## 2. Phonology

### 2.1 Segments

Iloko has fifteen native consonantal phonemes, and a glottal fricative used in loanwords and one native word, haán 'no', the colloquial variant of saán. Fourteen of the consonants (all but the glottal stop) may appear geminate in roots, e.g. lawwalawwá 'spider', tengngá 'center', ballá 'crazy', saibbék 'sob', saiddék 'hiccup', sayyét 'immodest lady', and bannáwag 'dawn'. The glottal stop only occurs geminate across morpheme boundaries: agaC-Párak [agaP?á:rak] 'smelling of alcohol'.

Table 1. Iloko consonants

|  | $\pm$ Voice | Labial | Dental | Alveolar | Palatal | Velar | Glottal |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Stops | - | p | t |  |  | k | ? |
|  | + | b | d |  |  | g |  |
| Fricative | - |  |  | s |  |  | (h) |
| Affricates | - |  |  | ts |  |  |  |
| Lateral | + |  |  | l |  |  |  |
| Tap/trill | + |  |  | r |  |  |  |
| Glide | + | w |  |  | y |  |  |
| Nasal | + | m |  | n |  | ng |  |

Stops are unaspirated and, in final position, unreleased. The voiceless velar stop is pronounced quite far back and tends towards slight fricativization before vowels. Unlike in Tagalog, glottal stop does not phonemically appear word-finally. Orthographically, glottal stop is not represented word-initially. Wordmedially, at a morpheme boundary, it is represented with a hyphen. Since in this sketch hyphens are used to indicate morpheme boundaries, word-medial glottal stop at morpheme boundaries will be transcribed here as <?>.

Syllables have mandatory onsets, so the basic syllable structure of the language is $\mathrm{CV}(\mathrm{C})$ : $a b a$ 'taro' [?á:ba], sam Rit 'sweet' [sam.?it]. Consonant clusters occur in both onset and coda positions in foreign loans and recently coined slang expressions which do not follow the native phonological structure: kláts.bag 'handbag ( $\mathbf{f}$. English)', ták.werts 'money (slang, f. kuartá [Sp. cuarta])', and brúha 'witch, sorceress; mythological monster (f. Spanish bruja)'.

The phonemes $/ \mathrm{t} /, / \mathrm{d} /$ and $/ \mathrm{s} /$ palatalize to [ t$]$ ], [d3], and [ $[J]$ before the palatal glide $/ \mathrm{y} /$ or its equivalent ( i + vowel), e.g. siák 'I' [Jak], tián 'belly' [tfan], idiáy 'there' [idzay]. Because of many borrowings from English, Spanish, and colloquial Tagalog where these palatal sounds are not complex phoneme sequences, the phonemic status of [ t$]$ ], [d3], and [J] is open to debate.

All consonants except the glottal stop can appear as onsets phonemically, and all non-glottal or nonpalatalized consonants may occur phonemically as codas. The glottal stop [?] occurs phonetically in words beginning in a vowel, and may surface as a coda phonetically when it replaces a coda $t$ or $k$ preceding another onset consonant: pukráy 'crumbly squash' > [pu?.ráy].

Iloko has four native vowel phonemes $/ \mathrm{i}$, e, a, and $\mathrm{u} /$. The new phonemes $/ 0 /$ and $/ \varepsilon /$ are found only in loanwords. In the northern dialects, the phoneme $/ \mathrm{e} / \mathrm{is}$ pronounced as $/ \varepsilon /$, not differentiated from its pronunciation in Spanish loanwords.

Table 2. Iloko vowels

|  | Front | Central | Centralized Back | Back |
| :--- | :--- | :--- | :--- | :--- |
| High | I |  | e | u |
| Mid | $(\varepsilon)$ |  |  | $(0)$ |
| Low |  | a |  |  |

The high vowel [ u ] is lowered considerably in word-final syllables, and is thus represented in the orthography, e.g. búlo 'kind of bamboo' /bú:.lu/, agsaó 'to speak'/agsaú/; ások 'my dog' /á:su=k/.

Sequences of two vowels other than the diphthongs /ia/, /io/, and /ua/ are pronounced as two syllables, with an intervening glottal stop in careful speech, siit 'thorn' [si.?ft], kées 'crazy' [ké:.Res], bigáo 'winnow'
[bi.gá:.Ro], saán 'no' [sa.1án], and dissúor 'waterfall' [dis.sú:.?or], but: al Paliá 'ghost' [1al.Pal.ya], bagió 'storm' [bag.yó], and luá 'tear of eyes' [lwa].

### 2.2 Stress and vowel length

Stress is phonemic, e.g. siká 'you, familiar' vs. sika 'dysentery'. There, are, however, certain environments that attract stress. Stress falls on the last syllable if the penultimate syllable is closed, i.e., the last vowel is preceded by two consonants (including a sequence of glottal stop + consonant): paltóg 'gun', takki' 'excrement', kulagtit 'jerking movement', tig-?áb 'belch', lis Pá 'nit, lice egg', pugtó 'guess'. Exceptions to this rule include words of foreign origin or words with a velar nasal coda preceding a final syllable: súngka 'kind of native game', bibingka 'rice cake', karámba 'jar' (Spanish loan), kuárto 'room' (Spanish loan).

Stress also falls on the last syllable if the last vowel is preceded by a consonant and glide: sadiá 'renowned', bituén 'star', aniá 'what'. Exceptions include borrowed words: aránia 'chandelier, from Spanish', hópia 'bean cake, from Chinese'.

Orthographic vowel sequences, which comprise two syllables, usually take stress on the first vowel when following two consonants, e.g. manabtúog [ma.nab.tú:.?og] 'thump', kulláaw [kul.lá:.?aw] 'owl'. Words that include two identical CVC sequences separated by a vowel usually will carry the stress on the vowel separating them: salisal 'compete', batíbat 'nightmare', arimasámas 'red skies at moonrise', bugábog 'mixed varieties of rice'. There are, however, a few exceptions: yakayák 'sieve', and pidipid 'closely set together'.

Vowels before geminate consonants and in stressed open (CV) syllables are automatically lengthened: sála 'dance' [sá:.la], babbái 'females' [bà:b.bá:.?i]. Open reduplicated syllables in roots that contain a vowel sequence also bear secondary stress/lengthening : na.ka-bà-bain (POT-RDP-shame) 'shameful'.

### 2.3 Reduplication

Reduplication in Iloko is used for both inflectional and derivational purposes. Formally speaking, there are six possible shapes of the reduplicant with the most common uses given in Table 3. Aside from the consonant gemination found in animate and kin plurals, all reduplicative morphemes in Iloko are prefixal, copying the first part of a given stem (root or prefix+root):

Table 3. Reduplication

| Reduplicant Shape | Use | Examples |
| :--- | :--- | :--- |
| -C- | Animate/kin plurals | laláki 'male' > lalláki 'males' <br> babái 'female' > babbái 'females' <br> ubíng 'child' > ubbíng 'children' |
| CV- | Plural argument | ag-pi-p<inn>a-básol=da <br> AV-PL-CAU<RCP>-blame=3p.ABS <br> 'they are blaming each other' <br> ka-ili-án 'townmate' > kakailián 'townmates' |
| Animate plural | General plurals <br> Imperfective aspect <br> Comparison | kaldíng 'goat' > kalkaldíng 'goats' <br> ag-bása 'read' > ag-basbása 'reading (in the process of)' <br> dakkél 'big' > dakdakkél 'bigger' <br> na-sam?'it 'sweet' > na-samsamPít 'sweeter' |
| CVC- | Lexical iterativity | ag-tilmón 'swallow' > ag-tilmotilmón 'swallow <br> repeatedly' |
| CVC(C)V- | Mutuality | rúpa 'face' > rupanrúpa 'face to, face' |
| CVC(C)V+N- | Lexicalized items | bánga 'pot' > bangabánga 'skull' <br> tukák 'frog' > tukaktúkak 'wart' |
| Full Reduplication |  |  |

Rubino, Carl. 2002. Iloko. In Nikolaus Himmelmann, and Sander Adelaar (eds.) The Austronesian Languages of Asia and Madagascar. London: Curzon Press.

