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THE MAGAZINE OF USENIX & SAGE

February 2002 • Volume 27 • Number 1

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THE WORKPLACE

Ask Mr. Know-It-All

by Trey Harris

**USENIX & SAGE**

The Advanced Computing Systems Association &  
The System Administrators Guild

# ask mr. know-it-all

by **Trey Harris**

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## The “S” Debate

Dear Mr. Know-it-All,

My mommy’s business card says she’s a “system administrator.” My daddy’s says that he’s a “systems administrator.” I asked them at dinner tonight which one was right, and they sent me to my room without dessert! So I went to the SAGE Web site and it says that SAGE is the “System Administrators Guild.” Does that mean that my mommy is right and my daddy is wrong? And by the way, didn’t you leave something out of SAGE’s name? Like an apostrophe?

Love,

*Johnny  
Sheboygan, WI*

Dear Johnny,

First off, you shouldn’t go rifling through your parents’ wallets for their business cards. That’s what probably got you sent to your room to begin with, not an argument over what a system administrator – or is it systems administrator? – is called.

That said, the first rule in linguistics is, if enough people say it, then it’s “right,” for some definition of “right.” So by that yardstick, both are right. But Mr. Know-it-All would suggest that the way SAGE does it is the more linguistically sound.

Here’s why: people like your father reason that since the person may have more than one system to administer, it should be a “systems administrator,” because a “system administrator” would be someone who only has one system to run.

That would be fine if human language in general, and English in particular, ran by the logic of the real world. But it doesn’t. It runs by its own, sometimes peculiar logic. And in the logic of the English language, the word “system” in “system administrator” is not actually a noun – remember, Johnny, a noun is a person, place, or thing, and it’s a word that we can put an “s” on the end of to make it plural.

You see, a system might be a person, place, or thing – actually, it *is* a thing, or maybe it’s a place, but it sure as heck isn’t a person – anyway, it might be a noun, but when attached to another noun, “administrator,” it becomes something else. An “adjunct,” you might say, if you like fancy linguistic words.

In any case, that adjunct doesn’t act like a noun, even though it still sounds like the noun it used to be. Instead, it acts like an adjective – you know, a descriptive word, like “blue,” or “flocinaucinihilipilificatory.” And adjectives in English don’t get to have the plural marker “s”.

You can see this in a lot of other cases in English where this happens – your teacher might call them “compound words,” (not “compounds words!”), though linguists have much fancier names for them. For instance, a miner who mines diamonds is a “diamond miner,” not a “diamonds miner,” even though he’ll mine more than one diamond during the course of his career. One hopes, anyway. And that pretty picture tube sitting on your desk is a “color monitor,” not a “colors monitor,” even though it can display more than just one color.

“Emergency management” (not “emergencies management”), “dog catcher” (not “dogs catcher”), “used-car salesman” (not “used-cars salesman”), “pastry chef” (not “pastries chef”) . . . the list goes on.

(Just for accuracy's sake, the actual rule in English makes an occasional exception for words with irregular plurals. A person who hates mice might as easily be a "mice hater" as a "mouse hater," but someone who hates rats would always be a "rat hater," never a "rats hater.")

Not to say that there isn't room for disagreement. Libraries are rife with counterexamples, where there is a "periodicals department," presided over by a "periodicals librarian," and a "microforms department," with a "microforms librarian." (Though these two may be because of the unfortunate connotations of their adjectival counterparts – "periodical librarian" makes Mr. Know-it-All think that he or she may only occasionally show up for work, and "microform librarian" puts one in mind of a minuscule person squeaking, "shhh!") And even libraries can go the other way. Every "reference librarian" Mr. Know-it-All has ever met has had at least a dictionary *and* a thesaurus to call upon.)

In perhaps the most analogous counterexample, most companies and institutions that run their own campuses have a "facilities management" division. And the logic runs exactly the same. They manage more than one facility – for example, the water in addition to the electricity – so they are "facilities," not "facility," managers.

That said, these plural forms sound newfangled and contrived to Mr. Know-it-All's ears. As if it is hoped that adding an "s" will somehow make the profession sound more important. If that's the case, why not add two?

Oh, that brings up something else – it has been suggested that, while "system administrator" might be the correct term for your father, your parents together would be two "systems administrators." Put the "s" on both, you see, to make the plural. Mr. Know-it-All has even heard a rumor – don't laugh – that some people think it should be "two systems administrator," following from "two attorneys general" or "two mothers-in-law."

Pluralizing both is just plain wrong. In English, the process of agreement – that is, changing the ending of one word so it matches some property of another – only applies to verbs, as in "I *code*, but he, she, or it *codes*." In "system administrators," there's no verb, so no agreement. Other languages, like Spanish, get to have fancy noun-adjective agreement, but you can't force it into English, no matter how much you might want to.

How about "attorneys general?" It turns out that "attorneys general" acts just like "system administrators," only backwards (backwards?). You see, in English, adjectives almost always come before the nouns they modify – but in a very few cases, like "attorney general" and "mother-in-law," the adjectives – "general" and "in-law" – come *after* the noun. These are all very old terms that entered the language when the adjective-before-noun rule wasn't as strict as it is today, and they just got "grandfathered" into the language when the newer rules took effect. A new term, like "system administrator," has to follow today's rule – no grandfather clause applies. Besides, it would have to be "administrators system" if you wanted to do that – the adjective still gets no plural, whatever the order they're in.

So, the long and short of it – if you have one sysadmin, you have a "system administrator." If you have two sysadmins, you have two "system administrators." If you have two thousand sysadmins, you're at LISA.

If you have one sysadmin, you have a "system administrator." If you have two sysadmins, you have two "system administrators." If you have two thousand sysadmins, you're at LISA.

Oh, and about that apostrophe – any sysadmin will tell you that it’s a bad idea to put a special character into a name.

Until next time,

*Mr. Know-it-All*

Dear Mr. Know-it-All,

I now understand that my uncle is a “network administrator,” not a “networks administrator.” But can you also tell me whether he works in a “Network Operation Center” or a “Network Operations Center”? I am sure it’s not a “Networks Operations Center” (and I don’t really care if it’s Centre).

Eagerly awaiting a reply,

*Johnny*

Dear Johnny,

I believe the real problem may be that, because of the recent economic downturn in the technology sector, and the fact that your entire family works in technology, you may be unhappy with your lot in life and are thus fixating on nomenclatural trivia as a sort of escape.

But I’ll take a stab at your question, because it hinges on another reason people say “systems administrator,” one that involves much less rationalizing – and is more linguistically sound – than the one I discussed earlier. Please note, however, that if you’re wishing to come away less confused than you started, you may do better to take up meditation rather than reading on. (Breathe in through your nose, and out through your mouth, and be mindful of your breathing. A mantra may help.)

One of the more confusing aspects of English to native speakers of many of the world’s other languages is English’s dualism of the possessive. Many languages have a “genitive case,” that is, a marker on a noun to indicate its association with another noun: for example, the Latin *amicus curiae*, or “friend of the court.” Many other languages have an “adposition” – a little word or sound that precedes, follows, or circumscribes another word – to do the same thing, such as the Spanish *Madre de Dios* or “God’s mother.”

English, confusingly, has both, though native speakers use them in subtly different situations, much too complex to go into here. English has both a genitive marker – a “z” sound typically written as “’s” or just “’” – and a possessive adposition, the preposition “of.”

(Note that English is by no means singular in this dualism. It is merely more confusing in its dualism, as the difference between the two is usually more clear-cut in languages that have both.)

The reason this is relevant is that English has a rule whereby a cohesive *noun-“of”-noun phrase* combination can be transformed into a *noun phrase-noun* compound by simply moving the noun phrase to the front. (The previous sentence is actually provably *wrong* in English, so wrong that Mr. Know-it-All rewrote it dozens of times before giving up, but it’s close enough without subjecting you to a couple of semesters’ worth of generative syntax so that we can use precise language.) For example, “minister of foreign affairs” becomes “foreign affairs minister,” “secretary of the interior” becomes

“interior secretary,” “college of arts and sciences” becomes “arts and sciences college,” and, yes, “center of network operations” becomes “network operations center.”

However, those cases where we prefer the genitive *cannot* be transformed in the same way. So “my best friend Mike’s wife” cannot become “my best friend Mike wife.” (Note that even though the genitive can be coerced, with awkwardness, into “of” and vice versa, the important thing is that subtle rule, still not entirely understood, which prefers one over the other.)

“Network operations center” is almost certainly correct, since, if forced to judge, most of us would probably accept “center of network operations” as being semantically equivalent, but bristle at “network operations’ center.” Note that this is a bedevilingly difficult distinction to tease out, because “network operations’ center” sounds the same as “network operations center,” and native speakers make grammatical judgments unthinkingly based on sound, not on syntactic rules of which they are largely unaware. In any case, it doesn’t really matter, as the important thing is that we are willing to accept “center of network operations” as being almost exactly equivalent.

So, in the same vein, is “systems administrator” simply shorthand for “administrator of systems?” If yes, then “systems administrator” should be correct. If, however, we only grudgingly accept as pedantically correct that long form, as, say, we’d grudgingly accept “miner of diamonds” for “diamond miner,” then “system administrator” would be correct.

Mr. Know-it-All still sides with the no-ess form. “Miner of diamonds” sounds silly and contrived, like “catcher of dogs,” “salesman of used cars,” or “chef of pastries” (and unlike “center of network operations”), and to his ear, “administrator of systems” sounds silly and contrived too.

To muddy the waters a bit further, there is mounting evidence that competing grammatical rules are all tried at once by the brain, and the one that gets a good answer first wins, even if there might be one that will get a better answer later. It seems completely plausible that, for many people, a rule that would generate “systems administrator” simply beats out another competing rule that would generate “system administrator,” regardless of which one is more “correct.”

Some linguists turn that theory on its head and suggest that a number of likely candidate outputs (say, both “system administrator” and “systems administrator”) are produced early by some estimation process, and then all the competing rules are run in parallel, and if a number of them begin to converge on one of the candidates, it is selected for utterance. (This theory has been used to explain how speech errors like Spoonerisms or so-called “Freudian slips” occur.) It would seem plausible that this process of “spreading activation” could select for “systems administrator,” since so many (possibly incorrect) rules would lead to that end.

The point is, it isn’t clear-cut that “system administrator” should be preferred. But when an organization like SAGE has to select one or the other, the evidence seems slightly stronger for the no-ess form.

Until next time,

*Mr. Know-it-All*

*Alexios Zavras (zvr@pobox.com) contributed the second letter from Johnny.*