PHONEMES OF THE IGNACIANO LANGUAGE

WILLIS AND REBECCA OTT

1. INVENTORY

There are fourteen consonant phonemes in Ignaciano[1] /p t k ƀ s š ¢ č
m n ñ ř ʔ h/; one semiconsonant /y/; and four vowels /i u ɛ a/.

2. CONSONANTS

The consonants include stops, fricatives, affricates, nasals, vibrant, and
glottals.

The stops /p t k/ are voiceless and contrast at three points of articula-
tion: bilabial, alveolar, and velar. Stops tend to be lenis word initial
except when in stressed syllables. *mapa* 'bee', *mata* 'armadillo', *tamutu*
'all, every', *tamuku* 'dog'.

Fricatives /ƀ s š/ contrast at bilabial, alveolar, and alveopalatal points
of articulation. The bilabial is the only voiced fricative, and with some
idiolects, may occur as a voiced stop. /ƀ/ has a variant [w] which occurs
before /a/, [ƀ] occurs only before /e/ and /i/: *biti* 'we', *beke* 'water hole',
bařu 'parrot'.

The alveolar and alveopalatal fricatives are grooved. The alveopalatal
fricative has been found only in a few words: *bayušiřiki* 'grasslands
quail', *šípu* 'young girl', *šéna* 'title used by older women for younger wo-

men'. However, it contrasts with the corresponding alveolar phoneme: *sipu* 'turtle', *šipu* 'young girl'.

The affricates /¢ č/ contrast at alveolar and alveopalatal points of articulation. Examples are given, showing contrast with other alveolar phonemes: *tiei* 'red', *títibe* 'sweet', *íti* 'blood', *iei* 'howler monkey', *miši* 'cat', *kataisisi* 'evil spirit', *nueueu* 'my elbow', *čuči* 'small parrot'.

The nasals /m n ñ/ contrast at bilabial, alveolar, and alveopalatal points of articulation: *mabasa* 'his town (man speaking)', *nabasa* 'my town', *nimařařakaʔi* 'I am gazing', *ñimararakaʔi* 'he is gazing (woman speaking)'.

There is one vibrant, the flapped alveolar /ř/. It never occurs word initially: *biři* 'cascabel', *yaře* 'Come!', *tiřa* 'older sister'.

There are two glottal consonants, the stop /ʔ/ and fricative /h/: *upaʔi* 'a wild fruit', *upahi* 'duck'. Note also the contrast of the glottal stop with the velar stop: *apiʔi* 'two (clay jars)', *apiki* 'two (teeth)'.

Though contrastive, the glottal consonants behave quite similarly in rapid speech. In the unstressed syllables of rapid conversation, both the stop and the fricative become so lenis they appear to be lost. Since there are no identical vowel clusters in Ignaciano, a word such as *tahaʔa* 'what?' may become considerably shortened in the question 'what do you want?' *tahaʔa + pibařaʔa > tapibařaʔa*. In the event of the loss of the /ʔ/ or /h/ between non-identical vowels, the second vowel becomes an offglide of the first, which is always stressed: *tahina* 'there is nothing', *taˡna nuřiřiču* 'there is nothing (wrong), I am fine'.

The semiconsonant /y/ is alveopalatal. The consonant-vowel patterns of Ignaciano permit vowel clusters in any position except word initial. The prevailing pattern is CV (see 5). Because of this pattern pressure [i] in consonant position is interpreted as /y/: *yupi* 'candle', *yati* 'night'.

We cannot leave the discussion of consonant phonemes without mention of those that have entered the language through Spanish words. These borrowed consonants are /f/; the variant [b] of the phoneme /b/; /d/; the variant [ŋ] of the phoneme /n/; and /l/. These are found in such words as (Spanish phonetically written in brackets): *baŋku* [baŋko] 'bench', *siŋkuki* [siŋko] 'five'; *fluře* [floř] 'flower', *labřiyu* [ladřilʸo] 'brick', *siye* [silʸa] 'chair', *dieki* [dies] 'ten'. Note the new pattern of consonant clusters, which are practically nonexistent in Ignaciano. Other interesting examples of borrowings: *ařube* [adobe] 'sun-dried mud brick' and *huřuma* [ořma] 'large clay pot for refining cane sugar'.

3. VOWELS

There are four vowels /i u e a/ in Ignaciano, contrasting in high and low, front and back tongue positions. The high front /i/ optionally varies to [ɪ] when following /a/. The high back vowel /u/ is rounded and optionally varies as low as [o] with some speakers. With some speakers the lower front vowel, /ɛ/ optionally varies upward to [e]. It also optionally varies backward toward a central mid-vocoid [ə] in word final syllables, which are unstressed. As the lower back /a/ (very comparable to the sound of Spanish /a/ phoneme) also optionally varies upward to this same allophone [ə] in other unstressed syllables with the same speakers, it is sometimes difficult to differentiate these two phonemes in their rapid speech.[2] Examples of vowel contrasts:

/i/ and /ɛ/: *biti* 'we'; *bitɛ* 'bat'.
/i/ and /u/: *baʔi* 'no'; *nubaʔu* 'my hand'.
/i/ and /a/: *kihařɛ* 'smoke'; *kahařɛ* 'cotton'.
/ɛ/ and /a/: *ačɛnɛ* 'road, path'; *ačanɛ* 'a person (undefined)'.
/ɛ/ and /u/: *nuñaʔɛ* 'my waist'; *nunaʔu* 'my forehead'.
/a/ and /u/: *tata* 'sir'; *tatu* 'treesap'.

Voiceless vowels have been observed in phrase final positions, though infrequently. Complete analysis has not yet been made, but it appears to be a phonetic feature of optional variation.

[čukulatɛhI ~ čukulatɛhi] *čukulatɛhi* 'chocolate grove'.

4. STRESS

In Ignaciano, stress is phonemic: *máyusi* 'pineapple', *mayúsi* 'he shot (at something) (man speaking)', *númama* 'my skin', *numáma* 'my chin'. Though unpredictable in many words, the general stress pattern seems to be that the primary stress most frequently falls on the second syllable and that secondary stress most frequently falls on the penult.

5. SYLLABLE PATTERNS

The following types of syllables occur in Ignaciano: V *a.p í.na* 'two'; CV *tá.si.ʔa* 'then'; CVV *káe.řea.na* 'camotes'. A word may consist of

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[2] For an example of similar phenomena in another language see: William, Shipley, "The Phonemes of Northeastern Maidu", *IJAL*, Vol. 22, No. 4 (Oct. 1956), 237.

as many as thirteen syllables. CV is the most common syllable type: *nu.ti* 'I', *ti.ẹi* 'red', *pe.ti* 'house'.

A syllable pattern rare in Ignaciano is the CVC. It is found in only three words: *nes.ta.pai.ka* 'I fall', *nes.ta.ka.bi.ya.ře* 'I will whip you', *suí.pis.ta.ka.pa* 'she pressed (them) together'. Note that in all three cases the syllable-closing consonant is a sibilant, ocurring before the homorganic stop.

All vowels are found in word initial, medial and final positions. All consonants may occur word initially except the vibrant /ř/ and the glottal stop /ʔ/. All consonants may occur in any syllable, word-medially and word-finally. As we have already noted, there are no word-final closed syllables, therefore no final consonants.

Because of the very infrequent occurrence of /š/ (see 2), nothing systematic can be said of its phonemic distribution.

The syllable type with the vowel cluster constitutes one of the most interesting aspects of the phonemic structure of Ignaciano. This syllable type with the double vowel nuclei (CVV) has two phonetic patterns. These are:

1. The nucleus with the vowel /a/ preceding the other vowel. /a/ carries the stress and the second member of the nucleus is an offglide. Examples: *taⁱ.ñe* 'pest', *naᵘ.řa.pe* 'paddle', *kaᵉ.ře.na* 'cooking banana'.

2. In all other nuclei the first vowel is shorter than the second, whether the syllable is stressed or not. It is interesting to note that when the first vowel of a syllable nucleus is /i/ or /u/, and immediately follows one of the stops /p/, /t/, or /k/, the following phenomenon occurs – /i/ sounds phonetically like palatalization and /u/ sounds phonetically like labialization: *pⁱa.ma* 'Give (me!)', *tⁱu.ři.pa* 'It's okay', *pᵘi.ti* 'now', *ta.mu.tᵘi.pa* 'that is all', *yu.kᵘa.na* 'fires'.

All four vowels occur in every syllable type with this restriction: /ɛ/ does not occur before /i/. All vowels may precede or follow any of the consonants in any position, with these exceptions: /b/ never occurs before /u/; /y/ never occurs before /i/; /ř/ and /ʔ/ never occur word initially.

All vowels may precede all consonants in word medial position without apparent restriction.

In initial position in words beginning with a vowel, the following has been noted:

/i/ never occurs before /ʔ/.

/a/ never occurs before /¢/.

/u/ never occurs before /s/, /m/ or /h/.

SAMPLE VOCABULARY OF THE IGNACIANO LANGUAGE

1.	man	/aháiřa/	34.	fish	/híma/
2.	woman	/ɛsɛ́na/	35.	tongue	/nunɛ́nɛ/
3.	people	/ačánɛ/	36.	mouth	/nuháka/
4.	husband	/suíma/	37.	lips	/nučɛ́ya/
5.	wife	/nuyɛ́na/	38.	tooth	/náʔɛ/
6.	father	/táta/	39.	nose	/nusíři/
7.	mother	/mɛ́mɛ/	40.	eye	/núkiʔa/
8.	baby, infant	/amúya/	41.	ear	/nučáka/
9.	old man	/ičábika/	42.	head	/nučúti/
10.	water	/únɛ/	43.	forehead	/nunáʔu/
11.	river	/kahákuřɛ/	44.	hair	/nučutímaka/
12.	house	/pɛ́ti/	45.	chin	/nupáni/
13.	roof	/pɛtimáikɛʔɛ/	46.	beard	/numáma/
14.	fire	/yúku/	47.	neck	/nupíkɛnu/
15.	firewood	/yukúki/	48.	stomach	/námi/
16.	ash	/ȼimápa/	49.	back	/nučɛpa/
17.	smoke	/kihářɛ/	50.	shoulder	/nuhíʔu/
18.	sky	/anúkɛʔɛ/	51.	arm	/nupábaki/
19.	rain	/tikíba/	52.	upper arm	/nunaʔɛpabaki/
20.	sun	/sáčɛ/	53.	elbow	/nuȼúȼu/
21.	moon	/káhɛ/	54.	hand	/nubáʔu/
22.	star	/hařáiřiki/	55.	finger	/nubáuki/
23.	thunder	/tiřúřɛka/	56.	fingernail	/nuhípaña/
24.	lightning	/tɛřámɛka/	57.	leg	/nupáikɛ/
25.	rainbow	/áʔɛ/	58.	knee	/nupúyu/
26.	day	/sáčɛmuʔú/	59.	shin	/nuȼánaki/
27.	night	/yáti/	60.	foot	/níwapɛ/
28.	earth	/mátɛhi/	61.	toe	/níwaki/
29.	tree	/yukúki/	62.	skin	/númama/
30.	leaf	/tapákahi/	63.	bone	/yápɛ/
31.	root	/tapářɛ/	64.	blood	/íti/
32.	canoe	/pakúřɛ/	65.	heart	/nusámuřɛ/
33.	paddle	/náuřapɛ/	66.	lungs	/taháha/

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