

6. Uvular Consonants

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1. Introduction

This chapter will discuss the distribution of one of the less common types of consonants, those with a uvular place of articulation. Consonants of this class are not as rare as those discussed in chapter 19, but are nonetheless found in only roughly one sixth of the language surveyed. Most languages have consonants in which the back of the tongue is raised toward the velum; some also have consonants in which the back of the tongue is raised toward the point where the opening into the nasal cavity is located. These are called **uvular consonants**.

Toward the back of the roof of the mouth the soft part of the palate narrows and terminates in a fleshy "tail" which is the uvula. *Uvular* is the adjective derived from *uvula*. Besides its role in speech, the uvula is active in actions such as snoring and gargling and plays a part in regulating the connecting passage between the mouth and the nasal cavity. When air is flowing in or out through the nose the back part of the soft palate (or velum) together with the uvula is lowered to open the passage between the nasal cavity and the mouth. The sound of loud snoring is caused by the uvula vibrating as air is forced through a narrower opening between mouth and nose than occurs during normal breathing. Most of the time during speaking this opening is closed by the velum being raised and the uvula making contact with the back wall of the pharynx so that the flow of air through the nose is blocked.

2. Defining the values

The great majority of the languages surveyed (80.9 %) have no uvulars. Uvulars are absent from several large areas, such as the

northern part of South America, the eastern part of North America, West and Central Africa, southern Asia including Indonesia and the Philippines, and the Pacific region except for a couple of languages in New Guinea. They are also absent from most of the languages of Europe outside the Caucasus region. Uvulars are concentrated in the western part of North America and the southern part of South America, in the Caucasus and Inner Asia as well as the far northeast of Asia. A lesser concentration occurs in eastern and southern Africa. The languages concerned are grouped into different classes depending on whether the uvulars found are stops, continuants, or both, as detailed below.

The most common type of uvular consonant is a stop of one kind or another, including plosives, affricates and ejective stops (ejectives are defined in chapter 7). In phonetic transcription voiceless and voiced uvular plosives are written with the symbols [q] and [q̣] respectively, and a uvular ejective stop as [q̣ʰ]. In 86 of the languages surveyed for this chapter — almost nine-tenths of those with any uvulars — there are one or more uvular stops. In 38 of these languages the only consonants at the uvular place of articulation are stops. These languages form the first group in our classification.

The other uvular consonants are continuants of various kinds. These are consonants during whose production the flow of air is continuous, unlike stops, which the airflow is briefly held back by a closure in the mouth. Continuants include fricatives and nasals, as well as trills and approximants. Of the languages surveyed, 60 have uvular continuants of one kind or another. In 48 of these this is in addition to stops, and in 12 the only uvular consonants are continuants. Languages with only continuants among their uvulars are grouped into a second category, and those with both uvular stops and continuants form the third.

@ 1. No uvulars	468
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@	2.	Uvular stops only	38
@	3.	Uvular continuants only	12
@	4.	Uvular stops and continuants	48
		total	566

3. Uvular stops and continuants

Languages whose only uvulars are stops are found especially in Africa and South America, but occur also in all areas where uvulars occur. In almost all the languages with uvular stops they contrast with velar stops, as, for example, in the Coast Tsimshian (British Columbia) words /q'ool/ 'six' versus /k'ool/ 'one' (these number words are used with reference to specific classes of objects). Only a very few languages, such as Qawasqar (Alacalufan; Chile), have uvular stops — as in the name of the people and their language — without corresponding velar ones. In these languages the pronunciation of the stops may show some variation between the uvular and velar locations, but the uvular is more typical.

The most common type of uvular continuant is a voiceless fricative, for which the phonetic symbol is [χ], based on the shape of the Greek letter "chi". In some varieties of German the sound at the end of a word such as *Bach* 'stream' is a sound of this type (in other varieties it is a velar fricative). A total of 51 of the languages have voiceless uvular fricatives. The largest cluster of these is found in the northwest of North America, where there is an area in which almost all the languages have both uvular stops and uvular fricatives. Tlingit (Na-Dene), the major indigenous language of southeastern Alaska, has ten different uvular consonants. There are three kinds of stops — voiceless, aspirated and ejective — and two kinds of fricatives — voiceless and ejective — and each of these types occurs with and without the rounding of the lips called labialization (written in phonetic transcription with a small raised "w" after the main

symbol). Examples of words with each of these sounds are given in Table 1 below.

Table 1: Words exemplifying the ten uvular consonants of Tlingit (Maddieson et al. 2001)

voiceless plosive	<i>qák^w</i>	'tree spine'
aspirated plosive	<i>q^hák^w</i>	'basket'
ejective stop	<i>q'ák^w</i>	'screech owl'
labialized voiceless plosive	<i>náaq^w</i>	'octopus'
labialized aspirated plosive	<i>q^{wh}áan</i>	'people, tribe'
labialized ejective stop	<i>q^wátʔ</i>	'cooking pot'
voiceless fricative	<i>χaak^w</i>	'fingernail'
ejective fricative	<i>χ'áak^w</i>	'freshwater sockeye salmon'
labialized voiceless fricative	<i>χ^wastáa</i>	'canvas, denim'
labialized ejective fricative	<i>χ^wáaʔ'</i>	'down (feathers)'

The other area of the world where languages with an especially large number of distinct uvular consonants are found is the Caucasus. For example, in Archi (Nakh–Daghestanian; eastern Caucasus), there are sixteen different types of uvular consonants. Both voiced and voiceless uvular fricatives occur in this language, and besides uvulars with labialization, ones with an added narrowing in the pharynx are also found.

Both German and French have a more unusual type of voiced uvular continuant, represented by the letter *r* in the orthography, in words such as German *rot* 'red' and French *rue* 'street'. In the most careful speech this sound is a uvular trill, during which the uvula makes several rapid contacts with the back of the tongue. The trilling is created purely by establishing the right aerodynamic conditions, which will cause the uvula to vibrate as the air flows past its location at the back of the mouth. Since several factors have to be within critical limits for the vibration to occur it is not surprising that trilling quite often fails to take place and instead a uvular fricative or approximant

is pronounced. For many speakers of standard French or German one of these variants has become the norm.

One further kind of uvular continuant is found in a few languages, a voiced uvular nasal (written in phonetic transcription with the small capital letter [N]). In the present survey only Japanese is considered to have a uvular nasal in its inventory of consonants, but it is a special case and other interpretations are possible. This nasal is the only consonant which can appear in word-final position in Japanese, as in the word /hon/ 'book'. Since this nasal has a clearly different distribution and pronunciation from the syllable-initial nasal sounds /m, n/, it is usually regarded as a distinct sound in discussions of the sound system of Japanese. Uvular nasals also occur in the dialects spoken by the Inuit peoples of Alaska, Canada and Greenland. The facts are complex but, as described by Rischel (1974) for West Greenlandic, in most cases the uvular nasals seem to be the result of a nasal consonant and a uvular stop "fusing" together into a single sound. For this reason, the uvular nasal is not considered a basic sound of this language although uvular stops and fricatives are.

The strong geographic concentration of languages with uvulars in the northwest of North America connects across the Bering Strait to an area in the far northeast of Asia where a cluster of languages with uvular stops and continuants occurs. Apart from the languages in the Eskimo-Aleut family, which account for only two of the languages in these areas in the sample, the languages on the Asian and the American sides of the Strait have not yet been convincingly shown to be related to each other. However, since the Bering Strait was undoubtedly an important route for the entry of human beings to the New World, typological similarities across the strait are suggestive of ancient or continuing contacts between the continents.