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How may I help you?

Our phone conversations with computers are becoming increasingly more common and more complex

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By TOM MAURSTAD / The Dallas Morning News

You're out somewhere: walking through a mall, waiting to board a plane, sitting in a restaurant. And, as always, someone nearby is talking on a cellphone.

Only, this time, instead of another distressingly personal conversation or obnoxious business call, the person is speaking in a weird, disjointed monologue of terse, one-word, seemingly unrelated exclamations. For a shaky second, you wonder if this guy is crazy and remind yourself not to make eye contact.

And then it hits you: He's not crazy. He's talking to a computer.

In one of those future-is-now moments, we increasingly find ourselves talking to computers, literally.

We call an airline, a bank, an insurance company and a vaguely human (usually female) voice talks to us, and we talk to it. It's like a scene out of *Star Trek*, only not nearly so cool.

In fact, finding yourself on the phone talking to a computer has become such a commonplace and exasperating experience, it is mocked on a current TV commercial (Citibank), always a sure sign that something has broken through to pop culture ubiquity.

"Talking to computers and them talking back is one of those science-fiction ideas that's been around a long time," says Alex Halavais, professor of the appropriately futuristic-sounding study of "informatics." He specializes in the social and technological effects of the Internet at the State University of New York in Buffalo.

"*Star Trek* is the ideal but the reality is not even close."

The truth, of course, is that we (humans) have been talking to them (computers) for a long time, in exchanges that have quickly receded into the mundane blur of everyday life. But as we move along our techno-evolution curve, these interactions are becoming less key-tapping command-and-response and more conversational give-and-take.

We've all heard the hype about voice-recognition software that enables a computer to understand and react to what you say to it. That's one of those things that sounds simple in theory but in practice proves to be tricky – add it to the "Where's my flying car?" list.

First off, there's the language issue, but let's just be Americ-o-centric and presume every computer we

need to speak to understands English. Think about all of the regional slang, accents and dialect that make up spoken English. The human brain is the ultimate voice-recognition tool, and still we have a difficult time understanding what someone else is saying to us, whether it's a friend on a cellphone or a stranger on the street.

What chance does a poor computer have, coming from a binary world of ones and zeroes, bleeps and bloops?

"It's definitely a challenge, but it's even more than that," says Peter Mahoney, marketing vice president for Nuance Communications. If you've had a phone conversation with a computer, chances are it was using software developed by Nuance, whose clients include United Airlines and Verizon. "Beyond the basic need to understand what you're saying, a computer needs to understand what you're trying to do. So humans talking to computers present variable challenges."

Some of them are obvious. A computer needs to be able to recognize words and understand them when strung together into sentences. And it needs to be able to do so no matter what accent you may have and what grammar you do (or don't) use. Fine.

But some of the challenges aren't so obvious. In fact, you'd probably never think of them unless it was your job to think of them. Consider cellphones and all those communication difficulties that inspired the popular wireless campaign based on the catchphrase "Can you hear me now?"

"That's a big problem," Mr. Mahoney says. "All the background and traffic noise, signal cutting in and out, just think how hard it is for you to understand someone on a cellphone and then imagine trying to program that into a computer."

Where all this talk of talking to computers takes a turn into sci-fi, think-about-it weirdness is in this fundamental fact about the intersection of humans and technology: It's a two-way evolution. Computers are changing to better communicate with us, but we are also changing to better communicate with them.

It's easy enough to see and hear that co-evolution; just stand in front of a mirror next time you call an airline to check on a gate. What you're likely to notice is that you act and sound differently than you would if you were talking to a person. When talking with a computer, You. Tend. To. Speak. With. More. Precision. In posture and tone, most people look and sound as if they are talking to a dog.

"It's changing us, there's no doubt about it. We're learning a new way to speak," says Steve Jones, a social historian at the University of Illinois who specializes in communication technology. "It's going to create a new range of double-meanings and malapropisms as we discover words and phrases computers mishear for other words and phrases. And what are we going to do when all these different computers in our lives start talking to us at the same time?"

Before such a scenario throws you into a full-blown techno-freak-out, relax. "The good thing is that all this change is creeping up on us," says Dr. Jones. "It's happening in such a slow, steady way, we don't even notice it's happening."

OK, that sounds nice and comforting. It's creeping up on us. We won't even notice – kind of like a frog in a pot of water that is slowly rising to a boil.

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