THE MORPHOPHONEMIC SYSTEM OF GUININAANG (KALINGA)

C. R. GIESER

Summer Institute of Linguistics
(Received November 17, 1969)

O. INTRODUCTION

The subdialect, called Guininaang, with which this study[1] deals, is that spoken by some eight hundred people who live in five villages, collectively called Upper, or Occidental, Guinaang, in the municipality of Pasil, in the province of Kalinga-Apayao in northern Luzon, Republic of the Philippines. The names of these villages are Guinaang, Galdang, Uulusan, Bagtayan, and Lisung.

There are four other villages, collectively called Lower, or Oriental, Guinaang, which are included when Guinaang is referred to in outside areas. These villages are Pugung, Dangtalan, and Puapo. Since, however, there are some differences between the dialects spoken in the two sectors, this description is confined to that spoken in the upper villages.

1. SKETCH OF PHONOLOGICAL SYSTEM. The basic phonological structure of Guininaang was described in 1958.[2] Since that time nothing has been discovered which materially alters the analysis given then; however, some observations have been made which serve to amplify what was presented at that time.

1.1 SEGMENTAL PHONEMES. In the 1958 it was stated that there are eighteen segmental phonemes in Guininaang, fourteen consonants and four vowels. These phonemes are: consonants *b, k, d, g, l, m, n, ng,*[3] *p, s, t, w, y,* and *q*[4] (glottal stop), and vowels *a, i, o,* and *u.*

1.11. CONCERNING *K*. Of these fourteen consonants, it now appears very probable that one, *k*, was not originally in the inventory. It is not known how this phoneme came into Guininaang; however, on the basis of the contrasts to follow, it is suggested that the

phoneme was acquired through Ilocano and Kalinga loanwords, whose pronunciations in this area usually retain *k*. We say "usually retain *k*", because, although there is a fluctuation between *k* and the glottal stop in this subdialect, in loanwords *k* is most frequently pronounced. This contrasts with terms common to Guininaang and neighboring subdialects, which differ only by glottal stop versus *k*, in which the glottal stop is pronounced most frequently.

Some contrasts, in analogous environments, between *k* and *q*, created by loanwords, are: [kasún] *kasún* 'wooden box' (< Sp. *cajon*), [qásu] *qásu* 'dog'; [kasál] *kasál* 'wedding' (< Ilocano *kasar*), [qasá] *qasa* 'rustling sound'; and [katám] *katám* 'plane (tool)' (< Ilocano *katám*), [qatá] *qatá* 'eye.'

1.12. CONCERNING *H*. In the earlier paper reference was made to a subphonemic alternate, *h*, of the phoneme *s* in syllable-initial position. Although its possible phonemic status is still not decided, it now seems possible that *h* may have become a Guininaang phoneme. This is indicated by the following contrast in analogous environments: [Hospitál] *hospitál* 'hospital', [sossoqód] *sossoqód* 'a period of the year.' This contrast differs from those to follow, because in 'hospital' [h] has not been heard to alternate with *s*, as is usually the case.

On the other hand, that *h* may still be regarded as a subphonemic alternate of *s* seems to be substantiated by the following examples of the assimilation of loanwords. In each case [h] in the foreign term has been assimilated as [h] ∿ [s] in Guininaang. Spanish *cajon* has been assimilated as *kahún* ∿ *kasún* 'wooden box'; Spanish *consejero* has become *konsihál* ∿ *konsisál* 'councilor'; and the name of a variety of sugar cane that originated in Hawaii is called *hinawáy* ∿ *sinawáy*.

It has been noted, in addition, that apparently the orthographic symbol *j*, even though not pronounced as the Spanish *j*, that is, as [h], has in at least one instance been regarded as if it were so pronounced. The instance is that of 'Japan, Japanese', which have been assimilated as *Hapún* ∿ *Sapún.*

Thus, in the case of *k*, and possibly *h*, we see how an original phonemic inventory can be increased by the 'mechanism of phylogenetic change . . . called borrowing' (Hockett, 1958, 389).

1.13. CONCERNING CERTAIN ORIGINAL PHONEMES. Since the 1958 paper was written additional data have been obtained with regard to some of the phonemes which are part of what is now considered to be the original inventory.

1.13.1. *d.* As stated in the earlier study (15) this phoneme has two allophones, [ǰ ∿ č] and [d]. The fo mer occurs syllable-initial, and the latter occurs syllable-final. With regard to the variants of the syllable-initial allophone, it was observed in the 1958 paper (16) only that there was some fluctuation between them. That observation was correct; however, now it can be added that generally the voiceless alveolar affricate [č] occurs before the high vowels *i* and *u*, while the voiced affricate [ǰ] occurs before the lower vowels *a* and *o*.

Examples: [číla] *díla* 'tongue', [čuki] *dugí* 'rice husks', [ǰakún] *dagún* 'dry season' , [ǰolá] *dolá* 'below, lower level.'

1.13.2. *l* (16–17). This phoneme has two submembers: an alveolar lateral [l], and a central resonant oral, [ł].

1.13.21. The distribution of [l] is as follows:

1.13.21.1. Word initial, [lakán] *lagán* 'sand'.

1.13.21.2. In a geminate cluster, [qálloŋ] *qállong* 'animal's nose ring', or as the reduplication of the syllable final member of such a cluster, [qulqullítom] *qulqullítom* 'you (sing.) tell a story'.

1.13.21.3. Following consonants made at the dental or alveolar points of articulation and following *y*: [manqadlós] *manqadlós* 'slippery (ground)', [lanlánnus] *lanlánnus* 'activity to make occasion enjoyable', [laslásan] *laslásan* 'to mix two things together with hands or spoon', [miqatlú] *miqatlú* 'third', [lailáion] *layláyon* 'to pull loose (e.g., a vine from a tree so it will fall)'. See 1.13.21.2 for example of *ll* sequence.

1.13.21.4. Contiguous to *i*, [čila] *díla* 'tongue', [pⁱáli] *báli* 'wind, storm'; or if separated from a preceding *i* by consonants, other than those cited in 1.13.21.3, which otherwise are followed by the submember [ł] (cf. 1.13.22.2), [liblá] *liblá* 'meat purchased', [síqlat] *pasiglá* 'hinge', [manqimlás] *manqimlás* 'smooth', [qinglái] *qingláy* 'name of a deity', [qiplúg] *qiplúg* 'egg', and [pˀaliulíuon] *baliwlíwon* 'to turn end for end.'

1.13.22. The other submember, [ł], occurs in all other environments.[5]

1.13.22.1. Intervocalic except contiguous to *i*, [qáłang] *qálang* 'granary', [pⁱáłon] *bálon* 'temporary barrier', [pⁱáłun] *bálun* 'provisions (as for a trip)', [múła] *múla* 'plant (item)', [natúłoŋ] *natúlong* 'deaf', [púłun] *búlun* 'companion', [ǰoła] *dolá* 'below, lower level', [ppołói] *bolóy* 'house', and [sołúng] *solúng* 'attack'.

1.13.22.2. Following consonants in environments not requiring [l]: [sabłáŋ] *sabláng* 'kind of flowering tree', [saqłót] *saqlót* 'kind of tie used in bamboo floor mats', [logłóg] *loglóg* 'water blackened by char of rice straw', [sumłág] *sumlág* 'It's moonlight', [pˀaŋłán] *banglán* 'fern wood', [ǰopłás] *doplás* 'precipice', and [laułáuan] *lawláwan* 'to have a celebration in honor (of someone)'.

1.2. SUPRASEGMENTAL PHONEMES. In the 1958 description only one suprasegmental phoneme, stress, was declared to have been established (19). This phoneme is substantiated by many sets of minimal pairs.

1.3. SYLLABLE PATTERNS. In 1958 Guininaang was stated to have two syllable patterns, CV and CVC,[6] a finding which has not been changed.

2. MORPHONEMIC SYSTEM. In the 1958 description as supplemented in paragraph 1. above the first of 'the three central subsystem' (Hockett, 1958, 137) of Guininaang, namely, the phonological, was dealt, with. It is the purpose of this paper to describe the second central subsystem of Guininaang, the morphophonemic.

---

[5]Borrowed terms are an exception; for frequently [l] is heard in environments in such forms where in Guininaang forms only [ł] is found. Examples: [pála] *pála* 'shovel', [paláto] *palato* 'plate', [papúl] *papul* 'boat, ship'.

[6]C stands for any consonant; V for any vowel.

Typically, the 'ways' in which Guininaang morphemes 'are variously represented by phonemic shapes' (Hockett, 1958, 135) are numerous and diverse. Thus, there are a number of different kinds of Guininaang morphophonemic 'alternation' (Hockett, 1958, 272), including among others assimilation, addition of phonemes, replacement, and vowel reduction.

A process which is sometimes considered to be a kind of morphophonemic alternation is reduplication,[7] and it is one which is found to a rather extensive degree in Guininaang. On the other hand, reduplication has been considered by others to be a 'morphologic process' (Hamp, 1963, 49).[8] Because reduplication in Guininaang is considered to have more pertinence to the morphology of the language than to its morphophonemic system, we have chosen to follow the latter interpretation and leave reduplication for consideration with Guininaang morphology.

In Guininaang the morphophonemic alternation that is manifested is primarily 'internal sandhi.' There is, however, with respect to one kind of alternation, assimilation, a small degree of 'external sandhi' (Hockett, 1958, 277).

Another way in which alternation may be classified is 'regular', that is, 'what occurs most frequently under stated conditions', or 'irregular', that is, what 'occasionally occurs under the same conditions' (Hockett, 1958, 280). This classification has been employed in the organization of the following description of Guininaang morphophonemic alternation.

2.1. REGULAR ALTERNATION. The kinds of alternation in Guininaang which are regarded as regular are assimilation, both between and within words, addition of phonemes, replacement of one phoneme by another, vowel reduction, and stress shift.

2.11. ASSIMILATION. This kind of alternation between words we call external, and within words, or between words and clitics, internal.

2.11.1. EXTERNAL. Assimilation between words involves two consonants, n and d, when they occur in word final position. This assimilation occurs in phrase level contexts, in which the consonant is brought into close contiguity with the initial consonant of the following word. The primary reference, however, of this contiguity is not spatial, but phonological.

The higher level phonology of Guininaang has not yet been analyzed; therefore, the phenomena of stress, intonation, and juncture that are involved cannot be fully described now. It has been observed, though, that when certain function words, such as *pon, pay,* and *payyán*, occur immediately following other common words, such as *boqón, daqán,* and *man*, the former are spoken as if they were clitics of the latter. The result of such juxtaposition is a phrase in which the two constituents are phonologically united, and partial assimilation takes place between the final *n* of one and the initial consonant of the other.

---

[7]Cf. Elson and Pickett, 1962, 45; Koutsoudas, 1964, 31; and Harris, 1960, 197.

[8]Cf. Sapir, 1921, 61; Bloomfield, 1933, 218; Nida, 1949, 69; and Gleason, 1955, 90–91.

Following are instances of this external assimilation: *boqón + pon > boqóm pon* 'It is not (e.g. a certain person. It is someone else), *daqán + pon > daqám pon* 'Not yet', *daqán + payyán > daqám payyán* 'Still not yet', *naqáqan + pon > naqáqam pon* was removed-when 'When it had been removed, . . .', *man + pay > mam pay* (An emphasis expression which conveys roughly the force of English 'You know it!').

Partial assimilation of final *-n* also occurs when the *-n* allomorph of *qon* (particle of attribution) occurs in numeral phrases, in which the *-n* and its following constituent are in the same close contiguity that characterizes the phrases referred to above.

The *-n* allomorph of *qon* occurs when the morpheme follows a vowel final form, e.g. *mambalú qon bolóy* ∿ *mambalún bolóy* 'good house.' It is to be noted that, if the free form, that is *qon*, occurs, there is no assimilation between its final *-n* and the initial consonant of the following form.

This assimilation occurs in numeral phrases when the consonant following *-n* is bilabial, i.e. *b, m,* or *p,* or velar, i.e. *g, k,* or *ng.* Examples: *dowá* 'two' + *-n + púlu* 'unit ten' > *dowám púlu* 'twenty', . . . + *bolóq* 'pig' > *dowám bolóq* 'two pigs', . . . + *manúq* 'chicken' > *dowám manúq* 'two chickens', . . . + *káyu* 'tree' > *dowáng káyu* (∿ *dowán qáyu*) 'two trees', . . . + *gasút* 'hundred' > *dowáng gasút* 'two hundred', and . . . + *ngípon* 'tooth' > *dowáng ngípon* 'two teeth'.

Final *-d* assimilates to the initial consonant of the following form in contexts similar to those above in which *-n* assimilates. In the case of *-d,* however, the assimilation is complete: *-d* becomes the same consonant as the following one. Examples: *naqíd* 'became non-existent' + *pon > naqíp pon* 'There is none', and *qawád* 'there is' + *qad > qawáq qad* there is-when 'when there is'.

2.11.2. INTERNAL. Internal assimilation is the morphophonemic alternation in Guininaang which carries perhaps the greatest functional load. This alternation is of two kinds, common[9] and fusing.[10]

Regular common assimilation always involves a final *n*, which assimilates either partially to a following bilabial or velar consonant, or completely to a following *l, w,* or *y*. It is, thus, alternation that is "phonemically conditioned" (Hockett, 1958, 281), and it is manifested primarily in connection with Guininaang affixation.

Fusing assimilation, on the other hand, does not always involve the same process. Rather, depending upon the elements that are brought together, it involves different kinds of assimilation. When the affix *maN-* occurs, therefore, the kind of fusion manifested is different from that manifested when forms occur with certain clitics. Because the assimilation manifested by *maN-* occurs in connection with affixation, it is described in paragraph 2.11.21-with affixation. Fusing assimilation of *maN-* is also phonemically conditioned, whereas that manifested with clitics is 'morphemically conditioned' (Hockett, 1958, 281).

---

[9]'Common' is here employed in this sense: '3a: occurring or appearing frequently: FAMILIAR b: of the best known kind' (Webster's Seventh New Collegiate Dictionary, 1965, 167).

[10]The term 'fusing' is borrowed from Sapir (1921, 130).

2.11.21. WITH AFFIXATION. There are two degrees of internal assimilation in Guini-naang, primary and secondary. In both, the alternation is triggered by the coming together of an affix final *n* with a following consonant. The factor which differentiates secondary from primary assimilation is the presence of concurrent alternation.

2.11.21.1. PRIMARY. Primary assimilation is that which is manifested without reference to any other alternation. It includes both common assimilation and fusing assimilation with *maN-*.

2.11.21.11. COMMON ASSIMILATION. This is the alternation manifested by an affix final *n* which is brought together with a consonant made at bilabial or velar points of articulation or with *l*, *w*, or *y*. The affixes which manifest this alternation are *man-*, *sin-*, *qin-*, and *mangin-*. The general pattern of this alternation is: If the final *n* of the affix is followed by alveolar *t*, *d*, *s*, or *n*, or by *q* (glottal), it remains unchanged. Affix final *n*, however, followed by bilabial *p*, *b*, or *m* partially assimilates to become *m*; while *n* followed by velar *k*, *g*, or *ng* partially assimilates to become *ng*. If the following consonant is *l*, *w*, or *y*, *n* completely assimilates, becoming *l*, *w*, or *y*, respectively.

2.11.21.11.1. *man-*. This is the one affix that has been observed to manifest all the alternations cited in the preceding paragraph as constituting the general pattern of common assimilation. Following are examples of these alternations:

man- before bilabial consonants becomes *mam-*: *man-* + *páda* > *mampáda* 'the same', . . . + *baqál* 'loincloth' > *mambaqál* 'to wear a loincloth', and . . . + *mumá* 'chew of areca nut and betel leaf' > *mammumá* 'to chew *mumá*'.

Before alveolar consonants and glottal *man-* does not change: *man-* + *tadúm* 'sharpness' > *mantadúm* 'to be sharp', . . . + *dagsún* 'heaviness (of weight)' > *mandagsún* 'to be heavy', . . . + *sagána* 'preparation' > *mansagána* 'to prepare', . . . + *niqqót* 'stickiness' > *manniqqót* 'to be sticky (e.g. of hand with sugar on it)', and . . . + *qomós* 'bath' > *manqomós* 'to bathe'.

man- before velar consonants becomes *mang-*: *man-* + *kapí* 'coffee' > *mangkapi* 'to prepare or drink coffee', . . . + *gidú* 'movement (of body)' > *manggidú* 'to move, make movements', and . . . + *ngína* 'monetary transaction' > *mangngína* 'to buy'.

Examples of complete assimilation before *l*, *w*, and *y*: *man-* + *libbát* 'rising from sitting' > *mallibbát* 'to start out (as on a trip)', . . . + *wátwat* 'something distributed to those attending a gathering' > *mawwátwat* 'to distribute *watwat*', and . . . + *yápit* 'thinness' > *mayyápit* 'to be thin (e.g. cloth)'.

2.11.21.11.2. *sin-*. This prefix manifests all the alternations of the general pattern, except that it has not been observed affixed to forms with initial *n* or *y*. Its not being affixed to a *y* initial form is consistent with the observation that in Guininaang phonology **iy* cannot occur as peak and coda[11] of the same syllable.

Examples: *simpayáw* 'owner of a *payaw*' < *payáw* 'rice terrace', *simbanóng* 'one rice terrace' < *banóng* 'retaining ridge around a *payaw*', *simmaltabá* 'one *maltaba*-ful' < *maltabá* 'large cast iron cooking vessel', *sintawón* 'one year' < *tawón* 'year', *sindángan* 'one

---

[11] The terms 'onset', 'peak', and 'coda' are borrowed from Charles F. Hockett (1955, 52).

dangan < *dángan* 'span (8")', *sinsalóp* 'one *salop*' < *salóp* 'ganta', *sinqapisqíl* 'one *qapisqil*' < *qapisqíl* 'piece (e.g. of rattan)', *singkabáyu* 'owner of a horse' < *kabáyu* 'horse', *singgasút* 'one hundred' < *gasút* 'hundred', *singngádan* 'one who has a (certain) name' < *ngádan* 'name', *sillíbu* 'one thousand' < *líbu* 'thousand', and *siwwalág* 'one giving *walag*' < *walág* 'tobacco, matches distributed at a gathering'.

2.11.21.11.3. *qin-*. This prefix manifests all the alternations of the general pattern, except before *y* and *q*. In accordance with the observation, already mentioned, that *iy* cannot occur in a single syllable, the alternation of *n* to *y* in this context would not be expected. In the case of *qin-* affixed to *q* initial forms, replacement (See 2.13.), not assimilation, is manifested. *n* before *n* is permitted, but no example has yet been observed.

Examples: *qimpádasna* 'He tried (it)' < *pádas* 'experience', *qimbagána* 'He told (it)' < *bagá* 'telling', *qimmúlana* 'He planted (it)' < *múla* 'plant (item)', *qintáqbuna* 'She poured (it) out' < *táqbu* 'pouring, spilling (e.g. a liquid)', *qindagásna* 'He sent (it) with someone' < *dagás* 'that sent with someone', *qinsáqadna* 'He set (it) in place' < *saqad* 'place, position', *qingkilawna* 'He *kilaw*-ed (it)' < *kilaw* 'process of partially cooking certain parts of an animal', *qinggagana* 'He used (it) for *gaga* < *gaga* 'killing of something to feed workers', *qingnginana* 'He sold (it) < *ngina* 'monetary transaction', *qillagana* 'She used (it) for weaving' < *laga* 'weaving', and *qiwwalitna* 'He gave (it) as *walit*' < *walit* 'gift to certain ones at death observance'.

2.11.21.11.4. *mangin-*. This prefix also manifests most of the alternations of the of the general pattern. All the alternations have been observed except *n* before *m*, *n*, *k*, *w*, and *y*. *mangimponqad* 'bottommost' < *ponqad* 'base', *mangimboloy* 'one using a house' < *boloy* 'house, *mangintuqud* 'provider (for a family)' < *tuqud* 'supporting post', *mangindola* 'lowest' < *dola* 'below', *manginsaqud* 'lowest < *saqud* 'below', *manginqapon* 'furthest toward' < *apon* 'direction toward', *manginggasat* 'one who has *gasat*' < *gasat* 'luck fortune', *mangingngatu* 'topmost' < *ngatu* 'high', and *mangillapqat* 'outer (layer), topmost' < *lapqat* 'top'.

2.11.21.12. FUSING ASSIMILATION. Fusing assimilation refers to those instances of Guininaang morphophonemic alternation in which the two elements that come together are altered phonologically in such a way that it appears that a kind of fusion has occurred. This kind of alternation is found in two different environments.

One is that in which the nasal morphophoneme, *N*, of *maN-* is joined in affixation to a following consonant. The other environment is when a clitic pronoun is added to a preceding *n* final suffix. The assimilation that is manifested in the latter is discussed in 2.11.22.

When the prefix *maN-* is added to a following consonant the alternation that is manifested is a fusion of the nasality of the morphophoneme with the point of articulation of the initial consonant of the following form. Thus, *N* fuses with bilabial consonants *p* and *b* to become *m*, with alveolar consonants *t*, *d*, and *s* to become *n*, and with velar consonants *k* and *g* to become *ng*. The exception to this pattern is that when *N* is juxtaposed with a following *q* (glottal), the result is *ng* also. No instances have been noted of the

manifestation of fusing assimilation by *N* + the nasals *m, n,* or *ng,* or + *l, w,* or *y.*

Examples of this alternation are: *maN-* + *payáw* 'rice terrace' > *mamayáw* 'one making, having *payaw*', . . . + *báyu* 'pounding in a mortar' >*mamáyu* 'one pounding in a mortar', . . . + *tampóq* 'rice flour' > *manampóq* 'one pounding rice into flour', . . . + *díla* 'tongue' > *maníla* 'one who takes the tongue (of an animal butchered)', . . . + *sungbát* 'answer' *manungbát* 'one who answers', . . . + *káyu* 'wood' > *mangáyu* 'to go after fire wood', . . . + *giyáb* 'notch' > *mangiyáb* 'one doing notching', and . . . + *qáwat* 'receiving' > *mangáwat* 'one receiving'.

2.11.21.2. SECONDARY. Secondary assimilation is the common assimilation manifested by a final *n* that has come into juxtaposition with a following consonant as a result of the concurrent alternation, vowel reduction (See 2.15.). Two affixes manifest secondary assimilation, *maN-* and *-in-*.

2.11.21.21. *maN-*. The primary alternation manifested by this affix, fusing assimilation, is described in 2.11.21.12. As seen in that section, when *N* assimilates to the following alveolar consonants, *t, d,* or *s,* the alveolar nasal, *n,* results. Since *n* in Guininaang affixation tends always to assimilate, even *n* resulting from fusing assimilation is subject to further assimilation if it comes into juxtaposition with a following consonant. Such juxtaposition cannot ordinarily occur; however, if, due to vowel reduction, the intervening vowel is lost, such juxtaposition does occur and *n* assimilates according to the general pattern, except in one instance. The exception is that *n* becomes *ng* before *q* instead of remaining *n.*

Instances of secondary assimilation of *n* in juxtaposition with all consonants, as a result of fusing assimilation and vowel reduction, have not been observed. Examples, however, of the combinations that have been observed are: *mampá* 'one winnowing' < *topá* 'winnowing', *mambód* 'one getting *tobod*' < *tobód* 'materials for native construction, e.g. house, fence', *mannód* 'one obstructing' < *sonód* 'obstruction', *mandóq* 'one pointing his finger' < *todóq* 'pointing with forefinger', *manggób* 'one doing burning' < *sogób* 'a burning', *mangngá* 'that sacrificed in *songa*' < *songá* 'one kind of ceremony when sacrifice is made,' and *mallíg* 'that which crowds out' < *solíg* 'crowding out, displacing'.

2.11.21.22. *-in-*. The other affix which manifests secondary assimilation is *-in-*. When affixed to a root of any pattern except Co . . ., *-in-* manifests no alternation. When, however, it is affixed to a root of this pattern, the weak vowel, *o,* is lost and the *n* of the infix and the second consonant of the root come into juxtaposition. As a result, *n* assimilates according to the general pattern.

No examples of assimilation of *n* before *k* have been observed; however, the following are examples that have been found: *dimpána*[12] 'He measured (it) by *dopa* < *dopá* 'fathom (i.e. distance between fingertips of outstretched arms)', *gimbána* 'She fired (them) < *gobá* 'firing of newly-made clay pots', *qimmósna* 'She bathed (it)' < *qomós* 'bath', *bintáqna* 'She broke (it)' < *botáq* 'broken piece (e.g. of clay pot)', *qindáwna* 'He requested

---

[12]*qin-* and *-in-* are inflectional affixes which convey completed aspect and action directed toward a goal. For facility in glossing the forms, the clitic pronoun *-na* 'third person singular' has been added, and in the gloss '(it)' or an equivalent is included to represent the implicit goal of the action.

(it)' < *qodáw* 'requesting', *binsátna* 'He snapped (it)' < *bosát* 'sudden break in, e.g. a tie', *pinnúna* 'She filled (it)' < *ponú* 'filing (a container)', *tinqópna* 'He satisfied (someone)' < *toqóp* 'satisfaction', *singgóbna* 'He burned (it)' < *soqób* 'burning (e.g. of house, material cut to make field on mountainside)', *dingngólna* 'He heard (it)' < *dongól* 'report', *qillótna* 'He made (it, e.g. a tie) tight' < *qolót* 'tightening', and *qingwána* 'He made, did (it) < *qowá* 'doing, making'.

2.11.22. WITH CLITIC PRONOUNS. In Guininaang morphophonemics both common and fusing assimilation are manifested when clitic pronouns of the ⟨-qo⟩ set are added to *n* final suffixes *-on* and *-an*.

2.11.22.1. COMMON ASSIMILATION. Common assimilation is manifested by an affix final *n* in juxtaposition with an ⟨-qo⟩ set clitic pronoun, when the first person plural pronoun, *-mi*, is added to *-an* or *-on*. Here, the final *n* of the affix completely assimilates to the pronoun initial *m*. Thus, *-an* + *-mi* > *-ammi*; *-on* + *-mi* > *-ommi*.

2.11.22.2. FUSING ASSIMILATION. There are three clitic pronouns of the ⟨-qo⟩ set which manifest fusing assimilation when they are added to the suffixes *-an* and *-on*. These pronouns are three of the singular set, *-qo* 'first person', *-no* 'second person', and *-na* 'third person'. The first and second pronouns have, respectively, the following allomorphs: *-qo* and *-q*, and *-no* and *-m*. The first allomorph occurs with a preceding consonant, and the second, with a preceding vowel.

The fusing assimilation manifested by these pronouns is of two kinds. The first, manifested by the first and the second person pronouns, results in a sequence of the vowel of the affix and the pronoun allomorph that follows a vowel, namely, *-q* and *-m*. Thus, *-an, -on* + *-qo* > *-aq, -oq* and *-an, -on* + *-no* > *-am, -om*.

The second kind of fusing assimilation is that manifested by the third person pronoun *-na*. Here, the final *n* of the affix and the initial *n* of the pronoun coalesce: *-an, -on* + *-na* > *-ana, -ona*.

2.11.23. SUMMARY OF INTERNAL ASSIMILATION WITH AFFIXATION. In summary, it is seen that, with few exceptions, the bilabial nasal *m* results when the *n* of the affix is juxtaposed with a following bilabial consonant; the alveolar nasal *n* remains unchanged before an alveolar consonant or glottal; and the velar nasal *ng* results when the following consonant is velar. In addition, if the following consonants are *l*, *w*, or *y*, the *n* completely assimilates, becoming *l*, *w*, or *y*, respectively.

These alternations, although regular, are not automatic (Hockett, 1958, 279). *n* is found in the language immediately preceding both bilabial and velar consonants, as well as before *l*, *w*, and *y*. The following examples are evidence: *panpanaqlúng* 'species of bat', *binbinbinón* (< *binbín*) 'to examine (something) very carefully', *manmanú* 'seldom', *Gón-gon*[13], 'proper name', *nganngáni* 'nearly, almost', *lanlánnus* (< *lánus*) 'whatever makes an occasion pleasurable', *bonwálon* (< *bónwal*) 'to raise to vertical (around a horizontal axis)', and *banyága* 'increase through trading'.

2.12. ADDITION. The morphemes which manifest this kind of alternation are the suffixes *-an* and *-on* and the first person singular clitic pronoun *-aq* of the ⟨-aq⟩ set when they

---

[13]A hyphen is used between *n* and *g* in this instance to distinguish the *n* and *g* sequence from the velar nasal phoneme, regularly represented by *ng*.

are affixed to vowel final forms. The phonemes that are added are *w, y,* and *q*. The semi-vowels, *w* and *y*, follow their homorganic vocalic counterparts, *u* (*o*) and *i*, respectively, and *q* follows *a*.

Examples of the alternation of *-an* are: *qadaguwán* 'to have pity toward (someone)' < *qadagú* 'pity', *dangliyan* 'to bevel, smooth sharp edges (e.g. of bamboo)' < *dángli* 'action of such beveling', and *qaláqan* 'to do, follow (as teaching)' < *qála* 'get'.

The alternation manifested by *-on* is illustrated thus: *punuwón* 'to fill (a container)' < *ponú, dabbiyón* 'to construct with *dabbi'* < *dabbí* 'wooden panel', and *piayqón* 'to like, desire (something)' < *piyá* 'goodness (e.g. of taste)'.

-aq manifests the following alternation: *mambáyuwaq* 'I pound in a mortar' < *mambáyu* 'to pound in a mortar', *qumáliyaq* 'I am coming' < *qumáli* 'to come', and *mangálaqaq* 'I am getting' < *mangála* 'to get'.

2.13. REPLACEMENT. Replacement is the morphophonemic alternation manifested when one phoneme is used in place of another. This alternation is found in Guininaang with regard to consonants and vowels.

2.13.1. *Y* REPLACES *Q*. There are two environments in which *y* replaces *q*. One of these is when *i* final prefixes are affixed to *q* initial forms. Examples: *qiyídaw* 'to seek omen of *qidaw* concerning (something)' < *qi-* + *qidaw* 'kind of omen bird', *miyunúd* 'to follow, be in accord with' < *mi-* + *qunúd* 'following', and *mangiyapnán* 'one causing (something) to go in a certain direction' < *mangi-* + *qapón* 'in direction of' + *-an*.

Optional exceptions to this pattern of alternation have been noted in which replacement of *q* is not manifested. Examples: *miqadáng* 'to be used for *qadang*' < *mi-* + *qadáng* 'help to family bereft by death', *niqawás* 'missed (as the mark)' < *ni-* + *qawás*.

The other environment in which this alternation is found is when *qin-* is prefixed to a *q* initial form. Example: *qinyasúgna* 'She placed (something) over the fire' < *qin-* + *qasúg* 'placing over a fire'.

2.13.2. *U* REPLACES *O*. The alternation here referred to is that in which the strong back vowel *u* replaces the weak vowel *o* in certain environments. These two vowels appear to fluctuate more or less freely; however, since their phonemic status has been established, it is not a case of fluctuation of allophones.

As far as is known now, replacement of *o* by *u* concerns only disyllabic forms of the patterns CoCV or CoCVC, with ultimate stress. When forms of either of these patterns, except CoCa (cf. 2.14.1.), are affixed by *-on* or *-an*, primary stress is drawn to the affix. This shift of primary stress involves secondary stress falling on the second syllable before it, or, in these forms, on the first of the two syllables of the root. When secondary stress falls on the weak vowel *o*, it is replaced by the strong back vowel *u*.

Examples: *busiyón* 'to open (e.g. a boil)', < *bosí, pusigón* 'to put a small crack in (e.g. a pot)', < *posíg* 'crack (in a pot)', *butaqón* 'to break (e.g. a pot)' *botáq* 'broken piece'.

2.14. VOWEL REDUCTION. This kind of regular alternation, which involves vowel loss in certain environments, is manifested by two of the Guininaang vowels, *o* and *a*.

2.14.1. REDUCTION OF FINAL *A*. When roots of the pattern CoCa are affixed by the

allomorphs *-qon* or *-qan* (cf. 2.12.) of the affixes *-on* or *-an*, respectively, *a* of the root is lost, resulting in forms of the patterns *CoCqón* or *CoCqán*. Examples: *gobqón* 'to fire (newly formed clay pots)' < *gobá*, *boqqán* 'to make a *boqa* at (a particular place)' < *boqá* 'excavation on mountainside for terrace, house site, etc.'. Note that the forms related to *CoCqán*, that is, *CinoCqán* and *maCoCqán*, also manifest reduction of *a*. Thus, *binoqqán* and *maboqqán* < *boqá*.

2.14.2. REDUCTION OF *O*. The weak *o* is never stressed in an open syllable of an unaffixed root, and it is *o* in unstressed open syllables that manifests vowel reduction.

It has been observed that *o* reduces, or is lost, also when forms of more than two syllables are involved. Examples: *talingdán* 'to screen, (something) (e.g. from view)' < *talingód* 'not exposed, e.g. to view' + *-an*, and *domdomgán* 'to have *domdomog* for (something)' < *domdomóg* 'kind of ceremony' + *-an*. Predominantly, however, it is the reduction of *o* in disyllabic words of the patterns CVCV or CVCVC that has been observed.

In terms of patterns of reduction manifested by *o* the word patterns involved may be divided into two groups: CoCV (C) and CVCoC. In all patterns the overriding general principle appears to be that *o* is lost whenever, were it to remain, it would be the peak of an unstressed open syllable between syllables having strong vowels as peaks.

The one exception to this principle is that when *qi-* is prefixed to a *q* initial root and *y* replaces the *q* the syllable *-yo* does not reduce. (Note *qiyopíq* in 2.14.21.2.).

2.14.21. CoCV (C). Reduction of *o* is manifested in roots of the patterns CoCV and CoCVC when they are affixed by the following: *maN-*, *-in-*, *ma-*, *qi-* and *-um-*. The resultant generalized patterns are *maNCV* (C), *CinCV* (C), *maCCV* (C), *qiCCV* (C), and *CumCV* (C).

2.14.21.1. In addition to the generalized patterns cited for CoCV forms the following is found also: *CinCVSán*.[14] Although an example of *CinCuwán* has been observed, none has been as yet for the pattern *CinCiyán*.

Examples: (*maN-*) *mamsí* 'one to open (e.g. a boil) < *bosí*; (*-in-*) *binsína* 'He opened (it)' < *bosí*; (*ma-*) *mabsí* 'can be opened' < *bosí*; (*qi-*) *qibqá* 'to break up (e.g. a large stone so that it can be removed)' < *boqá*. No example of *qi-* + *CoCí* has been observed. (*-in-an*) *pinnuwána* 'She completed filling (it)' < *ponú*; (*-um-*) *bumsí* 'to open (as numerous boils)' < *bosí*.

2.14.21.2. Turning to the CoCVC pattern, in addition to the generalized patterns of reduction cited above, the following are also found: *CinCVCán* and *maCCVán*. For the pattern CoCóC these affixation patterns are found instead: *CinoCCán* and *maCoCCán*. Also for CoCóC, the pattern *CoCCón* exists.

Examples: (Exclusive of CoCóC): (*maN-*). *mamdít* 'that which crushes (e.g. insects)' < *podít*, *mangsáy* 'that which razes (e.g. a house)' < *gosáy* 'collapse, disassembly'; (*-in-*) *sillígna* 'It displaced (it)' < *solíg* 'crowding out, displacing', *qindáwna* 'He asked for (it)' < *qodáw* 'requesting'; (*ma-*) *maqsít* 'to dry up (as a source of water)' < *qosít*; (*qi-*)*qiyopíq*

---

[14]S represents semivowels, *y* and *w*, which are added to the suffix *-an* when it is affixed to forms having final *i* or *u*, respectively. (Cf. paragraph 2.12.)

'to use (something) as receptacle for what has been shelled' < *qopíq* 'shell'; *(-in- -an)* *qinsitána* 'She drained (it) off' < *qosít*; *(ma- -an)* *maqpiqán* 'to be husked, skinned, shelled' < *qopíq*; *(-um-)* *qumpíl* 'to engage in *qopil*' < *qopíl* 'wrapping of glutinous rice with a certain leaf'.

2.14.21.3. Forms of the pattern CoCóC manifest the same patterns of vowel re-. duction as those of the more inclusive pattern CoCVC, described above, except when affixed by *-on* and by *-in -an* and *ma- -an*. Instead of conforming to the pattern C*u*CVCón and C*u*CVCán they manifest reduction according to the patterns CoCCón and CoCCán.. In contrast, also, to the patterns C*in*CVCán and *ma*CCVCán, forms of the CoCóC pattern follow the patterns C*ino*CCán and *ma*CoCCán..

Wherever suffixation is involved in CoCóC forms, the same alternation occurs as that of the more generalized pattern CVCoC. These will be treated in the following paragraphs.

Examples of vowel reduction manifested by CoCóC forms: *(maN-)* *mangmós* 'one who bathes (someone)' < *qomós* 'bath', *(-on)* *postón* 'to bundle (something, e.g. kindling)' < *posót* 'bundle', *(-in-)* *dingngólna* 'He heard (it)' < *dongól* 'report', *(ma-)* *masgób* 'to be burned, burnable' < *sogób* 'burning', *(qi-)* *qisnod* 'to use as *sonod*' < *sonód* 'obstruction', *(-an)* *qodnán* 'to hold (something)' < *qodón* 'valuable property', *(-in- -an)* *qinotbána* 'It bit (the person)' < *qotób* 'bite', *(ma- -an)* *maqotpán* 'to be roofed' < *qotóp* 'roof'.

2.14.22. CVCoC. Because suffixation only forms of this pattern would result in an open syllable with the *weak o* as peak, CVCoC forms manifest reduction only when suffixed by *-on* or *-an*. The following are the resultant generalized patterns of reduction: CVCCón, CVCCán, C*in*VCCán, and *ma*CVCCán.. V in these representations stands for the vowels *i, a,* and *u,* exclusive of *o,* which was dealt with in 2.14.21.3.

Examples: *(-on)* *pasqón* 'to use a *pasoq* on (something) < *pásoq* 'wedge'; *(i- -an)* *itipyán* 'to use as *tipoy* for (someone)' < *típoy* 'soup that accompanies rice in a typical meal'; *(-an)* *lawsán* 'to hire (someone's carabao)' < *lawós* 'hiring of carabao'; *(-in- -an)* *qiniddána* 'He gave to (him)' < *qitód* 'giving'; *masuypán* 'place/time to sleep' < *súyop* 'sleep'.

2.15. STRESS SHIFT. Shift of stress is an alternation manifested by all roots whenever they are suffixed by *-on* or *-an*. When a form is affixed by either of these suffixes primary stress shifts one syllable in the direction of the suffix. Examples: *tuttuwáqon* 'to believe (something)' < *tuttúwa* 'true'.

2.2. IRREGULAR ALTERNATION. The kinds of alternation in Guininaang morphophonemics that are irregular include metathesis, suppletion, vowel reduction, persistence of *o*, and internal assimilation.

2.21. METATHESIS. Only one instance of this kind of alternation has been observed in this dialect: *sogób* 'burning' when it is affixed by the suffix *-on. sogób + -on > sobgón* 'to burn (something)'. This alternation may also be considered to be secondary, since it is only manifested when reduction of the vowel *o* is also manifested.

2.22. SUPPLETION. 'Suppletion' (Hockett, 1958, 280) refers to alternation in which the alternants have shapes which bear little or no resemblance to each other. In Guininaang this kind of alternation has been observed to be manifested by roots and by affixes.

2.22.1. Roots. At least four roots have been observed to manifest suppletive alternation. They are *-qoy, qabá, ququs,* and *-qowá.* Two of these, *-qoy* and *-qowá,* are bound roots; while the other two may be free forms.

-qoy 'going' has two alternants: *-qoy* and *qay-.* [15] The former is the alternant which receives prefixes and infixes, and the latter receives suffixes. Following are its affixed forms: (*maN-*) *mangóy* 'one traversing', (*-um-*) *qumóy* 'to go', and (*-on*) *qayón* 'to traverse (a particular way)'.

qabá has one suppletive alternant, when affixation is by *-qon: qabú-: qabuqón* 'to carry (a child) on the back'. When affixation is otherwise, *qabá* is the alternant.

ququs 'piece of sugar cane to be chewed', has an alternant *-qus.* The former receives the affix *qi-*; while the latter receives any other affixes. The affixed forms of this root are: (*maN-*) *mangús* 'one chewing sugar cane', (*-on*) *qusón* 'to chew (some sugar cane)', (*-in-*) *qinúsna* 'He chewed (it)', (*qi-*) *qiyuqús* 'to include (as dirt from dirty hands) with ququs' and (*ma-*) *maqús* 'can be chewed'.

-qowá 'do, make', the fourth root, is rather uncertainly classified as irregular, because, except when it is affixed by *-qon*, it is wholly regular insofar as its stem is concerned. It manifests regular reduction of the weak vowel, and, even when affixed by *-qon*, it could be regarded as regular, since the final *a* of the root is lost before *-qon* which is regular for CoCa forms (cf. 2.14.1.).

If, however, *-qowá* conformed to the regular pattern, the resultant form when affixed by *-qon* would be **qowqón.* In Guininaang, however, the sequence **ow* in a single syllable is not allowed; therefore, *qo-* as the suppletive alternant of *-qowá* before *-qon* is found.

The affixed forms of this root are: (*maN-*) *mangwá* 'one doing, making', (*-on*) *qoqón* 'to do, make (something)', (*-in-*) *qingwána* 'he made (it) (cf. note in 2.11.21.22.), (*ma-*) *maqwá* 'can be done, made', and (*-um-*) *qumwá* 'to do (e.g. work).

2.22.2. AFFIXES. The one affix that manifests what may be termed suppletive alternation is *-on*, and this occurs with only two roots, *qála* and *qíla.* The alternant manifested is *-n: qalán* 'to get (something)' and *qilán* 'to see (something)'.

2.23. VOWEL REDUCTION. The loss of a vowel as irregular alternation concerns the two vowels *i* and *a*, and each instance of this alternation contrasts with a pattern of regular alternation.

2.23.1. *i.* This vowel, which is strong, is not lost, except in rare instances. It has been observed to manifest reduction in three roots, *singit, lisób,* and *qitód.*

singit 'search for' is the root which manifests the greatest degree of reduction of *i.* These are the instances: (*maN-*) *mangngít* 'one searching', (*-on*) *singtón* 'to search for (something) for (somebody)', and (*ma- -an*) *masingtán* 'time, place of searching'.

Each of the other two roots, *lisób* 'triggering' and *qitód* 'giving, manifest reduction of *i* only when affixed by *-in-: linsóbna* 'He triggered (it)' and *qintódna* 'He gave (it)'.

---

[15]Two irregular variants of *-oy* are *qi-* ∿ *qin-,* which although they are very close in meaning, are much more restricted in distribution than *-oy* ∿ *qay-.*

2.23.2. *a*. This is the vowel that manifests the greatest degree of irregular reduction.

2.23.21. When *a* final CVCV roots are suffixed by *-qon* or *-qan*, the *a* remains. There are some roots, however, which lose *a* when they occur with these suffixes. These roots and their affixed forms, grouped by root word pattern, are:

CiCa. From *sidá* 'any dish to accompany rice': *sidqán* 'to eat (something) with (something else). Also, when *-an* is affixed to certain *maN-* affixed a final forms, *a* is lost before the allomorph *-qan*. Example: *mangilqán* 'time, place of seeing' < *mangíla + -an*.

CaCa. From *qamá* 'like': *qamqón* 'to do (something) like'. Note that the form *qamaqón*, which follows the regular pattern, does occur in the language. An example also of *-qan* affixed to a *maN-* affixed root is *mangalqán* 'time, place of getting' < *mangála + -an*.

CuCa. From *búna* 'left by a person (e.g. food), *bunqán* 'to leave some purposely'.

2.23.22. Regularly *a* in the initial syllable of *CaCV* roots is not reduced; however, there are two roots of this pattern which lose *a* irregularly: *qadí* 'refusal' and *lapú* 'beginning'. The affixed forms are: from *qadí*, *mangdí* 'one refusing', and from *lapú*, *nalpú* 'came from', *nalpuwán* 'place of origin', and *mampalpú* 'to leave from'.

2.23.23. A few roots of pattern CVCVC also show irregular reduction of *a*, e.g. from *táyan* 'leaving behind', *taynán* 'to leave (something) behind'; and from *layád* 'desire', *laydón* 'to have high regard for (someone)'.[16]

2.24. Persistence of *o*. Irregularly also the weak vowel *o* sometimes persists in environments in which it regularly reduces.

The two instances of the *CáCoC* pattern are: from *dálom* 'inside', *dalómon*[17] 'to put (something) inside', and from *bálon* 'temporary barrier', *balónon* 'to barricade temporarily (e.g. where wild pigs would pass)'.

Some instances of the *CoCóC* pattern are: from *qotáp* 'view', *maqotáp* 'can be viewed'; from *qoqál*, *maqoqál* 'can be removed'.

CoCóC is another root pattern which manifests this irregular alternation: from *lotóg* 'swelling', *qilotôg* 'to be about to swell'.

2.25. COMMON ASSIMILATION. Irregular common assimilation has been observed with regard to two consonants, *n* and *d*.

2.25.1. Irregular assimilation of *n* is manifested when some disyllabic roots, having identical syllables with bilabial onset[17] and *n* as coda, are affixed by *-in-*: e.g. *pinompónna* 'he stacks (it)' < *ponpón* 'stack (e.g. rice bundles)'.

2.25.2. One instance of irregular secondary assimilation of *d* within a word has been observed: *gussán* 'to step on (something)' < *gosód* 'footstep' + *-an*. It may be noted also that the strong back vowel, *u*, replaces the weak vowel, *o*, in this pattern of affixation of *gosód*.

3. OPTIONAL ALTERNATION. In addition to alternation in Guininaang which are governed by rules, and properly called morphophonemic, there are alternations which are

---

[16]Although *laydón* is possible, *malyád* is the prevailing form in Guininaang.

[17]*dalómon* is a variant of *dalmón*, which manifests regular reduction. At this point we have no opinion as to which is more prevalent.

optional and do not strictly follow any morphophonemic rules.

The kinds of optional alternation found in Guininaang are: contraction, replacement, syllabic offglide, assimilation, addition, and voicing-unvoicing.

3.1. CONTRACTIONS. One kind of optional alternation that is very common in Guininaang is that known as contraction. In this alternation two morphemes in juxtaposition coalesce, to greater or less degree to form a third element. Usually the last segment, or segments, of the second of the two combining elements are joined to either the first element itself or to the initial segment, or segments, of that element.

3.11. When the first of two morphemes that manifest this alternation ends in a vowel and the second morpheme is a marking particle, most often of CVC pattern, the final consonant of the particle is added to the first morpheme. When contraction is of this kind, the first element is usually a pronoun. The particles that have been observed as the second contracting element are: *nan, dit,* and *qod.*

Examples: *siyánan < siyána,* 'this' + *nan, siyát < siyá* 'it' + *dit, qalánat < qalána* 'he gets + *dit, qíntaqód < qíntaqó* 'let's go' + *qod,* and *qanót < qanó* 'quotative particle' + *dit.* Another example, *qasáwat,* which derives from *qasáwan dit,* 'spouse of', illustrates a slightly different pattern of contraction.

There are additional examples of contraction in which the last part of the second element is joined to the first element itself. In these instances the first element is vowel final; while the second is a form beginning with the syllable *qa-* which, in the contraction, is lost. The morphemes which manifest this alternation are *qagáy,* 'a modal particle', and *qabós* 'also, again'. Examples: *qamágay < qamá* 'like + *qagáy,* and *qawitómmibos* 'we take also' < *qawitón* 'take' + *-mi* 'we' + *qabós* 'also'.

3.12. The second kind of contraction in Guininaang is that in which, in the resultant form, parts of both of the combining morphemes remain, e.g. *payyát < payyán dit, yat < yan dit, pot < pon dit,* and *nit < nin dit.*[18]

3.2. REPLACEMENT. Another kind of optional alternation found in Guininaang is that in which a phoneme substitutes for another phoneme or subphonemic segment; or a morpheme is replaced by a phoneme.

3.21. There are four phonemes which may optionally be replaced by another phonological segment: *u* by *i, i* by *a, s* by *h,* and *q* by *w* or *y.* In each case the frequency of the alternation is very limited, and, as implied by the term optional, there are no rules governing its manifestation.

Replacement of *u* by *i* has been observed in these instances: *imóy* for *umóy* 'to go', *imóyon* for *umóyon* 'to depart', *limibbát* for *lumibbát* 'to get up (from sitting)', and *iwayón* for *uwayón* 'to await (someone)'.

a has been observed to replace *i* in these instances: *naqaddán* for *naqiddán* 'has been given to', and *tagammú* for *tigammú* 'to know'.

A more common replacement heard in Guininaang is that of *h* for *s.* (cf. 1.12.). No particular restrictions governing this alternation have been discovered. It has been observed in function elements, in a proper name, and in occasional content words: e.g. (Marking particles) *hi* for *si, hin* for *sin, hádi* for *sádi* 'present time', *qahí* for *qasí* 'particle indicating

---

[18]Since these are practically all function items, with multiple meanings, the glosses are not attempted.

sequence', *qohá* for *qosá* 'another', *lohân* for *losán* 'all (of few in number)', and *Háyang* for *Sáyang* (proper name).

The fourth instance of optional replacement is that of *w* or *y* for *q* in the conjunctive *qot*. This is an example of a morpheme which manifests optional alternation between a free form and a clitic. If the option of the free form is taken, no further alternation is manifested. *qot* is found in all environments.

if, on the other hand, the option of the clitic is taken, further alternation, phonemically conditioned, is manifested. It is in connection with this alternation that replacement is found. *w* replaces *q* if the final vowel of the preceding form is *u* (*o*), and *y* replaces *q* if that vowel is *i*. Examples: *tágu* 'person' *qot* ∿ *táguwot*, and *qasí qot* ∿ *qasíyot*.[19]

3.22. The morphemes that have been observed to be replaced by a phoneme are all free function elements. The replacing phoneme in each case is a bound element which attaches to the preceding form. The phonemes involved in this alternation are *-q* for the marking particles *si* and *od* and *-n* and *-a*, which are bound allomorphs of the free allomorph *qon*. In the case of the allomorphs *-n* and *-a*, the former, *-n* occurs with a vowel final form and the latter, *-a*, occurs with a consonant final form.

Examples: *siyáq* (< *siya* + *-q*) ∿ *siyá qod* (meaning uncertain), *mangnginaq* (< *mangngína* + *-q* ∿ *mangngína si* 'he buys . . .', *bolóya* (< *bolóy* 'house' + *-a*) . . . ∿ *bolóy qon* . . ., and *tágun* (< *tágu* 'person' + *-n*). . . ∿ *tágu qon* . . . Both of the latter are partial attributive phrases including the head noun and the linking particle *qon*, but without the attributive element.

3.3. PHONEME LOSS. This optional alternation is manifested by the particle *qot* when the clitic option is taken (cf. 3.21.) and the final phoneme of the preceding form is a consonant. Example: *gidúyot* (< *gidúy* 'bark blanket' + *qot*) ∿ *gidúy qot*.

It may be noted at this point how different allomorphs of a given morpheme may manifest different kinds of alternation. *qot* is an example. As noted above, if the free form is spoken, 'invariant alternation' (Hockett, 1958, 272) is manifested, that is, the morpheme manifests no alternation. If, however, the clitic option is taken, three different kinds of alternation are manifested, dependent on the final phoneme of the preceding form. If that phoneme is a consonant, phoneme loss is manifested in the loss of *q*; if it is *-i* or *u*, replacement is manifested in *q*'s being replaced by *-y* or *w*, respectively.

3.4. SYLLABIC OFFGLIDE. Syllabic offglide is an optional alternation manifested by monosyllabic particles of the CVC pattern. The offglide is a repetition of the vowel peak of the syllable resulting in a CVCV sequence: e.g. *qod* (∿ *qódo*), *qot* (∿ *qóto*), *sin* (∿ *síni*), *sit* (∿ *síti*).

3.5. ASSIMILATION. Two instances of optional internal assimilation have been observed. One is partial assimilation of *ng* before a bilabial to become *m*: *sungbát* 'answer' ∿ *sumbát*. The other example is that of the assimilation of *p* in *napgós* 'quickly done' to *g*, *naggós*. *napgós* results from *na-* + *pogós*.

3.6. VOICING-UNVOICING. The last kind of optional alternation is that in which a voiced consonant, brought into juxtaposition with a voiceless consonant through vowel

---

[19]*asíwot* has also been heard, thus indicating that the semivowel replacement of *q* may be the homorganic equivalent of the *o* of *qot* as well as the *i* of *qasí*.

reduction, may be unvoiced, or in which a voiceless consonant through the same morphophonemic alternation may be voiced.

Examples of such voicing are: *qiddón* 'to give (something) < *qitód* + *-on; mapoddán* 'to have some cut off (e.g. of a log)' < *ma-* + *potód* + *-an*. Unvoicing is exemplified by the following: *napsúg* ∿ *nabsúg* (< *na-* + *bosúg*) 'satisfied (with food)', *napsi* ∿ *nabsi* (< *na-* + *bosi*) 'opened (as a boil)'.

REFERENCES

BALLARD, D. LEE. 1965. Inibaloi Morphophonemics. Unpublished manuscript.

BLOOMFIELD, LEONARD. 1933. Language. New York, Holt.

CONANT, C. E. 1913. The Pepet Law in Philippine Languages. Reprinted in Filipiniana II, Linguistics, 126–168, Manila, 1938.

ELSON, BENJAMIN and VELMA PICKETT. 1962. An introduction to Morphology and Syntax. Santa Ana, Summer Institute of Linguistics.

GLEASON, H. A., JR. 1955. An Introduction to Descriptive Linguistics. New York, Holt.

HAMP, ERIC P. 1963. A Glossary of American Technical Linguistic Usage 1925–1950. Utrecht, Spectrum.

HARRIS, ZELLIG S. 1960. Structural Linguistics. Chicago, The University of Chicago Press (Phoenix Book).

HOCKETT, CHARLES F. 1950. Peiping Morphophonemics. Lg. 26.63–85.

_____. 1955. A Manual of Phonology. Memoir 11 of IJAL.

_____. 1958. A Course in Modern Linguistics. New York, Macmillan.

KOUTSOUDAS, ANDREAS. 1964. The Handling of Morphophonemic Process in Transformational Grammars. Papers in Memory of George C. Pappageotes, supplement to Word 20.3.

MARYOTT, KENNETH R. 1961. The Phonology and Morphophonemics of Tabukang Sangir. Philippine Social Sciences and Humanities Review 26.111–126.

NEWELL, LEONARD E. 1956. Phonology of the Guhang Ifugao Dialect. The Philippine Journal of Science 85.523–539.

NIDA, EUGENE A. 1949. Morphology. Ann Arbor, University of Michigan Press.

REID, LAWRENCE A. 1963. Phonology of Central Bontoc. Journal of the Polynesian Society 72.21–26.

ROE, G. R. 1966. Isneg Spelling. Philippine Journal for Language Teaching 4.66–71.

SAPIR, EDWARD. 1921. Language. New York, Harcourt, Brace. (References are from Harvest Book HB7, New York 1956 edition).

SHETLER, JOANNE. 1964. Morphophonemic Change in Balangao. Unpublished manuscript.

WONDERLY, WILLIAM L. 1951. Zoque II: Phonemes and Morphophonemes. IJAL 17. 105–123.

TABLE 1

GUININAANG INTERNAL ASSIMILATION WITH AFFIXATION.

	p	b	m	t	d	s	n	q	k	g	ng	l	w	y
Primary														
man-	m	m	m	n	n	n	n	n	ng	ng	ng	l	w	y
sin-	m	m	m	n	n	n	( )	n	ng	ng	ng	l	w	-a
qin-	m	m	m	n	n	n	( )	-b	ng	ng	ng	l	w	-a
mangin-	m	m	( )	n	n	n	( )	n	( )	ng	ng	l	( )	-a
maN-	m	m	( )	n	n	n	( )	ng	ng	ng	( )	( )	( )	( )
Secondary														
maN-	m	m	( )	( )	n	( )	n	ng	( )	ng	ng	l	( )	( )
-in-	m	m	m	n	n	n	n	n	( )	ng	ng	l	( )	-a

a   *iy* sequence in same syllable not permitted.

b   qin- + q- > qiny- (See 2.13.1.).

( ) No example observed. Alternation may or may not be permitted.