

CONSONANT PLAY IN LEXICAL SETS
IN NORTHERN TOTONAC

Ruth Bishop

In the dialect of Totonac spoken in Apapantilla, Puebla, there is a small set of words with an interesting phonetic variation which affects the meaning. The set falls into two groups. Group A is characterized by the phonetic variation between $\underline{\pm}/\underline{s}/\underline{\check{s}}$ and is the larger of the two groups. Group B is characterized by the variation between normal and backed pronunciation of the \underline{k} sound ($\underline{k}/\underline{q}$). Within each group there are word pairs whose only difference is this phonetic variation and the word pairs have a common lexical base. The pairs are usually of the same word class, adjectives or verbs, with an occasional noun pair.

In Group A the variation is most often between $\underline{\pm}$ and \underline{s} in word initial position, although $\underline{\pm}/\underline{\check{s}}$ and $\underline{s}/\underline{\check{s}}$ also appear. In Group B the variation is most often word medial or the second member of an initial consonant cluster. There are also pairs or sets of words which have a combination of the variations, i.e., some form of the $\underline{\pm}/\underline{s}/\underline{\check{s}}$ variation appears in the same word with the $\underline{k}/\underline{q}$ variation. The positions of variation may be separated by other phonemes as in stoqo 'to string (beads)' or they may be members of the same consonant cluster as in sku 'to smoke (with fire)'.

The difference indicated by this variation in word pairs of Group A seems to be one of degree of intensity with $\underline{\pm}$ being the most intense, \underline{s} less intense, and $\underline{\check{s}}$ least intense. For Group B the variation seems to be that of general action or condition indicated by \underline{q} and more specific action or semantic extension indicated by \underline{k} . There are exceptions. The gradation of intensity in Group A is not always apparent when combined with a variation of Group B and the relationship between words of the same pair can be very obscure.

The clearest example of degree of intensity is illustrated by two color words: ±mukuku 'yellow' and smukuku 'light yellow'; ±ka'yaa'wa 'dark green' and ska'yaa'wa 'light green'. Less clear is the word for 'blue'. The $\underline{\pm}$ form ±mumonqo means 'bruised' or 'morado' (Sp.) while the color itself is smumonqo 'blue'.

The word pair involving the color 'gray' is defective. The pair consists of pu'pu'ku 'gray' and ±pu'po'qo 'gray, ash color'.¹ This pair also illustrates the presence of both Group A and Group B variation. To conform to the pattern, ±pu'po'go should be the darker, more intense color and pu'pu'ku (with \emptyset rather than \underline{s} or $\underline{\check{s}}$) should indicate the lighter color. Testing with various

shades of gray might prove this true. At present, all that can be said is that the presence of the q in combination with the ɿ has obscured the relationship between the words and seemingly reversed it.²

The following word pairs have either a simple ɿ/s or s/ʃ variation. They are present along with appropriate comments.

slitwa' 'upright, straight' ʃlitwa' 'direct, straight'

In the illustrative sentences of the Northern Totonac dictionary, both of these words referred to a road, but only the first referred to a tree. The Spanish gloss 'derecho' (straight) appeared with both words. If synonyms were checked they would probably confirm that the members of this word pair could not be used interchangeably although both have the common characteristic of straightness. A direct route from one place to another might not be strictly straight throughout its length.

smili 'to roll up (petate)' ʃmili 'to roll up (sleeve, pants)'

While the illustration indicates a larger object to be rolled when using smili, it is also possible that the stiffness of the object may enter into the meaning. But the pattern is followed, with the s word being more intense (requiring more effort to roll up the palm mat) than the ʃ word. The rolling up of the sleeve means actually in the form of a roll and not just doubling over as is often done.

jicɿwa' 'to be bored, irritated, jikswa' 'to drown; choke, get discouraged' suffocate'

In this pair of words, the variation does not occur word initially. The final morpheme wa' often appears on adjectives to indicate a condition or state of being. Thus the variation actually occurs in morpheme final position. Following the pattern, the ɿ word should be more intense. Perhaps the longer period of duration in being bored or irritated could be considered more intense than the definite, one-time action of drowning or suffocation.

ɿpi'li'li' 'pinto' spi'li'li' 'pinto'

The Spanish word 'pinto' could be defined as having a design of some sort, spotted or striped. The boa is ɿpi'li'li' while the tigre (jaguar) is spi'li'li'. This pair needs more investigation as to whether it is the size of the design or the brightness of color or contrast.

ɿti'li'li' 'round' sti'li'li' 'round'
(automobile tire) (comal)

In this word pair the intensity takes the form of size--the larger size having the ɿ while the smaller size carries the s variation. An interesting note is that the verb ʃti'li', without the final syllable reduplicated, means 'to throw a fish net'. The obvious connection is the circular motion employed in throwing the net.

pi'mpi'li' 'naked, barren' spi'mpi'li' 'naked'

Here again the difference is one of size, the ɿ form of the word pair referring to an adult or an expanse of land. The s word refers to a child; the larger size or area being the more intense form and taking the ɿ.

mu'kɿa 'to smell fragrant' mu'ksa 'to smell fragrant'

This is another example of the variation word medially. It is also difficult to decide which word is more intense. The ɿ member of the pair refers to the fragrance of fruit while the s member is reserved for the fragrance of flowers. Perhaps the fragrance of fruit which has more than just sweetness could be considered more intense and thus the pair would conform to the pattern. There is an antonym for mu'ksa; it is the word pu'ksa which means "to smell bad". However, there is no word *pu'kɿa for a different type of unpleasant smell.

puusqo'qa' 'to hug' puuřqo'qa' to hug'

In this pair of words there seems to be no overt difference in meaning; the words are listed as alternate pronunciations in the dictionary. Whatever distinction there may have been has been lost through the years.

su'nu 'to blow with the mouth'
mouth' řu'nu 'to be hot'

This pair has an uncomplicated variation s/ř, but it appears that the more basic word is řu'nu 'to be hot.' The general use of the word 'blow' is for blowing up a fire to remove chaff from corn or coffee beans, which has little connection with being hot. However, when a person is very hot, he often will 'blow with the mouth'. This could possibly be the connection, but the pattern is reversed if řu'nu is the basic, more intense word.

In Group A there are two sets of words with the ɿ/s/ř variation and one of these sets is related to a second word pair. The unifying element is derived from the noun ɿtucuu'n 'thorn'. Each of the words is in some way sticking or pricking. The first set of words is:

ɿtoqo 'to stir' stogo 'to stick with a needle, to string (beads)'
řtoqo 'to nail'

The related word pair is:

ɿtuku 'to stick, prick, (pin or thorn)'
 řtuku 'to brace up, prop up'

In the first set above, the common lexical base is that of an object inserted into another. Shapes are very important to Totonacs and the handle of a spoon or a stick which would be instruments for stirring are long and narrow as are needles and nails. In the words for 'to string' and 'to nail' there is

the additional lexical connection of uniting two or more objects by the insertion of a third object which is long and narrow.

In the word pair from Group B, the lexical connection is somewhat fuzzy. If one is pricked with a thorn, usually the thorn does not go through the finger. Hopefully it only sticks up until it can be removed, if indeed it remains in the finger at all. A limb which is propped up gives the appearance of having the prop entering it in a superficial way. It would look similar to the thorn sticking out of the finger before removal. If the prop were a forked one, the limb would rest in the fork. It would not be completely encircled so one could not say that it was inserted into the prop.

If we take the first word of each of these pairs, ɬtoqo and ɬtuku, we have an additional legitimate word pair. Again, the appearance of a spoon or stick in some liquid and the thorn protruding from the finger have a similar appearance. The stirring instrument does not go through the liquid and come out on the other side. It merely 'sticks' the liquid as a thorn 'sticks' the finger.

The hole made by a nail is larger than the hole made by a needle, so in the set of three the intensity appears reversed because of the double variation in the 'to string' and 'to nail' words. However, an instrument for stirring is thicker or bigger around than a needle, so these two words conform to the intensity pattern. With ɬtoqo and ɬtuku, it would appear that the k word is more basic and the q word derived in a way. This is in opposition to the stated pattern. And comparing ɬtuku with ʂtuku we find the pattern of intensity reversed again if size can be considered intensity. The brace or prop is certainly larger than a thorn or pin; but the ɬ word is more basic.

The second set of words with the full ɬ/s/ʂ variation is:

ɬku 'to burn' sku 'to smoke'
(fire) ʂqo 'to sting-burn'

The word 'burn' has the primary meaning of flame burning, although the same word can also refer to what the sun does to exposed skin. And interestingly enough, the word to extinguish a fire can also be used to describe a flushed or sunburned face which has returned to its normal state--the fire went out. The word 'to smoke' refers only to a fire not burning well; it is not the word for smoking a cigarette.

In comparing ɬku and sku there is a simple ɬ/s variation with the ɬ word being the more intense, following the pattern. Comparing ɬku with ʂqo we have a double variation between ɬ and ʂ initially and between k and q as the second member of a consonant cluster. Again the ɬ is more intense, a burn from fire being much more painful and of longer duration than the burning sensation caused by the sting of an insect or contact with the leaf of a particular plant. The relationship between sku and ʂqo appears to be obscured by the double variation. However, the effect of smoke on the nose and eyes is that of stinging. The word ʂqo describes the effect of smoke in the eyes as well as the result of rubbing the eyes with hands that have handled chile.

ḷga'lo'qo 'naked, barren' sqa'lo'qo 'naked'

In this word pair, we have a difference in size as in the pair previously cited with the same meanings. However, in this pair the size/intensity is reversed if we use 'naked' as the primary meaning of the ḷ member of the pair. It refers to a baby whereas the s member refers to a small child in the examples cited. If we take 'barren' as a primary meaning, then the pattern is maintained--the expanse of barrenness being much greater on a piece of land than on a small child.

Other pairs with double variation are:

saga 'to iron' ṣaka 'to sharpen by filing,
wipe off'

In this pair there is the occurrence of both types of variation, the s/ṣ in the usual word initial position and the k/q word medially. The most common way of sharpening a machete is by rubbing it on a rock. The use of a metal file and the iron for smoothing clothes would have come from outside the culture at a later date. Thus it appears that ṣaka is the more basic word and therefore, more intense. Certainly sharpening a machete requires more vigorous action than pushing an iron over clothes. The second meaning of ṣaka 'to wipe off' with the idea of cleaning or polishing has the rubbing action of knife sharpening. However, in both ironing and filing the action is repeated in a fixed area whereas wiping off a surface is more a one-time action. The presence of the k/q variation may reverse the normal intensity relationship between s and ṣ.

Another pair with the double variation is:

ḷgo'pa 'to disintegrate in water (soap)' sku'pa 'to dissolve, melt'

Here the double variation occurs in the same consonant cluster. And again it appears that the intensity is reversed, perhaps because of the co-occurrence. Salt, ice, manteca (lard) completely disappear in the action of sku'pa. The soap left in water does not disappear, but its solid state is changed.

stuu'nka 'to straighten' ṣtoo'nqa 'to stretch'

The double variation in this pair is non-contiguous and the intensity is somewhat obscure perhaps because of the presence of both types of variation. We may say that to straighten an object does not alter its basic shape in any way and would be less intense than stretching which would make the object longer and narrower. If we follow this reasoning, the pattern is reversed and the ṣ member of the pair is more intense than the s member. Again, not all objects which can be unbent and straightened are capable of being stretched. If we explore further the use of these words, a different conclusion might be reached.

ḷo'qoqo 'having a hole' su'kuku 'perforated'

The common element in this word pair is the hole and in

spite of having both types of variation, the pattern is maintained. A perforated hole would be much smaller (less intense) than the hole indicated by the ± member of the pair.

There remain two other word pairs in Group A.

maataastuka 'to lengthen by adding onto' maataaštuka 'to overtake on the road'

The common element in this pair is the lengthening by addition. One adds distance to where one is and thus overtakes the other person. It should be pointed out that the maa-causative morpheme can be removed from maataastuka leaving the word with the meaning 'to be increased by adding'. This deletion is not possible with maataaštuka.

The final pair of words are accompanied by the third person singular possessor prefix iš-. Neither word can stand alone without its prefix and the words appear to have nothing in common lexically. Therefore, they may be of no significance. The words are iša'kstu 'only (literally, 'its self, its aloneness') and iša'kštu 'above (literally, 'its aboveness, above it').

In Group B the word pairs are uncomplicated, the only difference being fronting or backing of the k k/q). The relationship seems to be between a general term and a derived or extended meaning of that term. There does not appear to be any definite pattern as to whether fronting or backing is the primary form. The variation usually occurs either medially or as the second member of an initial consonant cluster.

The only pair with the variation word initial is the following:

qa'tla 'big' ka'tla 'full grown'

In this word pair, the more general meaning is represented by the backed k (q) sound of the word 'big'. The other member of the pair indicates that the object has reached its full size but still lacks in maturity or ripeness, in the case of fruit. It will not grow any larger in size but will develop in other ways.

šneqa 'to dry up' šnika 'antonym of to swell'

The first word of this pair refers primarily to plants. It is easy to see the connection between this and the loss of swelling. Both decrease in size and there could even be shriveling. In an agrarian culture, the more basic concern would be for plants which dry up for lack of moisture while the 'swelling' word is derived.

stala'nqa 'crystalline, clean (white clothes) ' stala'nka 'clear mind, sober'

It is obvious in this word pair that the basic meaning is clear or crystalline with reference to water. The idea of 'clean' with reference to white clothing may have come later. The

derived meaning is fronted (k). A person's mind is muddled when drunk just as water can be disturbed and muddied. A sober person has a clear mind and can think well.

laqatin 'one'

lakatin 'one place'

The counting system in Totonac employs prefixes to designate various objects according to shape. The actual numerical part of the above pair is the morpheme -tin 'one'. If unsure as to the proper prefix, a speaker can employ the general prefix laqa- and be safe. Thus the second member of the above pair is the specific term, 'one place' in contrast to one animal or one person.

ɬqaa 'to scratch'

ɬkaa 'to measure'

In this pair there is again a rather obscure lexical connection. It is possible that in the past measuring was done by placing a measuring unit on the ground and scratching at the end of each unit. If this is true, then this word pair falls in line with the previous ones with the general meaning indicated by q and the derived meaning the more normal, fronted k.

ɬta'qa'la 'flat and thin'

ɬta'ka'la 'board'

This pair is a non-parallel word class, consisting as it does of an adjective and noun. Also the final glottal stop is absent in the adjective. The obvious connection of the two words is evident because of the importance of shapes to Totonacs. The basic member is the adjective used to describe objects that are flat and thin. When boards were introduced into the culture, they conformed to the shape so the variation from q to k with added final glottal indicated the noun 'board'.

The remaining pairs are not quite as numerous and all have been analyzed as having the derived or extended meaning indicated by the q or backed member of the pair.

ɬtoqo 'to stir'

ɬtuku 'to prick, to string'

This pair was discussed previously in connection with the related set in Group A. The meaning 'to prick' is basic.

staqa 'raw, unripe'

staka 'to grow'

Here is another non-parallel word pair, an adjective again but this time paired with a verb. The basic meaning would appear to be that of 'growing'. The later development would be the q word because of the undesirability of eating an unripe fruit or food in a raw state when customarily it would be cooked.

sqa'ta 'to brace with a
wedge'

ska'ta 'to learn'

This word pair has the least relationship of all lexically. The logical explanation would be that learning in any culture is advantageous. The more knowledge a person has, the easier it is

to rise to a more prestigious position. The learning is a "wedge" to give one a firmer position in society. The fronted member is basic.

a'qaloqot 'horn'

lukut 'bone'

In the first member of the this pair the prefix a'qa-, referring to the ear, has a q which could be strong enough to cause the k of the 'bone' morpheme to be backed in concordance. This would require further study as to how many syllables can be controlled by such backed consonants. A horn is literally 'ear-bone' and the relationship of the words is obvious with 'bone' being the basic form and 'horn' being derived.

There is one final example of fronting/backing alternation with an entirely different morpheme. The word for 'hot' referring to temperature of water, food, etc., is či'či. Its companion is the word for 'lukewarm' and is ɕi'ɕi. Lexically this pair falls into Group A with the difference being one of intensity, but the progression from sibilant to fricative to indicate this has been reversed. Some fronting of the č has been observed in baby-talk (adults to babies) and has even carried over to Spanish in the word 'chiquito' (small) which would be pronounced in Totonac ɕikito. No other examples of this kind were found in the dictionary.

FOOTNOTES

¹Totonac has a three vowel system: i, a, u. Contiguous to the backed consonants q and j the quality of the vowels i and u is so modified that they approximate the e and o of Spanish and are written as such whenever they occur in this position. They are not, however, identical to e and o and are not actually vowel phonemes in Totonac.

²It seems that the ɛ form is the basic one and the ø form is a derived word for this "colorless" color term. Color studies indicate that before the Conquest (and even until the present in some Indian languages of Mexico) only red, yellow, green, black and white were named. The distinctions in Spanish which name blue as opposed to green, purple as opposed to red, orange (and brown) as opposed to yellow, as well as a color term for gray, evidently gave rise to new color words in some of the Indian languages. In some cases Spanish words were borrowed in their actual forms, in other cases the Spanish words were changed to conform to the phonology of the Indian language, and in yet other cases, new words appear to have been formed. This latter explanation might explain the 'bruised'/'blue' set.