

A year ago, when I first took this course, and first watched this video I had the following thoughts:

*Language is one of many things that separates different cultures in our world, whether they be peoples or programmers. To put into perspective how long ago this talk was given, I remember in elementary school around 2003 buying the Java 2 for Dummies book. This talk was given in 1998, 5 years before I bought that book. It is now the year 2015, and in our classes we are using Java 7. In the many years since then, Java has been acquired (for better or worse) by Oracle and is no longer managed by Sun Microsystems. And the Cathedral vs Bazaar style of language development is a rather interesting topic. C/C++ have been contributed to over many years and are still around, yet many users also use more Cathedral grown languages such as Oracle's Java or Microsoft's C#. And these are all larger, and well developed languages. Yet, the manner in which Steele gives his speech, he illustrates an interesting point. He started with single syllable words from the English language and used definitions and rules to build his vocabulary to a minimum word set needed to give the speech. Done in this way, many non-English speakers would perhaps be very able to follow the speech, simply from knowing the basics of English. So in a way, smaller programming languages also have their place. Knowing what we do today, and seeing where programming languages were more than 15 years ago, it's difficult to say whether there is a need for an update. After all, even for well-established languages such as English, we spend time looking back towards the Latin, Greek, and Germanic roots of the words we use. Should it be any different for the programming languages we use today? This is a very important speech to listen to because of the many comparisons that can be drawn between the languages we speak to communicate with other persons and the languages we use to communicate with machines. I do not think that this should be required for PLC. Instead, we should make this a requirement for all students. Steele makes a very interesting point at the very end. How would our world be different, if all of those with the opportunity to speak and be heard, kept their vocabulary for the speech as simple as possible?*

This time, I was more drawn to the discussion of having specific languages last for decades or centuries. According to Wikipedia, the C programming language was first seen in 1972. Forty-four years later, C is still very widely used. Assuming Java was released in the 1990's, it is in its second or early third decade of use. While it would be naïve of me to say that we could be using these languages centuries later, I think it is fair to say that the languages that we have then would likely come from these languages. I think that C will last for a very long time however. As it is, Rose currently teaches C to all students who take Electrical Engineering, Computer Engineering, Computer Science, and Software Engineering. Those who choose to take up a Robotics minor, or a minor in any one of these courses will also learn C. And yet still, there will be more students who find that they need to use C for something, or even decide to learn it for fun. So it's fair to say that a majority of students that graduate from Rose-Hulman at one point in their time as a student were exposed to C. This is because it is expected that these students will likely encounter C in the real world when they are working full time in their respective fields. Because of this, I suspect that the C programming language will be widely used for another four decades at least.