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What do job interviews really tell us?

1.

Nolan Myers grew up in Houston, the elder of two boys in a middle-class family. He went to Houston's High School for the Performing and Visual Arts and then Harvard, where he intended to major in History and Science. After discovering the joys of writing code, though, he switched to computer science. "Programming is one of those things you get involved in, and you just can't stop until you finish," Myers says. "You get involved in it, and all of a sudden you look at your watch and it's four in the morning! I love the elegance of it." Myers is short and slightly stocky and has pale-blue eyes. He smiles easily, and when he speaks he moves his hands and torso for emphasis. He plays in a klezmer band called the Charvard Chai Notes. He talks to his parents a lot. He gets B's and B-pluses.

This spring, in the last stretch of his senior year, Myers spent a lot of time interviewing for jobs with
technology companies. He talked to a company named Trilogy, down in Texas, but he didn't think he would fit in. "One of Tril-ogy's subsidiaries put ads out in the paper saying that they were looking for the top tech students, and that they'd give them two hundred thousand dollars and a BMW," Myers said, shaking his head in disbelief. In another of his interviews, a recruiter asked him to solve a programming problem, and he made a stupid mistake and the recruiter pushed the answer back across the table to him, saying that his "solution" accomplished nothing. As he remembers the moment, Myers blushes. "I was so nervous. I thought, Hmm, that sucks!" The way he says that, though, makes it hard to believe that he really was nervous, or maybe what Nolan Myers calls nervous the rest of us call a tiny flutter in the stomach. Myers doesn't seem like the sort to get flustered. He's the kind of person you would call the night before the big test in seventh grade, when nothing made sense and you had begun to panic.

I like Nolan Myers. He will, I am convinced, be very good at whatever career he chooses. I say those two things even though I have spent no more than ninety minutes in his presence. We met only once, on a sunny afternoon in April at the Au Bon Pain in Harvard Square. He was wearing sneakers and khakis and a polo shirt, in a dark-green pattern. He had a big backpack, which he plopped on the floor beneath the table. I bought him an orange juice. He fished around in his wallet and came up with a dollar to try and repay me, which I refused. We sat by the window. Previously, we had talked for perhaps three minutes on the phone, setting up the interview. Then I E-mailed him, asking him how I would recognize him at Au Bon Pain. He sent me the following message, with what I'm convinced--again, on the basis of almost no evidence--to be typical Myers panache: "22ish, five foot seven, straight brown hair, very good-looking:)." I have never talked to his father, his mother, or his little brother, or any of his professors. I have never seen him ecstatic or angry or depressed. I know nothing of his personal habits, his tastes, or his quirks. I cannot even tell you why I feel the way I do about him. He's good-looking and smart and articulate and funny, but not so good-looking and smart and articulate and funny that there is some obvious explanation for the conclusions I've drawn about him. I just like him, and I'm impressed by him, and if I were an employer looking for bright young college graduates, I'd hire him in a heartbeat.

I heard about Nolan Myers from Hadi Partovi, an executive with Tellme, a highly touted Silicon Valley startup offering Internet access through the telephone. If you were a computer-science major at M.I.T., Harvard, Stanford, Caltech, or the University of Waterloo this spring, looking for a job in software, Tellme was probably at the top of your list. Partovi and I talked in the conference room at Tellme's offices, just off the soaring, open floor where all the firm's programmers and marketers and executives sit, some of them with bunk beds built over their desks. (Tellme recently moved into an old printing plant--a low-slung office building with a huge warehouse attached--and, in accordance with new-economy logic, promptly turned the old offices into a warehouse and the old warehouse into offices.) Partovi is a handsome man of twenty-seven, with olive skin and short curly black hair, and throughout our entire interview he sat with his chair tilted precariously at a forty-five-degree angle. At the end of a long riff about how hard it is to find high-quality people, he blurted out one name: Nolan Myers. Then, from memory, he rattled off Myers's telephone number. He very much wanted Myers to come to Tellme.

Partovi had met Myers in January, during a recruiting trip to Harvard. "It was a heinous day," Partovi remembers. "I started at seven and went until nine. I'd walk one person out and walk the other in." The first fifteen minutes of every interview he spent talking about Tellme--its strategy, its goals, and its business. Then he gave everyone a short programming puzzle. For the rest of the hour-long meeting, Partovi asked questions. He remembers that Myers did well on the programming test, and after talking to him for thirty to forty minutes he became convinced that Myers had, as he puts it, "the right stuff." Partovi spent even less time with Myers than I did. He didn't talk to Myers's family, or see
him ecstatic or angry or depressed, either. He knew that Myers had spent last summer as an intern at Microsoft and was about to graduate from an Ivy League school. But virtually everyone recruited by a place like Tellme has graduated from an élite university, and the Microsoft summer-internship program has more than six hundred people in it. Partovi didn't even know why he liked Myers so much. He just did. "It was very much a gut call," he says.

This wasn't so very different from the experience Nolan Myers had with Steve Ballmer, the C.E.O. of Microsoft. Earlier this year, Myers attended a party for former Microsoft interns called Gradbash. Ballmer gave a speech there, and at the end of his remarks Myers raised his hand. "He was talking a lot about aligning the company in certain directions," Myers told me, "and I asked him about how that influences his ability to make bets on other directions. Are they still going to make small bets?"

Afterward, a Microsoft recruiter came up to Myers and said, "Steve wants your E-mail address." Myers gave it to him, and soon he and Ballmer were E-mailing. Ballmer, it seems, badly wanted Myers to come to Microsoft. "He did research on me," Myers says. "He knew which group I was interviewing with, and knew a lot about me personally. He sent me an E-mail saying that he'd love to have me come to Microsoft, and if I had any questions I should contact him. So I sent him a response, saying thank you. After I visited Tellme, I sent him an E-mail saying I was interested in Tellme, here were the reasons, that I wasn't sure yet, and if he had anything to say I said I'd love to talk to him. I gave him my number. So he called, and after playing phone tag we talked--about career trajectory, how Microsoft would influence my career, what he thought of Tellme. I was extremely impressed with him, and he seemed very genuinely interested in me."

What convinced Ballmer he wanted Myers? A glimpse! He caught a little slice of Nolan Myers in action and--just like that--the C.E.O. of a four-hundred-billion-dollar company was calling a college senior in his dorm room. Ballmer somehow knew he liked Myers, the same way Hadi Partovi knew, and the same way I knew after our little chat at Au Bon Pain. But what did we know? What could we know? By any reasonable measure, surely none of us knew Nolan Myers at all.

It is a truism of the new economy that the ultimate success of any enterprise lies with the quality of the people it hires. At many technology companies, employees are asked to all but live at the office, in conditions of intimacy that would have been unthinkable a generation ago. The artifacts of the prototypical Silicon Valley office--the videogames, the espresso bar, the bunk beds, the basketball hoops--are the elements of the rec room, not the workplace. And in the rec room you want to play only with your friends. But how do you find out who your friends are? Today, recruiters canvas the country for résumés. They analyze employment histories and their competitors' staff listings. They call references, and then do what I did with Nolan Myers: sit down with a perfect stranger for an hour and a half and attempt to draw conclusions about that stranger's intelligence and personality. The job interview has become one of the central conventions of the modern economy. But what, exactly, can you know about a stranger after sitting down and talking with him for an hour?

2.

Some years ago, an experimental psychologist at Harvard University, Nalini Ambady, together with Robert Rosenthal, set out to examine the nonverbal aspects of good teaching. As the basis of her research, she used videotapes of teaching fellows which had been made during a training program at Harvard. Her plan was to have outside observers look at the tapes with the sound off and rate the effectiveness of the teachers by their expressions and physical cues. Ambady wanted to have at least a minute of film to work with. When she looked at the tapes, though, there was really only about ten seconds when the teachers were shown apart from the students. "I didn't want students in the frame, because obviously it would bias the ratings," Ambady says. "So I went to my adviser, and I said, 'This
isn't going to work."

But it did. The observers, presented with a ten-second silent video clip, had no difficulty rating the teachers on a fifteen-item checklist of personality traits. In fact, when Ambady cut the clips back to five seconds, the ratings were the same. They were even the same when she showed her raters just two seconds of videotape. That sounds unbelievable unless you actually watch Ambady's teacher clips, as I did, and realize that the eight seconds that distinguish the longest clips from the shortest are superfluous: anything beyond the first flash of insight is unnecessary. When we make a snap judgment, it is made in a snap. It's also, very clearly, a judgment: we get a feeling that we have no difficulty articulating.

Ambady's next step led to an even more remarkable conclusion. She compared those snap judgments of teacher effectiveness with evaluations made, after a full semester of classes, by students of the same teachers. The correlation between the two, she found, was astoundingly high. A person watching a two-second silent video clip of a teacher he has never met will reach conclusions about how good that teacher is that are very similar to those of a student who sits in the teacher's class for an entire semester.

Recently, a comparable experiment was conducted by Frank Bernieri, a psychologist at the University of Toledo. Bernieri, working with one of his graduate students, Neha Gada-Jain, selected two people to act as interviewers, and trained them for six weeks in the proper procedures and techniques of giving an effective job interview. The two then interviewed ninety-eight volunteers, of various ages and backgrounds. The interviews lasted between fifteen and twenty minutes, and afterward each interviewer filled out a six-page, five-part evaluation of the person he'd just talked to. Originally, the intention of the study was to find out whether applicants who had been coached in certain nonverbal behaviors designed to ingratiate themselves with their interviewers--like mimicking the interviewers' physical gestures or posture--would get better ratings than applicants who behaved normally. As it turns out, they didn't. But then another of Bernieri's students, an undergraduate named Tricia Prickett, decided that she wanted to use the interview videotapes and the evaluations that had been collected to test out the adage that "the handshake is everything."

"She took fifteen seconds of videotape showing the applicant as he or she knocks on the door, comes in, shakes the hand of the interviewer, sits down, and the interviewer welcomes the person," Bernieri explained. Then, like Ambady, Prickett got a series of strangers to rate the applicants based on the handshake clip, using the same criteria that the interviewers had used. Once more, against all expectations, the ratings were very similar to those of the interviewers. "On nine out of the eleven traits the applicants were being judged on, the observers significantly predicted the outcome of the interview," Bernieri says. "The strength of the correlations was extraordinary."

This research takes Ambady's conclusions one step further. In the Toledo experiment, the interviewers were trained in the art of interviewing. They weren't dashing off a teacher evaluation on their way out the door. They were filling out a formal, detailed questionnaire, of the sort designed to give the most thorough and unbiased account of an interview. And still their ratings weren't all that different from those of people off the street who saw just the greeting.

This is why Hadi Partovi, Steve Ballmer, and I all agreed on Nolan Myers. Apparently, human beings don't need to know someone in order to believe that they know someone. Nor does it make that much difference, apparently, that Partovi reached his conclusion after putting Myers through the wringer for an hour, I reached mine after ninety minutes of amiable conversation at Au Bon Pain, and Ballmer reached his after watching and listening as Myers asked a question.
Bernieri and Ambady believe that the power of first impressions suggests that human beings have a particular kind of prerational ability for making searching judgments about others. In Ambady's teacher experiments, when she asked her observers to perform a potentially distracting cognitive task—like memorizing a set of numbers—while watching the tapes, their judgments of teacher effectiveness were unchanged. But when she instructed her observers to think hard about their ratings before they made them, their accuracy suffered substantially. Thinking only gets in the way. "The brain structures that are involved here are very primitive," Ambady speculates. "All of these affective reactions are probably governed by the lower brain structures." What we are picking up in that first instant would seem to be something quite basic about a person's character, because what we conclude after two seconds is pretty much the same as what we conclude after twenty minutes or, indeed, an entire semester. "Maybe you can tell immediately whether someone is extroverted, or gauge the person's ability to communicate," Bernieri says. "Maybe these clues or cues are immediately accessible and apparent." Bernieri and Ambady are talking about the existence of a powerful form of human intuition. In a way, that's comforting, because it suggests that we can meet a perfect stranger and immediately pick up on something important about him. It means that I shouldn't be concerned that I can't explain why I like Nolan Myers, because, if such judgments are made without thinking, then surely they defy explanation.

But there's a troubling suggestion here as well. I believe that Nolan Myers is an accomplished and likable person. But I have no idea from our brief encounter how honest he is, or whether he is self-centered, or whether he works best by himself or in a group, or any number of other fundamental traits. That people who simply see the handshake arrive at the same conclusions as people who conduct a full interview also implies, perhaps, that those initial impressions matter too much—that they color all the other impressions that we gather over time.

For example, I asked Myers if he felt nervous about the prospect of leaving school for the workplace, which seemed like a reasonable question, since I remember how anxious I was before my first job. Would the hours scare him? Oh no, he replied, he was already working between eighty and a hundred hours a week at school. "Are there things that you think you aren't good at, which make you worry?" I continued.

His reply was sharp: "Are there things that I'm not good at, or things that I can't learn? I think that's the real question. There are a lot of things I don't know anything about, but I feel comfortable that given the right environment and the right encouragement I can do well at." In my notes, next to that reply, I wrote "Great answer!" and I can remember at the time feeling the little thrill you experience as an interviewer when someone's behavior conforms with your expectations. Because I had decided, right off, that I liked him, what I heard in his answer was toughness and confidence. Had I decided early on that I didn't like Nolan Myers, I would have heard in that reply arrogance and bluster. The first impression becomes a self-fulfilling prophecy: we hear what we expect to hear. The interview is hopelessly biased in favor of the nice.

3.

When Ballmer and Partovii and I met Nolan Myers, we made a prediction. We looked at the way he behaved in our presence—at the way he talked and acted and seemed to think—and drew conclusions about how he would behave in other situations. I had decided, remember, that Myers was the kind of person you called the night before the big test in seventh grade. Was I right to make that kind of generalization?

This is a question that social psychologists have looked at closely. In the late nineteen-twenties, in a
famous study, the psychologist Theodore Newcomb analyzed extroversion among adolescent boys at a summer camp. He found that how talkative a boy was in one setting--say, lunch--was highly predictive of how talkative that boy would be in the same setting in the future. A boy who was curious at lunch on Monday was likely to be curious at lunch on Tuesday. But his behavior in one setting told you almost nothing about how he would behave in a different setting: from how someone behaved at lunch, you couldn't predict how he would behave during, say, afternoon playtime. In a more recent study, of conscientiousness among students at Carleton College, the researchers Walter Mischel, Neil Lutsky, and Philip K. Peake showed that how neat a student's assignments were or how punctual he was told you almost nothing about how often he attended class or how neat his room or his personal appearance was. How we behave at any one time, evidently, has less to do with some immutable inner compass than with the particulars of our situation.

This conclusion, obviously, is at odds with our intuition. Most of the time, we assume that people display the same character traits in different situations. We habitually underestimate the large role that context plays in people's behavior. In the Newcomb summer-camp experiment, for example, the results showing how little consistency there was from one setting to another in talkativeness, curiosity, and gregariousness were tabulated from observations made and recorded by camp counsellors on the spot. But when, at the end of the summer, those same counsellors were asked to give their final impressions of the kids, they remembered the children's behavior as being highly consistent.

"The basis of the illusion is that we are somehow confident that we are getting what is there, that we are able to read off a person's disposition," Richard Nisbett, a psychologist at the University of Michigan, says. "When you have an interview with someone and have an hour with them, you don't conceptualize that as taking a sample of a person's behavior, let alone a possibly biased sample, which is what it is. What you think is that you are seeing a hologram, a small and fuzzy image but still the whole person."

Then Nisbett mentioned his frequent collaborator, Lee Ross, who teaches psychology at Stanford. "There was one term when he was teaching statistics and one term he was teaching a course with a lot of humanistic psychology. He gets his teacher evaluations. The first referred to him as cold, rigid, remote, finicky, and upright. And the second described this wonderful warmhearted guy who was so deeply concerned with questions of community and getting students to grow. It was Jekyll and Hyde. In both cases, the students thought they were seeing the real Lee Ross."

Psychologists call this tendency--to fixate on supposedly stable character traits and overlook the influence of context--the Fundamental Attri-bution Error, and if you combine this error with what we know about snap judgments the interview becomes an even more problematic encounter. Not only had I let my first impressions color the information I gathered about Myers, but I had also assumed that the way he behaved with me in an interview setting was indicative of the way he would always behave. It isn't that the interview is useless; what I learned about Myers--that he and I get along well--is something I could never have got from a résumé or by talking to his references. It's just that our conversation turns out to have been less useful, and potentially more misleading, than I had supposed. That most basic of human rituals--the conversation with a stranger--turns out to be a minefield.

4.

Not long after I met with Nolan Myers, I talked with a human- resources consultant from Pasadena named Justin Menkes. Menkes's job is to figure out how to extract meaning from face-to-face encounters, and with that in mind he agreed to spend an hour interviewing me the way he thinks interviewing ought to be done. It felt, going in, not unlike a visit to a shrink, except that instead of
having months, if not years, to work things out, Menkes was set upon stripping away my secrets in one
session. Consider, he told me, a commonly asked question like "Describe a few situations in which
your work was criticized. How did you handle the criticism?" The problem, Menkes said, is that it's
much too obvious what the interviewee is supposed to say. "There was a situation where I was
working on a project, and I didn't do as well as I could have," he said, adopting a mock-sincere
singsong. "My boss gave me some constructive criticism. And I redid the project. It hurt. Yet we
worked it out." The same is true of the question "What would your friends say about you?"--to which
the correct answer (preferably preceded by a pause, as if to suggest that it had never dawned on you
that someone would ask such a question) is "My guess is that they would call me a people person--
either that or a hard worker."

Myers and I had talked about obvious questions, too. "What is your greatest weakness?" I asked him.
He answered, "I tried to work on a project my freshman year, a children's festival. I was trying to start
a festival as a benefit here in Boston. And I had a number of guys working with me. I started getting
concerned with the scope of the project we were working on--how much responsibility we had, getting
things done. I really put the brakes on, but in retrospect I really think we could have done it and done
a great job."

Then Myers grinned and said, as an aside, "Do I truly think that is a fault? Honestly, no." And, of
course, he's right. All I'd really asked him was whether he could describe a personal strength as if it
were a weakness, and, in answering as he did, he had merely demonstrated his knowledge of the
unwritten rules of the interview.

But, Menkes said, what if those questions were rephrased so that the answers weren't obvious? For
example: "At your weekly team meetings, your boss unexpectedly begins aggressively critiquing your
performance on a current project. What do you do?"

I felt a twinge of anxiety. What would I do? I remembered a terrible boss I'd had years ago. "I'd
probably be upset," I said. "But I doubt I'd say anything. I'd probably just walk away." Menkes gave
no indication whether he was concerned or pleased by that answer. He simply pointed out that another
person might well have said something like "I'd go and see my boss later in private, and confront him
about why he embarrassed me in front of my team." I was saying that I would probably handle
criticism--even inappropriate criticism--from a superior with stoicism; in the second case, the
applicant was saying he or she would adopt a more confrontational style. Or, at least, we were telling
the interviewer that the workplace demands either stoicism or confrontation--and to Menkes these are
revealing and pertinent pieces of information.

Menkes moved on to another area--handling stress. A typical question in this area is something like
"Tell me about a time when you had to do several things at once. How did you handle the situation?
How did you decide what to do first?" Menkes says this is also too easy. "I just had to be very
organized," he began again in his mock-sincere singsong. "I had to multitask. I had to prioritize and
delegate appropriately. I checked in frequently with my boss." Here's how Menkes rephrased it:
"You're in a situation where you have two very important responsibilities that both have a deadline
that is impossible to meet. You cannot accomplish both. How do you handle that situation?"

"Well," I said, "I would look at the two and decide what I was best at, and then go to my boss and say,
'It's better that I do one well than both poorly,' and we'd figure out who else could do the other task."

Menkes immediately seized on a telling detail in my answer. I was interested in what job I would do
best. But isn't the key issue what job the company most needed to have done? With that comment, I
had revealed some-thing valuable: that in a time of work-related crisis I start from a self-centered consideration. "Perhaps you are a bit of a solo practitioner," Menkes said diplomatically. "That's an essential bit of information."

Menkes deliberately wasn't drawing any broad conclusions. If we are not people who are shy or talkative or outspoken but people who are shy in some contexts, talkative in other situations, and outspoken in still other areas, then what it means to know someone is to catalogue and appreciate all those variations. Menkes was trying to begin that process of cataloguing. This interviewing technique is known as "structured interviewing," and in studies by industrial psychologists it has been shown to be the only kind of interviewing that has any success at all in predicting performance in the workplace. In the structured interviews, the format is fairly rigid. Each applicant is treated in precisely the same manner. The questions are scripted. The interviewers are carefully trained, and each applicant is rated on a series of predetermined scales.

What is interesting about the structured interview is how narrow its objectives are. When I interviewed Nolan Myers I was groping for some kind of global sense of who he was; Menkes seemed entirely uninterested in arriving at that same general sense of me--he seemed to realize how foolish that expectation was for an hour-long interview. The structured interview works precisely because it isn't really an interview; it isn't about getting to know someone, in a traditional sense. It's as much concerned with rejecting information as it is with collecting it.

Not surprisingly, interview specialists have found it extraordinarily difficult to persuade most employers to adopt the structured interview. It just doesn't feel right. For most of us, hiring someone is essentially a romantic process, in which the job interview functions as a desexualized version of a date. We are looking for someone with whom we have a certain chemistry, even if the coupling that results ends in tears and the pursuer and the pursued turn out to have nothing in common. We want the unlimited promise of a love affair. The structured interview, by contrast, seems to offer only the dry logic and practicality of an arranged marriage.

5.

Nolan Myers agonized over which job to take. He spent half an hour on the phone with Steve Ballmer, and Ballmer was very persuasive. "He gave me very, very good advice," Myers says of his conversations with the Microsoft C.E.O. "He felt that I should go to the place that excited me the most and that I thought would be best for my career. He offered to be my mentor." Myers says he talked to his parents every day about what to do. In February, he flew out to California and spent a Saturday going from one Tellme executive to another, asking and answering questions. "Basically, I had three things I was looking for. One was long-term goals for the company. Where did they see themselves in five years? Second, what position would I be playing in the company?" He stopped and burst out laughing. "And I forget what the third one is." In March, Myers committed to Tellme.

Will Nolan Myers succeed at Tellme? I think so, although I honestly have no idea. It's a harder question to answer now than it would have been thirty or forty years ago. If this were 1965, Nolan Myers would have gone to work at I.B.M. and worn a blue suit and sat in a small office and kept his head down, and the particulars of his personality would not have mattered so much. It was not so important that I.B.M. understood who you were before it hired you, because you understood what I.B.M. was. If you walked through the door at Armonk or at a branch office in Illinois, you knew what you had to be and how you were supposed to act. But to walk through the soaring, open offices of Tellme, with the bunk beds over the desks, is to be struck by how much more demanding the culture of Silicon Valley is. Nolan Myers will not be provided with a social script, that blue suit and
organization chart. Tellme, like any technology startup these days, wants its employees to be part of a fluid team, to be flexible and innovative, to work with shifting groups in the absence of hierarchy and bureaucracy, and in that environment, where the workplace doubles as the rec room, the particulars of your personality matter a great deal.

This is part of the new economy's appeal, because Tellme's soaring warehouse is a more productive and enjoyable place to work than the little office boxes of the old I.B.M. But the danger here is that we will be led astray in judging these newly important particulars of character. If we let personability--some indefinable, prerational intuition, magnified by the Fundamental Attribution Error--bias the hiring process today, then all we will have done is replace the old-boy network, where you hired your nephew, with the new-boy network, where you hire whoever impressed you most when you shook his hand. Social progress, unless we're careful, can merely be the means by which we replace the obviously arbitrary with the not so obviously arbitrary.

Myers has spent much of the past year helping to teach Introduction to Computer Science. He realized, he says, that one of the reasons that students were taking the course was that they wanted to get jobs in the software industry. "I decided that, having gone through all this interviewing, I had developed some expertise, and I would like to share that. There is a real skill and art in presenting yourself to potential employers. And so what we did in this class was talk about the kinds of things that employers are looking for--what are they looking for in terms of personality. One of the most important things is that you have to come across as being confident in what you are doing and in who you are. How do you do that? Speak clearly and smile." As he said that, Nolan Myers smiled. "For a lot of people, that's a very hard skill to learn. But for some reason I seem to understand it intuitively."