Narrator: It's a Monday morning at Brooklyn Law School, and Professor Margaret Berger is deep into the minutiae of case law. It's gripping stuff.

Professor Margaret Berger: What are you doing?

Professor Margaret Berger: Stop, stop.

Narrator: The purse is gone in just nine seconds, but a roomful of law school students watch it happen, and they become eyewitnesses themselves. This is not a real crime; the whole thing is staged for the TV cameras, the purse snatcher a TV employee. Once it's over, they're asked for a description of the intruder.

Professor Margaret Berger: I wonder if I could describe him. Ha, ha. I don't remember a thing about him, other than maybe a odd shape of nose.

Narrator: The class is warned not to share their thoughts about the intruder. Clearly, this incident, taped in 1995, is not a rigorous scientific experiment. But it does yield the kind of results that investigators run into all the time as they look for that crucial eyewitness: the one whose testimony could provide "the big break." Roy Malpass is a psychology and criminology professor at the University of Texas. He was a consultant for this demonstration. The day after the staged purse-snatching, Professor Malpass interviews twentynine of the eyewitnesses to get their descriptions.

Witness #1: Five-six or five-seven...

Witness #2: Five-seven, five-eight

Witness #3: Five-nine?

Witness #4: Five-ten? Um...

Witness #5: Five-eleven.

Witness #6: Six feet.

Witness #7: Six-two.

Narrator: Descriptions of what the intruder was wearing are all over the map, too.

Witness #8: He had a ski jacket on, with yellow trim over the pockets.

Witness #9: He was wearing a ski jacket. It was white...

Witness #4: His shirt was a plaid pattern. I think it was a dark plaid pattern, like brownish.

Narrator: In fact, the purse snatcher had on a white t-shirt, a denim shirt, a blue ski jacket with black trim, and jeans. The student eyewitnesses don't fare any better describing his face and hair.

Witness #8: He has like a rounded face.

Witness #4: He had a slim face.

Witness #10: It wasn't entirely straight. It seemed like it had a wave.

Witness #9: It was straight, probably shoulder-length. Uh, not shoulder-length. Short.

Witness #1: I think he was slightly balding.

J.P.: He had a really weird-looking nose. It looked like it was off. Like it was maybe broken or something before.

Narrator: J.P. was the guy who ran after the intruder. There's an important reason that he remembers something strange about the purse snatcher's nose.

Professor Margaret Berger: I don't remember a thing about him, other than maybe odd shape of nose.

Narrator: It is false information planted by Berger, and J.P. processes it as a fact. It shows just how malleable memory can be. Afterwards, J.P. doesn't even remember the professor's comment.

J.P.: I don't know. I've been tuning out professors since I was 12, so...

Narrator: So, is there anything odd about the perpetrator's nose at all? J.P. tries to identify the intruder by photos.

J.P.: I'd say that's him.

Dr. Roy Malpass: He doesn't seem to have any problem with his nose.

J.P.: No more than the rest of them.

Narrator: Memory isn't always the most reliable way to identify a criminal suspect, even though the stakes couldn't be higher.

Dr. Roy Malpass: Not only do people not do it well, they don't even understand why. That contributes to it not being done well. Um, so that police would use procedures that don't work, uh, very well, and, uh, they are completely unaware of the fact that the procedures aren't working well.

Narrator: Studies by psychologist Rod Lindsay and his colleague Gary Wells show that simple procedural changes in the lineup can have a profound effect on eyewitness accuracy. These days, police departments are much more likely to use photo lineups instead of physical lineups, but live or not, lineups are critical.

Man: About twenty percent of the time, witnesses are picking someone who the police simply put into the lineup to serve as a known innocent filler.