President's Corner
Se Habla Windows?
Sprechen sie Android? Parlez vous Apple?
By Greg Skalka, President, Under the Computer Hood User Group, CA May 2016 issue, Drive Light
www.uchug.org
president (at) uchug.org

How many languages do you think are actively spoken today? You might be as surprised as I am that it is estimated to be around 7000 currently. Some of these are natively spoken by many (Chinese is spoken by the most people, over 1 billion). About 23 languages cover half the world's population, while around 25% of current languages are endangered (spoken by fewer than 1000). Linguists believe half of the languages spoken today will disappear by the end of the century. With increased globalization, this does not seem surprising. Since language is the primary means of human communication, why do there need to be so many of them? In a world that seems to be shrinking due to instant communication around the world, multilingualism is becoming more prevalent and may be necessary to just get by.

Technology also has its own language, or rather, languages. Not only do we use technical terms in our spoken and written communications with each other when dealing with technology, our interaction with our devices is very much like a language of its own. Even beyond the computer programming languages used to create the apps we use, the user interfaces of our computers, phones and other smart devices require us to interact in particular, defined ways and use specific terms and grammar. Through key presses, swipes, scrolls, pull-downs, pinches, clicks and control key combinations, we must interact with each of our devices in their own "native" languages. Multilingualism is necessary here as well, as our different devices tend to communicate with us in different ways.

Just as people from different geographic regions may use different languages, the same kind of tech devices from different companies can have different ways of interacting. My native human language is English, and my native computer language is Microsoft Windows. Though I took some German in school, know a few words in Czech due to my heritage, and have picked up some Spanish from living most of my life in Southern California, I don't feel I'm multilingual. I can probably put together a few sentences in German, but could not really converse with someone. I really only think in English.

It is similar with computers, as I've used the Windows OS for so long that, for better or worse, I tend to think in terms of its user interface when dealing with other devices. I have a PDA (yes, one of those old personal digital assistants) that runs Windows Mobile, and through my experience I can use it almost effortlessly. A few years ago, I won an iPad Mini, and found it to be a very confusing device. I had never used Apple devices much before that, and it seemed to me that they took a different approach to most everything, almost like using a different language (or at least a different dialect). The Mini seemed like a fine piece of hardware, but its user interface seemed almost

alien. To this day, I have yet to be able to copy photos or files to a memory device, so that I can use them on other devices. I can't even find where they hide the photos taken on the tablet, let alone copy them off.

Part of the strangeness was no doubt due to a different physical interface; getting used to a touch-screen tablet with taps and pinches, when I was accustomed to mouse clicks and key presses. Still, I am much better at using my Android tablet than the iPad. While the Android OS did not copy the Windows way of doing things, it did not go out of its way to be different from Windows, as it seems Apple tried to do.

One of my favorite tech devices today is my Chromebook, which seems to be mostly like a Windows laptop. It can even edit many Office documents, but I've found I don't yet speak its language fluently when it comes to copying and moving files in its equivalent to Windows File Manager. I have some books on using the Chromebook that I probably should read to better understand how to communicate my needs to the device; it is the same kind of things I'd need to do were it necessary for me to speak with someone in German.

Just as human language changes over time, so too can tech language change. Though they each purport to speak English, a conversation with Chaucer (from the 1400's), Shakespeare (from the 1600's) or even Thomas Jefferson (from the 1800's) might be difficult at times for a person alive today. Having a senior citizen make sense of a conversation between two teenagers today can be daunting enough. That senior can remember when computers were controlled through the DOS command line interface. The GUI, or graphical user interface, was a big change, but also a big improvement. Now changes like Windows 10 tiles and ribbons may not be so much an improvement as a change for change's sake.

It is obvious that older people would have a harder time with new technology as they are effectively learning a new language. I have no illusions that I could easily become fluent in a second language, as I've spent far too many decades thinking in English. Young people can learn a new tech "language" much easier, just as they could learn a second linguistic language much easier at that point in their lives. Give a young child, perhaps barely speaking, a tablet or smart phone, and they likely can take to it more easily than their grandparents could initially. Their malleable young minds are not as burdened with previous experiences and preconceived ideas about the technology.

Fortunately, future tech will probably operate in a more transparent way. Devices like Amazon's Echo, Google's Home Assistant and in-phone assistants like Siri are probably indicative of many human-tech interfaces in the future. Being able to speak to your device in your native language eliminates much, but not all of the added complexity. I have a couple of the Amazon Dot devices, and you do have to be aware of the correct way to request information if you want to avoid one of Alexa's "I don't know" responses.

Alexa is pretty understanding when it comes to grammar in the English language. I have some programmable light control devices that Alexa can also control through voice

commands. I've found Alexa understands "Turn bedroom light on" as well as "Turn on bedroom light". Word order in this case is not so significant; Yoda could tell Alexa to "On, the bedroom light turn," and she would do so.

I think Yoda would be in trouble with Alexa if he spoke something other than English, however. I don't think Amazon presently supports any language for Alexa other than English. Though Google generates its home web page in many languages, its Home Assistant only speaks and understands English. This will need to change in the future, as only 1.5 billion of the 7 billion people on Earth can speak English (and only 375 million are native speakers). Just as Microsoft Windows has extensive foreign language and alternate alphabet support to reach a global market, these virtual assistants will need to be able to speak other languages. Of course, since all of their intelligence is in the cloud, all it should take is more computing power and programming. It should be possible to have Alexa listen in one language, but respond in another. Imagine being able to converse with Alexa in a made-up language, like Pig Latin or Klingonese. Why not?

Eventually, however, the man-machine interface may evolve such that normal human language is bypassed completely. Technology that receives inputs from the electrical signals in our muscles, or that can read our brain waves directly, may not be far off. We may simply think it to get what we want, and our responses will come within our virtual reality headset. Of course, this begins to sound a bit like the Matrix - not so good for us humans. Or for you Star Trek fans - the Borg!

If we avoid building a huge border wall around our country and allow continued globalization and minimally restricted world travel, I suspect the number of living human languages will eventually be reduced to just a handful. This would I think be a big benefit to humanity in general (so long as I'm not forced to learn Chinese), as 7000 languages seems like way too many for Google to make home pages for, and California to print ballots for. Hopefully our tech user interfaces will also evolve into something more universal and intuitive, so we can avoid the strange new controls in Windows 2050.