

(L) Hide and Seek in Hunzib (1/3) [10 Points]

Hunzib is a Northeast Caucasian language spoken by approximately 3,500 people around Dagestan, Russia. Below are some Hunzib verbs in their singular and plural forms along with their English translations.

The plural form of a verb generally indicates that the verb's subject or object is plural, or that the action is performed frequently or repeatedly. Below are two sets of Hunzib verbs (under the tables we specify the differences between Set A and Set B). Some relevant pronunciation notes are listed on the next page. Throughout this problem, the abbreviation 's.' stands for someone, somewhere, or something.

Set A		
Singular	Plural	Translation
ãqáa	ãqabáa	<i>be thirsty</i>
áq'u	ááq'u	<i>bring s.</i>
čóqe	čowáqe	<i>get known to s.</i>
ék'e	eyák'e	<i>burn</i>
éže	eyáže	<i>take s. away</i>
éq'ə	əwáq'e	<i>lead s.</i>
gíč'	giyáč'	<i>slip into water</i>
gúše	guwáše	<i>touch s.</i>
háhel	háhál	<i>feed with milk</i>
ícox	íčáx	<i>stay</i>
ĩzáa	ĩzabáa	<i>wash s.</i>
k'ék'el	k'ek'ál	<i>get frightened</i>
líše	liyáše	<i>be sticky</i>
líq'ə	líwáq'e	<i>dress up</i>

Set B		
Singular	Plural	Translation
áhuk'	áhák'	<i>make s. take s. off</i>
ékle	ekále	<i>drop s.</i>
éžel	ežál	<i>chase s.</i>
éc'k'ə	əc'ák'e	<i>fill s.</i>
gúk'le	guk'ále	<i>put s. on to s.</i>
hálduk'	haldák'	<i>make s. white</i>
háldul	haldál	<i>be white</i>
íč'lə	íč'ále	<i>be renewed</i>
íqəl	ĩqál	<i>hide s.</i>
íq'k'ə	iq'ák'e	<i>grow s.</i>
íq'lə	iq'ále	<i>grow up</i>
íxk'ə	ixák'e	<i>warm s.</i>
líšel	lišál	<i>glue s.</i>
rélek'	relák'	<i>straighten</i>

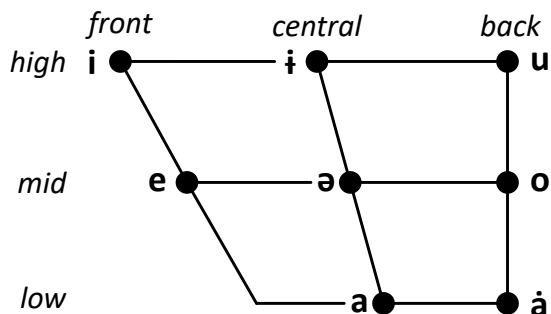
The difference between Set A and Set B involves two endings called the verbalizer and the causative: the verbs in Set A do not include them, while each verb in Set B includes exactly one of them. Here's how these two endings are defined:

- The verbalizer turns an adjective into a verb or changes the meaning of an existing verb. It has the forms **-l**, **-lə**, and **-le**.
- The causative is similar, but it adds another participant to the verb, usually meaning that one person or thing causes another to be or do something. It has the forms **-k'**, **-k'ə**, and **-k'e**.



(L) Hide and Seek in Hunzib (2/3)

Pronunciation notes: the vowels used in this problem are illustrated in the diagram below. The words *high*, *mid*, *low*, *front*, *central*, and *back* refer to the position of the tongue in the mouth. Their exact meanings are not relevant for solving the problem.



c = *ch* in *chocolate*; **x** = *gh* in *ugh*. **q** is a **k**-like sound made further back in the throat. **š**, **ž**, and **č** are pronounced like **s**, **z**, and **c**, but further back in the mouth, with the tongue against the hard palate. **λ** and **ɭ** are pronounced like **s** and **c** but with air flowing along the side of the tongue.

The symbol ' indicates an ejective consonant (pronounced with a sharp popping sound). The symbol ~ indicates a nasalized vowel (pronounced through the nose). The symbol ˈ indicates a stressed vowel.

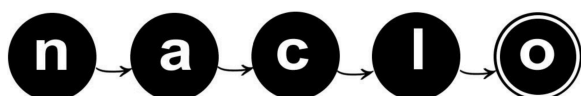
L1. Give the plural forms for the Hunzib verbs **ĩɭ'e**, **koxáa**, **ɭ'əq'ə**, **óč'ok'**, **úq'e**, and **úxel** (their meanings are not relevant for this task).

ĩɭ'e	<input type="text"/>	koxáa	<input type="text"/>	ɭ'əq'ə	<input type="text"/>
óč'ok'	<input type="text"/>	úq'e	<input type="text"/>	úxel	<input type="text"/>

L2. Give the Hunzib plural forms of *dress s. up*, *put s. on*, *put the fire on*, *renew s.*, *take s. off*, and *warm up*.

<i>dress s. up</i>	<input type="text"/>	<i>put s. on</i>	<input type="text"/>	<i>put the fire on</i>	<input type="text"/>
<i>renew s.</i>	<input type="text"/>	<i>take s. off</i>	<input type="text"/>	<i>warm up</i>	<input type="text"/>

L3. Explain your observations about how the verbal plural, causative, and verbalizer are formed in Hunzib.



(L) Hide and Seek in Hunzib (3/3)

L4. Here are two more Hunzib verbs in the singular and plural:

Singular	Plural	Translation
úhle	uwáhle	<i>spoil s.</i>

Singular	Plural	Translation
gíč'k'e	giyáč'k'e	<i>pour s.</i>

They do not follow the rules established previously. What plural forms would you have expected, and how might these irregular forms have arisen?

úhle

gíč'k'e

Explain how the irregular forms might have arisen: