The syllable and sonority: exercise

The SYLLABLE is the central unit in the sound system of English. More choices are involved in producing a syllable than in producing any other unit, viz. tone group, foot, or phoneme.

The syllable is also a natural phenomenon. Its production is a physiological event, and its reception a psycho-acoustic one.

Those last two paragraphs were about the syllable at the stratum of phonology within language, and the syllable at the stratum of material reality, outside language.

In between these two strata lies phonetics.

When we are listening to continuous speech, one of the main phonetic ways we identify where each syllable begins and ends is by perceiving the SONORITY of individual sounds (phones) while we are hearing them in sequence.

As you might be able to guess from the German terms *Selbstlaut* 'vowel' and *Mitlaut* 'consonant', a vowel is essentially a sound that can be pronounced 'on its own', whereas a consonant can typically only be pronounced 'together with' a vowel. Vowels have a higher degree of sonority than consonants – they 'sound' more; consonants sound less. This means that a vowel can occur at the 'peak' of a syllable, whereas consonants typically occur only at the edges of syllables.

The diagram below shows a SONORITY SCALE for English, with open vowels like [ɑ] at the top and stops like [p] at the bottom. Some intermediate degrees are also labelled.

I have chosen the word ⟨strengths⟩, pronounced here as [s̪t̪ɹ̪ɐ̟ŋᵏθs̪]; it often has an optionally inserted [k] (shown here raised above the baseline), to make the transition from [ŋ] to [θ] 'easier to pronounce'.

Your task: Plot the sonority of each individual sound in [s̪t̪ɹ̪ɐ̟ŋᵏθs̪] on the chart below. The sound [ŋ] has been done for you. A key will be provided afterwards.

