DON’T BLAME THE MESSENGER  

When jurors say that a case doesn’t add up, we ought to pay attention

By Julius (Jay) Wachtel. Just when we thought it was finally safe to turn on the news, word comes that Casey Anthony didn’t visit a website eighty-four times seeking information about chloroform as the D.A. had claimed. John Bradley, a Canadian software engineer who analyzed the family computer for the prosecution, determined after returning home that the site had only been visited once. Worried that someone’s life might hang in the balance, he called prosecutors while the trial was still in session and volunteered to come back at his own expense to clear things up. But they weren’t interested.

As it turns out, the D.A.’s men didn’t bother to pass on the startling little tidbit to the defense. Oops!

Of course, now that Casey’s dealing with the problems of being free, whether someone clicked once or a thousand times hardly matters. (Her mother said she was the one, but her timecards show she was at work.) Yet it’s another example of the leaky evidentiary bucket that Florida’s finest tried to pawn off as a forensic tour de force. With the help of CNN, which covered the trial in exhausting if not always dispassionate detail, let’s take on three key items of physical evidence.

A single strand of hair. Eager to prove that the victim’s body was left to rot in a car for days, prosecutors had an FBI trace evidence analyst testify about a single hair found in the trunk. She said that the hair was microscopically similar to Caylee Anthony’s hair but not her mother’s. A darkened area at the root was also consistent with post-mortem banding, suggesting that the hair had been attached to a decomposing body.

On cross-examination, though, the analyst conceded that her evaluation was hardly conclusive. In 2009 the National Academy of Sciences reported that “there is no scientific support for the use of [microscopic] hair comparisons.” Post-mortem banding is even more controversial. Lawrence Kobilinsky, the head of forensic sciences at John Jay College later told Time magazine that banding can also be produced by air pockets and determining its real cause is purely subjective.

Another FBI expert analyzed the hair’s mitochondrial DNA. That narrowed the strand’s origin to anyone in the Anthony maternal lineage, from the victim to her brother, mother and grandmother.

Vapor of decomposition. To bolster its claim that Caylee’s body decayed in the trunk prosecutors called Dr. Arpad Vass. A sprightly fellow with a Ph.D. in anthropology, Dr. Vass is the proud inventor of a process that analyzes air samples for the signature of decomposition. He testified that when a container of air from the trunk was opened he “jumped back a foot or two” because the odor of death was so pronounced. What his instruments detected, he said, could have “only” been produced by the decay of human remains. He also said that there were very high levels of chloroform.

Prosecutors called Dr. Vass’s techniques “state of the art.” On cross-examination, though, it became apparent that Dr. Vass, who lacks a degree in chemistry, was speaking only for himself. His secret recipe
is his alone. What’s more curious is that the results he’s reported have never been replicated. According to Dr. Kobilinsky, the process is “not junk science, but it never should be brought into a courtroom at this stage.” As for the chloroform, Ruth Smith, a forensic science professor told Time that unless improbably large quantities were used, detecting it after so much time had passed was improbable. “Chloroform’s quite a volatile liquid, and it wouldn’t really stick around for that long.”

**The duct tape.** Three pieces were found: one was still adhering to the victim’s skull and two were on the ground nearby. Medical examiner Dr. Jan Garavaglia testified that her finding of homicide was based on three reasons: the alleged accidental drowning wasn’t promptly reported, the body had been hidden, and there was duct tape present in sufficient quantity and of sufficient size to cover the mouth and nose and lead to suffocation. Her conclusion seemed like plain old common sense: “There is no child that should have duct tape on its face when it dies.”

Over defense objections prosecutors played a grisly video that depicted strips of duct tape superimposed over the victim’s nose and mouth. Under cross-examination anthropologist Dr. Michael Warren conceded that there was no tape on the face when the body was discovered and that the video depicted only a “possible” means of death. Still, the defense had to somehow neutralize the tape. For that they turned to Dr. Werner Spitz.

Dr. Spitz has a long and distinguished medical career. He served as chief medical examiner in Detroit and assisted the commission that investigated the assassination of President John F. Kennedy. As a pathologist for the defense his best-known work has been for Phil Spector, a music producer who was accused in the shooting death of a woman he invited to his mansion. At the 2007 trial Dr. Spitz concluded that bloodstain patterns indicated that the victim’s wound was self-inflicted. His testimony was credited for helping hang the jury. (They voted 10-2 for conviction. Interestingly, the 2009 National Academy of Sciences report that discredited hair comparison did essentially the same with respect to bloodstain patterns.)

Two years later, at Spector’s retrial, Dr. Spitz got into a prolonged argument with a prosecutor about his enormous fees. Rattled by aggressive cross-examination, Dr. Spitz seemed evasive and unconvincing. This time the verdict was unanimous: guilty. Spector got nineteen years to life and remains imprisoned.

At the Anthony trial, Spitz called the cause of death undetermined and criticized Dr. Garavaglia for conducting a “sloppy” autopsy. He also insisted that the tape was only applied after Caylee’s death, perhaps to bind her jaw and skull. Dr. Spitz later called the acquittal “the right decision.”

Prosecution witnesses and trial observers ridiculed Dr. Spitz’s notions. However improbable his testimony, though, it apparently resonated with jurors. Interviewed after the trial, both the foreman and juror number three felt that not even the tape could prove that the child was murdered:

**ABC News:** I’m going to press you on this, duct tape, on a baby, in a bag, rotting in the woods. Most people look at that, they put two and two together, they say it’s a murder.

**Juror #3:** Well, in our country, unfortunately, you have to prove it...But it’s someone else’s life, and if I’m wrong, and kill someone else, I can’t live with that...why be mad at me, the prosecution had to prove it, why is it my fault that they didn’t prove their case?
Juror #3 said she was one of six who were initially inclined to find Casey Anthony guilty of aggravated manslaughter. (According to the foreman the initial vote on the murder count was 10-2 to acquit.) But she eventually changed her mind:

CNN: So what convinced you and the five others to switch your votes...?
Juror #3: I think everyone will tell you the same thing, it’s just lack of hard evidence...like I said, the duct tape and the chloroform and things like that...if you took a hard, good look at it, you could kind of...there was a lot of doubt surrounding all those certain things so, there’s not enough to make anything stick.

It wasn’t just the forensics. Jurors had grave suspicions about Casey’s father, George:

Foreman: There was a suspicion of him. That was -- that was a part of our conversation that we had of the -- well, what I’d call the round robin topics that we had when we were doing deliberation. That was brought up.
FOX News: Suspicious that he was involved in covering up the death, suspicious he was involved with the -- an accidental death, or suspicious he was a murderer?
Foreman: All three. We don’t know. We don’t know. The suspicions were raised.

And similarly, from Juror #3:

ABC News: What did you make of George Anthony’s testimony?
Juror #3: He did not help the state’s case
ABC News: Why?
Juror #3: Because he was clearly dishonest...he was evasive...his story seemed to change...if it wasn’t going to help the prosecution’s case, he was going to try...”I don’t recall”....
ABC News: Do you believe George Anthony had something to do with what happened to Cayley?
Juror #3: I don’t know if he had anything to do with it, but he was there.

In an era when so many wrongful convictions have come to light it’s not surprising that there were concerns about calling it wrong, and especially in a capital case:

ABC News: How much did the fact that this was a death penalty case weigh on you...?
Juror #3: Well, it weighs heavily...it’s pretty, it’s the ultimate, the ultimate...it’s as big as you can get...someone else’s life in your hands...if they want to charge and they want me to take someone’s life they have to prove it or I’m a murderer too and I’m not any better.

Unlike most states, Florida doesn’t give jury instructions about direct and circumstantial evidence. (Click here for a discussion. Click here for current Florida jury instructions.) Accordingly, none were given at the Anthony trial. So who could blame Juror #3 for weighing their relative importance herself?

They had good strong circumstantial evidence, but at the end of the day it was circumstantial and there was no [one] strong piece of evidence that said something definitively. Every piece of evidence could kind of [say] this or that, this or that way, there were many different ways you could have gone with each piece of evidence.
Well, not every piece, at least not at first. Until Dr. Spitz took the stand, that one “strong piece of evidence” that could have “said something definitively” was the duct tape. Of course, once he was done there were doubts about that too.

Not everyone was upset with the outcome. Lawyers and forensic experts expressed dismay at the “experimental,” near-junk quality of much of the prosecutions’ physical evidence and applauded jurors for seeing through the fluff. Some felt that a murder conviction would not have survived an appeal.

What to make of all this? The state had one undeniable jewel – the duct tape. Its value, though, was likely diminished by all the questionable testimony about vapors and such. Regrettably, the only DNA on the tape was matched to an FBI analyst who contaminated it during handling. Yet considering that similar duct tape was found at the residence, prosecutors could have made tape their centerpiece and perhaps gone after Dr. Spitz’s improbable testimony with greater passion. Instead, they threw in the kitchen sink and confused the jury.

It’s possible that the case was doomed from the start. Police ignored a tip about the remains for months, and by the time the body was found the cause of death couldn’t be medically determined. So there’s plenty of blame to go around. Meanwhile Casey Anthony faces an uncertain and highly problematic future. As she’ll soon realize there may be worse things in life than being found guilty of murder.