Generating Spelling Suggestions

Overview

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By the end of this video you will be able to…

- Describe the general idea of generating spelling suggestions for misspelled words

speel correction

How do we generate spelling suggestions?

speel

We want to suggest words that are "close" to what was typed. But what defines "close"?

speel

Close == altered a little as possible

speel

1 step away (single character transformation):

- **Substitution—apeel, sbeel, spell, speek, …**
- **Insertion—bspeel, sipeel, spetel, speele, …**
- **Deletion—peel, seel, spel, spel, spee**

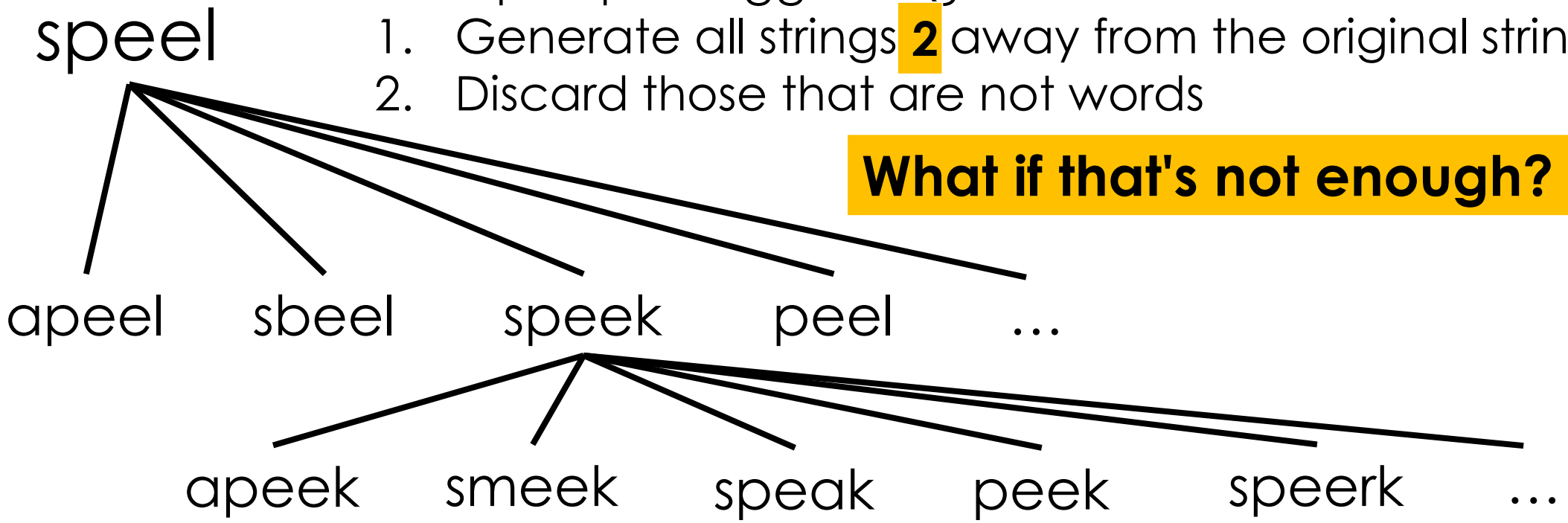
A simple spell suggest algorithm:

1. Generate all strings "1 away" from the original string
2. Discard those that are not words

A simple spell suggest algorithm:

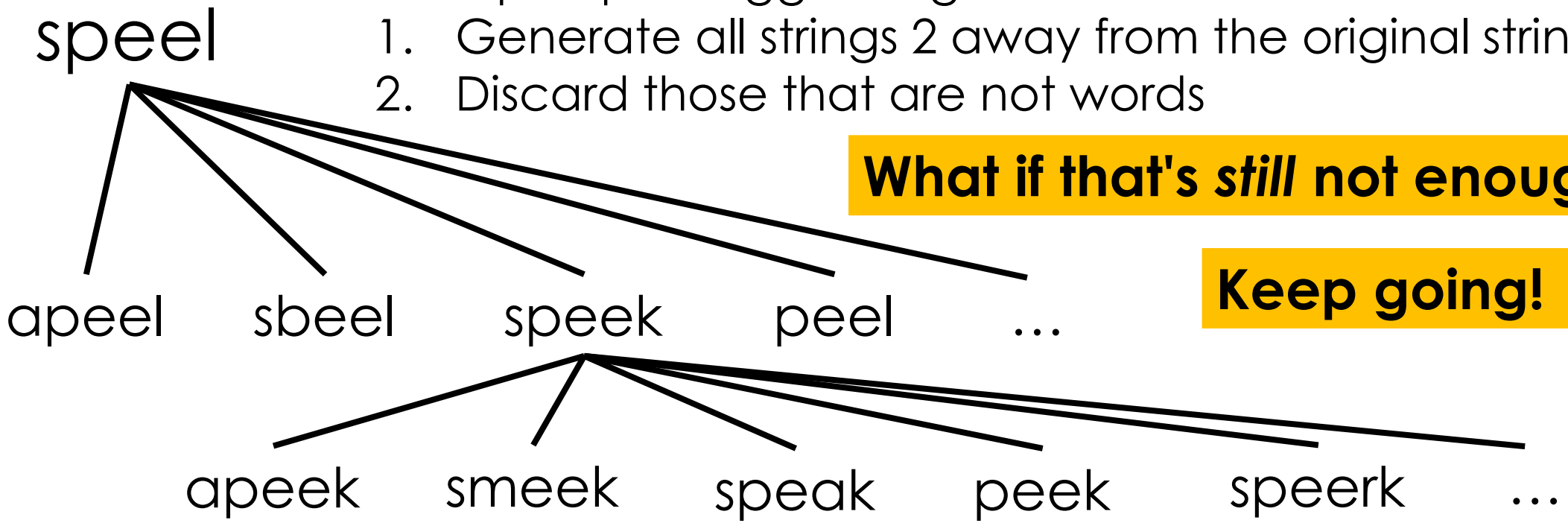
1. Generate all strings **2** away from the original string
2. Discard those that are not words

What if that's not enough?



A simple spell suggest algorithm:

1. Generate all strings 2 away from the original string
2. Discard those that are not words



What if that's *still* not enough?

Keep going!