

section	concept	colloquial description of Ultan's rules	Ultan's rules	example
210	transcription	Some roots and suffixes sometimes change depending on what comes before or after. This chart notes some of the rules for when those sounds changes occur. What Ultan calls morphophonemes are sounds that sometimes disappear or change. He uses capital letters for those sounds. We just write the sound in parentheses to show that sometimes it's there, and sometimes not.	The transcription that has been adopted for Konkow is basically phonemic with the addition of a few morphophonemes, i.e., cover symbols representing systematic restricted alternations between two or more phonemes.	
220	Unrestricted Alternations			
221	vowel harmony	i changes to match the vowel of the syllable before it after a k or k'.	i changes to the vowel of the preceding syllable after k or k' when a glottal stop intervenes.	pók'o 'luminary' from pók'-i objective case týtykym grove from týtyk-im subjective case
222	vowel loss	i is omitted after a vowel or long vowel or any of the consonant final morphemes.	i changes to Ø after any vowel, length, or any of the consonant - final morphophonemes.	k'ólos?an if he lacks it from k'ólo-is?an lack.participle k'ólon lack from k'ólo-in lack-verb.final c'és let me see from c'e-im see-subject býsa:m cane from býsa:-im cane-subject
223	loss in conformity with the syllable canon	Any consonant or length is lost before a sequence of two consonants.	Any consonant or length is lost before a sequence of two consonants.	wasehc'ók'o two blackberries from wáse(j)-h-cók-i blackberry-plural-dual-objective c'ámmihñono knives from c'ámmi(t)-h-nono plural súmujdi on the sugar pine nuts from súmu:-j-di sugar.pine-plural.distributive-locative.case
224	Loss of glottal or implosive release	Glottal stops ? are removed before a consonant at the ending or a word. c' gets lost if it is at final position of a word. c' and j are represented by t when they are at the position before the last component of a word.	Any glottalized or imploded stop becomes the corresponding homorganic (voiceless) stop before a consonant or juncture. Imploded stops and c' do not occur in syllable-final position phonemically; however, since the reduplication {C} always occurs in these environments b, d, c', do occur morphophonemically in them. Because the palatals c' and j have no direct counterpart in the voiceless stop series, they are represented by t.	wípbát'in repeatedly break branches off from wíbat'-(C):-b- iterative-plural wátdásin split into large pieces wádas:-(c)-d-n wít'òjin bent in several places wíc'oj-(c)+d-in wípmòlin skin several animals wímol-(c)+m-in t'étjak'an mash underfoot from t'étjak'-(c):-j-in wihápèle:n slide easily out of from háp' ják'atsi:n push out of from k'at' býlekwòdojdi hilltop from lek' wə̀nə̀nə̀knon ridge from wə̀nek' c'úk'ut'òmisin wash oneself from c'úk'ut'
230	Vowel harmony O	o gets changed to the same vowel as the one in the following syllable. This happens with bio and de.	O > the vowel of the following syllable. This occurs with the harmonizing prefixes and two model suffixes. From bÓ with a rock like object. c'édejam Did you (plural) see it? From {de} : dO interrogative	bátajton miss hitting with a rock from b(ó) békesin graze with a rock from b(ó) bík'ihnon plug a hole by driving a mass in from b(ó) bót'okdiknon paste a blob on from b(ó) búc'ut'in break, crack (an egg) from b(ó) býtykdò:n flip (a coin) from b(ó) bə̀hə̀ptin make a clumsy object fit from b(ó)
		the interrogative component -de sometimes changes to da when it is used to express a dual rather than a plural question.	From {de}: do interrogative	c'édejem Did you (plural) see it? from de c'édaja:m Did you two see it? from de
232A	Consonant loss and assimilation to the preceding vowel.	Before the following verb suffixes: ti, ti2, me(h), we'es, ma, pe and the following noun suffixes: pe, dik'y, and the case marker wete, the ending né(h) loses the h before i.	H becomes length before consonant followed by juncture, and before the following morphemes and class of morphemes. VERB SUFFIXES- ti, ti2, me(h), we'es, ma, pe, classes 13, 15, 18, 19 and the participles; Noun Suffixes: pe, dik'y, case markers, ho(j), and the postposition wete. né(h) intensifier exceptionally shows loss of H before i. All of these are for ho, but the	mìnhano néhwèwe:n! You talk too much! némsa kò:n. It's snowing hard. (here before im) bája:p! crack acorns bája:tín crack acorns for bája:mè:n not crack acorns bája:de did he crack acorns?

			vowel of bo changes when the second vowel is different then o.	bája:mino'e if you crack acorns bája:c'e if he cracks acorns bája:peni would you crack acorns bája:wète having cracked acorns jémpo: young man (before i) jémpo:k'i sólo the young man's shoe
		The changeable sound h becomes h in other cases.	h becomes h elsewhere	bájahdo:n begin to crack acorns bájahki:n will crack acorns bájahc'ono they say you cracked acorns bájah?ùn (he) was there cracking acorns jémpohtë:! poor young man jémpohpikno that young man
232B	Consonant loss and assimilation to the preceding vowel.	Consonants become vowel length (:) before the changeable sound l but remains a consonant elsewhere	Consonants become vowel length before the changeable sound l but remains a consonant elsewhere	c becomes length before l, remains c elsewhere.
		j can change in several ways. It can change to i or im in certain instances.	j k'ó:do(j) country, place	Appears before l as k'ó:do k'ó:dom before im k'ó:dojnak to the spot ?énwytù:n turn back wýtújton return
		When a k occurs after a long i:, the i: loses its length.	k májdy(k) person- Has a short vowel before i	májdy before i but májdyknà: from the man k'ádi:m rain k'ádikde Did it rain?
		pi(n) can vary to not have the n and occur as pi	n ?épipi:s'an because he was afraid	?épipins?am he was afraid. pi~pi(n) Sec.465
		When p occurs before an i, it can be changed to vowel length (:) of the i before where the p was.	p mási:n finish a job	mási:pkin will finish a job
		Like p, t can change to i: when there is an i before the t.	t k'áiki:s I'm going to have supper	k'áikitpy Let's have supper
		There is another change that occurs with vowel length. After any consonant except h when h can vary, w is replaced to become vowel length (:) before the place where the w was located.	w : After any consonant but h of h , it assimilates totally to that consonant. This alternation differs from the others in this section with respect to its fixity of occurrence. In normal speech it occurs somewhat sporadically and with greater frequency for some informants than for others (see also {we}, Sec. 560).	k'ý:da:n hang (inter) k'ý:dawtin hang (tr.) ?ýmpinnèsin (he) kept coming all the while lúmittè?esin (he) kept on finishing ?ýk'ojjè?esin (he) kept going ?ýsippè?esin (they) kept coming out c'í:me:wè?esin (he) still wasn't dressed ?wówe?esin (she) was crying all the time
233	Quantitative assimilation to syllable stress	~ (superscripted) represents an alteration between short, unstressed vowel in non word-initial position and a long, stressed vowel in word-initial position.	~ (superscripted) represents an alteration between short, unstressed vowel in non word-initial position and a long, stressed vowel in word-initial position.	c'ý:k'ýn crease, wrinkle vs. bác'yc'ykki:n frown, grimace from c'ýk' t'í:t'in vs. ?étit'in green from tít'
240	Additional symbols	The symbols in this chart are kept simple and conform to those used in the Konkow orthography chart.	Special transcription symbols are used	
250	General Morphophonemic Tendencies	This chart attempts to show many of the reoccurring patterns but does not cover them all.	There are lots of tendencies in normal speech which are beyond the scope of this grammar.	
251	a	When similar sounds occur next to one another in between vowels the stress is on the second consonant	Emphatic gemination of consonants most often observed intervocally following the stressed vowel of an initial	hèssi! what hèllólopèm já:mpin! Big ones came down (the trail)

		sound. When there is also a stress at the end of the final part of the word, an exclamation mark is used.	syllable or medially preceding a stressed vowel. On occasion, word-final nasals after stressed vowels are also geminated. All of these examples occur within the context of {!}.	hájosam jámani tàmyimm! They carried it straight up the hill
	b	When there is a sequence of identical vowels with a h or glottal stop (ʔ) a long vowel tends to occur when the first vowel is stressed.	Reduction of a sequence of identical vowels with intervening semivowel, h, or ʔ to a corresponding long vowel tends to occur when the first vowel or, in the case of a reduplication, the reduplicative base (i.e., second vowel) is stressed.	jòhó:jdi while kneeling from jòhohójdi ʔópé:n miss (someone) from ʔòpéjen c'á:ni dò:n biting from c'áwajni dò:n háwaky (LS) ~ há:ky (ES) seem má:ti like that from má'ati wé'es (LS) ~ we:s (ES) usative
	c	Sometimes a sound is inserted between a ni and two consonants with vowels on either side.	Epenthetic i between two consonants bounded by vowels, i.e., VC1C2V > VC1iC2V. Note that the original sequence is phonotactically permissible.	myk'ulipa:m his (fore)fathers jánito~jánto tell p'yt'ic'e because she was cold
252	Vowel Harmony A	When two sounds with the same meaning and a particular consonant vowel pattern (C1V1C2V1 and C1V1C2), the second consonant has a prolonged sound with a partially closed vocal tract.	Two morphs with related or at times identical referents have the shape C1V1C2V1 and C1V1C2 respectively. C2 is always a continuant.	k'yly~k'yl roll k'olo lack, not be, hollow (?) vs. k'ol large hole, hollow pé:ne~pé:n two c'ó:lo creased vs. c'ol mash
	Vowel Harmony B	The vowel u changes to the vowel y when it occurs in the first component of a word.	u > y in the vicinity of fronted phonemes.	búni~býni pubic hair c'úpe~c'ýpe cedar bark c'úkc'kpè sour wytújton~wytýjton return
253	Weakening of syllable-final consonants	When there is a k at the end of the sentence is pronounced weakly and tends to become an h. This h often gets lost in regular speech.	Syllable-final k is quite lenis and tends to become h, usually before stops and nasals. This secondary h may, in turn, develop into length and eventually be lost in allegro speech. This general development, it will be noted, is in essence the same which is responsible for the more systematic syllable-final alternations described above and, in all probability, pairs such as: si(p) ~ si(h) out, do(j) ~ do(h) up, k'ó:do(j) ~ k'ó:do country, májdý(k) ~ májdý person, wássah ~ wással bad, et al.	májdýhkù: that man bákc'ihki:n will cover with a sheet ʔýdihnon reach ʔámanah mýjem... thither they... nu:ti wee a little bit (cf. núkti a little)
254	Alternations between glottalized (ʔ) and plain stops	There are a number of times words have been recorded with slightly different sounds. Often this involves either having or not having a glottalized consonant.	A number of such pairs have been recorded with either no semantic contrast or at best doubtful meaningful distinctions.	púni~p'úni counting string knot po~p'o ball wíkisin~wík'isin hurt páka:ti~páka:t'i frog ʔóske~ʔósk'e rabbit ʔi:tyk'yn~ʔi:t'yk'yn cold
255	j and h alternate with glottal stop (ʔ)	Sometimes the glottal stop (ʔ) tends to become h in the beginning of the word before stressed vowels. j tends to become glottal stop (ʔ) after stressed vowels.	The two developments are, however, inverse to one another. ʔ tends to become h word-initially before stressed vowels, whereas j tends to become ʔ intervocallically after stressed vowels. Thus, ʔ becomes h	híbe:di everywhere hynopè! Let's go! hóno head jó'ehk'o:n go to shoot bó:emc'i: rabbitskin blanket p'íʔok'on hot, warm