

## Finally, A Computer That Understands Its Owner

*by Jonathan Sidener*

I'm writing this sentence with my hands folded in my lap. Now I'm twiddling my thumbs. Technology has freed me from the shackles of the keyboard. It's kind of exciting.

Several times over the years, I've experimented with speech-recognition software. The experience has always started with high expectation, and ended with disappointment.

But this time, the technology works. It's cranking out sentences. Subjects. Verbs. Predicates. Punctuation. Be it prose or drivel, it's appearing on the screen as I dictate to my computer.

A computer that understands spoken words. Intergalactic travel. A robot that will bring me a beer while I watch football. This is the stuff of science fiction - and now one piece has come true.

I was rooting for the robot to get here first, but you have to admit that a computer that understands speech is pretty cool.

Right now, it's just a dictation tool, but imagine when someone figures out how to link this software to Google and other key tools.

Me shouting across the room: "Computer, what's the weather forecast?"

"Sunny and warm."

"Computer, what's the score?"

"Padres 6, Giants 0, top of the sixth."

"Computer, get me a beer."

"I have no arms."

In all seriousness, the software I used to dictate the first draft of this column, Dragon NaturallySpeaking 9, marks a milestone in speech-recognition software. Many people who spend hours typing every day will be excited to learn that major progress is being made in the field.

Many people who spend hours typing every day will be excited to learn that major progress is being made in the field.

Throughout my newspaper career, I've seen colleagues crippled by too many hours at the keyboard. Some have left work on disability to rest or for surgery, while others have left the field completely.

Speech-recognition software that actually works offers hope for relief from these repetitive-stress injuries, with one caveat: The software is not yet ready for many workplaces. NaturallySpeaking 9 still requires quiet surroundings and would probably struggle in the midst of the babble and hubbub of a newsroom or other lively cubicle farm.

When I used it at home, it paused and produced a little box filled with question marks every time my dogs barked in the background.

Nuance, maker of NaturallySpeaking, says the application will work without training, a process in which a user reads a standard text and the computer begins to learn how the user's voice varies from standard pronunciation.

The installation process offers a choice of a short training session or launching the program without training.

Frankly, I didn't feel like writing another "speech recognition not ready for prime time" story. So I did the training, which entailed reading a couple dozen paragraphs. After a short tutorial, I wrote the first sentence. It was less than an hour after I opened the box.

The results are pretty remarkable. It's very accurate, and when it does get something wrong, it's easy to go back and fix things.

I remember working with an earlier version of Dragon NaturallySpeaking, I had to read Jack London out loud for about an hour. And then when I tried to use the software, the results were atrocious. Mistakes were difficult to fix without using a keyboard - and it made a lot of them. I never used that earlier version a second time.

My plan was to write a few paragraphs using the software. But it went so well that I wrote most of the first draft via dictation. Using a keyboard and mouse to move the cursor around are more intuitive for me, so I edited and revised using my fingers.

While Nuance gets much of the credit for the progress, personal computer hardware manufacturers get some, too. Speech recognition requires heavy lifting by computer processors. NaturallySpeaking 9 requires a processor of at least 1 gigahertz and at least 512 megabytes of memory.

As computer processing speed continues to increase, future versions from Nuance and competitors should only get better.

I'm very encouraged by my experience with NaturallySpeaking 9. Maybe it will help me make some progress on my long-suffering novel. I can lean back in my chair, prop my feet up and dictate away. I hope I don't develop repetitive-stress problems from spending so much time twiddling my thumbs.

Copley News Service

*Finally, A Computer That Understands Its Owner by Jonathan Sidener*