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SPANISH LOANWORDS IN ACOMA: II*

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- 4.2. Loanwords with special comment
- 4.3. Dubious forms
5. Interpretation of the substitutions
6. Integration of Spanish loans in Acoma

4.2. A number of words need special comment either because of their form or meaning.¹²

Apaches, Comanches. These words might be from English. However, if they were, we would expect *ʔapéči and *kaménči. At least one speaker has made an equation be-

* Part I, IJAL 25.147-53 (1959).

¹² Material is quoted from the following sources: COCHITI (a Rio Grande Keres language), from my own field notes; SANTA ANA, SAN FELIPE, SANTO DOMINGO (Rio Grande Keres languages), Irvine Davis, personal communications; KERES, Robert F. Spencer, op. cit.; TAOS, George L. Trager, (a) The Days of the Week in the Language of Taos Pueblo, New Mexico, Lg. 15.51-55 (1939), (b) Spanish and English Loanwords in Taos, IJAL 10.144-158 (1944); TEWA, Edward P. Dozier, Two Examples of Linguistic Acculturation: The Yaqui of Sonora and Arizona and the Tewa of New Mexico, Lg. 32.146-157 (1956); HOPI, Charles F. and Florence M. Voegelin, Hopi Domains, a Lexical Approach to the Problem of Selection, IJAL Memoir 14 (1957); ZUNI, Stanley Newman, Zuni Dictionary, IJAL, Publication Six of the Indiana University Research Center in Anthropology, Folklore, and Linguistics (1958).

My Cochiti material is unphonemicized and written in a broad transcription. Davis' Santa Ana, San Felipe and Santo Domingo material is phonemic; I have made substitutions in his transcription in order to make it comparable to the transcription used here for Acoma. These three languages have the following features that differ from Acoma: (1) there is no contrast between aspirated and unaspirated affricates; (2) voiceless vowels contrast with voiced vowels and are marked by small capitals; (3) voiced stops are found, principally in loan words, and are marked by small capitals (e.g. /B/ is the voiced stop [b], but /b/ is the voiceless unaspirated stop [p]). We have made some changes in Newman's Zuni orthography; the changes are obvious and need not be listed.

tween the English voiced and voiceless stops and the Acoma unaspirated and aspirated stops; in his words 'Acoma has a b and p' (the speaker knows English very well, but has only a limited command of Spanish). Compare the use of the aspirated consonant in the English loan ʔúwákú·tʔi, *overcoat*.

číšé, a native word for *Apaches*, is preferred by older speakers.

Apple. The final vowel is wrong. In view of the Acoma form, we would expect the Spanish model to be *manzane, or more likely *manzán. Compare Zuni mansan; but Santa Ana, San Felipe, Santo Domingo mansá·na, Taos mons'onu-, Hopi mansá:na.

Apricot. We may not have the proper Spanish model. Cochiti ʔaramigú, Santa Ana ʔarabigú, and the form listed by Spencer, ʔará·pik, shed no light on the problem.

Beet. The initial consonant and vowel are irregular. There are three other examples of an initial voiced stop being replaced by a nasal: *money*, *peaches* and *window*. Possibly all four of these words were borrowed via a Tanoan language, but if so, the language is unidentified. Taos replaces initial /b/ in early Spanish loans with m; but Taos is an unlikely source since it is so far to the north, and none of these words were recorded by Trager with an initial nasal. The Tanoan language of Jemez¹³ has an initial series of voiced nasalized spirants, and hence is a possible source. All the remaining Tanoan languages have initial voiced stops.¹⁴ Compare Santa Ana bidabé.

¹³ This remark is based on a very brief observation of Jemez by the author.

¹⁴ For southern Tiwa (Sandia and Isleta), see George L. Trager, The Historical Phonology of the Tiwa Languages, SIL Vol. 1, no. 5 (1942); for Tewa, see Harry Hoijer and Edward P. Dozier, The Phonemes of Tewa, Santa Clara Dialect, IJAL 15.139-144 (1949).

Cat. Dozier gives *musa* as the 'Spanish form of English *pussy*'. I have been unable to find such a form. However, compare Spanish *micha*, *miza* meaning *cat*, *pussy*. This borrowing is found throughout the pueblo area: Santa Ana, San Felipe, Santo Domingo *mú'sa*, Taos *m'qsi-*, Tewa *mú'sah*, Hopi *mó'sa*, Zuni *mu'sa*. Whorf and Trager give the Uto-Aztecan reconstruction **müsa cat*, *feline animal*¹⁵ without any supporting forms.

Catholic. Mrs. Hansen was not sure of this word. The final syllable has been dropped; compare *apricot*, *court* and *Wednesday*.

Chili. The initial consonant and vowel are not the expected phonemes. Cochiti has *čšrí*, and Spencer lists *čú'r*; the *u* is probably a recording for the high central unrounded vowel. However, Santa Ana, San Felipe, Santo Domingo have a front vowel, *č'ri*. Other pueblo groups show: Taos *c'ili*, Tewa *čidih*, Hopi *cí:li*. Acoma and Cochiti are at opposite extremes of the Keres area; probably the word was borrowed by one Keres pueblo, spread to the other Keres pueblos, and then reborrowed or reshaped at a later date by some of the pueblos.

Coin. *yâ·ri* is equivalent to English *bit*. Thus, *dyû·we yâ·ri two bits*, *dyâ·na yâ·ri four bits* (also *tá·máwákáci sendâ·wa fifty pennies*), *šísá yâ·ri six bits*. *yâ·ri* is never used without one of these three numerals.

Comanches. See remarks under *Apaches*.

Court. The last two syllables are hard to

account for. *-nir-* might reflect the Spanish cluster /*nd*/ with loss of the final /*-nsia*/. Spencer notes that this form is used for *jail* at Santa Ana.

The word refers to a building built by the Spaniards at Acoma.¹⁶

Cow, goat. The final *-ši* presumably reflects the Spanish plural in *-s*. However, we would expect **wá·kasi* and **gárawasi*. Either Acoma borrowed from an eastern Keres language, or the words reflect an older substitution pattern. Compare the forms from the other pueblos: Cochiti *wágáši*, Santa Ana, San Felipe, Santo Domingo *wá·gaši*, Tewa *wá·sih*, Zuni *wa·kaši* (prob. < Acoma), Hopi *wá:qasi* (prob. < Zuni), all meaning *cow*; Santa Ana *gá·bra* (*sgárawaši* is recognized as an 'old word'), San Felipe, Santo Domingo *gárawaši*, Tewa *kavrah*, Hopi *qapí:ra*, all meaning *goat*.

Feast day. The initial consonants are irregular. Perhaps the following vowel cluster conditioned the change.

Foreman. *Mayordomo* in NMSp. means *ditch boss*, and also in most of the Indian languages in which it is borrowed. At Acoma the term has wider use and includes such officials as the one in charge of sheep dipping.

Goat. See remarks under *cow*.

Lard. In an earlier recording from a different speaker I recorded a final *-a*. This may have been an error, but if not, it shows that there is variation in some words from speaker to speaker. Compare also *bullet*, *Comanches* and *drunkard* in which Mrs. Hansen uses two forms that show variation in the final vowel.

Monday. See remarks under *cow* concerning final /*-s*/ > *ši*. Many of the words for the days of the week show irregularities, but no others show *-ši* for final Spanish /*-s*/ (see *Tuesday*, *Wednesday*, *Thursday* and *Friday*).¹⁷ Compare Taos *l'unąsi* (phoneti-

¹⁵ Benjamin L. Whorf and George L. Trager, *The Relationship of Uto-Aztecan and Tanoan*, AA 39.609-624 (1937).

Lawrence B. Kiddle has informed me in a personal communication that he has found the forms [mis, mísi, móso, mósi, miči, mič, miš, miši], all meaning *kitty* in American Spanish. All except [móso] and [mósi] have come from interviews with speakers of American Spanish. Kiddle has found these words borrowed into Indian languages from the pueblo area through Mexico to South America. Almost all the languages of Northern Mexico and the Southwestern United States have borrowed this word with a high back vowel in the first syllable, whereas in other areas of Spanish America the first vowel is most often a high front vowel.

¹⁶ See Matthew W. Stirling, *Origin Myth of Acoma and other Records*, BAE-B 135.1-123 (1942), figure 1, p. 18.

¹⁷ Spencer records *mérikuš* < *miércoles* (*Wednesday*) and *šuwí·piš* < *jueves* (*Thursday*).

cally final [-ši]), Tewa dú·neh. Zuni and Hopi have not borrowed any of the words for the days of the week (or at least they are not recorded) although Zuni has borrowed *domingo* with the meaning of *week*.

Money. Perhaps the change /d/ > n can be explained by assimilation to the following nasal (see *window* and remarks under *beet*). Compare Santa Ana niné·ru.

Ox. The form was recorded in a text by tape from a fifty year old speaker. Mrs. Hansen did not know the word, but the context of the text suggests the meaning *ox*. The word occurs as a borrowing in the nearby pueblo of Laguna.¹⁸

Peaches. The first consonant and first and last vowel are irregular. Compare Cochiti nurási, Santa Ana nurá·sɪ, Santo Domingo durá·sɪ and the Keres form rurá·s given by Spencer. The word does not seem to have been borrowed by the non-Keres pueblos. See remarks under *beet*.

Prayer. The initial vowel may have been influenced by rusá·yu, *beads*.

Soldier. Possibly borrowed from Tewa *sundaroh*; -nd- seems to be the normal Tewa substitution for Spanish /ld/. The only troublesome feature is that all three syllables have the mid tone in Tewa, and the Acoma form reflects the Spanish stress. Compare Santa Ana sundá·ru, and the Keres form santá·r listed by Spencer.

Spaniard. This is one of the earliest borrowings in Acoma. Bancroft finds that the Acomas were using the word *Castillos* in 1598, and says 'so the Span. were generally called by the N. Mexicans. The name is a corruption of Castellanos.'¹⁹ The word is irregular on several accounts, but the most interesting is the substitution of r for the double 'l'; thus we can be sure that the

Spanish of that time had the palatalized [ʎ].

Compare Santa Ana kasdí·ra, and Hopi gastí·la. The fact that Hopi has l instead of r shows that it was not borrowed from Keres but probably was borrowed directly from Spanish, which is surprising since the borrowing had to take place at a very early date. We would expect all early Spanish loans to come into Hopi via an other pueblo since the Hopi had almost no direct contact with the Spaniards in the very early days. The word might have this shape if borrowed from Zuni (Zuni has an /l/ but no /r/), but the form has not been recorded for Zuni.

Sunday. This is the only example of a nasal being dropped before a stop. The borrowing is probably early.

Teacher. Derivatives of this word often show a final a: ?usumé·stá·ni *school*, kusumé·?ésta *student*, súsúmé·sta *I'm studying, going to school*, sísúmé·sta *I taught him*. The vowel could either be from the fem. form *mestra*, or could be another example of /o/ > a. The second syllable -su- in the derivatives is perhaps from Spanish *su*, third person pronoun.

Thursday. The substitution of ʃ for /x/ is irregular. Spencer says 'Spanish j (x) becomes Keresan h and š [read ʃ?] the latter appearing more frequently before stressed vowels.'²⁰ But note *box*. Probably /x/ > ʃ in earlier borrowings. Spencer also records ká·š < caja, *box* (read gá·ša?).

Wednesday. The /le/ of the Spanish has been dropped. Spencer gives mérikuš (read mérikuši?); but Santa Ana has mégurišɪ.

White man. The loss of the initial vowel is irregular. But compare Jemez beliganu,²¹ Tewa merikanu,²² Zuni melika (Newman derives the word from English, perhaps cor-

The final -š is probably to be taken as -ši. Santa Ana has rúnišɪ *Monday*, mégurišɪ *Wednesday*, but wíbišɪ *Thursday*.

¹⁸ John Menaul, *Laguna Indian Translation of Mc Gufeyf's [sic.] New First Eclectic Reader*, Laguna, New Mexico (1882).

¹⁹ H. H. Bancroft, *History of Arizona and New Mexico, 1530-1888*; San Francisco (1889), p. 138.

²⁰ Op. cit., p. 145.

²¹ Wilfred William Robbins, John Peabody Harrington and Barbara Freire-Marreco, *Ethnobotany of the Tewa Indians*, BAE-B 55.1-188 (1916), p. 117.

²² Ibid.

rectly). Perhaps compare also Tonkawa melikan.²³

The model may be the Spanish masc. form thus representing another example of /o/ > a.

Window. See remarks under *beet* and *money*. Compare Santa Ana bendá'na.

4.3. A number of words require comment either because we suspect or other writers have suspected a Spanish origin.

?ámu *love*. Spencer derives the word from the Spanish verb amar *to love*. This may be correct, but it is possible that the word is native and the resemblance is chance. The word is conjugated by an auxiliary verb, e.g. ?ámú'sí *I love her*. Compare the derivative ?ámú'ma-si'ça *I prayed*. If the word is borrowed from the Spanish verb, it would have to be from the inflected form amo *I love*.

?añé·ruci *musical instrument* (non-Indian, as violin, piano, etc.), zañé·ruca *he played a musical instrument*. The gloss suggests a foreign origin; also the sequence -me- is rare in native words.

guwá·ku *chicken, rooster*. Possibly from Spanish guaco *prairie chicken*, though the glottalized w suggests the resemblance is chance. But compare Hopi kowá:ko. The word is not found in eastern Keres.

hánči, some kind of Mexican dance or round dance. The word is undoubtedly borrowed because of the nasal cluster, but I have not been able to find the Spanish model. We would expect the Spanish word to be *janche.

kanú·wi *boat, ship*. Spencer suggests Spanish canoa, but the final syllable could be accounted for more easily by English canoe.

karaníu *stud horse or bull*, karaníu-či'ça *he (horse, bull) is sexually aroused*. The form is certainly from Spanish but I have been unable to locate the model.

pecú·t'ri *pig, hog*. From Nahuatl pitzotl.

²³ Harry Hoijer, *An Analytical Dictionary of the Tonkawa Language*, UCPL 5.1-74 (1949). Hoijer also derives the word from English.

The presence of the dental affricate rather than the palatal affricate indicates that the form was borrowed directly from Nahuatl rather than through Spanish. Compare Santa Ana, San Felipe, Santo Domingo bicú·dri, Tewa pe'cureh, Hopi picó:ti, Zuni picu·ti.

pisá·ri *blanket, rug*. Spencer gives the Spanish word pisar but I have not been able to find such a form. The model may be a derivative of NMSp. piso *door mat* (pisito *small rug*); or from frazada *blanket* (the vowels are wrong in this form). Compare Santa Ana bisá·ri, San Felipe, Santo Domingo bísari, Taos pis'olo-, Hopi pösá·la, Zuni pisa·li (prob. < Acoma).

sárámpi, the name of a Kachina dancer.²⁴ The nasal cluster points to a foreign origin, either Spanish or a non-Keres Indian language. The two tonal accents would seem to rule out Spanish as the source.

tudá·ci *priest*. Spencer records the form totá·č and adds 'According to Parsons, this term, in common use among the Keresan Pueblos derives from Nahuatl totatzin *Reverend Father*.'²⁵ Santa Ana has dudáči. The Acoma form (and also the Hopi totá·ci) probably came directly from Nahuatl Indians who accompanied the early Spanish missionaries and soldiers, since if the word came via Spanish we would expect č and the falling accent. The Hopi glottal stop is probably to be compared to the Acoma glottal accent. The Santa Ana form, and the form recorded by Spencer were probably borrowed through Spanish.

wá·kə *Rocky Mountain bee plant*. A word of similar phonetic shape is found throughout the pueblo area²⁶ and Spanish guaco is probably borrowed from a pueblo language.

wí·ski *whiskey*. Either borrowed directly

²⁴ See White, op. cit., p. 79 (no. 34).

²⁵ Op. cit., p. 138.

²⁶ Leslie A. White, *Notes on the Ethnobotany of the Keres, Papers of the Michigan Academy of Science, Arts and Letters* 30.557-568 (1944; published 1945), p. 559.

from English or from NMSp. güisque (<Eng.).

5.0. Most Spanish phonemes have more than one correspondence in Acoma. There are several reasons for this: (1) Often the environment conditions the reflex of a Spanish phoneme in Acoma. (2) There are several chronological layers of borrowings and we can assume that the rules for substitution were not always the same. (3) Some words were borrowed indirectly from Spanish via a neighboring pueblo, thus reflecting a different set of rules of substitution. (4) There have been at least two dialects of Spanish in New Mexico during the last three hundred and fifty years. It has not always been possible to isolate these various factors, especially when we only have three or four examples of a given phoneme or phonemic sequence.

5.1. We have already given the environmental conditioning factors under **3** when such factors were clear. In the following paragraphs we list multiple substitutions that are probably the result, at least in part, of environmental conditioning factors.

There are four examples of nasal substitutes for Spanish initial voiced stops: *beet*, *money*, *peaches* and *window*. In *money* and *window* there is a nasal in the following syllable. However this factor is absent in the word for *beet*, and such an explanation would be rather far-fetched for *peaches*, even though the Spanish model (but not the Acoma form) does have a nasal. In addition, words like *bank* and *Sunday* have a phonetic shape similar to *money* and *window* but fail to show the nasal substitution.

There are a few other multiple substitutions which may in part be the result of conditioning. These are: a and u </o, u/(other than the Acoma a after w); the three accent-vowel length patterns from Spanish stress; and the unaccented e < unstressed /e/. We have noted in **3** that these changes tend to be found in certain environments but general rules could not be made.

Diagram A illustrates a set of conditioned

changes involving consonants, vowels and stress.

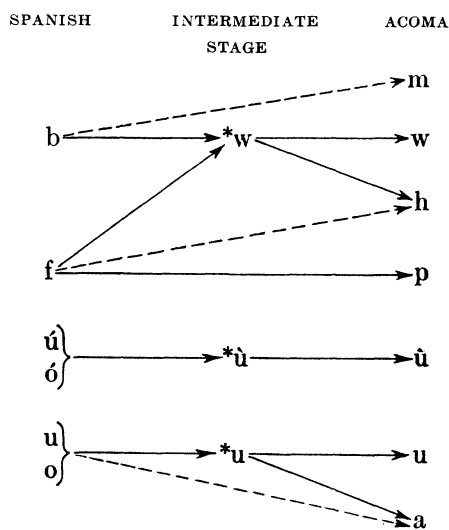


DIAGRAM A

The solid arrows represent regular conditioned substitutions, the broken arrows irregular or unexplained correspondences. The grave accent (') stands for any of the three accent-vowel length patterns. The intermediate stage has no reality but is set up to expedite the restatement of the rules of substitution, as follows: /b/ > *w; and in *beet* and *window* > m. Initially /f/ > p, medially > *w; and in *feast day* > h. /ú, ó/ > *û. /u, o/ > *u; but > a irregularly in some words. Then moving from the intermediate stage to Acoma, the rules are: *wû > hù, *wu > wa, and elsewhere *w > w.

5.21. Haugen, in discussing linguistic borrowing, has stated in effect that the more distorted words are assumed to be the early loans, while those more similar to their model are the late.²⁷ We have been unable to find any diagnostic features that make

²⁷ Einar Haugen, *The Analysis of Linguistic Borrowing*, Lg. 26.210-231 (1950). Haugen's statement on p. 216 reads: "Early loans are assumed to be the more distorted words, while the late are more similar to their models." There is a difference between 'distorted words' and what we have been calling irregular substitutions.

it possible to divide a large number of loanwords into chronological groups. Further, many Spanish words have a phonemic sequence that can be interpreted in Acoma with no accommodation save that required by the allophonic differences of the two languages; for example, Spanish /péra/, Acoma bé'ra *pears* could have been borrowed at any period.

There are three treatments of consonant clusters which presumably reflect different periods of borrowing. The cluster may be simplified, split with a vowel inserted, or retained. Unfortunately there are too few examples of the reflex of any one cluster. /ns/ is split in *apple* and is probably an older reflex than that found in *principal*, *St. Francis* and *St. Lawrence* where the /ns/ cluster is retained. /rk/ is simplified in *Albuquerque* and *apricot* but split in *Wednesday*. (However, we doubt that *Albuquerque* was borrowed before the word for *Wednesday* since the town was not founded until 1706 and did not become an important trading center until sometime later.) /rn/ is simplified in *Friday* but split in *California*. /ng/ is simplified in *Sunday* whereas all other nasal plus stop clusters are retained. The /kr/ cluster is retained in *Christ*, simplified in *sexton*; the similar /pr/ cluster is simplified in *Protestant*. It is very unlikely that *Christ* was borrowed later than *sexton* and *Protestant*, but the word was probably touched up at a later date by more fluent bilinguals.²⁸

Spanish words that end in /-n, -l, -r/ have two treatments in Acoma: (1) the consonant is dropped or (2) a vowel, i or a, is added. Probably those that drop the consonant (*corral*, *Lent*, *prayer*, *St. John*, *St. Stephen* and *song leader*) are earlier than those that add a vowel (*bacon*, *beet*, *box*, *captain*, *coin*, *fiscal*, *hunter*, *mattress*, *melon*, *million*, *pie*, *principal*, *ribbon*, *sexton*, *sheep herder* and *train*), but we can offer no suggestions as to what factors have operated

to produce the variation in the final vowel when the consonant is retained.

Final /-s/ > either -ši or -si. The loans with -ši, *cow*, *goat* and *Monday*, may show older patterns of substitution. Kiddle reports (personal communications) that the /s/ in early American Spanish (and some current dialects) was a retroflex concave with a broadened contact of the tip.

č is found in two words, *chili* and *spoon*, where ž is expected. These words are probably older than *curly*, *Matachina*, *mattress* and *pig* (see 4.2 and 6.1).

Stressed /í/ > ə in two loans, *chili* and *Spaniard*. Both words have other features that mark them as either old Spanish loans or as interueblo loans.

There are a number of other words which show distortions of various kinds that are probably early. *Goat* shows a metathesis of the consonant cluster as well as final -ši for /-s/. *Court*, *Catholic* and *Wednesday* show reductions in the final syllable or syllables. *Thursday* has ʂ < /x/. *Peaches* and *Spaniard* are irregular on several points.

5.22. Trager has divided all the Spanish loanwords in Taos into three chronological groups but adds that "the separation is made in . . . [some] cases, I must admit, on the basis of the meaning of the words rather than from their form"²⁹ In the present study we have grouped into different periods only those words for which we have evidence based on form. While the results are not as neat or all-inclusive as Trager's, the material should be of more value to the historian and ethnologist. However, in two instances (*Christ* and *Albuquerque*) we have rejected the formal evidence for historical reasons; these examples thus serve to remind us that the formal evidence alone is not always conclusive.

In the first few years of contact, presumably before the mission period, the Acoma probably borrowed such terms as *chili*, *peaches*, *cow*, *goat*, and *Spaniard*.

²⁸ See Haugen, op. cit., p. 216.

²⁹ Op. cit., p. 153.

Words for the days of the week were borrowed early, as in Taos. Some religious terms, as *Lent*, *prayer*, *St. John*, *St. Stephen*, though early do not seem to be among the earliest terms. They were probably borrowed after the establishment of the mission in 1628. Words for plants and animals were borrowed in all periods, while terms for material objects (as *bacon*, *box*, *coin*, *matress*, *ribbon*, *train*) were borrowed in later periods. Most of the titles for officers seem to have been borrowed later than some, if not most, of the religious terms.

5.3. We have indicated in **4.2** which words may have been spread by interpuablo borrowing and in **4.1** and **4.2** which words seem to reflect Spanish dialectal differences. We can be sure that many of the problem forms could be explained if we had fuller records of the loanwords in other pueblo languages, especially the Rio Grande groups where Spanish activity was concentrated. The only list available for a Rio Grande pueblo is Dozier's for Tewa, and that appears to be incomplete.³⁰ It would also be desirable to have more information about New Mexico Spanish. Some of the words that seem to show /o/ > a in final position might have been borrowed from forms that have changed gender in New Mexico Spanish. This explanation is most unlikely in the words for *bishop* and *bull*, but is at least plausible in such words as *hour*, *gold* and *spoon*. Trager notes a similar problem in the Taos word for *oats*.³¹

6.1. One new phoneme, *ž*, seems to have been introduced into the Acoma phonemic system as a result of Spanish contact. *ž* is found in only one non-Spanish word, *ží·ží·*, address form for sibling of the opposite sex. The term has not been reported as a kinship

term for any of the other Keres pueblos³² nor do any of the non-Keres pueblos have such a form. Thus it would appear to be an innovation. It is quite possible that the form originated in 'baby talk'.³³ The term fills a gap that would otherwise exist in the Acoma kinship system,³⁴ and is of the same general shape as other baby words, such as *yá·yá·* *mama* (compare Hopi *yí·yí·*), *dyá·dyá·* *daddy*, *má·má·* *carry me*, *ʔámaʔáma* *I want to go to the toilet*. If the term was borrowed from baby talk it probably would not be borrowed with a new phoneme. Specifically, it must have been borrowed from baby talk after the phoneme *ž* had been introduced in Spanish loanwords. Additional evidence that the phoneme is new is found in the morphophonemic system: in place of the expected **ž-č* alternation there is a *dʷ-č* alternation.³⁵

Spanish loanwords have introduced some changes in the distribution of the phonemes. In native words, only the sibilant plus stop type of cluster is common, and the sibilant plus affricate cluster is found in one morpheme. The new nasal clusters can be interpreted as an extension of the existing

³²Elsie Clews Parsons, *The Kinship Nomenclature of the Pueblo Indians*, AA 34.377-389 (1932).

³³Parsons records the term in Laguna as a 'nursery term' (Laguna Genealogies, Anthropological Papers, American Museum of Natural History, 19.168, pt. 5 [1923]).

Baby talk is recorded in Hopi by Mischa Titiev (Suggestions for Further Study of Hopi, IJAL 12.89-91 [1946]) and Voegelin (op. cit., p. 50), and in Comanche by Joseph B. Casagrande (Comanche Baby Language, IJAL 14.11-14 [1948]). Baby talk in Comanche, as described by Casagrande, is very similar to Acoma, both in regard to use and phonetic characteristics of the words.

³⁴See Barbara H. Mickey, *Acoma Kinship Terms*, SJA 12.249-256 (1956). Mickey (p. 252) states "It seems more probable that in view of the importance of reciprocity in the terminological relationships, the self-reciprocal term [*ží·ží·*] belongs to the older system." Other interpretations are possible; see Wick R. Miller, *Some Notes on Acoma Kinship Terminology*, SJA 15.179-184 (1959).

³⁵The phonemes *dʷ* and *tʷ* also alternate.

³⁰Robbins, Harrington and Freire-Marreco (op. cit., p. 108-117) give several items not listed by Dozier. This is surprising in light of the fact that Dozier is a native speaker of Tewa.

³¹Op. cit., p. 147.

pattern. The distribution of the nasal clusters, however, is not as free as that of the sibilant clusters. The nasal clusters are not found in initial position and the stop is never glottalized. We have no examples in our corpus of *ng* or *nʒ*. The other clusters (*ns*, *gr*, *hy*) are anomalous.³⁶

Other innovations include the use of *r* in initial position and the addition of a new allophone of *n*, namely [ŋ], in the cluster *nk*.

6.2. Only a limited part of the Acoma phonemic system is used to render Spanish words in Acoma. Glottalized consonants are not used in loans, nor are the dental and retroflex affricates. Unaspirated and aspirated stops and affricates are, for the most part, limited to accented and unaccented syllables respectively. The tonal accents and vowel cluster combinations are limited.³⁷

Acoma speakers tend to interpret the Spanish phonemic system in terms of their own system. This is a feature characteristic of language contact and has been noted by many linguists.³⁸ We find it useful to distinguish four general types of interpretations: (1) Retention (/A B C/ > /a b c/ or /x y z/). The system of the source language is kept intact, though there may be phonetic changes. (2) Over-differentiation (/A B C/ > /a b c/ and /a¹ b¹ c¹/). Over-differentiation often results when the source language groups two sounds into allophones of one phoneme while the borrowing language groups the same two sounds into two phonemes. But this is not always the case, as our material illustrates. (3) Under-differentiation (/A B C/ and /A¹ B¹ C¹/ >

/a b c/). (4) Loss of pattern (A B C/ > /a q z/).³⁹

Since Acoma has three series of stops and Spanish two, Acoma could retain this part of the Spanish system. But as a matter of fact only the voiceless series of Spanish is retained and then over-differentiated in Acoma, i.e., is split between the aspirated and unaspirated series. This fact is hard to explain. Aspirated stops (and affricates) are not found after the last tonal accent in a word (thus the substitution of *k* for /k/ in *cow*). But the unaspirated stops are found in unaccented syllables if there is a following accent (thus **g* instead of *k* could occur in *basket*, *box*, *bucket*, *bullet*; **b* instead of *p* in *pie*, and so on).

The Spanish voiced stops lose their patterning in Acoma, i.e. /b, d, g/ are usually reflected by *w*, *r-t*, *g-k*. This is not surprising since Acoma has no phonemes that are phonetically comparable to the Spanish voiced stops. The pattern of the Spanish sibilants is also lost in Acoma, for /f, s, x/ are usually reflected by *p-w*, *s-š*, *h-š*. The Spanish nasals and semivowel are retained fairly well, but /r, r¹, l/ all fall together since there is but one Acoma liquid. Only two of the consonant cluster types are consistently reflected in Acoma, namely the nasal and sibilant clusters.

Both Spanish and Acoma have a five vowel system, but the distinctive features of the back vowels are different. As a result Acoma retains the Spanish patterning for all the vowels except the back vowels. Spanish stress is reflected by Acoma vowel length and tonal accent but with over-differentiation since Acoma has three patterns that are roughly similar to Spanish stress.

6.3. Many of the Spanish loanwords have

³⁶ The cluster *sw* is found in the English loan *swê:ra*, *sweater*.

³⁷ These remarks do not apply to derivations that show morphophonemic alternations (see 6.3).

³⁸ Haugen, *op. cit.*; Weinreich, *op. cit.*; and many others. Weinreich also used the terms 'over-differentiation' and 'under-differentiation' but in a somewhat different sense (p. 18-19). See also Weinreich, On the description of Phonic Interference, Word 13.1-11 (1957).

³⁹ These four types are adequate for the examples of the interpretation of Spanish in Acoma. One additional type listed by Weinreich, 'reinterpretation of distinctions', is not found in our material.

been found in derivatives which undergo morphophonemic changes. It is interesting to see how these loans are treated.

We have noted the alternation between aspirated and unaspirated stops. When such an alternation occurs the unaspirated stop must be taken as basic. In *gú·wá·čugú* *he stuck out his tongue* and *káčəka* *he smoked* the third person prefix is *g-*, the unaspirated consonant being basic; but in *tú·wá·čugú* *I stuck out my tongue* (dubitative) and *táčəka* *I smoked* (dubitative) the aspirated consonant must be taken as basic in the prefix. The stops in loanwords show both treatments but we have too few examples to offer any explanation as to why this should

be so. Thus the *g-k* alternation in *tamí·ku* *Sunday*, *támí·gú·zé* *on Sunday* shows that the stop is morphophonemically unaspirated. On the other hand, there is no alternation in *mê·stu* *teacher*, *ʔusumé·stá·ni* *school*, *susumé·stá·ní* *when I was in school* ⁴⁰ (compare *súwakə* *I got dressed*, *ʔúwágəni* *clothes*, *súwágəni* *when I got dressed*) and the stop is morphophonemically aspirated.

The accent ablaut and alternation between glottalized and unglottalized sonorants have also been illustrated in the examples given above.

⁴⁰ The fact that the stop is part of a sibilant cluster makes no difference in the morphophonemic alternations.