Print | Close

The Introverted Face

By James Hamblin

People whose faces are perceived to look more "competent" are more likely to be CEOs of large, successful companies. Having a face that people deem "dominant" is a predictor of rank advancement in the military. People are more likely to invest money with people who look "trustworthy." These sorts of findings go on and on in recent studies that claim people can accurately guess a variety of personality traits and behavioral tendencies from portraits alone. The findings seem to elucidate either canny human intuition or absurd, misguided bias.

There has been a recent boom in research on how people attribute social characteristics to others based on the appearance of faces—independent of cues about age, gender, race, or ethnicity. (At least, as independent as possible.) The results seem to offer some intriguing insight, claiming that people are generally pretty good at predicting who is, for example, trustworthy, competent, introverted or extroverted, based entirely on facial structure. There is strong agreement across studies as to what facial attributes mean what to people, as illustrated in renderings throughout this article. But it's, predictably, not at all so simple.

Christopher Olivola, an assistant professor at Carnegie Mellon University, makes the case against *face-ism* today, in the journal *Trends in Cognitive Sciences*. In light of many recent articles touting people's judgmental abilities, Olivola and Princeton University's Friederike Funk and Alexander Todorov say that a careful look at the data really doesn't support these claims. And "instead of applauding our ability to make inferences about social characteristics from facial appearances," Olivola said, "the focus should be on the dangers."
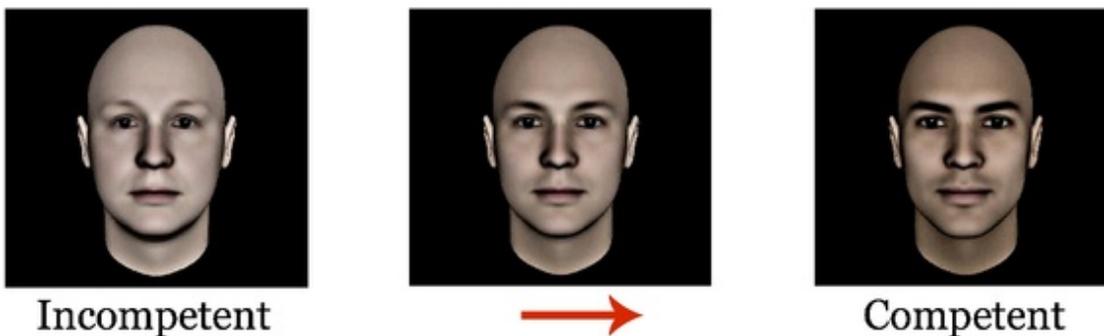
Unreliable   →   Trustworthy
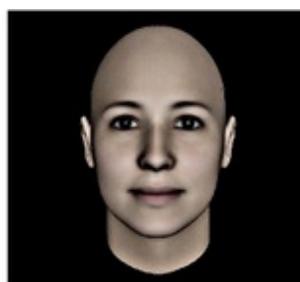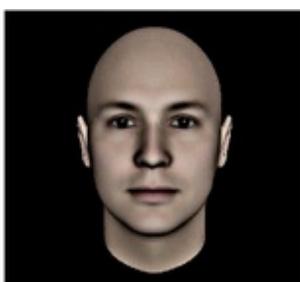
"When we see someone's face, we can make a lot of useful judgments," he said, "like about age, emotional state, gender, et cetera. For this, the face is pretty useful. But there's a pretty rich literature showing that we don't just stop there."

By systematically altering or selecting the faces that participants are presented with, researchers have been able to examine how variations in facial appearance bias human decisions. These studies have shown not just correlations, but causal evidence that facial appearances influence voting, economic exchanges, and legal judgments. People tend to draw inferences about personality characteristics, above and beyond what we might assume based on things like gender, ethnicity, or expression. Social attributions from faces alone tend to be constructed from how common facial features are within a culture, cross-cultural norms (e.g., inferences on masculinity/femininity), and idiosyncrasies like resemblance to friends, colleagues, loved ones, and, importantly, ourselves. Olivola's research has shown that these facial attributions people make have serious implications for how people are treated, and their outcomes in life. The especially unfortunate part of these inferences is how heavily they factor into critical decisions, in lieu of actual facts.

"The fact that social decisions are influenced by facial morphology would be less troubling if it were a strong and reliable indicator of people's underlying traits," the researchers write in today's article. "Unfortunately, careful consideration of the evidence suggests that it is not."

The primary problem is that people feel they have this sense, and they ignore other relevant information, Olivola said. Politics is a great example. His research has shown that politicians whose facial structure is deemed to look more competent are more likely to win elections. (They use actual politicians in these studies. Fortunately for researches, Olivola noted, most Americans don't know who most congressional candidates are.) But that sense of competence in a face amounts to nothing. "We really can't make a statement on that," he said. "What's an objective measure of competence?"


Incompetent   →   Competent

In the case of CEOs, if you control for how the company was doing before they came on board versus after, there is really no relationship between their "facial competence" and the company's subsequent success. "People are convinced that more competent-looking businesspeople are more valuable, and

they get higher salaries," Olivola explained, even though the companies don't perform any better under their leadership. "It's not accuracy in prediction; it's bias, actually."

Olivola has also done studies that show in conservative-leaning states, finding that the more "traditionally Republican" a person's face is deemed to look, the more votes he/she gets. Even if they're a Democrat. And the correlation between facial competence and vote share is strongest among voters who are lacking in political knowledge.

This suggests two solutions: Either make sure people don't see the candidates, an amazing but obviously impossible idea, or make sure people are educated—that they know what the candidates are about. That significantly reduces the biasing effect of facial competence.

Personality traits are also fraught, in that most studies rely on self-reported personality tests. "If I rate myself as extroverted and I try to look it in my pictures, you might rate me that way, but it doesn't mean I am." If there was some actual measure, like that when a person goes to parties, they make X number of friends, then we could start to talk about accuracy. But really, these studies just affirm that people see themselves the same way others seem them.

Introverted ➡ Extroverted
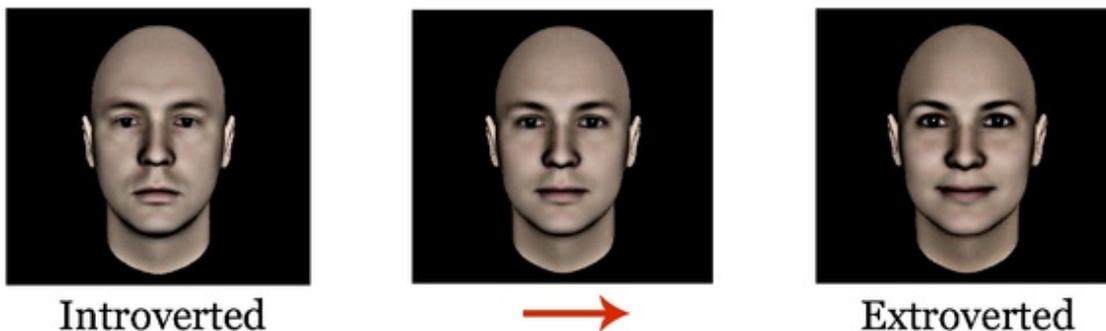
Trends in Cognitive Sciences, Olivola et al./The Atlantic

In online dating, Olivola said, people are selecting pictures because they want to convey something. "You might think, 'Wow, this person looks really fun and outgoing.' Well, yeah, they're not going to post a picture of themselves where they're deep inside their books at the library. (Unless they're trying to attract a certain kind of person.) But if you ask an acquaintance, they may say, no, that person's not that fun. They think they are, but they're not."

All that these studies really tell us, Olivola said, is "'I've managed to fool you into thinking I'm extroverted, because that's how I like to be seen.' Of course I want everyone to think I'm intelligent and fun, and I like to think I am—"

"I'm sure you are," I said.

"So this is kind of dangerous," he continued after a beat. "I mean, is it wise for us to tell people, 'Oh, yeah, people are great at telling political orientation on the basis of faces.' If someone looks like they're conservative, or if they look like they're gay or whatever, it's totally okay for you to think you're

probably right? We need to be more careful about that. It makes for great articles and everything, but when you look at the data critically, it paints a much less generous picture of the human ability to draw accurate inferences from faces. We need a lot of strong evidence before putting that message out there."

So this interesting research walks a thin line between relevant psychology and physiognomy. In the 1883 textbook *Types of Insanity: An illustrated guide to the physical diagnosis of mental disease*, Dr. Allan Hamilton wrote of a time when psychiatric practice was largely based on appearances. "When one walks through the wards of any asylum for the insane," Hamilton wrote, "he will be immediately impressed with the repulsiveness of the faces about him." The doctor includes characteristic sketches of people with melancholia, idiocy, imbecility, and mania—recognizable in a patient with "brows being corrugated, teeth covered by compressed lips, [and] eyes widely open."

In an article in *Annual Review of Psychology* earlier this year, Olivola and a separate group of Princeton colleagues made a similar point about the treacherous grounds on which this research treads. They address that countless papers have recently been written claiming that people can reliably judge a variety of traits and characteristics from facial morphology alone, arguing that a critical reexamination of the methods and findings in many of these studies paint a much less favorable picture. Though in that review, the team concedes that some of these structural cues "could have a kernel of truth," they are largely a judgmental illusion. They note that in criminal cases, facial appearances often predict sentencing decisions, judgments of guilt, and punishment severity. The most interesting, but also troubling, aspects of human judgment and decision making is how fallible and inconsistent it can be. The researchers also offer the additional caveat: "In real-life situations, people do not interact with disembodied faces."

Don't we?

This article available online at:

http://www.theatlantic.com/health/archive/2014/10/the-introverted-face/381697/