

THE DETECTIVES WHO NEVER FORGET A FACE

[LETTER FROM LONDON](#)
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London's new squad of "super-recognizers" could inspire a revolution in policing.

By [Patrick Radden Keefe](#)

A predator was stalking London. He would board a crowded bus at rush hour, carrying a *Metro* newspaper, and sit next to a young woman. Opening the newspaper to form a curtain, he would reach over and grope her. The man first struck one summer afternoon in 2014, on the No. 253 bus in North London, grabbing the crotch of a fifteen-year-old girl. She fled the bus and called the police, but by that time he had disappeared. A few months later, in October, he assaulted a twenty-one-year-old woman on the upper level of a double-decker as it approached the White Hart Lane stadium. She escaped to the lower level, but he followed her, and he continued to pursue her even after she got off the bus. She flagged down a passerby, and the man fled. In March, 2015, he groped a sixteen-year-old on the No. 168. On each occasion, the man slipped away from the crime scene by blending into a crowd of commuters. But, each time, he left a trace, because public buses in London are monitored by closed-circuit-television systems.

When transit police played back the footage of each sexual assault, they saw the same middle-aged man in spectacles and a black parka. He had thinning hair and a dark mustache that was going gray. After consulting the electronic readers on each bus, investigators isolated one fare card that had been used on all three. If the pass had been bought with a credit card, it could be linked to the perpetrator. But the man had paid for it in cash.

The transit police found themselves in a familiar predicament: a case in which a crime is captured on video but no one can identify the perpetrator. London has more than eight million residents; unless somebody recognizes a suspect, CCTV footage is effectively useless. Investigators circulated photographs of the man with the mustache, but nobody came forward with information. So they

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turned to a tiny unit that had recently been established by London's Metropolitan Police Service. In Room 901 of New Scotland Yard, the police had assembled half a dozen officers who shared an unusual talent: they all had a preternatural ability to recognize human faces.

Most police precincts have an officer or two with a knack for recalling faces, but the Met (as the Metropolitan Police Service is known) is the first department in the world to create a specialized unit. The team is called the super-recognizers, and each member has taken a battery of tests, administered by scientists, to establish this uncanny credential. Glancing at a pixelated face in a low-resolution screen grab, super-recognizers can identify a crook with whom they had a chance encounter years earlier, or whom they recognize from a mug shot. In 2011, after riots broke out in London, one super-recognizer, Gary Collins, a cop focusing on gangs, studied the grainy image of a young man who had hurled petrol bombs and set fire to cars. The rioter wore a woolen hat and a red bandanna, leaving only a sliver of his face uncovered, like a ninja. But the man had been arrested years earlier, and Collins had noticed him at the police station—in particular, his eyes. The rioter was convicted of arson and robbery, and is now serving six years.

When the transit police brought the proper case to the super-recognizers, Eliot Porritt, a detective sergeant in the unit, took up the investigation. Porritt, who is thirty-six, is ruffled and cerebral, with a mop of curly black hair. As a boy, he loved watching movies with his father, and found that he could identify actors who had been in other films they'd seen, even in tiny parts. As a police officer—first as a beat cop in Islington, and then working plainclothes on a robbery squad—he discovered that while walking the streets he could spot faces and know, in a flash, who they were, where he had met them, and whether they were criminal suspects.

Three times a week, the Met issues an online bulletin, "Caught on Camera," featuring video stills of unidentified suspects committing crimes. Many officers ignore it, but Porritt found the activity of

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picking out faces quietly absorbing, like doing a crossword puzzle. He soon became known for his prowess at making identifications—“idents,” in the Scotland Yard vernacular—and last year he was asked to join the super-recognizers.

In the groping case, the transit card did not reveal the suspect’s identity, but Porritt could use it to reconstruct his movements. On a digital map of North London, he pinned a flag on each bus stop where the card had been used. He noticed that the man took as many as twenty bus trips a day. Sometimes he rode in one direction, got out, crossed the street, and went in the opposite direction. “He wasn’t commuting,” Porritt told me. “He was casing victims.”

Studying the map, Porritt plotted the various routes and developed a hunch that the man lived in Camden. Porritt grew up there, and he decided to go and ask around. He invited Alison Young, an officer who had just joined the unit, to tag along. Young is twenty-nine, with long red hair and an ebullient sense of humor. She had worked as a community-support officer for several years, but one day she was summoned to an auditorium at Scotland Yard, where dozens of officers were instructed to take a facial-recognition exam. Using a laptop, Young found matches in a series of faces that were presented like masks—without hair or other context. When the test was done, she was startled to learn that she had received the second-highest score.

By some estimates, as many as a million CCTV cameras are installed in London, making it the most surveilled metropolis on the planet. Boris Johnson, who before becoming Britain’s Foreign Secretary served as the city’s mayor, once said, “When you walk down the streets of London, you are a movie star. You are being filmed by more cameras than you can possibly imagine.”

Porritt thought that the cameras outside the Camden Road railway station might have caught the groper walking by, so he and Young visited the CCTV office there. As Porritt examined the equipment,

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Young gazed out a window at scores of rush-hour commuters streaming in and out of the station. Then, suddenly, she shouted, “Oh, my God. That’s him!”

Young was staring at a man just inside the entrance: he had a mustache and wore glasses. She watched him pick up a *Metro* from a stack on the floor and walk out of the station.

“We ran like maniacs,” Young recalled. They caught him, and after he was in handcuffs he muttered to Porritt, “I’m sorry, I’m sorry.” A fifty-six-year-old clerical worker named Ilhan Karatepe, he subsequently pleaded guilty to three counts of sexual assault and received a suspended sentence. (He was also barred from riding public transportation by himself.)

“Here was a guy that nobody could identify until Alison spotted him,” Porritt said. “Every identification we make is effectively a cold case. We’re unique. There’s no precedent for what we’re doing.”

In 2008, a postdoctoral student at Harvard named Richard Russell began working with a team of perceptual psychologists on a study of prosopagnosia, or “face blindness,” a condition in which patients are unable to recognize human faces. In extreme cases, prosopagnosia can be a socially debilitating affliction: a mother tries to retrieve the wrong child from day care because she does not recognize her own baby; a patient is shown a photograph of a woman and wonders who it is, only to be informed that she is looking at a picture of herself. But many people suffer from milder forms of face blindness, and may not realize that they are in any way abnormal. “We’re not good at talking about how we recognize faces,” Russell said. “So we assume that other people are like us.”

Until recently, only a few hundred prosopagnosics had been studied, and from this research neuroscientists and perceptual psychologists had established a binary “pathological” model: either you were normal, and could recognize faces, or you had face blindness. But new studies have indicated that although prosopagnosia can result

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from a stroke or traumatic brain injury, it is a heritable condition that is sometimes present from birth. It's also much more widespread than was previously believed. With the advent of the Internet, formerly isolated individuals have found a community of fellow-sufferers.

Collaborating with two psychologists, Ken Nakayama and Brad Duchaine, Russell disseminated a bulletin in the Boston area seeking research subjects who thought that they might be face blind. The researchers heard back from many people who believed that they were prosopagnosic. But they also heard from a small group who said that they were “the opposite.”

Russell had come to suspect that facial recognition might not be simply a faculty that was either present or absent. What if it was on a spectrum? If most people are pretty good at recognizing faces and prosopagnosics are terrible at it, Russell recalls thinking, shouldn't there be “some people on the high end”?

The team studied four people who considered themselves exceptionally good at remembering faces. First, the researchers administered a version of the exam that Alison Young aced in the auditorium at Scotland Yard, the [Cambridge Face Memory Test](#), in which the subject is instructed to find matches among faces stripped of hair or other visual clues. A second test, called Before They Were Famous, consisted of a series of images of celebrities, from Malcolm X to Scarlett Johansson, in their youth. (The researchers chose celebrities because they needed faces that most subjects would have some prior familiarity with.)

The four subjects in the study performed extremely well. Prosopagnosics often have strange stories about how they cope with their condition. The subjects had their own curious tales about being on the other end of the spectrum. They not only recognized character actors in movies—they recognized the extras, too. In social situations, prosopagnosics often smiled blandly and behaved as if

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they had previously encountered everyone they met, rather than risk offending acquaintances. Russell's subjects described the opposite adaptation: they often pretended that they were meeting for the first time people whom they knew they'd met before. After all, if you're introduced to someone at a party and you remind him, in pointillist detail, about the circumstances of a brief meeting years earlier, he might reasonably conclude that you are a stalker. One of the subjects described an ex-boyfriend's referring to her as a "freak of nature."

In 2009, Russell and his colleagues published a paper in the *Psychonomic Bulletin & Review*, "Super-Recognizers: People with Extraordinary Facial Recognition Ability," which concluded that there is "a broad distribution" of the facial-recognition capability. On tests, the four super-recognizers performed at least two standard deviations above the mean, which meant that they were "about as good at face recognition and perception as developmental prosopagnosics are bad."

Earlier this summer, I visited New Scotland Yard, a tower of mirrored glass not far from St. James's Park, to spend a week with the super-recognizers. Detective Chief Inspector Mick Neville, who created the unit, greeted me. "I'm the Henry Ford of CCTV," he told me. "The rest are just playing at it, really."

Neville is burly and ruddy-faced, with beady eyes and a flinty, tough-guy grin. He speaks in the gruff murmur of his native Lancashire and swathes his considerable bulk in pin-striped suits and regimental ties. As a trainee detective in Brixton, during the nineteen-nineties, Neville worked gangs, and he excelled at recruiting informants. Raised by a working-class single mother, he found common ground with the young people he arrested for robbing post offices and betting parlors. He'd slip them cigarettes or buy them a sandwich, then cajole them into snitching on their associates. In those days, CCTV images were stored in big photobooks, like family albums, and Neville would barge into a holding cell, plop the book down, and bark, "All right—names and faces!"

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The first permanent CCTV cameras in London were installed in 1968, in Grosvenor Square—the home of the U.S. Embassy—to monitor students protesting the Vietnam War. More cameras were added during the seventies and eighties. In 1993, a toddler named James Bulger vanished from a shopping center in northwest England. Footage from a security camera showed two older boys leading him away. Both boys were convicted of Bulger’s murder, and the eerie images of his final walk were played incessantly on the news, solidifying the rationale for more cameras. By the late nineties, more than half of the Home Office’s crime-prevention budget was devoted to CCTV. The profusion of cameras was premised on a coercive principle: the new architecture of surveillance would dissuade people from committing crimes. “There is a friendly eye in the sky,” a Home Office minister proclaimed in 1994. “There is nothing sinister about it, and the innocent have nothing to fear.”

CCTV was clearly effective at recording malfeasance, but it struck Neville that if so many people were committing crimes on camera then perhaps the cameras weren’t much of a deterrent. He wondered why people took the risk. “Some people are drunk, or high, or just evil,” he told himself. But many rational criminals had clearly concluded that the police were unlikely to do much with CCTV footage. If you left fingerprints at a crime scene, they were entered into a centralized database. But if you left your image behind, Neville noticed, “it would just sit there.”

In 2006, he set up a dedicated unit to comb through CCTV footage and make identifications. At first, he was given mostly cops who had conditions that rendered them unfit for other duties. Sitting at a computer and scrolling through hours of surveillance footage can be migraine-inducing work; it is not for everyone. Yet Neville was stuck with an arbitrary crew of misfits. He referred to his staff, not without affection, as the Dirty Dozen.

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For an official in a starchy bureaucracy, Neville has a surprising compulsion for candor. In 2008, he attended a conference and complained, “Billions of pounds has been spent on kit, but no thought has gone into how police are going to *use* the images. The cameras are not working.” The *Guardian* published an article about Neville’s remarks, highlighting his assessment that Britain’s use of CCTV was “an utter fiasco.”

The Met hastily issued a statement contradicting Neville’s views and reassuring citizens that CCTV was “an important tool in protecting the public.” According to Neville, several of his colleagues and superiors attempted to shut down his unit. “I had to pull all sorts of strings to keep it going,” he said.

During this struggle, Neville heard about the Harvard paper on super-recognizers. He had noticed that some officers and informants excelled at making identifications, but he had always attributed the difference to motivation. What if there was a neurological explanation? At another conference, Neville met Josh Davis, a psychologist whose dissertation focused on forensic analysis of CCTV footage, and on the risks associated with misidentifications. The detective and the scientist decided to collaborate, subjecting Met officers who were especially good at making identifications to facial-recognition tests. Davis told me that initially he was dubious when Neville spoke of the remarkable capabilities of some of his officers. “I knew about prosopagnosia, but I hadn’t known that there was anyone at the other end of the scale,” he said. “It was itself a sort of blindness.”

In Room 901, Eliot Porritt sat with four colleagues at cluttered tables, staring at computer screens showing the faces of suspects. Alison Young had brought a bag of sweets, and the super-recognizers chewed candy while scrolling through the database. Whenever a crime is committed in London, police check to see if any suspects were captured on CCTV. Most cameras in the city are private—installed by businesses or homeowners—and when the police request footage the owners generally oblige. (When they

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don't, police have legal authority to compel them to turn it over.) An officer scans the footage and selects a screen grab of the perpetrator, which is uploaded to a centralized database at the Met. There are now more than a hundred thousand images of unidentified suspects in the database, each with its own six-digit code. The super-recognizers regularly cross-reference the images with a database containing mug shots of people who have been arrested.

Mick Neville picked up a composite sketch of a white man with a high forehead, a blocky haircut, and a pointy jaw. "Who's this?" he said. "Attempted rape suspect," Porritt said. "He looks like the one-armed man from 'The Fugitive,'" Neville observed. There was a murmur of agreement.

The super-recognizers adore Neville, and when he is not around they speak of him with familiarity and affection. But Neville, who served in the British Army and comes from a long line of soldiers, appreciates the perquisites of rank, and when he is in the room everyone sits a bit straighter. Neville has a good memory for faces, but, as he told me, "I'm not like *them*." He speaks about his team members with the dainty protectiveness of an orchid keeper. He describes Porritt as "an artist."

In 2012, Neville started working with Josh Davis, the psychologist, to identify super-recognizers. Officers who did well on Davis's tests were called upon from time to time to do identifications. The effort proved so successful that, last year, Neville obtained permission to create the dedicated unit. When I visited Room 901, there was a tally on a whiteboard that tracked the progress of Neville's experiment: "WEEK: 61. IDENTIS: 1957."

When a super-recognizer makes an ident, she must submit it for "peer review," in which a second super-recognizer—usually Eliot Porritt—renders an independent judgment. Porritt tends to request peer review from Jim Bullock, a laconic sergeant who works several floors up. One afternoon, Porritt trudged upstairs to find Bullock studying three CCTV images of a middle-aged black man with

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dreadlocks shoplifting in different locations. Two officers on the force—neither of them super-recognizers—had identified the man, but they had identified different suspects. “We’re trying to work out which one is the correct ident,” Bullock said. “The research is good for both,” he continued, pulling up mug shots. Both potential matches were from the area, and both had been arrested for shoplifting in the past.

“This guy here,” Porritt said, indicating one of the CCTV images. “He looks almost more Tamil.” “I think it’s the lighting, because he looks very dark,” Bullock said. “It’s very bright when you walk into a store.”

One quirk of facial recognition is that, from infancy, we tend to be better at recognizing faces of the ethnicity that we are most frequently exposed to: white people are generally better at recognizing white faces, black people tend to be better at recognizing black faces. At this point, the super-recognizer unit consists exclusively of white officers. But the Met has some thirty thousand police officers, and Davis has identified about a hundred and fifty who qualify as super-recognizers; Neville can draw on this diverse auxiliary force. One especially prolific super-recognizer who works outside the unit is Idris Bada, a jailer at Charing Cross Police Station. Bada, who is black, books fifty or so new prisoners each day. His brain is like an illustrated atlas of London’s criminal underworld. Once, he peered into a cell and recognized a prisoner who, thirty years earlier, had attended his elementary school.

“Here’s another image that’s just come in,” Bullock said, pulling up a picture. “Fourth image of the guy that this might be.”

Porritt noted that the video clip had been distorted. “You’ve got to be careful, because the proportions have been stretched laterally,” Porritt said. “The nose and the face look wider.” Porritt wondered whether they could access the original video. “You can’t see details like the ears,” he said of the stills. With video, you can see a face

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from multiple angles, you can observe someone's gait, and you can avoid tricks of the light.

Paul Smith, an officer who helps Neville manage the unit, told me that one day someone showed him an image of a crime that had taken place not far from his home: a kid had stolen a charity box from a gas station. When Smith saw the image, he was aghast. It was his stepson. Smith's stepson is autistic and is dependent on a caregiver, yet there he was: the same jacket, the same posture, the same manner of thrusting his hands in his pockets. "It was going to cause a lot of issues for me," Smith told me. "But I have a duty to be impartial." Before saying anything to his colleagues, he decided to check the original video. His identification was wrong. "When I looked at the image, it was him," he said. "But when he moved it wasn't."

Scrutinizing the CCTV images, Porritt and Bullock began to suspect that they might depict not the same dreadlocked shoplifter but, rather, multiple thieves who bore a superficial resemblance to one another. They stared at the faces in silence, until Bullock said, "Let's come back to this tomorrow, when the brain's a bit fresher."

Being a super-recognizer can be draining: there is no off switch for this mysterious capability. It is not uncommon for a super-recognizer, out on the town with friends, to bolt off after spotting someone with an outstanding warrant. Before joining the unit, James Rabbett, a young detective with a hipster beard, won an award for making two hundred arrests in a year. Rabbett, who has a cocksure manner, displays powers of recognition that are exceptional even by the unit's standards. He told me that, since joining the team full time, six months ago, he has made nearly six hundred identifications. Rabbett sometimes makes as many as five arrests a week while off-duty. This is fantastic for racking up stats, if less than conducive to a fulfilling social life. "It's become a bit of a burden," he allowed. Once, Rabbett was off-duty in Finsbury Park when he recognized a jewel thief and chased him down. A year

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earlier, he had glanced at the man's image on a WANTED poster. "You're nicked on suspicion of stealing a bag a year ago!" Rabbett said. The thief, we may fairly assume, was surprised. (He subsequently pleaded guilty.)

"Faces are special," brain scientists like to say. Days after birth, an infant can distinguish its mother's face from those of other women. Babies are more reliably engaged by a sketch of a face than they are by other images. Though human faces are quite similar in their basic composition, most of us can differentiate effortlessly among them. A face is a codex of social information: it can often tell us, at a glance, someone's age, gender, racial background, mood. Using f.M.R.I. scans, researchers have discovered that certain areas of the brain are hardwired for processing faces.

The human brain is often less reliable than digital algorithms, but it remains superior at facial recognition. This might no longer seem true in an era in which Facebook prompts users to tag friends in photographs. With its database of two hundred and fifty billion user photos, Facebook has developed a facial-recognition algorithm that is more reliable than those developed for the F.B.I. But Facebook's software has conspicuous advantages: people usually post photographs of friends, and this helps Facebook narrow the range of possible matches. The image quality also tends to be high: you're unlikely to post a grainy shot taken from a bad angle while a person is moving or in shadow.

"It's bullshit," Mick Neville said when I asked him about automated facial recognition. "Fantasyland." At the airport, when a scanner compares your face with your passport photo, Neville explained, "The lighting's perfect, the angle's perfect." By contrast, the average human can recognize a family member *from behind*. "No computer will ever be able to do that."

Some industry observers share his skepticism. In 2014, Shahar Belkin, a co-founder of FST Biometrics, which develops facial-recognition technology, told The Verge that any firm promising to

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deliver “near-human” capabilities is lying. “The difference between a human brain and a computer is huge,” he said.

After the 2011 London riots, the Met gathered two hundred thousand hours of CCTV footage. Computer facial-recognition systems identified one rioter. Gary Collins, the super-recognizer, identified a hundred and ninety. The riots were Neville’s proof of concept. “From that point on, things got a lot easier,” he said.

The journalist Clive Thompson, in his 2013 book, “Smarter Than You Think: How Technology Is Changing Our Minds for the Better,” suggests that for some tasks the most formidable tool is neither a human brain nor a computer but both working in tandem—a “centaur” strategy. The super-recognizers follow this approach. To navigate the Met’s database, they rely on a proprietary software program to guide them. Each time an image is entered into the system, a human tags it with metadata; if the super-recognizers are searching for a white male between the ages of forty and fifty who is known for nonresidential burglaries in East London, they can select for those criteria.

“Have a go,” Eliot Porritt said one morning. I took a seat facing a monitor and scrolled through the search options. The racial categories include Northern and Southern European, African or Caribbean, Middle Eastern, East Asian or South Asian. (Crime by people from Central and South America is apparently so rare in London that these categories did not merit inclusion.) You can sort the images using numerous tags, each with its own menu of subcategories: “Accessories (Jewelry, Eyewear, Bandanna . . .)”; “Tattoos (Angel, Animal, Bird . . .)”; “Hair Style (Comb Over, Dirty, Extensions . . .).” Momentarily puzzled by an entry labeled “Lacking,” I clicked the drop-down menu to see “Eye, Limb, Tooth, Teeth.” These designations are so specific, Porritt said, that a search can become counterproductively narrow. “Less is more,” he advised. You might end up with a few hundred more faces to sort through, but you’re less likely to miss your culprit.

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Computers may not be great at spotting faces, but logo-recognition algorithms are very effective. And it turns out that many criminals not only commit the same crimes again and again; they do so wearing the same outfits. (The super-recognizers find this hilarious, and joke about “crime clothes.”) Cameras had captured a burglar committing several break-ins wearing the same Everlast sweatshirt, which happened to be a perfect match for the one that he had worn in a mug shot taken after a previous arrest. Another thief was devoted to a newsboy cap. As I scrolled through the database, even my untrained eye picked out multiple shots of the thief in his trademark hat. There are other tells. When Mick Neville gives talks, he shows a slide featuring “the cross-eyed Peckham arsonist,” and gently suggests that the next time the man feels like setting a fire he might want to consider wearing shades.

Four out of five people identified by the super-recognizers are “habitual” repeat offenders. A member of the unit, Andy Eyles, explained, “If you do something and get away with it, you’re not going to branch out.” One wall of the office features a list of “Prolific Unknowns,” with thumbnail images of individuals who have been recorded repeatedly committing the same offense but have not yet been identified by name. If you can find a “linked series” of images, Neville explained, and then identify the perpetrator, you’ve cracked a dozen cases at once.

Recently, a handsome, olive-skinned man of about forty showed up in multiple clips. He would walk into a jewelry store or a boutique and engage a saleswoman in conversation, posing as a wealthy customer in search of a gift for his girlfriend. When the saleswoman turned her back, the man used sleight of hand to pocket a bracelet or shove a cashmere sweater down his pants.

As the super-recognizers scoured the database for images of clean-cut white male shoplifters, they were startled by how many pictures of the man they had accumulated. “It just grew and grew,” Porritt said. Eventually, they had images of nearly forty thefts: the man had

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stolen clothes, antiques, designer sunglasses, luxury cosmetics. He'd made off with more than a hundred thousand dollars' worth of merchandise. After circulating his image in the press, the team received a tip that his first name was Austin. When they consulted the database of booking photos, they found their man: one Austin Caballero, who had been arrested for shoplifting in 1993.

But they could not find a current address for Caballero, and had to wait for him to strike again. On New Year's Day, 2015, Porritt received a call at home. In the predawn hours, a man had taken a taxi to buy cigarettes; he refused to pay the driver and ended up assaulting him. When he was arrested, the man gave the name Jack Donaghy. (Apparently, he was a "30 Rock" fan.) It was chaotic at the station, and the officers were about to let "Jack Donaghy" go when somebody thought to fingerprint him. It was Caballero. Two of Porritt's colleagues went to the station and presented Caballero with a collage of photographs documenting thirty-six incidents of shoplifting. He pleaded guilty to all of them.

Porritt sometimes talks about the database using mystical language, like a trophy fisherman musing about the sea. Scrolling through thousands of photos, he squints his eyes, as if looking for a pattern that is hidden just beneath the surface. "I still think in the database there's a massive series—*bigger* than Caballero," he said. "Keyser Söze's in there."

One afternoon in August of 2014, a fourteen-year-old girl named Alice Gross left her home in West London and disappeared. Six hundred police officers joined a manhunt for her. Gross's image had been captured by a camera as she walked along a canal. The super-recognizers examined the footage, and Porritt and his colleagues fastened on a ghostly clip showing a man on a bicycle following the same route a few moments later. Gross disappeared into a wooded area where there were no cameras. The man did the same. Sometime later, he reëmerged, and the super-recognizers traced his movements as he made his way to a shop where he bought beer; he then disappeared into the woods again. Eventually, police

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discovered Gross's body at the bottom of the River Brent. Using the footage, the super-recognizers helped identify her killer—a builder and convicted murderer named Arnis Zalkalns. But by the time police found Zalkalns he had hanged himself from a tree.

As with the abduction of the toddler James Bulger, the Alice Gross case underlined both the potential and the limitations of CCTV. The cameras helped to solve an unspeakable crime—but they did not prevent it. With a queasy smile of consolation, Porritt said, “We were told that had Zalkalns lived they would have had enough evidence based on what we found to charge him. So, that felt good.”

Given how adept the super-recognizers have proved at solving property crimes, it seems likely that they will eventually find weightier applications for their gifts. Counterterrorism is one field in which powers of facial recognition could make a difference. In 2013, after the Boston Marathon bombing, authorities raced to identify the two bombers by using CCTV footage that had captured their faces before the blast. The F.B.I. crowd-sourced the problem, releasing the images to the public. Amateur sleuths on Reddit pinpointed several innocent students (and one person who was dead). Having a squad of super-recognizers at the F.B.I. could be useful not just in making identifications but in guarding against misidentifications.

Super-recognizers could also improve airport security. In 2014, researchers in Sydney, Australia, conducted a study of officials who issue passports. When volunteers presented passport applications containing photographs of other people, the officials did not recognize the discrepancy fourteen per cent of the time. One might attribute this alarming statistic to reckless inattention. Yet the system for hiring passport officers likely rests on the faulty premise that applicants have essentially equal skill in recognizing faces.

According to recent studies, as much as two per cent of the U.S. population may suffer from prosopagnosia, and as many as eight

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million citizens may have a more moderate impairment. Richard Russell, the psychologist, who is now at Gettysburg College, believes it is statistically inevitable that some passport officers at American airports are face blind—and that quite a number are significantly impaired. For decades, teen-agers have faked their way into bars using borrowed I.D.s with comically dubious photographs. What if that is all it takes to fake your way onto an airplane?

Talking with the super-recognizers, I found myself wanting someone like Alison Young stationed at the airport. Shouldn't anyone applying for a job that involves face-matching—from a guard at a federal building to a sentry outside a nuclear plant—take the Cambridge Face Memory Test? Josh Davis and other scholars who study super-recognizers believe that the gift may be roughly as common as face blindness, which would mean that one in fifty people has a brain that is especially well suited to such jobs.

Mick Neville often tells a story about the brothers Alfred and Albert Stratton, who were hanged in 1905 for murdering a married couple while robbing their shop, in Deptford. No witnesses could definitively link the brothers to the crime, but on an empty cash box investigators discovered a greasy thumbprint that turned out to be a match for Alfred Stratton. It was the first time that fingerprint analysis helped secure a murder conviction in Great Britain. Neville believes that we are on the cusp of what he calls “the third revolution in forensics.” He expects that, as with fingerprints and DNA, CCTV imagery will be embraced as a forensic science and accorded the respect and the resources it deserves. “In the Met, we solve about two thousand cases a year with fingerprints and another two thousand with DNA,” he told me. “This year, we solved twenty-five hundred crimes using imagery, and it's about ten times cheaper than those methods.”

The super-recognizers already have made a difference in U.K. law. Traditionally, an officer who identified someone in court had to demonstrate prior acquaintance with the individual. But the super-

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recognizers have succeeded with prosecutions in which they have offered “indirect identifications”—establishing familiarity with a suspect through repeated exposure to his likeness on CCTV. When I asked Neville how reliable this standard was, he replied, “I’ve never met Alex Ferguson, the former Manchester United manager. But I would recognize him.”

The super-recognizers acknowledge that they are not infallible, which is why they have the peer-review process as a safeguard. According to statistics that they freely share with the press, seventy-three per cent of their identifications have led to criminal charges; many of these suspects, realizing that they have been caught in flagrante, plead guilty. But thirteen per cent of the unit’s identifications have been wrong. Sometimes the super-recognizers have identified someone as the culprit of a crime only to discover that the suspect was in jail when the incident took place. Porritt emphasized that suspects very seldom go to prison solely on the basis of their identifications. “It’s never our word alone that puts someone away,” he said. “What we do, by identifying suspects, is help *direct* the investigation.”

There is something quaintly Victorian about many of the crimes that the London unit has investigated: the artful pickpocket, the roving purse snatcher. Caballero, the most prolific scalawag identified by the super-recognizers to date, received only four years in prison. Such an initiative might have harsher consequences in the United States, with our fixation on nonviolent drug crimes and lengthy sentences. Neville’s techniques could also be applied with chilling effects in a country like China, which has one of the greatest concentrations of CCTV surveillance outside the United Kingdom.

At the same time, if legal authorities accept that there is a spectrum of facial-recognition ability—and that this skill can be evaluated with simple tests—it could be a boon to defense attorneys, and could inspire an overhaul of criminal procedures that involve such identifications. In recent decades, the status of eyewitness testimony has been undermined as scholarship has demonstrated that after

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stressful situations people are often mistaken about what they have seen. But what if, even on a good day, the people offering testimony have an impaired ability to recognize faces? When a police officer testifies that he saw a defendant fleeing the scene of a crime, should we not ask how that officer has fared on the Cambridge Face Memory Test? In July, a cop in Savannah, Georgia, confronted a young African-American named Patrick Mumford in a driveway and repeatedly Tased him, in the mistaken belief that he was another man, Michael Clay, whom the cop had a warrant to arrest. “They look a lot—a good bit alike,” the officer told a neighbor after realizing his mistake. “It’s not far off.”

In fact, Clay and Mumford don’t look alike. The officer could have made the mistake because he’s a racist, or because he was badly trained, or because, as a white man, he is better at recognizing white faces than brown ones. But wouldn’t it be helpful to know where he falls on the facial-recognition spectrum? If he’s demonstrably inept at recognizing faces, the public might wonder whether he should still be deployed, with a gun, on the street.

Tony Porter, the head of the U.K.’s commission on CCTV technology, functions as a kind of in-house watchdog for the government. Last year, he observed that the proliferation of such tools could fundamentally alter “the psyche of the community.” In particular, he warned that, as algorithms advance, CCTV might eventually be used “to predict behavior.” It already is. Paul Smith, the officer who helps Neville manage the unit, told me that from time to time the super-recognizers are assigned to concerts and street festivals in a “preventative capacity.” Moving incognito through the milling crowds, they are tasked with picking out “known troublemakers” and “risky fans” and either eject them before they can disturb the peace or simply keep an eye on them. Concert organizers welcome the super-recognizers; Smith noted that thefts of mobile phones drop precipitately whenever the team works an event. Yet there is something disquieting about the idea of public events infiltrated by superhuman watchers, like Argus, the creature from Greek mythology with a hundred eyes.

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Neville parries such civil-liberties concerns with impatient disdain. “There’s an *obsession* with compliance,” he grumbled to a group of officials at a conference that I attended in London. “We’re focussing on all the things we can’t do, rather than what we *should* do.”

In January, authorities in Cologne were overwhelmed by reports of sexual assaults that had occurred during New Year’s Eve festivities. The German government requested help from the super-recognizers, and Neville dispatched Porritt and Eyles to the city. The super-recognizers helped make some identifications, but they were dismayed by how little footage they had to work with: Germany has not embraced CCTV to nearly the extent that the U.K. has. James Rabbett pointed out to me that whereas in Britain people live with the knowledge that “ninety per cent of their day” is captured on camera, “a lot of other countries have issues with human rights and that sort of stuff.”

Despite such cultural differences, Neville believes that his ideas can be exported across the globe. Even in a city with less comprehensive surveillance, the police could systematize the process for gathering images and configure a searchable database. Another easily adaptable element of his program is testing the facial-recognition skills of officers. He points to Alison Young, who identified the Camden groper. Had she not taken the test, she might still be working her old beat, with no inkling of her rare talent. “You could be the best soccer player in the world, but unless you pick up the ball you’d never know,” Neville said.

Neville plans to retire soon, and he feels that his forensic contributions have not yet been adequately appreciated by the Met. “I’ve been the same rank for fifteen years,” he told me. “If I worked for the Ford Motor Company and figured out how to make more cars at a fraction of the cost, I’d be promoted.” He plans to follow the example of Bill Bratton and Jack Maple, who became international consultants after devising the heralded CompStat system at the New York City Police Department. Neville hopes to advise other departments, for a fee, on how to identify and train their own super-

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recognizers. The police department of St. Petersburg, Florida, recently announced that it is working with psychologists at Dartmouth and Harvard to test the facial-recognition capabilities of its officers. Other departments are likely to follow.

One afternoon at Scotland Yard, Neville arranged an awards ceremony at which he commended CCTV operators, in an effort to foster esprit de corps. Beverages were served, and after seeing off the last stragglers Neville stuck around with a handful of the super-recognizers, drinking wine in plastic cups and chatting. There was something valedictory about the gathering: at the end of the week, the team would be vacating Room 901. The Met has sold New Scotland Yard, and the unit is relocating to a facility in Lambeth. (“New New Scotland Yard,” someone joked.)

When I asked Alison Young, out of earshot of Neville, about the prospect of his departure, she noted that the team relied on him to advocate for them in the department. “He’s a legend,” she said.

“We’re still technically a temporary unit,” Porritt said. There was a sense that without Neville the whole initiative could be disbanded on a bureaucratic whim.

Neville clearly shares this concern. He feels that he has unlocked a mystery of the human mind which could signal a revolution in policing. He is frustrated when he encounters skepticism, as if he were claiming to have discovered officers with telepathy or E.S.P., and he feels a nagging suspicion that had he written an algorithm instead the brass would be rushing to embrace it. “People don’t want to believe that humans could be better than a machine,” he told me. “And the sad truth in this wicked world we live in is that people don’t want to pay a human. They want to buy a machine.” ♦

Where do you fall on the facial-recognition spectrum? Take the [Cambridge Face Memory Test](#) to find out.

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Patrick Radden Keefe, a staff writer, has been contributing to The New Yorker since 2006.

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