse inference due to a missing witness -- that the uncalled witness would testify in a way harmful to the party that did not call them -- and those cases where defense counsel merely questions the adequacy of the Commonwealth's case as it was presented at trial. See Saletino, 449 Mass. at 672 ("Nothing we say today prohibits a defense attorney from arguing to the jury, in a case where there is no missing witness instruction, that the Commonwealth has not produced sufficient evidence to warrant a conviction beyond a reasonable doubt. . . . A defendant has wide latitude in every case to argue that the Commonwealth has failed to present sufficient evidence and, in this sense, that there is an 'absence' of proof or that evidence is 'missing'").

We conclude that it was certainly not manifestly unreasonable for the judge to decline to give a missing witness instruction in this case. Farris's testimony, while it could have corroborated a portion of Burgess's account, was not "of distinct importance to the case" (citation omitted). Williams, 475 Mass. at 720. Rather, the judge properly allowed defense counsel to argue a general lack of corroboration at closing, which counsel did forcefully:

> "Second, what about all of the people that she talked about? She talked about Heather Farris, who drove her home from work that night. Where is Heather Farris? To corroborate what she says? . . . What about the next morning when she says that her aunt . . . drove them into Boston to get rid of the gun. Where is the aunt . . . to tell us, yes, I remember that morning? We drove into Boston. You don't have it. There is no corroboration."

b. Bowden instruction. The defendant contends that the judge erred in failing to give an instruction for his Bowden defense. See Bowden, 379 Mass. at 486 (permitting defense on grounds of inadequate scientific testing and investigation). This argument is unavailing. As we have explained repeatedly, "a judge is not required to instruct on the claimed inadequacy of a police investigation. 'Bowden simply holds that a judge may not remove the issue from the jury's consideration.'" Commonwealth v. Durand, 475 Mass. 657, 674 (2016), cert. denied, 138 S. Ct. 259 (2017), quoting Commonwealth v. Lao, 460 Mass. 12, 23 (2011). Here, the defendant was allowed to argue the

inadequacies of the police investigation, and did so. There was no error.

5. Evidence of Lawrence's acquittal. The defendant also contends that it was error for the judge to exclude evidence of Lawrence's prior acquittal. The defendant maintains that exclusion of this evidence abridged his rights under the Sixth Amendment to the United States Constitution and art. 12 of the Massachusetts Declaration of Rights to present a complete defense. Because the issue was not preserved,[12] we review for a substantial likelihood of a miscarriage of justice. See Commonwealth v. Cassidy, 470 Mass. 201, 210 (2014).

The defendant concedes in his brief that "it would be improper to allow introduction of a coconspirator's acquittal to show that the defendant himself should be acquitted." Here, however, it is unclear what relevance Lawrence's acquittal would

[12] The defendant filed a motion in limine to exclude a theory of joint venture, or, in the alternative, to present evidence of Lawrence's acquittal. By agreement of the parties, the judge precluded a theory of joint venture and did not reach the defendant's alternative request. Subsequently, the Commonwealth moved to exclude evidence of Lawrence's acquittal. That motion was allowed, without objection, and the defendant did not seek to revisit the question at trial.

Nonetheless, throughout his opening statement, the prosecutor explained that the jury would learn of a conspiracy between the defendant and Lawrence, the prosecutor introduced significant evidence of joint venture at trial, and the judge instructed on statements by joint venturers in his final charge, as well as when the statements were introduced.

have had aside from this impermissible inference. The defendant argues that, because Lawrence's statements were admitted against the defendant as a coventurer, Lawrence is akin to a witness at the trial. If the jury knew that Lawrence had been acquitted, they might have viewed his efforts to recruit the defendant in a different "context." This argument is unavailing. The fact of Lawrence's acquittal would not necessarily serve to impeach his reported statements. Commonwealth v. Dorazio, 472 Mass. 535, 545 (2015) ("A finding of not guilty at a criminal trial can result from any number of factors having nothing to do with the defendant's actual guilt" [citation omitted]). The judge did not abuse his discretion in excluding evidence of Lawrence's acquittal.

6. Prosecutor's closing argument. It is impermissible for a prosecutor to "'misstate the evidence or refer to facts not in evidence' or 'play . . . on the jury's sympathy or emotions, or comment on the consequences of a verdict." Carriere, 470 Mass. at 19, quoting Commonwealth v. Kozec, 399 Mass. 514, 516-517 (1987). A prosecutor may, however, argue "forcefully for a conviction based on the evidence and on inferences that may reasonably be drawn from the evidence." Carriere, supra, quoting Kozec, supra at 516. Similarly, "[w]hile a prosecutor may not vouch for the truthfulness of a witness's testimony, . . . where the credibility of a witness is an issue, counsel

may 'argue from the evidence why a witness should be believed'" (citation omitted). Commonwealth v. Brewer, 472 Mass. 307, 315 (2015), quoting Commonwealth v. Raposa, 440 Mass. 684, 694–695 (2004).

Where, as here, the defendant did not object at trial, we review the prosecutor's closing argument to determine "whether any of the challenged statements was improper and, if so, whether it created a substantial likelihood of a miscarriage of justice." Commonwealth v. Martinez, 476 Mass. 186, 198 (2017). We examine the challenged statements "in the context of the entire closing, the jury instructions, and the evidence introduced at trial." Id., citing Commonwealth v. Costa, 414 Mass. 618, 628 (1993).

The defendant argues that the prosecutor misstated facts in evidence, drew impermissible inferences, wrongly vouched for Burgess's testimony, and made inflammatory statements. Reviewing the prosecutor's closing argument as a whole, we discern one impropriety, but conclude that it did not create a substantial likelihood of a miscarriage of justice.

The prosecutor argued a theory of the case, consistent with the defendant's statement to Burgess, that the defendant chased the victim's vehicle on foot before firing the fatal shot from the side. At trial, and on appeal, the defendant contends that this was a physical impossibility, because the distance between

shell casings and the period of time between shots would have required him to cover some seventy yards in a little over two seconds, or, otherwise put, run at over 150 miles per hour. We conclude that the prosecutor's argument did not rely on such unreasonable inferences, because it was consistent with the defendant's statement, and Mendes's testimony, which left open an interpretation of the events that would have allowed for a longer period of time between the shots being fired. While a prosecutor may not infer a physical impossibility from the evidence, see Lao, 460 Mass. at 21-22 (inferences must be possible), where an alleged impossibility rests on competing testimony,[13] the prosecutor is free to argue that one witness should be believed over another.[14]

---

[13] A nearby officer heard the shots and testified that the time between volleys was "a second or two." A resident who heard the shots stated that they were "a few seconds" apart, but also that the second set of shots sounded further away. On the other hand, while Mendes was clear that she was not able to estimate the time with any certainty, when pressed she said "maybe a minute" and gave an account consistent with a larger period of time in which the victim began to stop the car, asked her if she was okay, adjusted his mirror, and recognized something that made him curse, and then tried to accelerate.

[14] The defendant also contends that the prosecutor misstated the evidence when she said that Burgess saw Lawrence drop the defendant off. Technically, this was a misstatement of Burgess's testimony (she testified to seeing Lawrence driving off while the defendant sat on the steps outside their apartment, but did not see him get out of Lawrence's vehicle). However, the statement was a reasonable inference from the evidence at trial: Burgess stated that both she and the defendant were planning to get dropped off because the

The defendant contends as well that the prosecutor exceeded the bounds of permissible argument by arguing that particular features of Burgess's testimony -- details that easily could have been refuted and self-incriminating statements -- provided reasons why she should be believed. We observe no error. "It is not improper vouching for the prosecutor to point to reasons why a witness's testimony, or portions of a witness's testimony, should logically be believed." Commonwealth v. Rolon, 438 Mass. 808, 816 (2003), citing Commonwealth v. Chavis, 415 Mass. 703, 713-714 (1993).

Finally, the defendant argues that the prosecutor used impermissibly inflammatory language in her closing when addressing the defendant's motive: "He did it for his friend, [Lawrence]. He did in a context of being a hired killer, or a hired assassin, except he didn't get paid. He did it, because he didn't mind killing someone; and he did it to help [Lawrence] get revenge for what [the victim] had done." These statements were inappropriate and should not have been made. "[I]t is improper to refer to a defendant with epithets that suggest he has a criminal record where the evidence does not support such a

---

defendant's vehicle was broken down, and Burgess saw him in the passenger seat of the gray Volvo earlier that night. See Commonwealth v. Lao, 460 Mass. 12, 21-22 (2011), citing Commonwealth v. Marquetty, 416 Mass. 445, 452 (1993) ("Inferences need not be inescapable, just reasonable and possible"). There was no error.

finding, or invite the jury to decide the case on general considerations." Commonwealth v. Lewis, 465 Mass. 119, 130 (2013).

Nonetheless, taking the passage as a whole, the prosecutor's general meaning is clear: that the defendant lacked any personal motivation for the killing. "[W]e ascribe a certain level of sophistication" to the jury, and, here, have little doubt that they would not have been swayed by this unnecessarily hyperbolic language. Id. at 131. While this statement was improper and should not have been made, given the totality of the evidence against the defendant, it did not create a substantial likelihood of a miscarriage of justice.

7. Review under G. L. c. 278, § 33E. We have carefully reviewed the entire record, pursuant to our duty under G. L. c. 278, § 33E, and we discern no reason to order a new trial or to reduce the degree of guilt.

Conclusion. The defendant's convictions and the order denying his motion for a new trial are affirmed.

So ordered.