Sonority

1. The sonority scale

By comparing patterns in various languages concerning possible nuclei, possible onset and coda clusters, etc., phonologists have developed what is known as the **sonority scale**. The exact steps of the scale are sometimes debated, but here is a widely used version of the scale:

The sonority scale

Low sonority *(preferred as onset)* — High sonority *(preferred as nucleus)*

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stops < fricatives < nasals < liquids < glides/high V < non-high V

The sonority scale can be seen as a scale that ranges:

- from a preferred onset to a preferred nucleus
- from a prototypical consonant to a prototypical vowel
- from segments with a more closed articulation to those with a more open articulation
- (if you know acoustic phonetics:) from segments with low acoustic energy and no formant structure to those with high acoustic energy and rich formant structure

2. Sonority and syllabification

As we have seen when discussing syllabification, many languages impose restrictions on the segments that can fill particular syllable positions or form clusters.

In many cases, these restrictions turn out to be based on sonority. Some examples:

- **Nuclei** may have to be **above** a certain sonority level
- The vowels in a **diphthong** may have to have **falling** (or **rising**) sonority
- **Onsets** may have to be **below** a certain sonority level
- **Codas** may have to be **above** a certain sonority level
- The consonants in a **cluster** may have to have **rising** or **falling** sonority
- The consonants in a **cluster** may have to be separated by a particular **sonority distance**

So, the phonological grammar needs to be able to make reference to the **sonority scale**, and to **distance** along this scale.

3. Cross-linguistic differences in the sonority scale

We can think of the sonority scale as a "near-universal." Most languages have a sonority scale very similar to the one shown above, but there are occasional differences.

- Some languages make **additional distinctions** within a sonority category, such as distinguishing voiced/voiceless stops or fricatives, or distinguishing mid/low vowels.
- Occasionally, a language will show somewhat **idiosyncratic sonority behavior**; if you find that you need to make a proposal about a different version of the sonority scale for some language, be sure to provide evidence to back up your claim.