

How to avoid spending the rest of your days in the far reaches of scientific obscurity

EFL, ESL, ENL, ELT... English is the international language for specific purposes. But how translate it as a plain, fluid language?

Surfing the net for "World English" the other day, I found an interesting PhD thesis (it can happen) posted on one of my favorite factoid sites. I learned some useful acronyms -- EFL (English as a Foreign Language), ESL (English as a Second Language), ENL (English as a Native Language), ELT (English Language Teaching) - and came across this somewhat convoluted insight:

"Thus, English as an international language is English for specific purposes (ESP). Because the in-group exerts a normative influence - after all the Medical Doctor from France wants his colleagues to understand what he is saying (that is why he uses English in the first place) - there is little danger of mutual unintelligibility within the specialised subgroup. (...) Because of the large amount of specialised vocabulary, someone who is not familiar with the ESP in question (Medical English in my **example**) **might not understand a word, though.**"¹

Now, for those who don't have ESP - for non-anglophones, ESP is also an acronym for Perception Extrasensorielle - I will translate this into English as a Plain, Fluid Language (EPFL): People in the same line of work need to communicate even though they may speak different languages. So they all use English and for the most part understand each other. But because they use so much jargon, to the rest of the world they might as well be speaking Swahili.

I know that scientists use jargon with good intentions. They're just trying to be "one of the gang." Most of them are not purposely trying to exclude non-scientists from understanding what they're doing with all that tax money. Indeed, like any language, ESP is best learned by immersion, and sometimes scientists get so immersed they don't even realize they left the rest of us by the side of the knowledge superhighway about ten exits back.

In "A Short History of Nearly Everything" (a great book despite its title), Bill Bryson tells the story of James Hutton, a late 18th century intellectual whose ideas revolutionized geology. This brilliant scientist had such a hard time expressing himself that few people ever managed, or even bothered, to read the thousands of pages he wrote. Here's a sample from "A Theory of the Earth with Proofs and Illustrations":

"The world which we inhabit is composed of materials, not of the earth which was the immediate predecessor of the present, but of the earth which, in ascending from the present, we consider as the third, and which had preceded the land that was above the surface of the sea, while our present land was yet beneath the water of the ocean."

This is not so much an overuse of jargon as just really bad writing. Thanks to a colleague who understood his work and had a good command of English, Hutton's ideas survived and had a lasting impact. However, his example is sobering. How many brilliant ideas have been lost because the words used to describe them were impossible to follow? How much more advanced would civilization be if only scientists could string together comprehensible sentences?

Bryson also points out some interesting examples from physics, where the jargon is famously thick. The Bogdanov theory, involving 'imaginary time' and descriptions of the nothingness before the big bang, was actually quite controversial for a while. Columbia University physicist Peter Woit described it to the New York Times as "more or less complete nonsense," but added that "these days that doesn't much distinguish it from a lot of the rest of the literature."

So go ahead and use scientific jargon --but use it thoughtfully. In this regard, the question-and-answer sessions following presentations are very revealing. If people ask good questions about your work, you are communicating well. If they don't, it either means:

- they're asleep (generally a bad sign)
- they couldn't follow you (also a bad sign), or
- you're a genius and they're in shock (statistically unlikely).



Dare to use at least one jargon-free but content-rich sentence in everything you write. And keep in mind that when funding sources run dry, or when you need a new job, you will need to explain in plain _____ (insert language) why you should be allowed to use loads of somebody else's _____ (insert currency) to continue pursuing your livelihood. If all your ideas are in ESP you may find yourself penniless and, as they say around here, "tout seul dans ton coin."

1 Daniel Spichtinger, 2000; PhD thesis, University of Vienna: "the Spread of English and its Appropriation"

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