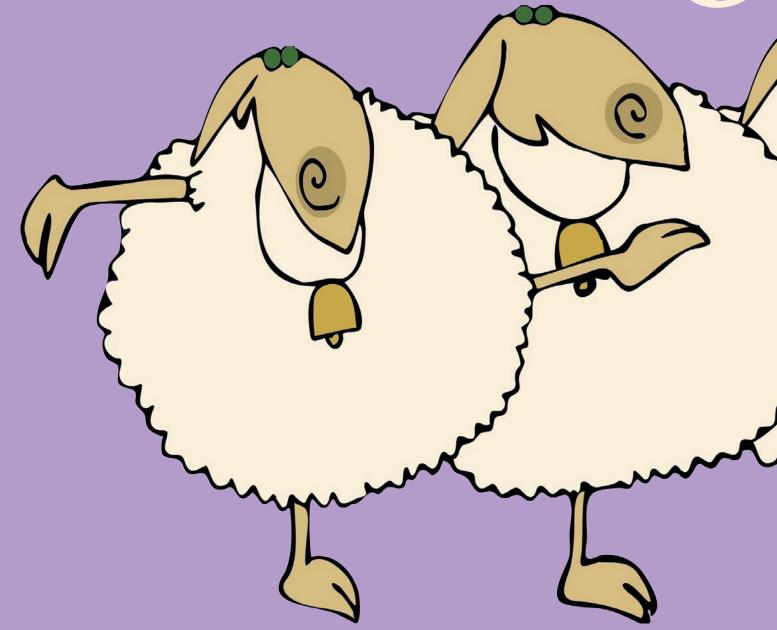
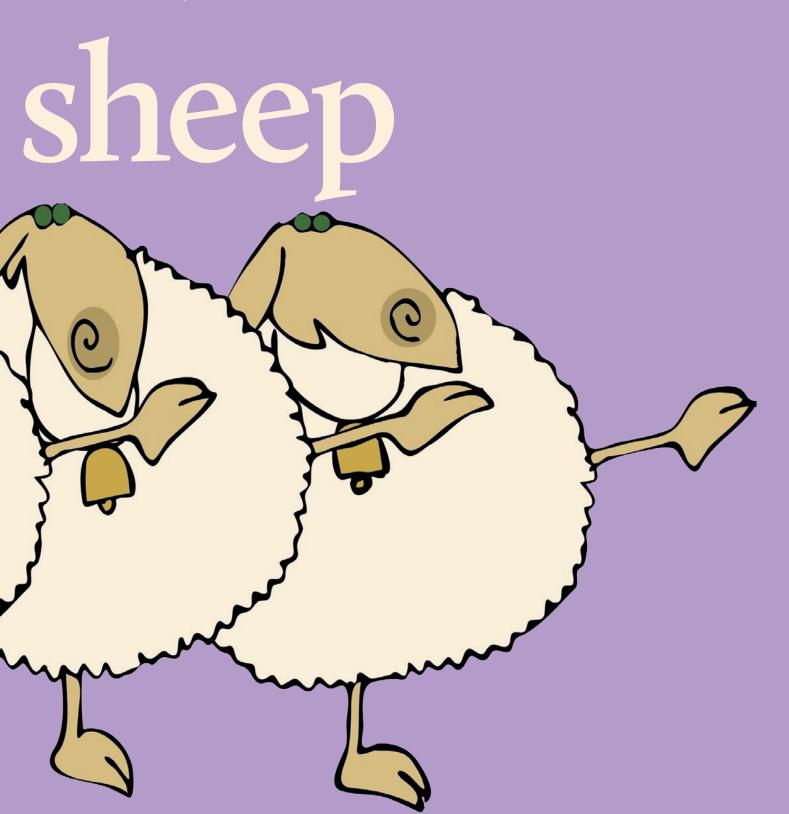


# Twerking



Ollie Sayeed uses spoonerisms to piece together how language is represented in the mind.



of the Reverend of the tongue became known as a

source of puns, accidental spoonerisms give us some insight into how language works. Under a broad definition, a spoonerism is where two 'things' have their positions in a phrase swapped around, as in *belly jeans* for *jelly beans*; investigating exactly what 'things' are allowed to be



Reverend William Archibald Spooner

switched around is revealing. To phonologists, who study how the sound systems of the world's languages work, mistakes like these can be important evidence - and typically for linguistics, there are some potentially knotty complications and surprising revelations along the way.

spoonerisms work? The simplest kind, of course, is where the first sounds of two words are swapped around. We have runny babbit for bunny rabbit, and shoving leopard for loving shepherd. (The first sound of the word shoving is a single sound, spelt <sh>, and written in IPA as [ʃ].) This tells us something simple, but worth noting anyway; it tells us that words are split up into sounds! A word isn't just stored in the brain as a continuous stream of mouth movement, like the motion of a ballet dancer, but as a sequence of discrete sounds - in a way, this justifies our use of discrete letters to write them. We could never switch around 'half of a [z]', only the whole thing.

It looks so far like we can take two sounds, and switch their places. But this isn't true of all cases; we sometimes seem to have more than one sound being switched over. In an utterance like *scay pale* for *pay scale*, it isn't just the first consonants [p] and [s] of the words that switch, or else we would have something like *say pcale*. The same is true of *coat thrutting* for *throat cutting* (not *croat thutting*), and *dreater swying* for *sweater drying* (not *dweater srying*). We can widen our definition of 'thing' to include moved units consisting of multiple sounds, then, like [sw] and [dr]. Note as well that we can spoonerize *monkey's uncle* as *unkey's muncle*, where the [m] here is switching with 'nothing'! So our rule is modified to: take two sounds (including 'empty space') and interchange them.

But how about these? For brake fluid, we can have blake fruid (or flake bruid), and in another classic Spooner example we have town drain for down train (or drown tain). In these cases, we don't switch around all of a consonant cluster, but only one consonant from it. So there is actually more than one way to spoonerize two words beginning with clusters; we can move the whole cluster, as in dreater swying, or just one sound, as in town drain or blake fruid.

"However, notice that, if our rule for spoonerisms is just "take two things and swap them around", it should cover switching a consonant with a vowel. Clearly, in most cases, we would end up with something unallowable as an English word: we couldn't spoonerize 'silly book' to produce ooilly bsk. But even when the output would be a possible English word – as in some (fictitious) example like apace stack for 'space attack', which we could produce by switching the consonant [s] with the vowel – we still have the feeling that this isn't a possible spoonerism."

The exception to this is where the switch would result in a sequence of sounds that isn't allowed in English, like [pk] at the beginning of a word as in *say pcale* (the sound spelt <c> here is written [k] in IPA).

So parts of clusters can move, like whole clusters. Rather than being annoying, this can tell us something about English, through the cases where it doesn't seem to be true. Given a phrase like *working cheap*, we can spoonerize it as something like cherking weep, switching around the [w] at the beginning of work with the thing written <ch> at the beginning of cheap. The latter spelling is misleading here, and the sound being pronounced is more accurately written in IPA as  $[t_i]$ ; the mouth starts by pronouncing a [t], and then moves into a [f], so it seems much like a cluster of two sounds. But can we swap the [t] to the beginning of the first word, as we were allowed to do with monkey's uncle? That would give us twerking sheep, which (despite being a nice image) people seem to agree isn't allowed as a spoonerism of working cheap.

How do we know this isn't allowed? Who says so? To be

confident in our claims, we need evidence for them. The late Victoria Fromkin was a phonologist who created the Fromkin Speech Error Database, an archive of speech errors overheard by her and her colleagues. The examples in the database show all kinds of linguistic mistakes: from wrong word choices like as composed to for as compared to, to grammatical errors like to dealt with it for to deal with it. Each time, Fromkin or her colleagues would note down what the speaker intended to say, and what the speaker actually said, and then record these facts as an entry in the database. So we can check the database to see if an error similar to the one we're looking at is attested by the data, just to make sure we're not making things up. Indeed, there are no examples in Fromkin's database of [tʃ] being split up into [t] and [f] by any spoonerisms, despite the fact that we know we're allowed to do this with clusters. This tells us something interesting: the segment [tf] is a single unit in the mind, not a combination of two sounds, despite the fact that it's pronounced using two

movements. Sounds of this type are called affricates, and spoonerisms are nice evidence that they're single sounds.

We haven't yet mentioned any spoonerisms involving vowels, but there are copious examples in Fromkin's records: odd hack for ad hoc, pless the strace for place the stress, fash and tickle for fish and tackle. These can easily be described in the terms we've been using so far; we take two segments, like the vowels in ad and hoc, and just swap them around. However, notice that, if our rule for spoonerisms is just "take two things and swap them around", it should cover switching a consonant with a vowel. Clearly, in most cases, we would end up with something unallowable as an English word: we couldn't spoonerize *silly book* to produce ooilly bsk. But even when the output would be a possible English word - as in some (fictitious) example like apace stack for space attack, which we could produce by switching the consonant [s] with the vowel - we still have the feeling that this isn't a possible spoonerism. We could account for this by proposing a restriction, stating

"Consider the changes we're allowed to make with consonants: fash and tickle but not fit and shackle for 'fish and tackle'."

that consonants and vowels can't be swapped around, but it turns out there's a more general rule of which this is a special case.

Consider the changes we're allowed to make with consonants: fash and tickle but not fit and shackle for fish and tackle; town drain but not noun trade for down train. It looks like there are restrictions not only on the sounds we can switch, but on their positions; swapping a [d] at the beginning of a word with a [n] at the end isn't allowed. More generally, we have to switch a sound with another sound in the corresponding 'position', whatever that means. This raises the possibility that perhaps there isn't actually a restriction on swapping consonants and vowels; the reason we're never able to is that they always appear in different, incompatible positions.

The next step is to work out what these 'positions' are. We might propose that 'beginning of a word' is a position, where a sound at the beginning of a word can only be switched with one from the beginning of another word. But Fromkin gives evidence of certain switches within words that this criterion wouldn't allow: carpsihord for harpsichord, canpakes for pancakes. The beginning of chord in harpsichord isn't a separate word, so this 'beginning of a word' category is too narrow. But clearly beginnings of words can't switch with anything, so an 'any consonant position' category is too broad; we need something that includes these other

positions, but excludes ends of words.
Suppose that word beginnings and certain word middles are in a position called the *onset*.
Are *all* consonants in onset positions, other than those at ends of words? If they were, we would allow *napcakes* for *pancakes*; this doesn't seem possible for a spoonerism, so [n] in the word *pancakes* can't be in an onset position. Say the remaining consonants - ends of words, and these other consonants in word middles - are in the *coda* position. This leaves vowels, which linguists say are in a position called the *nucleus*.

This all tells us that words aren't just unstructured strings of sounds; they're divided up into smaller units, and rules can make reference to positions within these units. Notice that these positions are in a certain order: the onset first, then the nucleus, then the coda, and then another onset, etc. In English, the onset and the coda can have nothing in them - as in the word *in*, which starts with a nucleus, or *to*, which ends with one. The whole onset-nucleus-coda unit is called a *syllable*, and we take words to consist of multiple syllables in sequence, each with their own internal parts. Every syllable must contain a nucleus, so the two-syllable word *attack* has *a* as its first syllable (containing only a nucleus) and tack as its second



(containing an onset, nucleus, and coda), whereas *stack* only has one syllable. We can switch around onsets with onsets, as in *runny babbit* or *carpsihord*; nuclei with nuclei, as in *odd hack* and *pless the strace*; or codas with codas, evidenced in Fromkin's database with examples like *tap stobs* for *tab stops*. We can also swap combinations of onset and nucleus - as in *cassy put* for *pussy cat* - or nucleus and coda - as in *a hunk of jeep* for *a heap of junk* - or even the whole syllable, as in Spooner's *kisstomary to* 



cuss rather than customary to kiss. But we can't mix between these positions; so elephant is mispronounced in Fromkin's database as ephelant, but never as eletanph. In the space attack example, s is in a coda but a in a nucleus, so we can't swap them around, despite them appearing to be in the same positions.

A final example is perhaps the most surprising of all. One of the spoonerism-type errors listed in the database is this: *glear* plue sky for clear blue sky. How does this work!? We seem to have switched [k] ... [b] to [g] ... [p], changing both sounds, which is definitely nothing like anything we've seen before, and there isn't any way of accounting for it by proposing an underlying level like the previous example. It's not just a random accident, because there are more examples with the same flavour: *spattergrain* for *scatterbrain* switching [k] ... [b] to [p] ... [g] (note that this is the other way round to *glear plue* sky), and skabetti for spaghetti, switching [p] ... [g] to [k] ... [b]. This is a puzzling regularity. No sound has been switched from anywhere to anywhere else; instead, two sounds have mutated into two other sounds. with no obvious reason.

In fact, this magic trick is much more like a spoonerism than it looks, and provides a wonderful piece of extra evidence for a part of linguistic theory phonologists have proposed for other reasons. Suppose that *something* has been switched around between the two words, but that this mysterious thing isn't a sound! Instead, suppose that one 'feature' of each sound has been switched around, in such a way as to turn [k] ... [b] into [g] ... [p]. This would be much like turning the nine of hearts and the ace of diamonds into the ace of hearts

and the nine of diamonds; we've changed the identity of both cards, but in a spooneristic way, by swapping the 'nine' and 'ace' bits around. In the same way, perhaps [k] is to [g] as [p] is to [b], in some feature, and that *glear plue sky* involves spoonerizing this feature from one sound to another. What could this feature be?

The answer is called *voice*, and has to do with the ways sounds are pronounced. Some sounds are pronounced with the vocal cords vibrating, and others are pronounced without vibration; the sounds with vibration are called voiced, and the others voiceless. In this sense, [g] is a voiced version of voiceless [k], and [b] is a voiced version of voiceless [p] (where the sounds in each pair are otherwise pronounced in the same way, in the same part of the mouth). So this gives an interesting explanation for the *glear plue sky* type: we start with *clear blue sky*, with a voiceless [k] and a voiced [b]. We end up with a voiced [g] and a voiceless [p], looking exactly like the features 'voiced' and 'voiceless' have switched. What about the other examples, spattergrain and skabetti? Here, we have a slightly different spoonerism involving the same features; to get from [k] ... [b] to [p] ... [g] (or vice versa), we have to propose that the sounds do switch places, but the 'voiced/ voiceless' features get left behind! So voiceless [k] and voiced [b] go to voiceless [p] and voiced [g] - the sounds have switched, except for their voicedness. This is a strange kind of spoonerism, and it tells us something very interesting - that sounds aren't unanalysable wholes after all. Instead, they're made of 'features', describing properties of each sound, and these features

can be moved independently of each other.

We've seen various kinds of tips of the slongue, and investigated them scientifically to see how exactly they work, throwing up some surprising conclusions: some sequences of sounds are stored in the mind as single units; words are structured in syllables with onsets, nuclei, and codas; and sounds have multiple 'features' that can behave independently of each other. This is a flavour of what linguistic investigation is like - some simple problem can turn out to have complicated implications, if you follow it through logically. There are details of spoonerisms I haven't mentioned here, which lead to even deeper conclusions about language and the way it's organized. Try thinking about some further examples, and see if you come across anything interesting! ¶

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# Find out more

# **Books**

Matthew Traxler (2012), Introduction to Psycholinguistics, Wiley-Blackwell.

### **Article**

'The non-anomalous nature of anomalous utterances' by Victoria Fromkin, in *Speech Errors as Linguistic Evidence* edited by Victoria Fromkin (Mouton, 1973).

## **Online**

You can find an interactive IPA chart for hearing some of the stranger sounds at www.yorku. ca/earmstro/ipa/