

On the Form of Chamorro Hypocoristics

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1 Introduction

Chamorro, the indigenous Austronesian language of the Marianas Islands, has hypocoristic forms usually of either one or two syllables in size; I will examine these forms in terms of Prosodic Morphology (McCarthy and Prince 1996). Reconciling both shapes under a single template is the optimal goal, but I will demonstrate tensions inherent in choosing to describe Chamorro hypocoristics as either sensitive or insensitive to quantity, as in either case a self-contradiction results. I further show that extrametricality cannot be invoked (either across the board or 'as an exception-marking device' (Kager 1996)) to salvage the single-template approach. In order to avoid this dilemma, I claim that Chamorro must possess two distinct templates for its hypocoristics.

2 Background

Chamorro is a phonologically well-described language, having been the subject of several scholarly papers (Chung 1983, Crosswhite 1996, Klein 1997, Klein and Harris 2000, Latta 1972, Seiden 1960, Topping 1968, Travis 2000) and otherwise employed as grist for phonologists' debates (cf. Halle and Vergnaud 1987). Additionally a structural description (Topping 1973) and dictionary (Topping et al. 1975) have appeared.

2.1 Chamorro Phonology Overview

The phonemic inventory (in slightly modified standard practical orthography, based on Topping (1973:16 and 27), Topping et al. (1975:xviii-xix) and Chung (1983:36)) is as follows.

Vowels:

Consonants:

i	u	p	t	k		
e	o	b	d	g	gw	'
æ	a		ch			
			j			
		f	s			h
		m	n	ñ	ng	
			l,r			
		w	y			

ch is an affricate often realized as [tʃ] before nonlow front vowels, otherwise as [ts]. Its voiced counterpart is *j*, which shows similar palatal allophony. *ñ* is a palatal nasal, while *ng* is a velar nasal. Apostrophe ' represents glottal stop. I note that Chung (1983) differs from Topping

(1973) and Topping et al. (1975) in considering that a voiced labialized velar stop *gw* is phonemic, and that the voiced palatal approximant *y* is a phoneme in addition to *j*.

Most Chamorro words consist of sequences of from two to four CV syllables (Seiden 1960:16), though intervocalic geminates and two-member clusters are common, as are word-final codas. In the myriad Spanish loanwords, too, clusters are common. Notably, coda consonants in Chamorro are apt to be realized in various places of articulation, and ‘speakers sometimes vary as to the point of articulation which they assign both to these and to nasals: cf. *makmata* or *matmata* ‘to wake up’, and *atman* or *apmam* ‘long ago’ (Chung 1983:38). Nonnasal coda stops are voiceless except when assimilating in voicing to a following obstruent having the same Place feature, e.g. *lepblu* [‘lebbly] ‘book’ (op. cit.:37).

Primary stress, realized as low pitch, falls on the penult as a rule. A small number of native Chamorro words and Spanish loans have antepenultimate stress, and some Spanish loans have final stress; examples will be seen in the names discussed below. Vowels lengthen under primary stress, apparently only in open syllables in penultimate position (Chung 1983:37; for a concise treatment of Chamorro stress, see Chung 1983; a more in-depth view can be found in Seiden 1960 or Halle and Vergnaud 1987:204-216).

2.2 Chamorro Hypocoristic Forms

Nicknaming—presumably including hypocoristic use—is said to be a salient feature of Chamorro culture (Thompson 1947; cf. Northern Marianas Online Encyclopedia 2003). ‘Most Guamanians are known not by their names but by their nicknames’ of various sorts (Thompson 1947:245) and a master fisherman’s nickname, inherited like property by his son, also tended to become the name of his fishing group (ibid.:141). Perhaps reflecting the importance Chamorros place on such matters, my main source of Chamorro hypocoristics, Topping et al. (1975), has about 120 subentries under ‘nickname’ (*fa’na’an*) in its English-Chamorro section. The great majority are clearly hypocoristics, showing obvious phonological relation to the corresponding base forms, as will become apparent. A half-dozen additional hypocoristic forms were gleaned from Pacific Daily News (2004) and from my wife (A. Candaso-Robertson, p.c.). Virtually all base forms involved are names from Spanish.

The most evident commonality among Chamorro hypocoristic forms is their right-edge orientation with respect to their base forms.

(1) (a)	<i>Kin</i>	[kín]	from	Joaquin	[hwa.kín]	
	(b)	<i>Ko’</i>	[kóʔ]	from	Francisco	[fran.sís.ko]
			from	Emelia	[e.mé.l(i.)ja]	
	(c)	<i>Lia’</i>	[lí.(j)aʔ]	or		
			from	Maria	[ma.rí.(j)a]	

Regardless of stress, rightmost syllables are the source for approximately 95% of the hypocoristics.

About 75% of Chamorro hypocoristics are disyllabic and 20% monosyllabic as in (1). The monosyllabic forms are usually (~90%) closed, roughly evenly split between glottal stop and nasal *n* or *ng* codas; it may be assumed that the latter is the place variation already noted in §2.1 for coda nasals. The disyllables usually (~80%) have open σ_1 , another ~15% having σ_1 closed by

(homorganic) nasal; σ_2 is routinely (~83%) closed, and about 93% of the time it is again either glottal stop or place-varying nasal which are the coda consonant.

The remaining 5% of Chamorro hypocoristics are tri- or quadrisyllabic as in (2). Of these, most are clearly lexicalized from formations which are productive in Spanish but not in Chamorro, as in (2b).

- (2) (a) *Pinkile* [piŋ.kí.leʔ] from Pepe [pé.pe] (=José)
(b) *Marikita* [ma.ri.kí.ta] from María [ma.rí.(j)a]

Various phonological alternations occur from source to hypocoristic, but none are crucial to the argumentation of this paper. It is an interesting but peripheral fact that hypocoristics can be formed from other hypocoristics; the Appendix of this paper contains a representative sampling of forms, for reference.

3 Previous Approaches

While Chamorro nicknames have been documented as noted above, hypocoristics as a specific phenomenon do not appear in the literature on this language, e.g. Topping (1973). An ideal source for comparisons might be published analyses dealing with closely related languages of the Philippine area. However, my literature search failed to turn up such work; only a voluminous list of Tagalog ‘nicknames’ (Manuel et al. 1965, which will undoubtedly be useful in future work) was found.

For the most closely relatable analysis I have turned to recently published treatments of Spanish-language hypocoristics, which are widely known and easily obtained, and which deal with more or less the same corpus of source names as found in Topping et al. (1975). Thus Colina (1996), Lipski (1995), Pineros (2000), and Prieto (1992) are also valuable as possible views of the Chamorro data. It should be noted that not all Spanish hypocoristic forms can be compared with those found in Chamorro. For example, left-edge-oriented hypocoristics (the subject of Colina (1996) and Prieto (1992), and much of the material in Lipski (1995) and Pineros (2000) [where they are his ‘Type A’]) are nearly absent from Chamorro.

The right-edge-oriented hypocoristics of Spanish (Pineros’ [2000] ‘Type B’) do resemble, and are sometimes identical to, Chamorro examples, though it appears from Topping et al. (1975) that different subsets of source names are the most common for Chamorro versus Spanish. Lipski (1995), working in a Prosodic Morphology framework, proposes prosodic circumscription (cf. McCarthy and Prince 1995:340-351) as a means of mapping to a disyllabic template for Spanish hypocoristics. Despite its merits (offering the possibility of a unified analysis for all hypocoristics in Spanish), an obvious drawback of this approach is that it renders monosyllabic forms problematic. This already indicates that Chamorro must use distinct processes from those Lipski is trying to represent. Moreover, Lipski’s approach crucially relies on multiple applications of a complicated circumscription mechanism to successively varying strings of segments, without clear motivation as to the choice of string in each case or for the change in string choice from one application to the next. Therefore, while I follow Lipski in attempting a unified analysis for Chamorro hypocoristics, I reject his circumscription-based approach.

Pineros (2000) offers an Optimality Theory-based account of right-oriented hypocoristics, which relies on the constraint HEAD(PWd)MAX (3).

- (3) HEAD(PWd)MAX: *Maximize the head of the PWd*
Every element contained in the head of the PWd ([i.e.] the main-stressed foot) of [the source form] must have a correspondent in [the truncated form]. (op. cit.:75)

This highly-ranked constraint is used to achieve a template defined by primary stress, yet its application to Chamorro would result in generation of unattested forms. As noted in §2.2, Chamorro hypocoristics are essentially insensitive to source-form stress, so that in an OT framework one would have to posit a more-highly ranked Alignment constraint. Another drawback of Pineros' approach for Chamorro is that he explicitly disallows placelessness of word-final consonants (*ibid.*), a serious difficulty given the potential behavior of nasals in any Chamorro coda (cf. §2.1 above). Thus, Pineros' analysis would have to be significantly reworked in order to apply to Chamorro. The preponderance of evidence suggests that Chamorro, while its personal names are nearly all from Spanish, applies its own distinct set of phonological processes in forming hypocoristics from them.

4 Chamorro Template Possibilities

If Chamorro needs an account independent of Spanish for its hypocoristic formation, a number of theoretical approaches are available. I make use of Prosodic Morphology in the following discussion, but as will be seen, certain details must be worked out in the course of determining a Chamorro template. In particular, absent any previously published analysis of Chamorro feet, Occam's razor leads me to attempt a unified-template account for Chamorro hypocoristics. The ramifications of this decision are played out in the sections that follow.

4.1 Quantity-Sensitivity

In §2.2 it was observed that three-quarters of the hypocoristics in Chamorro are disyllabic. It follows from general observations of the language's phonology that disyllables are penultimately stressed, i.e. trochees. What template is to be expected, starting from these facts?

If Chamorro is a quantity-sensitive language, then we expect the foot inventory to consist of LL and H, *pace* McCarthy and Prince (1995:321). Given the putative placelessness of coda nasals, and by extension of coda glottal stop (since the latter is defined in feature matrices as lacking place, cf. Harris and Lindsey 2004), it is a simple matter to term codas nonmoraic and thus confirm that feet containing two light syllables are present. Heavy monosyllables are absent, however: Though single-syllable forms are numerous (cf. §2.2) and are nearly all closed, we have already committed ourselves to viewing their codas—all nasals and glottal stops—as nonmoraic. Except for a few interesting monosyllables containing the diphthong *ai*, no segments present themselves as possible postnuclear morae. The monosyllabic hypocoristics then must be viewed as light syllables, yet L is not a recognized metrical foot type or variant. (Alternatively, the monosyllables might be considered as feet shaped σ , but neither is this foot type recognized in the literature; the only quantity-insensitive Ft is $\sigma\sigma$.)

So perhaps Chamorro's closed σ hypocoristics must be H, with their codas concomitantly moraic. In that case, we still expect the foot inventory to contain LL. Referring again to §2.2, σ_1 is usually open (thus L), but σ_2 is normally closed and thus H in a quantity-sensitive language.

An LH foot must be iambic, if Chamorro is sensitive to quantity, yet $\sigma\sigma$ is virtually absent from the data set. Worse, those disyllables having a closed σ_1 must then be sequences of HH; that is not a foot type either, and is a sequence achievable only by two consecutive feet. This latter represents an undesirable complication, given that most roots in Chamorro are trochaic disyllables, making for a typologically bizarre minimal word.

The presumption of quantity-sensitivity for Chamorro runs into a vicious circle of logic, allowing monosyllables while disallowing attested disyllables, or vice versa. Perhaps, then, this language is not sensitive to quantity.

4.2 Quantity-Insensitivity

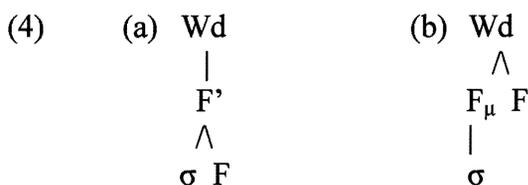
Syllabic feet are an accepted feature of Prosodic Morphology (McCarthy and Prince 1995:321), in that the theory expects $\sigma\sigma$ to be an available template. This accommodates the attested Chamorro syllabic trochee, but the σ forms do not fit that foot shape. Again the difficulty is that no separate monosyllabic quantity-insensitive foot shape occurs in PM. Seemingly a new complication ensues, where in any case two distinct foot shapes must be proposed.

It would be preferable to find a single template for all forms. An idea sometimes advanced to explain penultimate-stress systems such as Chamorro is ‘extrametricality as an exception-marking device’ (Kager 1996). In the case of Polish (op. cit.:380) the vast majority of words have stressed penults, and the rare antepenultimate stresses can be analyzed as cases of final-syllable extrametricality—thus preserving the generalization about stressed penults. For Chamorro’s hypocoristics, however, the disyllables (over three-quarters of the attested forms) would have to be labeled exceptional in having extrametrical syllables, already a suspect claim. Moreover, it is the monosyllabic forms which would have to be considered the template, and in so claiming we lose any inherent motivation with penultimate stress; there is after all no such thing in a single-syllable word.

Under standard sensitivity and insensitivity to quantity, neither a mono- nor a disyllabic template appears to concisely capture the Chamorro facts. An escape from this dilemma has recently been suggested, however, as noted in the following section.

4.3 Weak Layering

To account for ‘a large class of templatic formations which are systematically beyond the reach of...templates’ based on integer multiples of the unit Foot, Itô and Mester 2003 propose Weak Layering. One approach to stray syllables is to add them in X’ fashion to a ‘Superfoot’ (4a) or to isolate them in Degenerate Feet (4b).



This would entail complicating the definition of feet. To maintain economy Itô and Mester provide a range of data suggesting that apparently stray syllables remain unfooted, thus

branching directly from Wd as in (5). Thus the label ‘Weak Layering’: There is no requirement under this analysis for an intervening F node (layer) above a syllable if there is no good motivation for constructing a foot there.

$$(5) \quad \begin{array}{c} \text{Wd} \\ \wedge \\ \sigma \text{F} \end{array}$$

Taking Chamorro σ hypocoristics as (a heavy) MinWd (only thus can there be stray syllables needing to be fitted into the template—albeit in 75% of the forms[!]): σ_2 of the $\sigma\sigma$ forms would need to be considered the unfooted one, because it is unstressed. Paradoxically, however, it is exactly σ_2 which is always the Ft-sized (H) syllable, and is thus unable to be termed a single-mora stray. This is a fatal flaw in the application of Weak Layering to the Chamorro data.

4.4 Simple Penultimate Stress

A quantity-sensitivity analysis having failed (§§4.1 and 4.3), I conclude that Chamorro is indeed insensitive to quantity. Recall that a large majority of hypocoristics in this language are disyllables with penultimate stress. Hayes 1995:204-5 notes, ‘Some typological support for the syllabic trochee analysis can be found in the propensity of penultimate-stress languages to tolerate exceptional words (e.g. borrowings) with antepenultimate stress, as in [numerous languages including] Chamorro... This pre-empts extrametricality for purposes of accounting for the basic stress pattern’. Thus ‘simple penultimate stress’ (loc. cit.) is a reasonable label for the metrical structure of this language. As noted in §4.2, quantity-insensitivity entails the simple postulation of two separate hypocoristic templates in the language, σ and $\sigma\sigma$. We must then apparently accept a novel monosyllabic form as an exception to the overall syllabic-trochee structure of Chamorro.

5 Conclusions

Chamorro hypocoristics, like those in many other languages, offer a view of phonological facts otherwise not easily accessible by the researcher (cf. Appendix). The one- and two-syllable forms reveal a fascinating tension between tendencies toward optimal syllables and toward minimal word-length. Tension exists, too, between simple penultimate stress and the possibility for its main exception, the monosyllable, to contain enough segments to be identifiable as (a) the correspondent of its source name and (b) hypocoristic in meaning (by containing certain characteristic coda segments). As a result of such tensions, which readily suggest a future Optimality Theory analysis, I suggest that Chamorro is quantity-insensitive and that there are two distinct and irreconcilable hypocoristic templates in the language.

Future research might profitably turn to the comparison of Chamorro hypocoristic formations with those of closely related languages. The copious Tagalog data in Manuel et al. (1965), based like the Chamorro ‘nicknames’ on Spanish source forms, would be a good starting point for such a study. I note that published studies of contact phenomena, as in other linguistic subdisciplines, tend to exclude the domain of names, and Stolz’ (2002) otherwise excellent paper leaves open the same gap for Austronesian research. Another particularly promising source of

comparative data could be the Spanish creoles of the Philippines, which are likely to contain elements both of Spanish and of Austronesian phonology.

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Appendix: Representative Samples of Chamorro Hypocoristics¹
Based on Topping et al. (1975)

Monosyllabic:

<i>Hypocoristic</i>	<i>Phonetics</i>	<i>Immediate Source(s)</i>	<i>Ultimate Source (if applicable)</i>
Bai'	[bájʔ]	Chum.bai'*	Jesús
Chong	[tʃón]	Con.cep.ción, Con.so.la.ción, A.sun.ción	
Chu'	[tʃúʔ]	Je.sús	
Ge'	[géʔ]	Mi.guél	
Pai'	[pájʔ]	Jo.sé.fa	
Ton / Tong	[tón / tón]	An.tó.nio	

Disyllabic:²

<i>Hypocoristic</i>	<i>Phonetics</i>	<i>Immediate Source(s)</i>	<i>Ultimate Source (if applicable)</i>
Acho'	[ʔátʃoʔ]	Ig.ná.cio	
Elo'	[ʔéloʔ]	Cor.né.lio, Pé.dro	
Umbai'	[ʔúmbajʔ]	Chum.bai'*	Jesús
Chacho'	[tsátʃoʔ]	Á.cho'*	Ig.ná.cio
Mame'	[mámeʔ]	Á.me'**?	Cár.men
Biban	[bíban]	Í.ba*?	O.lí.va
Chumen	[tʃúmen]	Chu'*	Jesús
Chumbai'	[tʃúmbajʔ]	Chu'*	Jesús
Genge'	[géngeʔ]	Ge'*	Miguél
Pileng	[pílen]	Pin* / Ping*	José
Pinke'	[pínkeʔ]	Pin* / Ping*	José
Lole'	[lóleʔ]	Do.ló.res	

¹ Key: * denotes a hypocoristic which serves as the base for another hypocoristic.

? denotes a presumed, but not yet found, hypocoristic form.

‡ denotes a hypocoristic not derived by the general rules; 'fossilized' or 'conventionalized'.

² It is worth pointing out that forms such as *Acho'* and *Elo'* demonstrate simultaneous initial and final truncation, which has not previously been mentioned in the literature on Chamorro. Forms such as *Chacho'*, *Mame'*, *Biban* also demonstrate a species of reduplication C-, distinct from the previously described CV- and -CV species.

Nado'	[nádoʔ]	Ber.nár.do
Tinung	[tínunʊ]	Faus.tí.no

Trisyllabic:

<u><i>Hypocoristic</i></u>	<u><i>Phonetics</i></u>	<u><i>Immediate Source(s)</i></u>	<u><i>Ultimate Source (if applicable)</i></u>
Bénkile'	[béŋkileʔ]	Bén*? / Béŋ*?	Vi.cén.te
Conchita	[kontʃíta]	A.sun.ción‡	

Tetrasyllabic:

<u><i>Hypocoristic</i></u>	<u><i>Phonetics</i></u>	<u><i>Immediate Source(s)</i></u>	<u><i>Ultimate Source (if applicable)</i></u>
Benbenidu	[benbenídu]	Be.na.ven.tú.ra‡	
Marikita	[marikíta]	Ma.rí.a‡	

