

The photo lineup

The photo lineup consisted of a picture of Richardson and pictures of five others who looked roughly similar to Richardson but who could not have committed the crime. It was administered to store employees who had had seen the killer and to customers who had seen him in the parking lot.

Photo lineup results tabulated

Observer	Response
Malone	"It looks more like three (Richardson) than any of the others."
Vocos	"If it's anyone, it's this guy." (Richardson)
Cerda	Chose Richardson's picture on the basis of the shape of his head and jaw size. 100% certain.
Guerrero	Chose Richardson on the basis of the eyes.
Atuatusi	Chose Richardson because he saw Richardson on TV following his arrest; hence of no value.
Customer	Chose Richardson on the basis the shape of his head and his skin color.
Eleven other customers	No recognition

Comments

From Tustin Police Department Investigative Report: Following Malone's identification of the suspect, Van Cleve states "Okay. The next thing I'm going to do is I can tell you that's the person we have in custody that we've arrested for the crime and we're pretty comfortable that that's the suspect in the shooting and so it's good that you picked him out because we're very confident we got the right person." Providing that kind of information to the witness is improper because there is always the possibility that some other suspect will be developed. Providing such information irretrievably compromises the witness for future independent identifications.

In this case in particular it is improper as well because a voice lineup is immediately forthcoming. Voices and visual features are correlated with each other on parameters

such as height, age and other features. Therefore, providing the witness information about visual identification may influence the subsequent voice identification.

To Witness Randy Carrillo, a Tustin PD detective says ‘We have to try. With everybody I’ve showed this photo lineup to, so many people now, --”

Carillo: “Yeah.”

Detective: “some have, actually, identified him.“

Another detective says ”We’re very confident we got the right guy.”

To witness Jason Sanchez, a Tustin PD Detective says “Well, that’s all I really had for you. I just had to show you the photo lineup, and just to let you know the investigation’s going really good. You guys know we have a guy in custody, and the police department is a hundred percent certain we’ve got the right guy.”

It is improper to state to a witness what other witnesses have said, either by way of identification or elimination.

The voice lineup

The voice lineup consisted of recordings of Richardson’s voice plus the voices of five speakers who could not have committed the crime, including four police detectives and an IT specialist who worked for the police department. Each person spoke the words “She works for an environmental agency called Three E Companies,” which Richardson had spoken in an interview when he was initially taken into custody.

Detective Van Cleve played the voice lineup for those who had heard the killer speak. Richardson’s voice was #6.

Voice lineup results tabulated

Listener	Response	Comment
Vocos	Unable to identify anyone.	Detective Van Cleve played the recording 3X for Vocos.
Malone	Chose Voice #3.	Van Cleve said “You need to be 100% certain before you choose a voice.” Malone: “I’m pretty sure it’s #3.”

Atuatasi	Chose Voice #4 or #6	Unable to choose between them
Cerda	Chose Voice #6 (Richardson)	"I'm pretty sure."

Comments

In Tustin Police Department Investigative Report Detective Van Cleve states "I took an audio excerpt from Richardson's interview at TPD on the date of his arrest as the base of the voice lineup. I used the statement, 'She works for an environmental agency called Three E companies' that Richardson made as the base. Detectives Mayfield, Sauerwein, and Alvarado along with Volunteer Ray Leger and IT Specialist Raul Delgadillo were audio recorded making the same statement."

The statement of the suspect was collected from his natural speech, whereas the statements of the fillers were not. These differences produced changes in style and fluency that are audible in the recordings.

Given their occupations, it would appear that the educational levels of the fillers were considerably above that of the suspect.

From transcript: Malone identifies voice three in the lineup (which is not the suspect) as the voice he heard previously. Van Cleve responds "Okay. Well, like I said, you don't have to pick anybody out." and continues later "I'd rather you not pick one unless you're 100 percent sure..." It is improper for Detective Van Cleve to express his preference about the how certain the witness should be.

Moreover, taking Van Cleve's comments in context, they may be interpreted as trying to dissuade Malone from his decision. If this is the case, it calls into question Van Cleve's objectivity.

Regarding Cerda, Van Cleve states in his investigative report "I asked him how certain he was and he said 'Pretty certain. All the other one's they don't sound familiar at all.' And 'I'm pretty sure that's the guy I heard.'" On the voice identification report sheet, Cerda is recorded as "100% Certain."

Witness Nicole Roman states “It’s been a while since I heard the voice. I couldn’t really remember what it -- and I know that the guy didn’t have an accent.” In fact, Richardson speaks in a dialect different from the other speakers. Whether in Roman’s mind this would constitute an accent would be interesting.

Summary

The photo lineup yielded five correct answers and eleven “no choice” responses.

The voice lineup yielded one correct answer, one incorrect answer and three “no choice” responses.

The Dirty Sock

In this case there was a piece of evidence that was unknown to me when I analyzed the results of the lineups. When the police swept the store, they found the dirty sock that had fallen out of the bag when the killer pulled out the gun. The sock contained five rounds of Winchester 38 Special ammunition, which was the kind of ammunition that killed Egan. From the sock, the police were able to collect DNA evidence. Recall that Richardson had previously been convicted of rape, from which the police had collected DNA. The DNA from the sock matched Richardson’s DNA.

This result confirms that Richardson was the man in the store and it proves that he shot Egan.

Richardson was found guilty of first degree murder.

In California, a separate jury considers whether the death sentence should be imposed. Two successive sentencing juries were hung on the death penalty question. A third jury unanimously agreed that the death penalty should be imposed.

Richardson’s attorneys argued that he should not receive the death penalty because of his appalling childhood. His grandmother, who mostly raised him, was an alcoholic. His

mother was a drug addict. She did not realize she was going to have a baby until she went to a doctor because of a bad LSD trip and the doctor told her she was pregnant. In concurring with the jury and imposing the death sentence, Judge William Froeberg called Richardson "a cancer on society...who has little or no regard for any life other than his own."

As he was sentenced, Richardson shouted "I didn't kill anybody, I'm innocent."

But for a sock dropped in a moment of haste, the probability of Richardson's conviction of capital murder with special circumstances and consequent eligibility for the death penalty would have been less certain.

Addendum

My friend, attorney Alex Selvin, who defends potential death penalty cases in California, tells me that his clients sometimes ask him to plead for sentences with potential death penalty consequences. They believe that California will not impose the death penalty. In the meanwhile, they will be held in a private cell and they will get to consult with attorneys over the course of many appeals.

SCIENCE: Bias in Voice Lineups

A showup is an identification procedure in which a possible witness is presented with a person whom they may have seen or heard previously. The witness is asked to state whether they can identify that person as one they have seen or heard, and may be asked to state the certainty of their decision.

A lineup is an identification procedure in which a possible witness is presented with a person whom they may have seen or heard previously along with several other persons who could not have been the person seen or heard previously. The witness is asked to state whether the person seen or heard is among them, and if so, which it was, and may be asked to state their degree of certainty of their decision.

When lineups are prepared and administered properly, they can serve as compelling evidence while protecting the innocent. On the other hand, if one person in the lineup differs markedly from the others, the lineup may be biased and can wrongly point at an innocent person. Additionally, interpreting the results can be problematic if the responses are less than clear-cut, which they were in this case.

The problem of bias is particularly acute in the case of lineups because your voice can reveal so much: your educational level, your ethnic and socio-economic background, your health, your age and much more. Matching them all in a voice lineup can be problematic.

It is possible to have subjects in a photo lineup dress similarly. But is it possible for an uneducated subject talk to similarly to an educated subject?

Richardson's exemplar consisted of a recording of the words as he had spoken them in normal conversation, whereas the others repeated the designated phrase. That caused a dramatic difference in speech style. Moreover, Richardson's dialect and educational level differed substantially from those of the other speakers, who were relatively uniform among themselves. That made Richardson stand out.

Criteria for Development, Administration and Testing of Voice Lineups

In her introduction to **Eyewitness Evidence, A Guide for Law Enforcement**, Attorney General Janet Reno states "Eyewitnesses frequently play a vital role in uncovering the truth about a crime. The evidence they provide can be critical in identifying, charging, and ultimately convicting suspected criminals. That is why it is absolutely essential that eyewitness evidence be accurate and reliable. One way of ensuring we, as investigators, obtain the most accurate and reliable evidence from eyewitnesses is to follow sound protocols in our investigations."

True as those observations are for eyewitness evidence, they are equally important for evidence based on hearing, which we may think of as "earwitness" evidence."

Because of the difficulty of preparing and administering unbiased voice lineups, I have prepared the following guidelines. They closely follow the US Department of Justice guidelines visual lineups except for changes necessitated by the modalities entailed.

Constructing a Voice Lineup

Recording the Voices

Recordings are imperfect. They may fail to record and play back all the voice frequencies or may limit the dynamic range of the voice. The effect of an imperfect recording may be compared to using a photograph that is blurred or insufficiently detailed. These effects may have the consequences of failing to provide sufficient information to allow an identification or of limiting information that would exclude a speaker.

Moreover, a recording can distort a voice; for example, by making a voice sound deeper or higher-pitched than the actual voice. Because recordings are imperfect, it may be advantageous to conduct a live voice lineup, though at the possible cost of other complications.

Selecting the utterance material

The spoken material should resemble as closely as possible the material spoken by the perpetrator at the time the voice was heard originally. Ideally, the material for the lineup should consist of the same utterance as was spoken by the perpetrator at the time it was heard originally, spoken in a natural way, though this may not necessarily be available. Typically, it is necessary to rely on the memory of the witness to determine what the original utterance was. Within practical limits, the material used in the lineup should be as long as the utterance originally spoken. Whatever approach is chosen for selecting the utterance material, it is imperative that the same approach be used for all of the speakers, suspect and fillers alike.

Producing the utterance material

If the subject is well educated and reads fluently, it may be appropriate to have him (and the fillers, assuming they also are well educated) read the materials. An alternative approach is to have the investigator read the utterance phrase by phrase, and have the suspect repeat the phrases onto the recording. It may be possible to capture natural speech by asking the suspect and the fillers the same meaningful questions, though their answers may not all be the same. Again, whatever approach is used for producing the utterance material, it is imperative that the same approach be used for all of the speakers. For example, it is inappropriate to record natural speech from the suspect and have the fillers say the same phrase from memory of his utterance or by reading it. Such differences in mode of production produce differences in style, fluency and elision effects that may identify the suspect as distinct

from the fillers.

Uniformity of accent, dialect, educational level, and speech characteristics

If the subject has an accent influenced by a foreign language or a distinct regional or social dialect, the fillers should have similar characteristics. For example, it would be inappropriate to present a suspect who has a lisp along with fillers who do not lisp. Similar considerations apply to the influence of social dialects, foreign languages and general voice characteristics. It would be inappropriate to present a suspect who speaks in a black urban dialect along with fillers who do not speak in that dialect. It would be inappropriate to present a suspect who has a Spanish accent along with fillers that do not have a Spanish accent. It would be inappropriate to present a subject with a very deep voice along with fillers with high-pitched voices. The suspect and the fillers should have similar levels of fluency in English (or whatever language is being used for the lineup).

Recording and playing back the lineup

The recording and playback equipment should be capable of recording and playing back the main range of the human voice faithfully and in an undistorted manner. An expert can check whether this is valid for the equipment used.

Recorded versus live lineup

As discussed above, recordings are imperfect. Therefore, it may be advantageous to conduct a live voice lineup. This can be done by having the suspect and the fillers stand behind the witness, behind a screen or in an adjacent room. If during the course of a live voice lineup the witness sees the suspect or the fillers, the basis for the identification is confounded between audio and visual media. Because the suspect and the fillers must perform for a live voice lineup, the situation may be less controlled than for a recorded lineup and less convenient.

In composing a voice lineup, the investigator should:

1. Include only one suspect in each identification procedure.
2. Select fillers who generally fit the witness' description of the voice of the perpetrator.
3. If multiple recordings of the suspect are reasonably available, select a recording that resembles the witnesses' description of the suspect's voice at the time of the incident.
4. Include a minimum of five fillers per identification procedure.
5. Create consistency between the suspect and fillers with respect to any distinctive characteristics (e.g., dialect, foreign accent, speech impediment, etc.).
6. If more than one lineup is to be conducted, consider placing suspects in different positions in each lineup, both across cases and with multiple witnesses in the same case. Position the suspect randomly in the lineup.
7. When playing the voice of a new suspect, avoid reusing fillers in lineups played to the same witness.
8. Ensure that no writings or information concerning previous arrest(s) will be visible to the witness.
9. Preserve the presentation order of the recorded lineup. In addition, the recordings themselves should be preserved in their original condition.

Instructing the Witness Prior to Hearing a Voice Lineup

Prior to presenting a lineup, the investigator shall provide instructions to the witness to ensure the witness understands that the purpose of the identification procedure is to exculpate the innocent as well as to

identify the actual perpetrator.

Requests to repeat a voice

If a witness asks to hear a voice again, it may be played or spoken as requested. However, the witness should not be allowed to hear another voice before rendering an opinion on the voice that was just heard. The reasoning underlying this constraint is that identification or elimination is to be made with regard to an absolute standard rather than by relative comparison of two or more voices. The issue is not whether one or another voice sounds more like that of the perpetrator, but whether the listener believes the voice is in fact the voice of the perpetrator.

Procedure for Instructing the Witness Prior to Hearing a Recorded Voice Lineup

Prior to presenting a recorded voice lineup, the investigator should:

1. Instruct the witness that he/she will be asked to listen to a set of recordings.
2. Instruct the witness that it is just as important to clear innocent persons from suspicion as to identify guilty parties.
3. Instruct the witness that individuals played in the voice lineup recordings may not sound exactly as they did on the date of the incident because voice is subject to variation depending on situations such as whether the speaker had a cold or was under stress or other factors.
4. Instruct the witness that the voice of the perpetrator may or may not be among the voices in the lineup.
5. Assure the witness that regardless of whether an identification is made, the police will continue to investigate the incident.
6. Instruct the witness that the procedure requires the investigator to ask the witness to state, in his/her own words, how certain he/she is of any identification.

Procedure for Instructing the Witness Prior to Hearing a Live Voice Lineup

Prior to presenting a live voice lineup, the investigator should:

1. Instruct the witness that he/she will be asked to listen to a group of individuals.
2. Instruct the witness that it is just as important to clear innocent persons from suspicion as to identify guilty parties.
3. Instruct the witness that individuals present in the lineup may not sound exactly as they did on the date of the incident because voice characteristics may vary depending on whether the subject had a cold or was under stress or other factors.
4. Instruct the witness that the person who committed the crime may or may not be present in the group of individuals.
5. Assure the witness that regardless of whether an identification is made, the police will continue to investigate the incident.
6. Instruct the witness that the procedure requires the investigator to ask the witness to state, in his/her own words, how certain he/she is of any identification.
7. Document the lineup procedures and content in writing, including:
 - a. Identification information of lineup participants.
 - b. Names of all persons present at the lineup.
 - c. Date and time the identification procedure was conducted.

Contradictory or otherwise anomalous responses

Witnesses may occasionally give contradictory or otherwise anomalous responses. For example,

they may identify more than one of the voices as the voice they heard previously, even though the investigator knows that all the voices in the lineup are different from each other. Witnesses may say that one voice is more like the voice heard previously than some other voice (even though they have been informed clearly that such a judgment is not the goal of an identification exercise). It is important to record such responses, as they may yield useful information about the witness as well as information about the voices.

Descriptions of the voice

Witnesses sometimes provide descriptions of a voice they heard previously. Such descriptions should be noted whether or not the witness is able to make an identification.

Requests to repeat a voice

If a witness asks to hear a voice again, it may be played or spoken as requested. However, the witness should not be allowed to hear another voice before rendering an opinion on the voice that was just heard. The reasoning underlying this constraint is that identification or elimination is to be made with regard to an absolute standard rather than by relative comparison of two or more voices. The issue is not whether one or another voice sounds more like that of the perpetrator, but whether the listener believes the voice is in fact the voice of the perpetrator.

Confirmation as to suspect choice

If the witness states that the voice of the suspect is the voice heard previously, it is not proper to confirm that judgment. Providing that kind of information to the witness is improper because there is always the possibility (at least until trial and conviction, and possibly thereafter) that some other suspect will be developed. Providing such information irretrievably compromises the witness for future independent identifications.

Stating what other witnesses have said

It is improper to state to a witness what other witnesses have said, either by way of selecting or eliminating a voice.

Avoiding cues to the witness

It is important that the person who is administering the lineup use care not to give cues to the witness as to which of the voices is that of the suspect. This issue has an interesting history beginning with a horse named Hans. In Germany in the 1890s, a performing horse named "Clever Hans" (der Kluge Hans, in German) tapped out the answers to simple arithmetic questions that were posed to him by his owner and trainer, Wilhelm von Osten, who was a retired mathematics teacher. Von Osten would ask questions like "Hans, what is the sum of two and three?" and Hans would tap his hoof five times. Especially in light of Darwin's then recent theory of evolution, animal intelligence was a topic of great interest at the time. Hans' abilities attracted such wide attention that the German board of education appointed a commission to investigate them. The commission found that Hans could get the right answers even when questioners other than von Osten posed the questions, and even when von Osten was not present, thus precluding the possibility that von Osten was secretly giving the answers to Hans. In 1904 the commission issued a report that concluded that Hans' abilities were real. Yet one member of the commission, a psychologist named Oskar Stumpf, continued the investigation. He found that when Hans wore blinders and therefore could not see the questioner, Hans did not get the answer right and sometimes became so ornery that he bit the questioner. Closely studying the situation, Stumpf observed that questioners usually reacted with subtle differences in posture and gaze when Hans reached the right answer. Hans was extraordinarily sensitive to such changes, and used them to get the right answer. Typically, the questioners themselves were unaware of their cues to Hans. In psychology, the ability of those who are administering tests or experiments to subtly, and even unknowingly, convey information about the answers to subjects is known in psychology as the "Clever Hans Phenomenon." Citation 3.

Testing a Voice Lineup

Measuring the Voices

In order to demonstrate that Richardson's voice differed from the voices of the others I measured the fundamental frequency, breathiness and amplitude variability of all the voices. On the basis of these measurements, I was able to show that Richardson's voice differed from the voices of the others.

Using a Surrogate Jury

Whether a voice lineup is biased can be tested with a surrogate jury, in which a group of listeners who have no connection with the case are asked questions about the people in the lineup. If they can guess who the suspect is, the lineup has no value. Worse, it has actually served to "finger" the accused.

References

Citation 1. Eyewitness Evidence:

A Guide for Law Enforcement

U.S. Department of Justice

Office of Justice Programs

National Institute of Justice

Technical Working Group for Eyewitness Evidence

October 1999

Washington, DC 20531

Citation 2. Eyewitness Evidence:

A Trainer's Manual for Law Enforcement

U.S. Department of Justice

Office of Justice Programs

National Institute of Justice

September 2003

Washington, DC 20531

Citation 3. The Clever Hans phenomenon: Communication with horses, whales, apes, and people. TA Sebeok, RE Rosenthal - Annals of the New York Academy of Sciences, 1981 - psycnet.apa.org