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Open Discussion: Role of Scientific Evidence

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OPEN DISCUSSION

BIEBER

I'd like to respond briefly to one of Mr. Pokorak's points that I can't agree with. Based on my own experience with homicide cases, some very bright people, including licensed physicians, have been convicted of homicides. They were very careful, but not careful enough, with disposing of key associative or physical evidence. So I don't think, given my experience of more than a decade working on a lot of homicide cases, that I would agree that there is an educational difference in those that commit serious crimes vis-à-vis evidence.

But I'd also like to go back to Mr. Cooley's comments because I think, while I may not disagree with some of his concerns about the state of affairs in science as it's applied to forensic investigations, I think that's precisely why we have these recommendations in the Report. I would disagree with Mr. Cooley's catego-

rization that the Council's Report has an overreliance on what you're calling forensic science. I think, in fact, we have established a requirement in our Council's Report that proper analysis of evidence must be there and that it must be done correctly. Just for the record, I feel like I must quote from our own document within the context of this requirement. I'm quoting from page twenty: "Not all physical or associative evidence will be capable of satisfying this requirement of conclusive evidence reaching the level of scientific certainty that adequately connects the defendant to the crime. Moreover, not all individual cases will involve evidence of sufficient quantity or quality to meet this requirement." So our Council members understand this point as well as any group could, and we have addressed it to the best of our ability.

Science is a moving target, as you point out. But I must remind the audience that these same techniques that Dr. Selavka's lab applies in the investigation of serious criminal acts are used every day by us in the hospital to determine what patient gets what bone marrow sample for treatment of leukemia or lymphoma. Everyday at the Air Force Mortuary in Dover, Delaware, these same techniques are used for reunification of families and soldiers' remains, and in the World Trade Center reunifications, and those in the genocide going on in Europe and the Sudan, for example.

So, it seems to me that Mr. Cooley wants to butter the bread on only one side. He is happy to use forensic science when it exculpates his client. But when it inculcates his client, he seems to be stepping back.

COOLEY

What techniques are you referring to?

BIEBER

In the military, we can use dental X-rays, full body radiographs, digital latent fingerprints, tattoos and distinguishing scars, medical devices that have been implanted into the body (replaced hips or knees for example) or DNA comparisons. And there is bone and facial contour reconstruction that the forensic anthropologists use. So there are a lot of methods. And I think you must admit that a lot of this technology has high scientific validity. It is widely used in other applications; in research labs, in the care and treatment of human and non-human animal patients. To categorize it all as "junk" science is disingenuous.

COOLEY

I think my focus was mainly on the identification sciences. Identifying teeth is completely different from identifying a bite mark on skin. That's all I'm saying.

BIEBER

It is precisely because of the potential issues of disagreement and potential incompetence of people in their interpretation or

analysis that we recommend, in our Report, that this external panel be convened to take a fresh look at whatever lab work has been done or not done in capital cases. There are also errors of omission. One of the first questions that I get from defense attorneys who contact me for assistance in reviewing a case is whether I will go to the crime lab and look at evidence to see if there's some piece of evidence that Dr. Selavka's group hasn't analyzed, or the Boston Police Crime Lab or the FBI haven't analyzed. This is because the defense may want to send it out to their own private lab for the reasons that Mr. Cooley alluded to—hoping they will find a DNA exclusion—and knowing that if they do the testing it may not be discoverable if it includes their client.

COOLEY

My focus was on identification sciences; I'm trying to figure out how patients are being benefited by those bite-mark and bullet identifications. Most of my focus was on those.

BIEBER

I think page twenty spells it out quite clearly; that we fully recognize that not every case will have this evidence. If it doesn't, then it doesn't go forward in this way. Some of it may not be, by itself, capable of meeting this high standard. The external review is designed to assure that it must.

COOLEY

I think a lot of people are not cognizant of the shortcomings of the identification sciences. There are other technologies, like DNA, that are far more advanced than the identification sciences. But my concern is based on the lack of research in those fields and the lack of scientists in those fields. My main point is: If you want to improve the capital punishment system, we need to improve the forensic science community—both for defense and prosecution experts.

SHERMAN

I think we can all agree that science is imperfect. I don't care whether it's forensic science, psychology, biology, medical science, or physics—there is uncertainty; there is room for error. As much as we would like to think science is all objective, there is subjectivity. The important thing is to have competent and honest scientists who will admit the uncertainties and tell you of potential problems in data or interpretation. That is what the law needs—and that is what I suspect this group is looking for.

Mr. Cooley brings up an important kind of error which we know exists—observer bias. Unfortunately, I think this independent scientific review panel leaves room for observer bias in the sense that, as I understand it, this group will receive scientific evidence only from cases where they know the defendant has been found guilty. Now, to me, if I know that a jury has found someone guilty, if there is observer bias, it's going to be there. I

would suggest that, even though it will increase the cost, if what you're after is accuracy and not convicting innocent people, you should give the scientific body not only evidence from cases where there was guilt found, but also acquittals. If the scientific review panel is blind as to the outcome of the jury decision, I think that kind of observer bias would be decreased.

SELAVKA

The world of forensic science has been benefiting from independent processes that are developing what are called technical and scientific working groups in every subdiscipline of forensic science. The scientific and technical working group process nationally has been developing national standards for every subdiscipline now for over a decade. Look at today's environment in an accredited laboratory. I agree that we shouldn't trust unaccredited labs as much as we trust the accredited lab. I'd like to see an independent scientific review process available to make sure that we are using the appropriate science for the appropriate purpose. That is probative information that helps resolve the case.

MOULTON

I think the big question is entirely independent of the issue of quality forensic science accreditation. Outside the question of quality forensic science there are two questions that I think are enormously important: How likely is it that evidence is going to be available in these sorts of cases? How often are we going to find scientific or other associative evidence that is highly corroborative of guilt? I'll give my answer: Very rarely—I'd say in maybe 20% of otherwise capital-eligible cases will have that sort of evidence. Did the Council undertake any kind of study to find out, in Massachusetts or elsewhere, how often, in otherwise capital eligible cases, you would find the scientific evidence? My experience, again anecdotal and personal, is that you are not going to find it very often.

That leads to the other question: Does that create a big proportionality problem? I say, "Absolutely it does." You are going to have cases that are otherwise equal in terms of just deserts for death, but just because of care, sloppiness, passion, or luck, quality of forensic examiners, in one case you are going to have that scientific evidence, and in the other case your not. That is not a valid basis, in my view, to distinguish between a capital eligible and a non-capital eligible defendant. So, the only question in there is the extent to which you looked at the question of how often you are going to have forensic evidence in these cases. I would be surprised if it's 20% of the cases that are otherwise capital eligible. That's part of the CSI effect. I think we have this notion from CSI, that it is always possible to extract useful forensic evidence; but in my experience that is just not true.

HOFFMANN

To the extent you asked about what the Council talked about, I can tell you that we asked that specific question—not in the context of a study, because there is no study available, because this has never been a requirement before—but we did ask Dr. Bieber, Dr. Selavka, and another crime-laboratory director who was on the panel. We were well aware of the fact that it would be a far smaller group than the total number of death-eligible crimes. We didn't have a number attached to it. But the sense of the Council was that a relatively small subset of the death eligible cases would meet this evidentiary standard.

This takes me directly to your second question—I can tell you that we explicitly, at great length and on numerous separate occasions, discussed the question of whether this created a proportionality problem. We decided, in the end, that given our goals, we were willing to accept the fact that whatever percent you come up with are not going to be eligible for the death penalty even though in theory their crimes ought to be at least as deserving of it as the others. We felt that that was no different from any other situation in which someone commits a crime and we can't even meet the "beyond a reasonable doubt" standard of guilt, or we don't even catch the guy.

Osama bin Laden is still alive because we can't catch him, but we decided that this fact does not become an argument for not giving the death penalty to Timothy McVeigh. This was a deliberate choice made by the Council. I'm not going to argue whether it is the right choice or not, because that's not what I'm here for today.

BIEBER

Referring again to the Michigan Study by Professor Gross and his students, over half of the exonerations that they tallied were due to false confessions, coerced confessions, or mistaken eyewitness identification. Given that sorry state of affairs, I think we would have been remiss not to require a much higher standard than human evidence.

MOULTON

I think that is a legitimate requirement. My answer would be: We shouldn't have the death penalty in this context, if we're going to create this problem. If one of your goals here is to promote fairness as well as accuracy—or minimization of false positives—you have created an enormous problem in the other direction because you are going to have a system in which people see that fortuity plays a huge role in who gets the death penalty. You are going to have Person A and Person B who are in all respects identical, but as it happens, with respect to Person A, it was that rare case where we actually got a fingerprint off of the gun. And with Person B, we couldn't get a fingerprint off the gun.

- POKORAK That suggests that fortuity is not the main factor in the death penalty today. I think that the attempt is to at least lower that concept.
- MOULTON Right.
- HOFFMANN Or to shift it.
- POKORAK Shift the balance.
- BIEBER But doesn't this argument apply to any criminal investigation? Some people escape detection altogether. There is a proportionality issue there as well. I know the stakes aren't the same
- MOULTON And it's also not highlighted. There is not a public identification of that Person B, who escapes punishment altogether. If we have two people, both capital eligible, it is glaringly apparent. I think there are plenty of cases in which we are just as confident. Then you come back to Mr. Cooley's point to some extent. There are plenty of cases in which we are just as confident about the outcome without forensic evidence as we are in cases where there is forensic evidence strongly corroborating of guilt. Non-stranger eyewitness identification cases, for example, with plenty of motive evidence and that sort of thing.
- MURPHY I have an observation: everything that we say about scientific evidence and testing is premised on the idea that the defendant will receive the evidence that doesn't support the finding of guilt—and that often is not the case. Even after the conviction, if evidence that is favorable to the defendant is found, it is often suppressed. We just heard that Madison Hobley was sentenced to death for an arson where his wife and his child died. We'd love to tell you that it was in good faith, however, it's one of the cases on the verge of torture, so we have to assume at least at this point that it was not.
- Nevertheless, when the prosecution was required under oath to say they had no further evidence, Ms. Lyon found out, finally, about a report that, six months after his conviction, they knew that there was a pattern of arsons in this area. That was never turned over despite numerous requests. So no matter how good the scientific community is, if you don't have law enforcement that is ethical and outstanding and if you don't have sanctions, if you don't do anything when they suppressed evidence, when they go on and they're not indicted, then you can see that thoughts of criminal justice in this country are going to continue to diminish.