Have you ever heard of VidCon? Turns out it is, in the words of Wikipedia, “a multi-genre online video convention, held annually in Southern California since 2010. Originally conceived by Hank and John Green of the “Vlogbrothers” YouTube channel, the convention is the largest of its kind in the world, gathering thousands of online video viewers, creators, and industry representatives worldwide.”

My wife and I had never heard of it either until our teenage daughter (who for the sake of this post we’ll call Magenta) put on the full-court press to attend. For better or worse, we caved and Magenta went to Anaheim for the start of the conference with her mom in tow. They had in hand tickets that were purchased months ago. However, they also needed to get their IDs for the conference. That was the first order of business and led to a text I received a little before 9 a.m. Central time (which, allow me to point out, is not quite 7 a.m. in Anaheim):

Just what does the longest line that Magenta’s Mom has ever seen look like? Take a gander (and see if you can spot Magenta).
So why bring this up? Beyond being able to publicly thank Magenta's Mom for falling on this particular parenting grenade, it serves as a nice lead-in to a recent Business Insider article on “Why people wait in hours-long lines for Shake Shack, Cronuts, and iPhones.”

The article is not asking why people wait in just any old line. The real question is why wait in line when the economic payoff to waiting is almost certainly not worth the cost of waiting? Magenta was not at all fazed by the line above. She has been counting down the days until she could stand in this line. Standing in this line is the only way she could take advantage of buying her VidCon ticket.

In contrast, think about Hot Doug's, Chicago's Sausage Superstore and Encased Meat Emporium (which uses the slogan “There are no two finer words in the English language than ‘encased meats,’ my friend”), which has notoriously long lines. Here is how an old Chicago magazine article described the experience:
Upon my arrival at Hot Doug’s — high noon, duck-fat Friday — I counted 50 souls outside Doug Sohn's beloved Avondale hot dog joint. The goofy cross section included a hipster in a hoodie that said TASTY SALTED PIG PARTS and an old lady with a walker. “We're screwed,” one guy groaned to his buddy when he saw the crowd. Then they got in line. People sang, asked trivia questions, snapped pictures. Their only anxiety was: Should I order two dogs or three?

“The majority who get to the front of the line are happy,” says Sohn. “If someone is angry, my first response is: I didn't send you a summons.”

Hot Doug’s duck-fat french fries might be sublime, but there are other places in the city to get french fries that don't involve standing around forever. So why do it? What does it say about you if you are willing to cool your heels for encased meats? That gets us back to the Business Insider piece. The reason to stand in line is because of what it says about you.

Experts say that waiting in lines is a way for us to cultivate our own identity. This psychological phenomenon is known as “self-signaling,” in which people make decisions to communicate the type of person they are to themselves.

Francesca Gino, professor of business administration at Harvard Business School, says, “Even behaviors that seem irrational, such as waiting in line for hours for a new product or service, begin to make sense when we think about the signals they send to ourselves.” …

People also want to be associated with the hottest trends, whether it is Cronuts or annual sample sales at well-known brands. Richard Larson, director of the Center for Engineering Systems Fundamentals at MIT, points out, “Oftentimes there are trendy things, and people want to be seen in trendy lines.”

This gets us back to Magenta. Being one of the hip kids who actually went to VidCon and got to stand in that big line has been very, very important to her. She sees the time standing in line (during which, Magenta's Mom reports, someone walked up and introduced himself as one of her Twitter followers) as part of the experience and not really a burden. Note that this should be all the more
true when the cost of the good or service is not exorbitant. Hot Doug’s could reduce the length of its line by raising prices. It has chosen not to do that. Consequently, it is the length of the line that limits business over the out-of-pocket costs of the encased meats. That certainly skew the customer base. There are plenty of people in Chicago who might plunk down, say, $25 for duck-fat fries. Most of those people won’t join a 50-person line.

Having said that, there are other explanations for why people would choose to join a longer line. These turn not on what you know about yourself that you want to signal to the world but on what the world might know that you don’t. This gets us to the realm of herd behavior and information cascades. The classic story has one imagine being in an unfamiliar town looking for a place to eat. There are two restaurants that appear to be largely interchangeable (i.e., you are not going to pick one because it serves Italian food and you are dying for some lasagna) except that one has a full dining room and the other is empty. Which would you go to? For most people, the default is to go to the busy restaurant. Presumably none of those people would have chosen the busy place if they knew the other place was better. Essentially this comes down to inferring other people's information from their actions.

A couple of limitations are worth noting here. First, these models can in a way be fragile. The dining room might be full, but how many of the people in there actually knew that this was the better restaurant as opposed to just making an inference as you are now doing? My colleagues Senthil Veeraraghavan and Laurens Debo have a paper along these lines with proper queuing dynamics. In equilibrium one or the other restaurant can have a line since arriving customers tend to pile into whichever line is longer even though the person who first picked one line over the other is long gone.

A second point is that the world has evolved since the first researcher motivated a model by asking the reader to pick between restaurants. Why just look at how busy a place is when you have a Yelp app on your phone? (I'll save you the trouble of looking it up; Hot Doug’s gets 4.5 out of 5 stars on Yelp with well over 3,000 reviews.) If you join the line for Hot Doug’s, you may do it with some certainty that it is a special experience. (Just be aware that the experience will be over soon: Hot Doug’s recently announced that it is closing this fall.)

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