Suspect Memories
Taking into account decades of scientific research, New Jersey is reforming its lineup procedures to reduce the number of false identifications. As our reporter discovered the hard way, however, it's never easy to pick a perpetrator out of a crowd.

By Jascha Hoffman

LATE ONE NIGHT IN AUGUST 1992, A WHITE STUDENT AT Rutgers University was watching television in her basement apartment when a black man entered. Claiming that he was wanted for murder and needed money to get to New York, he took her wallet from her purse. He told her to be quiet and he led her to the kitchen, closed the blinds, and raped her. Both before and after the rape, the victim carefully observed her attacker's face, and she called the police immediately following the attack to give them a detailed description of the assailant. She was unable to point him out, however, when she was shown book after book of mug shots at the police station.

Eight months later, crossing the street near her house, the victim spotted a man she believed to be her rapist. She called the police, who promptly picked him up. Fifteen minutes later, the victim identified McKinley Cromedy from behind a one-way mirror at the police station in what was essentially a one-man lineup, a procedure known in law enforcement as a "show-up." Based on the victim's testimony, a jury convicted Cromedy of robbery and rape, despite a lack of physical evidence linking him to the crime scene. He was sentenced to 60 years.

Cromedy appealed his conviction, citing psychological studies showing that witnesses are considerably worse at identifying members of a different race. The New Jersey Supreme Court reversed Cromedy's conviction in 1999, finding that juries must be informed of the problems associated with cross-racial identification. It was one of the first rulings to insist on such a warning. Soon after, DNA evidence proved Cromedy innocent.

At the time, New Jersey's criminal justice system was embroiled in allegations of racism, manifested in racial profiling, unfair sentencing practices, and, perhaps most direly, wrongful convictions. Dozens of New Jersey cases have since been overturned by DNA evidence. In most cases, faulty identifications were to blame for those convictions. (The phenomenon is not unique to New Jersey, though. About 85 percent of cases nationwide that have been overturned by DNA analyses relied on bad eyewitness evidence.) With its Cromedy decision, New Jersey's highest court indicated that it intended to do its part to repair the system and salvage the state's tarnished reputation. But before the courts could set tougher standards, the district attorney's office made the unusual move of deciding to clean up its own act.

In the spring of 2000, Lori Linskey, deputy attorney general in the New Jersey Division of Criminal Justice, flew in Gary Wells, the country's foremost expert on the psychology of eyewitness memory. Linskey asked Wells to make a presentation to the state's lead prosecutors about the many sources of error that can taint witness identifications. Some prosecutors wanted to improve their identifications, Linskey recalled recently, but most, she said, were wary of complicating their standard procedures and of incurring additional costs. Others saw the whole issue as an academic affront to police integrity. According to Linskey, though, there were few skeptics in the room when Wells was finished. Wells showed the prosecutors a clip of a man planting a bomb on a rooftop. The clip included a long, unobstructed view of the perpetrator's face. Then Wells conducted a mock lineup on the spot, challenging the prosecutors to finger the guilty party. Not one of them was able to pick out the culprit.

In 2001, New Jersey made two major changes to the procedures that govern all state and local identifications. It became the first state to take into account the decades of psychological research that had been devoted to these procedures. The research hadn't uncovered a method of repairing a flawed memory or of making witnesses better at identifying people of a different race. What the research did suggest, though, was that there are relatively simple, inexpensive ways to reduce the number of witness mistakes. New Jersey instituted two. The first was straightforward: To avoid leading the witness, the person running the lineup shouldn't know who the suspect is. The second was a bit less obvious: In a lineup, show the faces one by one instead of all at once to discourage guessing. These changes in procedure put New Jersey at the forefront of identification reform—but there are still many ways for witnesses to point to the wrong face.
MOST APPLIED PSYCHOLOGISTS AGREE THAT MEMORY IS A process that can be broken down into stages—perception, storage, and recall—each of which is vulnerable to failures and distortions. In broad daylight, a witness generally needs several seconds of close-up exposure without obstruction in order to remember a face later. In the dark, it's far more difficult. The quality of a memory is determined not just by the external conditions at the moment of perception, but also by a witness's state of mind. Since the strongest memories are formed when a person is alert but not panicked, many witnesses to crimes are hardly in an ideal frame of mind. If a witness is exhausted, using drugs or alcohol, or is simply terrified, his memory of an assailant can be compromised.

Not all problems of perception are so intuitive. As one would expect, unusual features—a prominent chin, a scar, or a birthmark—can make the memory of a face easier to retain. But studies have also shown that distinctive features are just as often a dangerous distraction. A scar will certainly help a witness eliminate any pristine faces as possibilities. When forced to choose among multiple suspects with scars, however, witnesses often find that they were so focused on the scar that they failed to pay close attention to other facial details.

Women tend to be better at remembering clothes, and men better at remembering vehicles and weapons, but there is no evidence that a witness's race or gender affects his ability to remember a face. Decades of research on several ethnic groups, however, has confirmed the "cross-race effect" that the Cromedy ruling recognized—that it is almost always harder to remember the faces of people outside your own race. There is also a "cross-gender effect," although it only works in one direction. Women remember women's faces better than men do, but both sexes perform about the same when remembering men's faces.

Even if a witness succeeds in forming a strong and accurate memory at the moment of perception, there is no guarantee that the memory will be safe in storage. Each person's "forgetting curve" is different. The quality of some witness's memories declines precipitously after a few minutes, though most memories degrade more steadily over a period of months. In addition to the vagaries of memory loss, there is the danger of memory gain: After-the-fact exposure to a face, whether in newspapers or in daily life, can artificially strengthen a memory or may trick the mind into fabricating a new one outright.

Generally, retrieval is the only stage of the memory process that law enforcement officials have any control over. Police departments and district attorneys' offices have devised several methods of fetching memories from the recesses of a witness's mind. In a "show-up," the method used in the Cromedy case, a witness is confronted with a lone suspect. The pressure to make a positive identification is strong, and the accuracy of the witness's memory is not tested by having to pick the suspect out of a crowd. Nevertheless, show-ups are still common, especially in courtroom settings, where a witness, under the scrutiny of a judge and jury, will more often than not place the suspect at the scene of the crime. More common than show-ups are lineups, though not the ones familiar to most Americans from movies and television. You wouldn't know it from watching Law & Order, but in-person lineups—where a witness looks through a one-way mirror at a group of suspects—are, for the most part, a thing of the past, all but replaced by photo lineups, which are cheaper and more often accurate. But the photo lineup, at least as traditionally administered, is hardly error-proof.

SERGEANT CARL RILEY AND ASSISTANT PROSECUTOR DAVID Hancock would make a lousy two-man lineup. Riley is a small, dapper black man with a close-cropped goatee and a vibrant manner of speech; Hancock is a tall, white man with graying hair and a stern demeanor. I recently visited Riley and Hancock in the Union County Prosecutor's Office to get a closer look at the new approach to lineups in New Jersey. Riley builds cases and Hancock argues them in court. Together the two have overseen hundreds of lineups—a few of them live, but most of them drawn from photo databases.

To show me how the state's new rules have changed their standard procedures, Hancock pulled from under his desk a flat wooden panel with six miniature wooden doors. He had commissioned the panel, which looked like an advent calendar, from a local carpenter. Hancock opened one of the miniature doors, and a small, expressionless face peeked out: a young black man with inch-long dreadlocks. I closed that door, tried another, and a similar face appeared. ("I added Velcro so the doors don't slide open," Hancock said proudly.)

Hancock's invention allows witnesses to see each face on its own terms, one at a time. Sequential lineups have been shown to reduce witness error rates significantly, though researchers do not agree on why that is. Some think sequential lineups require witnesses to look longer and harder at each face.
Other scholars subscribe to Gary Wells's theory that a sequential lineup cuts down on witness error by discouraging relative judgments—that is, preventing witnesses from picking a suspect because he thinks to himself, "This face looks more like the guy who attacked me than the other faces in the lineup do." The sequential approach encourages witnesses to compare each face individually to the face in their memory—and not to each other.

Whatever the reason for the higher accuracy, sequential lineups, like their nonsequential predecessors, remain only as good as their administrators. New Jersey's second major reform was to mandate that lineups be blind. Like a blind medical trial, blind lineups attempt to remove any error from being introduced by the experimenter's knowledge being passed on to the subject.

When the subject of blind lineups came up, David Hancock's earlier enthusiasm for his state's new approach to lineups evaporated. He scoffed at the idea that an overzealous cop in his county would drop a thumb on the suspect's photo, calling such an insinuation an affront to police integrity. Yet even in a world of uniformly virtuous investigators, psychologists believe there would still be a need for blind lineups. Researchers have shown that suggestion can be unintentional, even nonverbal: a pause after pointing to the suspect's photo, or a look of frustration or disapproval when the wrong face is fingered.

Or suggestion can creep into the process at a different stage. Another problem with lineups, one not addressed by New Jersey's new guidelines, is the slanted spread. A slanted spread is a set of photos in which the suspect is unfairly singled out because the photos of nonsuspects (known as "fillers") don't look like him. In one study, French psychologist Jacques Py presented subjects with photo lineups drawn from the archives of the Paris police and asked, "Who is the suspect?" With no knowledge of the case, let alone a description of the perpetrator, Py's subjects chose the suspect nearly twice as often as they should have by chance.

Assembling a fair spread is difficult. Ideally, all of the suspects should bear a resemblance to the witness's description of the culprit, down to the finest details. In the case of a live lineup, this can mean finding six identical pairs of aviator glasses, or six men with a birthmark the shape of Paraguay on their left cheek. This is not an easy task when the fillers in live lineups have to be drawn from the local holding cells or, in a pinch, from police ranks. Photo fillers may be drawn from a variety of sources—local mug shots, statewide booking records, even driver's license databases—and the wider selection is another reason photo lineups are more reliable, if far from foolproof.

The problems associated with lineup identifications are starting to receive more attention, thanks in part to the efforts of Jennifer Thompson Cannino. In 1985, she spent the duration of a brutal rape memorizing her rapist's features, and then devoted herself to bringing him to justice. Ronald Cotton was sentenced to life in a North Carolina prison based on Cannino's testimony. Ten years later, he was one of the first people to be released from prison after being proven innocent by DNA evidence. Cannino is now friends with Cotton, and the pair have appeared publicly to raise awareness about mistaken identifications. Along with Union County's Riley, Cannino was present at a recent meeting of North Carolina's Actual Innocence Commission, a body of police, politicians, and researchers convened in response to a spate of wrongful convictions in that state. Its first act was to recommend the adoption of blind and sequential lineups statewide. Cannino told me that her memory of the rapist's face got mixed up with the faces she saw at each step of the identification process, including both a photo lineup and later a physical lineup. She believes that a blind lineup might not have led her to pick Cotton. "Everybody was truly trying to do things right, but I was given unintentional clues as to who was the suspect," she said.

A handful of police departments across the nation are beginning to follow New Jersey's lead. Santa Clara, Calif., and several Minnesota counties have recently adopted sequential lineups. Chicago is currently experimenting with blind and sequential lineups, testing their efficacy in the city's busy 11th district with an eye toward widespread change if the new methods prove successful at reducing false identifications.

Chicago's almost scientific approach to reform is a promising one. Perhaps the biggest obstacle to reforming the identification process is the scarcity of data on false identifications. It is difficult to keep statistics on mistaken identification because they are disclosed only sporadically. The number of filler photos picked out by witnesses each year might be a good indicator of the rate of mistaken identification, but most police departments don't tally them. Law enforcement officials, even ones amenable to change, tend not to like admitting that their old procedures were fallible. David Hancock maintains that New Jersey's new regimen has not affected his department's rate of error, which he says remains low. "It
doesn't change the identification," he told me. "It just gives us more ammunition in court to meet what I think are frivolous defense challenges." Hancock said he would be inclined to trust a confident witness as long as he wasn't "a drunk guy who was high at the time, who saw the guy for 15 seconds on a poorly lit street corner." This is not the attitude that Gary Wells and other lineup researchers are hoping to bring about.

AT MIDNIGHT ON A RECENT SATURDAY, I WAS WALKING back to a friend's house in Jersey City, N.J., when I was approached by a group of teenagers asking for spare change outside a convenience store. Out of habit I refused and walked on. About a block later, under a street lamp on a residential street, they cornered me against a parked car and beat me unconscious with their fists. Before I blacked out, I had a few subdued but lucid moments to fix on the face of the ringleader, whose friends were holding me back as he punched me repeatedly. I had another chance to observe him when a bouncer from the nightclub across the street politely asked the teens to escort me around the corner to avoid attracting attention. When I came to in the ambulance, I did not remember which state I was in, much less what had happened to me or who had done it.

By the next day, however, I remembered that my attackers were three nonwhite males around the age of 16, and I had a clear mental image of the one who did most of the damage. His coffee-colored skin, lanky build, bright eyes, short curly hair with bleached highlights, thin lips: The trauma seemed to have etched them into my mind with a permanence that made me question whether he was indeed a stranger. I went to make an identification at a shabby second-floor police station. I was encouraged to flip through binders full of mug shots, divided into juvenile and adult, male and female, black, Hispanic, and white. This is how an identification often begins. In the absence of a suspect, often the only option is to wade through the county jail's roster of fresh faces waiting for a spark of recognition.

The juvenile binders were a depressing sight, a catalog of kids frozen on the night of their arrest. They seemed paralyzed by a mixture of fear and belligerence, with looks of defiance coming from children who couldn't have been older than 11, and tears running down the cheeks of children who sometimes looked like full-grown men. On some pages, the differences among the photos—skin tone, hairstyle, build, facial structure, eye shape, even something as intangible as the personality they radiated—gave me hope that when my attacker's face showed up, I would know it immediately. On other pages, though, the expressions looked so similar that I wondered if they were multiple takes of the same person. I imagined that one could make a convincing flipbook out of the whole binder.

In the end I settled on three photos, two from the black juvenile binder and one from the Hispanic binder. Seen one at a time, all three photos seemed to match my still-severe memory of the attacker's build, hair, skin, face, and eyes. Looking at them as a group, however, was disappointing: One was clearly much darker-skinned than the others, and another was clearly taller when measured against the background. They didn't even look like distant relations of each other, much less the same person. After glancing among the photos a few times, my confidence that I had met any one of the young men began to crumble. Worse, I started to doubt whether I would have known the difference if someone inserted a picture of my attacker alongside these. Despite my desire to see the kid punished, I could not finger any of the photos. Maybe he hadn't been arrested before in Jersey City. Or maybe he was right there, staring back at me, and I couldn't pick him out.