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Eliminating the Human

We are beset by—and immersed in—apps and devices that are quietly reducing the amount of meaningful interaction we have with each other.

by **David Byrne**

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I have a theory that much recent tech development and innovation over the last decade or so has an unspoken overarching agenda. It has been about creating the possibility of a world with less human interaction. This tendency is, I suspect, not a bug—it's a feature. We might think Amazon was about making books available to us that we couldn't find locally—and it was, and what a brilliant idea—but maybe it was also just as much about eliminating human contact.

The consumer technology I am talking about doesn't claim or acknowledge that eliminating the need to deal with humans directly is its primary goal, but it is the outcome in a surprising number of cases. I'm sort of thinking maybe it *is* the primary goal, even if it was not aimed at consciously. Judging by the evidence, that conclusion seems inescapable.

This then, is the new norm. Most of the tech news we get barraged with is about algorithms, AI, robots, and self-driving cars, all of which fit this pattern. I am not saying that such developments are not efficient and convenient; this is not a judgment. I am simply noticing a pattern and wondering if, in recognizing that pattern, we might realize that it is only one trajectory of many. There are other possible roads we could be going down, and the one we're on is not inevitable or the only one; it has been (possibly unconsciously) chosen.

I'm not saying that many of these tools, apps, and other technologies are not hugely convenient. But in a sense, they run counter to who we are as human beings.

I realize I'm making some wild and crazy assumptions and generalizations with this proposal—but I can claim to be, or to have been, in the camp that would identify with the unacknowledged desire to limit human interaction. I grew up happy but also found many social interactions extremely uncomfortable. I often asked myself if there were rules somewhere that I hadn't been told, rules that would explain it all to me. I still sometimes have social niceties "explained" to me. I'm often happy going to a restaurant alone and reading. I wouldn't want to have to do that all the time, but I have no problem with it—though I am sometimes aware of looks that say "Poor man, he has no friends." So I believe I can claim some insight into where this unspoken urge might come from.

Human interaction is often perceived, from an engineer's mind-set, as complicated, inefficient, noisy, and slow. Part of making something "frictionless" is getting the human part out of the way. The point is not that making a world to accommodate this mind-set is bad, but that when one has as much power over the rest of the world as the tech sector does over folks who might not share that worldview, there is the risk of a strange imbalance. The tech world is predominantly male—very much so. Testosterone combined with a drive to eliminate as much interaction with real humans as possible for the sake of "simplicity and efficiency"—do the math, and there's the future.

The evidence

Here are some examples of fairly ubiquitous consumer technologies that allow for less human interaction.

Online ordering and home delivery: Online ordering is hugely convenient. Amazon, FreshDirect, Instacart, etc. have not just cut out interactions at bookstores and checkout lines; they have eliminated *all* human interaction from these transactions, barring the (often paid) online recommendations.

Digital music: Downloads and streaming—there is no physical store, of course, so there are no snobby, know-it-all clerks to deal with. Whew, you might say. Some services offer algorithmic recommendations, so you don't even have to discuss music with your friends to know what they like. The service knows what they like, and you can know, too, without actually talking to them. Is the function of music as a kind of social glue and lubricant also being eliminated?

Ride-hailing apps: There is minimal interaction—one doesn't have to tell the driver the address or the preferred route, or interact at all if one doesn't want to.

Driverless cars: In one sense, if you're out with your friends, not having one of you drive means more time to chat. Or drink. Very nice. But driverless tech is also very much aimed at eliminating taxi drivers, truck drivers, delivery drivers, and many others. There are huge advantages to eliminating humans here—theoretically, machines should drive more safely than humans, so there might be fewer accidents and fatalities. The disadvantages include massive job loss. But that's another subject. What I'm seeing here is the consistent "eliminating the human" pattern.

Automated checkout: Eatsa is a new version of the Automat, a once-popular "restaurant" with no visible staff. My local CVS has been training staff to help us learn to use the checkout machines that will replace them. At the same time, they are training their customers to do the work of the cashiers.

Amazon has been testing stores—even grocery stores!—with automated shopping. They're called Amazon Go. The idea is that sensors will know what you've picked up. You can simply walk out with purchases that will be charged to your account, without any human contact.

AI: AI is often (though not always) better at decision-making than humans. In some areas, we might expect this. For example, AI will suggest the fastest route on a map, accounting for traffic and distance, while we as humans would be prone to taking our tried-and-true route. But some less-expected areas where AI is better than humans are also opening up. It is getting better at spotting melanomas than many doctors, for example. Much routine legal work will soon be done by computer programs, and financial assessments are now being done by machines.

Robot workforce: Factories increasingly have fewer and fewer human workers, which means no personalities to deal with, no agitating for overtime, and no illnesses. Using robots avoids an employer's need to think about worker's comp, health care, Social Security, Medicare taxes, and unemployment benefits.

Personal assistants: With improved speech recognition, one can increasingly talk to a machine like Google Home or Amazon Echo rather than a person. Amusing stories abound as the bugs get worked out. A child says, "Alexa, I want a dollhouse" ... and lo and behold, the parents find one in their cart.

Big data: Improvements and innovations in crunching massive amounts of data mean that patterns can be recognized in our behavior where they weren't seen previously. Data seems objective, so we tend to trust it, and we may very well come to trust the gleanings from data crunching more than we do ourselves and our human colleagues and friends.

Video games (and virtual reality): Yes, some online games are interactive. But most are played in a room by one person jacked into the game. The interaction is virtual.

Automated high-speed stock buying and selling: A machine crunching huge amounts of data can spot trends and patterns quickly and act on them faster than a person can.

MOOCS: Online education with no direct teacher interaction.

"Social" media: This is social interaction that isn't really social. While Facebook and others frequently claim to offer connection, and do offer the appearance of it, the fact is a lot of social media is a *simulation* of real connection.

What are the effects of less interaction?

Minimizing interaction has some knock-on effects—some of them good, some not. The externalities of efficiency, one might say.

For us as a society, less contact and interaction—real interaction—would seem to lead to less tolerance and understanding of difference, as well as more envy and antagonism. As has been in evidence recently, social media actually increases divisions by amplifying echo effects and allowing us to live in cognitive bubbles. We are fed what we already like or what our similarly inclined friends like (or, more likely now, what someone has paid for us to see in an ad that mimics content). In this way, we actually become less connected—except to those in our group.

Social networks are also a source of unhappiness. A study earlier this year by two social scientists, Holly Shakya at UC San Diego and Nicholas Christakis at Yale, showed that the more people use Facebook, the worse they feel about their lives. While these technologies claim to

connect us, then, the surely unintended effect is that they also drive us apart and make us sad and envious.

I'm not saying that many of these tools, apps, and other technologies are not hugely convenient, clever, and efficient. I use many of them myself. But in a sense, they run counter to who we are as human beings.

We have evolved as social creatures, and our ability to cooperate is one of the big factors in our success. I would argue that social interaction and cooperation, the kind that makes us who we are, is something our tools can augment but not replace.

When interaction becomes a strange and unfamiliar thing, then we will have changed who and what we are as a species. Often our rational thinking convinces us that much of our interaction can be reduced to a series of logical decisions—but we are not even aware of many of the layers and subtleties of those interactions. As behavioral economists will tell us, we don't behave rationally, even though we think we do. And Bayesians will tell us that interaction is how we revise our picture of what is going on and what will happen next.

I'd argue there is a danger to democracy as well. Less interaction, even casual interaction, means one can live in a tribal bubble—and we know where that leads.

Is it possible that less human interaction might save us?

Humans are capricious, erratic, emotional, irrational, and biased in what sometimes seem like counterproductive ways. It often seems that our quick-thinking and selfish nature will be our downfall. There are, it would seem, lots of reasons why getting humans out of the equation in many aspects of life might be a good thing.

But I'd argue that while our various irrational tendencies might seem like liabilities, many of those attributes actually work in our favor. Many of our emotional responses have evolved over millennia, and they are based on the probability that they will, more likely than not, offer the best way to deal with a situation.

What are we?

Antonio Damasio, a neuroscientist at USC wrote <u>about a patient he</u> <u>called Elliot</u>, who had damage to his frontal lobe that made him unemotional. In all other respects he was fine—intelligent, healthy—but emotionally he was Spock. Elliot couldn't make decisions. He'd waffle endlessly over details. Damasio concluded that although we think decision-making is rational and machinelike, it's our emotions that enable us to actually decide.

With humans being somewhat unpredictable (well, until an algorithm completely removes that illusion), we get the benefit of surprises, happy accidents, and unexpected connections and intuitions. Interaction, cooperation, and collaboration with others multiplies those - opportunities.

We're a social species—we benefit from passing discoveries on, and we benefit from our tendency to cooperate to achieve what we cannot alone. In his book Sapiens, Yuval Harari claims this is what allowed us to be so successful. He also claims that this cooperation was often facilitated by an ability to believe in "fictions" such as nations, money, religions, and legal institutions. Machines don't believe in fictions—or not yet, anyway. That's not to say they won't surpass us, but if machines are designed to be mainly self-interested, they may hit a roadblock. And in the meantime, if less human interaction enables us to forget how to cooperate, then we lose our advantage.

Our random accidents and odd behaviors are fun—they make life enjoyable. I'm wondering what we're left with when there are fewer and

fewer human interactions. Remove humans from the equation, and we are less complete as people and as a society.

"We" do not exist as isolated individuals. We, as individuals, are inhabitants of networks; we are relationships. That is how we prosper and thrive.

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