Quantity is usually a two-dimensional contrast and three-way contrasts that arguably exist are rare and not overwhelmingly productive. Languages generally have only two distinct lexical items expressing contrasts in length, height, and distance: big–little, large-small, high-low, long-short. The same holds for a geminate-singleton contrast denoting consonantal quantity — the contrast is usually binary. About half of the world’s recorded languages have this contrast but allophonic contextual lengthening and shortening exist in most languages. Unlike a quantity opposition for vowels, a singleton-geminate contrast is most prevalent in an intervocalic position. Since acoustically the duration of closure is the most stable acoustic marker for consonantal quantity and since this is necessarily ‘silence’ when it comes to a voiceless stop, the preference for intervocalic contrast makes perfect sense. Nevertheless contrasts in initial and final position do survive for centuries.

In this paper, we trace the historical path, synchronic rules and representations and processing consequences of consonantal quantity across the languages of the world. We will attempt to show that consistently, it is the phonological grammar which constrains the synchronic system, processing and change.