

#### 4. Orthography

One young man had not attended literacy classes for quite some time. When he did come to the clearing, on occasion he would bring something he'd written. As one of the first literates who had learned to write using the initial orthography, he had a tendency to inconsistently write nasal graphemes.

On one occasion he brought a lengthy account of an encounter with a puma (later printed in Primer #6:32-34). When asked if he would check it after it was typed, he smiled and gave a soft gasp sound signaling consent.

A couple of days later when his composition was given to him, he was not told that in that typed copy nasal consonant graphemes had been substituted by their oral grapheme counterparts. Everything else was as he had written. One example was an introductory word he had overused and written *ñowo* but which had been typed as *yowo*. As he proofread, each time it occurred he stopped, reread and then corrected it to *yöwo* (note: not to the original *ñowo*). Throughout, he did not change any consonants back to a nasal grapheme, e.g., y to ñ or d to n. Rather, as he read, several times he chuckled and commented "I forgot" or "I didn't dot it" (referring to the dieresis nasal marking). In the original, he apparently had used the nasal consonant graphemes to indicate nasalization of the vowel or the syllable, but not as nasalization of the consonants.

Such incidents contributed to the orthography design. The five oral vowels, five nasal vowels (with a dieresis (¨) to indicate their nasalization) and eight consonants of the phonemic inventory make up the present practical alphabet. Waodani respond to what appear to be lengthened vowels as two syllables, therefore they are written simply as double vowels. (See Appendix E.7.) The orthographic symbols with the exception of *æ*, are taken from the Spanish alphabet and therefore found on Spanish typewriter keyboards.

Initially the orthography over-differentiated by including graphemes for both the oral consonant phonemes and their nasal allophones. That orthography was used in the beginning of the literacy program and in the early drafts of literacy

materials. The current orthography does not include nasal graphemes for consonant allophones. (See figure 3.)

The present practical orthography in part came about because pedagogical problems which arose supported the need for a review of the nasal representation. During the early literacy classes, there were indications that students who had made previous attempts to learn to read were experiencing serious difficulties because there appeared to be contradictions in the written form of the language. The problem turned out to be an inconsistency in the form for indicating nasalization. As the alphabet had evolved, there were four ways in which nasalization was cued. Those multiple cues for nasalization were perplexing to the learner during both reading and writing.

Consequently orthographic changes were considered in order that the alphabet more closely reflect the linguistic reality of the language. Further testing done with naive speakers, semi-literates and literates confirmed that the inconsistency was misleading, causing reversals in reading and forcing the learner to look at the language in a way that seemed counter intuitive. For one, it made the influence of nasalization appear to flow in the opposite direction than it did. Also, as Waodani began to write their own compositions, they indicated a tendency and preference for writing phonemically rather than phonetically (i.e., for indicating the independent basic sounds not sound variations dependent upon or resulting from their context).

figure 3: WAODANI ORTHOGRAPHY REVISIONS

INITIAL:

-1972-    æ   a   b c d e   g        i   m n ñ ŋ o   p q u t w y (1)  
           ä   ä                    ë            ī                    ö  
           æn an                    en            in                    on

REVISIONS:

July 1973-    æ   a   b c d e   g        i   m n ñ ŋ o   p q u t w y (2)  
               ä   ä                    ë            ī                    ö

Feb. 1978-    æ   a   b c d e   g        i                    o   p q u t w y (3)  
               ä   ä                    ë            ī                    ö

N.D. 1978-    x   a   b c d e   g        i                    o   p q u t w y (4)  
               x̄   ä                    ë            ī                    ö

Oct. 1978-    e   a   b c d i   g/gu i                    o   p q u t w y (5)  
               ë   ä                    ī            ī                    ö

Nov. 1978-    æ(ǣ) a   b c d e   g/gu i                    o   p q u t w y (6)  
               ä(ǣ) ä                    ë            ī                    ö

SPANISH:

a b c ch d e f g/gu h i j k l ll m n n o p qu r rr s t u v w x y z

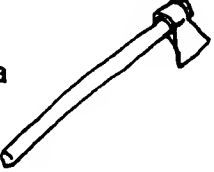




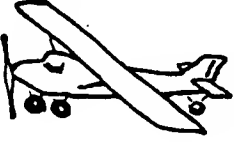


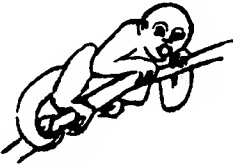

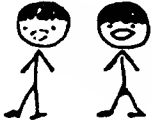
- (1) Nasalization indicated in several ways, ambiguous vowels, overdifferentiated consonants.
- (2) Nasalization standardized as dieresis (¨) only. Completely unambiguous vowels; but redundantly indicated consonants.
- (3) Nasal consonant allophone graphemes omitted; unambiguous, non-redundant.
- (4) Trial use of x for /æ/ (look alikes in Spanish cursive).
- (5) Conformity to Spanish diagraph gu (before i, ī, e, ë) and trial use of e and ë for /æ/ and /æ̃/, and i and ī for /ɪ/ and /ɪ̃/.
- (6) Alternate é introduced as an option when æ is mechanically unavailable; all items unambiguous; non-redundant.








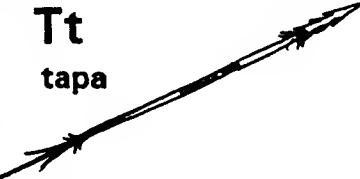



Data supportive to orthographic changes, such as in the *yōwo* ~ *ñowo* example given above, indicated that consonant phonemes which are pronounced differently in certain environments i.e., the allophones, are not considered as different by the Waodani, even though they may be heard as different by non-Waodani. That is, the Waodani see phonetically nasal allophones [m, n, ŋ, ñ] as being akin to or variations of their phonemic oral counterparts /b, d, g, y/, to the extent that only one group or the other need be graphically represented. Put another way, each of these consonants has a predictable alternate variation: {b~m, d~n, g~ŋ, y~ñ}. For example, when the allophone [n] occurs in a word, it may be written as a d, but the reader will intuitively and automatically pronounce it appropriately as an n in certain environments. Or conversely, it could be written as an n and would be pronounced as a d when appropriate. Either way, both forms of the consonants do not need to be written.

Therefore, the linguistic reality of the language supports a phonemic rather than a phonetic practical orthography. That is, in the case of the consonants, it allows for writing only one of the two forms of consonants, either the nasal or the oral set rather than differentiate between basic and alternate forms.† To use both forms is overdifferentiating and confusing for the Waodani and causes inconsistent spelling. Yet for non-Waodani, using only one set is confusing - for them it is underdifferentiation and requires giving attention to pronunciation rules until the phonological system is internalized (figure 4, Peeke 1979:11).

† For example, the English letter t is written one way but is pronounced differently depending upon its initial, medial or final position in a word; tap, patio, pat.

# WAODÄNI TEDEDÖ ... yewæmönë

<p><b>Aa</b> awænca</p> 	<p><b>Ää</b> ämö</p> 	<p><b>Bb</b> baga</p> 
<p><b>Cc</b> coba</p> 	<p><b>Dd</b> dagænca</p> 	<p><b>Ee</b> ebo</p> 
<p><b>Ëë</b> ëmöwo</p> <p><i>Enoi Enwë Äwä Eono Dabo Äwäwäwä Bëi Gampæde</i></p>	<p><b>Ææ</b> æpæ</p> 	<p><b>Ææ</b> æwæ</p> 
<p><b>Gg</b> gatä</p> 	<p><b>Ii</b> iwä</p> 	<p><b>Ïï</b> iñäna</p> 

<p><b>Mm</b> mënedemö</p> 	<p><b>Nn</b> näwäñe</p> 	<p><b>Ññ</b> ñöo</p> 
<p><b>Oo</b> oba</p> 	<p><b>Öö</b> öontoca</p> 	<p><b>Pp</b> poganta</p> 
<p><b>Qq</b> quedemënä</p> 	<p><b>Tt</b> tapa</p> 	<p><b>Ww</b> wao</p> 
<p><b>Yy</b> yawë</p> 		

ISSUES FOR LITERACY MATERIALS DEVELOPMENT IN  
A MONOLINGUAL AMAZONIAN CULTURE:  
THE WAODANI OF ECUADOR

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PATRICIA M. KELLEY

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We accept this thesis as conforming  
to the required standard

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