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A GRAMMAR OF KOREAN

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## PREFACE

It has been my pleasure to work with the following persons at various times over a period of several years in collecting the linguistic data for this grammar: Mr. Carl Kwak, Dr. Doo Soo Suh, Mr. Oh Ki Hyoung, Mr. Oh Ki Hang, Miss Min Sam Kih, Miss Yun younghi and Mr. Kwang Lim Koh.

I have benefitted very much from the discussions of problems of Korean analysis which I was able to bring up in the Seminar on the techniques of linguistics during the Spring term, 1954, in the University of Pennsylvania.

I wish to thank A.F. Brown, who proofread the typescript.

It is my good fortune to have been a student of Zellig S. Harris. In the preparation of this grammar, as in all my linguistic work and study, I have received from him not only moral support but also a great deal of concrete help. During my work on this material, he gave me help in the form of frequent discussions and consultations, so that I could organize my material

into a descriptive grammar. I am grateful to him for his constant interest, patience and generosity.

## INTRODUCTION

This grammar is intended as a description of the basic structure of the phonology and morphology of spoken Korean, with a brief outline of the syntax of the clause. Many problems of analysis remain, and many lapses of data are still to be filled in. It is felt, however, that new solutions or solutions to problems left unsolved here will not basically clash with this description, and that additional and more detailed linguistic data will, in general, fit into the structure as analyzed on the basis of the material already gathered. Where data seems to be inadequate, this is pointed out, and where problems of analysis remain, this is pointed out too, with suggestions for possible lines of further investigation. Alternative analyses are presented where they have occurred to the writer and seem reasonable or important enough to discuss. Since no text material has been included, many illustrative sentences have been used.

The material on which this grammar is based is informant data from several sources. The writer feels that unless there is adequate knowledge of all the dialects, geographical and social, of a language,

a description of the speech of a single informant would probably be the most regular. In the present case, the writer does not know very much about Korean dialects, and the description suffers from this lack, as will be evident. For, without a knowledge of all the dialects, the linguistic material gotten from more than one informant source is often difficult to judge when questions of alternative forms and usages come up. Nevertheless, it was decided to attempt a general description, in spite of the obvious lacks of data. There is at least one advantage in this procedure: lines for further investigation into dialect and other differences can be made known.

The bulk of the material of this description was gotten in the course of work with one informant in 1944. The rock-bottom basic analysis was made on the basis of this data. Subsequent informant work in 1946 and in 1950-54 added some new material; but most of this additional material was gathered not in the course of normal informant work, but as a sideline to other work, so that there was often no opportunity to track down many leads that came up. All of the material for the present study was gathered in the United States.

All of the informants were educated persons who had studied in Seoul. However, their childhoods, at least, were spent in different parts of the country. The foreign situation in which the informants worked presumably reduced the naturalness of their speech, not to speak of the inhibiting effect of the informant-linguist situation itself. Without first-hand familiarity with Korea, it was sometimes difficult for the writer to judge the naturalness of utterances or situations.

While it may not be possible to characterize the material of this study adequately as to style or dialect, still we may say that, on the whole, it is a record of the speech of the educated (and to a more or less extent, Westernized) middle and upper classes of Seoul; in addition, it contains some important forms characteristic of the dialect of North Korea. In the analysis, an attempt is made to identify dialectal forms, including those characteristic of women's speech. It should be noted that the utterances on which the description is based were rendered in a rather formal manner. No systematic attempt is made in this study to describe very rapid speech.

The analysis used in this study is largely the one used in the writer's Spoken Korean.<sup>1</sup> The

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1. 2 vols., Henry Holt and Co., New York, 1945-47.

phonemic transcription used is the same, except that here /æ/ is used for a, /we/ for ö, /ŋ/ for ng and /c/ for j. More details on usage on many points (though not all) may be found in the textbook. Some of the illustrative sentences used here have already appeared in Spoken Korean.

As to bibliography in English, there seems to be little published material at this date that is of much descriptive value. For textbooks, besides the writer's Spoken Korean, there is also Introduction to Spoken Korean, 2 vols., by Elinor Clark Horne and Sang Soon Yun, Yale University, New Haven, 1950-1. There is also An Introduction to the Korean Spoken Language, by Horace G. Underwood, The Yokohama Seishi Bunsha, Tokyo, 1890; this book is interesting for its attempt to treat Korean in two ways, "from the Korean standpoint" and "from the English standpoint." For a purely linguistic study of Korean, there is the excellent A Korean Grammar by G.J. Ramstedt, in Mémoires de la Société Finno-Ougrienne LXXII, Helsinki, 1939; this book is historically and comparatively oriented. An interesting study of Korean phonology may be found in the article Korean Phonemics, by Samuel E. Martin, in Language 27.4, 1951, pp. 519-533; this article also contains a partial bibliography of additional works on Korean linguistics.

## CHAPTER I

### THE PHONEMES

In the following sections, we describe the allophones, and group them into phonemes<sup>1</sup>. In Chapter 2, we consider the distributions of the phonemes, and offer a re-phonemization on the basis of new considerations.

#### 1.1 The Tentative Vowel Phonemes

There are eight vowel phonemes in Korean. Each of these vowel phonemes has one main allophone, whose position can be regarded as the "cardinal position" of the phoneme around which the other allophones of the phoneme cluster.

/i/ is a high front unrounded vowel. /e/ is a mid or lower-mid front unrounded vowel. /æ/ is low front unrounded. /ʌ/ is high central unrounded. /ø/ is mid or lower-mid central unrounded. /u/ is high back rounded. /o/ is mid or lower-mid back rounded. /ɑ/ is low back unrounded.

---

1. [ ] encloses phonetic representation; / / encloses phonemic representation after rephonemization in 2.22, as a general rule, except that in the sections up to 2.22 it is also used to set off the tentative phonemes when cited individually.



All of these phonemes have tenser and higher-pitched allophones (though of the same vowel "color") when they occur after the fortis, laryngeal-cônstricted consonant phonemes / P, T, C, K, S/.

In utterance final position, vowels may be checked short, or they may trail off. Aside from this, each of the vowel phonemes has several allophones, differing from the cardinal position in degree of frontness, height or rounding of the lips. These are roughly described below.

/i/ has a lower variant [I] in a syllable<sup>1</sup> opened and closed by a consonant, especially before /m, n, p, l/, but not /ŋ/. E.g., [cəmšIm] /cəmšim/<sup>2</sup> 'lunch', [hIn] /hin/ 'white', [cIp'] /cip/ 'house', [p<sup>h</sup>imIl] /pimil/ 'secrecy'. In open syllables that are weak-stressed and followed by a consonant-initial syllable, especially one beginning with /t, y/, the variant of /i/ is [Ī], a shorter and laxer variety of [I]. E.g., [k<sup>h</sup>apsĪda] /kapsita/ 'let's go', [iJĪyo] /icciyo/ 'there is'. In other syllable-initial and syllable-final positions, the variant of /i/ is the cardinal high-front vowel [i]. E.g., [šige] /sike/ 'clock', [miin] /miin/ 'pretty', [p<sup>h</sup>ibu] /pipu/ 'skin'. The allophones

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1. See 2.3

2. In the example, / / encloses final phonemic representation (as in 2.22).

[ɪ] and [ĩ] seem to vary with [i], the latter being the usual vowel in slower speech.

/e/ has two main allophones. There is a higher-mid front vowel [e<sup>h</sup>] after /k, y, s/, e.g., [s<sup>h</sup>e<sup>h</sup>ːt] /set/ 'three', [k<sup>h</sup>e<sup>h</sup>ːmo] /kemo/ 'stepmother', [ye<sup>h</sup>-diyagi] /yetiyagi/ 'story'. The main variant of this phoneme, [e], a mid front vowel, occurs otherwise.

/æ/ also has two main allophones. The higher-low front vowel [æ<sup>h</sup>] occurs after /k, y, s/; e.g., [iyæ<sup>h</sup>-gi] /iyæki/ 'story'. Elsewhere, the main variant is [æ], a low front vowel.

[u] has several variants deviating from the position of the main allophone [u], which is a tense mid-high, unrounded vowel. Before /m/, there usually occurs a vowel [u<sup>h</sup>] which is slightly farther back than [u], and also has a slight amount of lip rounding; e.g., [u<sup>h</sup> mʃik] /umsik/ 'food'. In the position C\_\_\_/l/ V<sup>l</sup> when the syllable is weak-stressed, a lower variant [u<sup>v</sup>] is heard (close to shwa); e.g., [p<sup>h</sup>u<sup>v</sup>-runnida] /pulumnita/ 'it's blue', [t<sup>h</sup>u<sup>v</sup>-rumagi] /tulumaki/ '(Korean)coat'. In rapid speech, the vowel is so short that the sequence [Cu<sup>v</sup>-ru] seems to vary with [Cru].

---

1. C is any consonant phoneme, V is any vowel phoneme.

/u/ has allophones which differ in the amount of lip-rounding. There is a very closely rounded high back vowel [ū] which occurs before or after /y, m/; e.g., [ūyū] 'milk', [m<sup>b</sup> ūl] /mul/ 'water'. In closed syllables, especially in the second syllable of a polysyllabic form, the lip rounding may be less, and the duration of the vowel often seems shorter; this variant, [û], may also be heard in open syllables that are not final in the utterance; e.g., [ølgûl] /ølkul/ 'face', [c<sup>H</sup>aymûn] /chagmun/ 'window', [cûmüseyo] /cumuseyo/ 'sleep!'. This sound is confusable with [u]. Otherwise, the variant is [u], with a fair amount of lip rounding.

/ø/ has allophones which differ in the position both of the tongue and of the lips. The cardinal vowel is a mid **central** unrounded vowel, [ø], as in [t<sup>H</sup>ø l] /thø l/ 'hair'. In weak-stressed open syllables it tends toward shwa [yødøp̄] /yøtøp/ 'eight', [t<sup>h</sup>uløgap̄ sida] /tulø-kapsita/ 'let's go out'. In other open syllables it may be slightly rounded and lower, so that this variant [ë] is confusable with [o]; e.g., [yëja] /yøca/ 'girl', [m<sup>b</sup> ëri] /nøli/ 'head'.

/o/ has three main allophones, the cardinal vowel is mid back rounded. It is more rounded and has an off-glide, [o<sup>w</sup>], before /a, t, ŋ/, as in [o<sup>w</sup>a]

/oa/ ~ /wa/<sup>1</sup> 'came', [o<sup>w</sup>t] /ot/ 'clothing', [co<sup>w</sup>ŋi] /coŋi/ 'paper', [t<sup>h</sup>o<sup>w</sup>ŋhwa] /toŋhwa/ 'table'. It has less rounding in other closed syllables, [ô], especially before /p, k, n/, and also after /y/, e.g., [sôn] /son/ 'hand', [ilgôp<sup>1</sup>] /ilkop/ 'seven'. Otherwise, the cardinal vowel [o] occurs.

/a/ does not seem to have more than one allophone [a], a low back unrounded vowel; e.g., [ac<sup>H</sup>um] /achum/ 'morning', [k<sup>h</sup>ic<sup>H</sup>a] /kicha/ 'train', [k<sup>h</sup>ak<sup>H</sup>aun] /kakkaun/ 'near'. In some forms, however, it does seem to have slightly centralized variants.

## 1.2 The Tentative Consonant Phonemes

The consonant phonemes are tentatively: series 1, /p, t, c, k, s/, series 2, /P, T, C, K, S/, series 3, /p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/, and /h, l, L, m, n, ŋ, w, y/.<sup>2</sup>

The corresponding stops and spirants in each series contrast in utterance-initial position, and between vowels; e.g., /tal/ 'month': /Tal/ 'daughter' : /t<sup>H</sup>al/ 'sickness', /øte/ 'where': /øTøk<sup>H</sup>e/ 'how' :

1. The mark ~ stands for "varies with" or "varying with".

2. Series 2 and 3, and /L/ will be eliminated in 2.22.

/sat<sup>H</sup>an/ 'sugar'.<sup>1</sup>

The consonant phonemes /p, t, c, k/ have quite lenis, slightly aspirated and sometimes very weakly voiced allophones [p<sup>h</sup>, t<sup>h</sup>, c<sup>h</sup>, k<sup>h</sup>]<sup>2</sup> initially, where they occur only before a vowel, or before /w, y/ followed by a vowel. Examples: [p<sup>h</sup>yøŋhwa] /pyøŋhwa/ 'peace', [t<sup>h</sup>æk<sup>ɿ</sup>] /tæk/ 'house', [cosøn] /cosøn/ 'Korea', [k<sup>h</sup>ot<sup>ɿ</sup>] /kot/ 'place'. /k/ has a front allophone /k<sup>y</sup>/ before /i, e/; e.g., [k<sup>y</sup>esip<sup>ɿ</sup>šiyø] /kesipsiyø/ 'please stay'. Before /y/, especially /yø/, there is a very far forward [k<sub>ɹ</sub>] (close to [č], as in [k<sup>y</sup>øŋc<sup>H</sup>i] /kyøŋchi/ 'scenery'. In final position, or before or after another stop, /p, t, k/ have unaspirated variants [p<sup>ɿ</sup>, t<sup>ɿ</sup>, k<sup>ɿ</sup>]. In utterance-final position, these allophones represent unreleased variants, which also are lenis and sometimes even have some slight voicing. Examples: [p<sup>h</sup>u<sup>w</sup>øk<sup>ɿ</sup>] /puək/ 'kitchen', [yøðp<sup>ɿ</sup>] /yøtøp/ 'eight', [p<sup>h</sup>it<sup>ɿ</sup>] /pit/ 'color', [suk<sup>ɿ</sup>p<sup>ɿ</sup>ak<sup>ɿ</sup>p<sup>ɿ</sup>u] /sukpakpu/ 'register', [p<sup>h</sup>æk<sup>ɿ</sup>p<sup>ɿ</sup>u] /pækpu/ 'father's older brother'. /c/ does not occur

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1. x:y means x contrasts with y.

2. [t<sup>h</sup>] is postdental; /c<sup>h</sup>/ is an affricate.

in these positions. Between vowels, or between a vowel and /w, y/ followed by a vowel, or next to /m, n, ŋ, L/ and a vowel, /p, t, c, k/ all have **lenis**, voiced allophones, [b, d, j, g]. In V\_\_\_\_\_V, [b] varies freely with a spirantized lenis bilabial [B], and [g] varies freely with spirantized lenis velar [G]. The initial and medial allophones of the affricate /c/ may be fully palatalized before all vowels in the case of some speakers, or **more** palatalized before /i/ than before other vowels in the case of other speakers, or the same speakers may show a large range of free variation in the amount of palatalization; /c/ is discussed further in 2.23 below. Examples of [b, d, j, g] are: [abøji] /apøci/ 'father', [t<sup>H</sup>anda] /thanta/ 'ride', [yøgwan] /yøkwan/ 'inn', [sogom] /sokom/ 'salt'.

/P, T, C, K, S/ represent a series of phonemes having only one allophone for each, i.e., [P, T, C, K, S]. These consonants are characterized by being fortis, unaspirated and produced with a constriction or tension in the throat, probably in the larynx. /P, T, C, K, S/ all occur initially and medially, but not finally. Examples: [Paruda] /ppaluta/ 'be fast', [Taŋ] /ttaŋ/ 'land', [handaLCum] /hantalccum/ 'for a month', [Kok'] /kkok/ 'immediately', [Sada] /ssata/ 'be cheap'.

/p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/ represent another series of phonemes having but one allophone for each, i.e., [p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>]. These consonants are characterized by being fortis and strongly aspirated. They occur initially and medially, but not finally. Examples are: [p<sup>H</sup>an] /phan/ 'board', [s<sup>H</sup>at<sup>H</sup>aŋ] /sathañ/ 'sugar', [c<sup>H</sup>ønc<sup>H</sup>øni] /chønchøni/ 'slowly', [k<sup>h</sup>urøk<sup>H</sup>e] /kuløkhe/ 'like that'.

/s/ has a strongly aspirated variant [s<sup>H</sup>] before /a/; it has a more lenis and weakly aspirated variant [s] before other vowels, but is palatalized, [š], before /i/ and before /wi/. After /m, n, ŋ/ and before a vowel, it may have a weak and sometimes slightly voiced variant [z]. All the allophones of /s/ are lenis spirants. /s/ does not occur before another consonant or in final position. Examples: [s<sup>H</sup>aram] /salam/ 'person', [cuseyo] /cuseyo/ 'give (me)!', [ši] /si/ 'poem', [seši] /sesi/ 'three o'clock', [sit<sup>H</sup>ak ] /sithak/ 'low table for eating', [šwipta] /swipta/ 'be easy', [t<sup>h</sup>o<sup>w</sup>ŋzæŋ] ~ [t<sup>h</sup>o<sup>w</sup>ŋsæŋ] /toŋsæŋ/ 'younger brother', [k<sup>h</sup>a<sup>d</sup>nši] /kansi/ 'snack', [p<sup>h</sup>amzæ] /pamzæ/ 'last night'.

/h/ includes five allophones: [h̥], a frontal variety of [h], with friction, sometimes approaching the sound of [š], occurs before /i, y/; [x], repre-

senting varying kinds of velar scrapes, occurs before /u, o, ø/; [f], a bilabial spirant, occurs before /u/; [ħ], a very weak clear glottal spirant, occurs between vowels and between /ŋ, l/ and a vowel (this [ħ] often is not heard in rapid speech); [h], a clear glottal spirant, occurs otherwise. Examples: [ħin] /hin/ 'white', [ħyø] /hyø/ 'tongue', [xuk] /huk/ 'soil', [xonja] /honca/ 'alone', [xonda] /honta/ 'destroy', [fue] /hue/ 'after', [fuge] /hukse/ 'admonition', [t<sup>h</sup>aħak] /tahak/ 'university', [coħun] /cohun~coun/ 'good', [sæŋdaħi] /sæŋtaħi~sæŋtaħi/ 'quite', [cinsirħada] /cinsilhata~cinsilata/ 'be faithful', /kohyaŋ~koyaŋ/ 'birthplace', /mohyøŋ~moyøŋ/ 'model, miniature'.

/l/ includes the allophones [l], [l<sup>d</sup>] and [r]. [l] occurs before a consonant, and also finally after every vowel but /i/. [l] is a post-dental voiced lateral; between /u/ and a consonant or utterance-final, it is more resonant, the tip of the tongue being held less flat than in other positions where [l] occurs. In /i/    #,<sup>1</sup> the allophone [l<sup>d</sup>] is the usual variant of /l/; this [l<sup>d</sup>] is an [l] with a [d]-

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1. /#/ represents silence, i.e., beginning or end of an utterance.



like onset, that is, a "pre-flapped" [l], as in [i<sup>d</sup>l] /il/ 'work', [mi<sup>d</sup>l̂] /mil/ 'wheat'. Between vowels, and between a vowel and /w, y, h/ plus a vowel, only [r] occurs. [r] is usually a single, light tongue-tip flap. Examples are: [mal] /mal/ 'word', [øлма] /øлма/ 'how much', [t<sup>h</sup>ul] /tul/ 'two', [k<sup>h</sup>i<sup>d</sup>l] /kil/ 'road', [uri] /uli/ 'we', [maru] /malu/ 'floor, patio', [k<sup>h</sup>yørñon] /kyørñon/ 'marriage', [naryøgasiyo] /nalyø-kasiyo/ 'go down!'. /l/ does not occur initially in an utterance.

/L/ has but one allophone, [L], which is a post-dental voiced lateral, phonetically very much like [l], but longer. [L] occurs only between vowels; e.g., [PaLi] /ppalli/ 'quickly', [suLe] /sulle/ 'vehicle, cart', [t<sup>H</sup>uLinda] /thullinta/ 'have bad relations'. [L] parallel with /l/, does not occur initially, nor does /L/ occur in final position or before consonants. /L/ contrasts with /l/ in the intervocalic position.

/m/ has two allophones, an ordinary bilabial nasal continuant [m] in most positions, and [m<sup>b</sup>] (with a [b] off-glide) before /i, u, w/. Examples are: [ama] /ama/ 'perhaps', [m<sup>b</sup>uøt<sup>7</sup>] /muøt~mwøt/ 'what', [m<sup>b</sup>ian hada] /mian-hata/ 'be sorry', [m<sup>b</sup>idaci] /mitaci/

'sliding door (or a closet)'.  
 /n/ also has two allophones. [n] is a post-

dental nasal continuant occurring in most positions, and [n̪] (with a [d] on-glide) initially before /i, e, a/. The [d] on-glide is sometimes heard as an off-glide, as [n̪̥]. Examples: [n̪̥næ] /næ/ 'my', [n̪̥ne] /ne/ 'yes', [n̪̥neson] /neson/ 'your hand'.

/ŋ/ likewise contains two allophones: [ŋ], a (medio) velar nasal occurring before a consonant, and in final position, and a very weak velar nasal [ŋ̪̥], occurring between vowels. Examples: [p<sup>h</sup>aŋ] /paŋ/ 'room', [c<sup>H</sup>iŋgu] /chiŋku/ 'friend', [annyøŋi] /annyøŋi/ 'peacefully'.

/w/ includes a voiced [w], occurring initially before a vowel, or between vowels, (where it is very weak) or after a voiced consonant and before a vowel, and a voiceless [w̥] occurring after a voiceless consonant and before a vowel. /w/ does not occur in final position, before a consonant, or before /u, ʌ/. Examples: [wæ] /wæ/ 'why', [cowahanda] /cowa-hanta/ 'like', [cwi] /cwi/ 'mouse', [šilgwa] /silkwa/ 'fruit'.

/y/ has but one allophone [y], occurring initially and before a vowel, or between two vowels, or between a consonant and a vowel. Like /w/, /y/ does not occur in final position, or before a consonant.

Examples: [yei] /yei/ 'manners', [p<sup>h</sup>yølo] /pyøllo/  
 'especially', [k<sup>h</sup>uya] /kuya/ 'he'.<sup>1</sup>

### 1.3 Pairs

#### 1.31 Vowel pairs

In this section we give examples of pairs showing the occurrence of different phonemes in the same environments. Not all of the examples are perfect, i.e., minimal-pairs, although there is at least one perfect pair for each contrast illustrated. With respect to the non-perfect pairs offered, most of them have at least one part perfectly paired as in /tasi:n:tasi/ 'place, stead: again'. We give pairs only for those distinctions which are phonetically not obvious to speakers of English.

/i:e/ - /kosi:kose/ 'place (subject):in the place', /kasiyo:kaseyo/ 'go! (by man) go! (by woman)', /pi:pe/ 'rain:hemp', /micu:mecu/ 'America:beanballs', /cicu:cecu/ 'landowner:chief mourner'.

/i:u/ - /sailttoḡan:saultttoḡan/ 'for 4 days: for 3 days', /isaḡ:usa/ 'more than:doctor', /icø:uca/ 'having forgotten:chair', /kil:kul/ 'road, way:writing, script', /kiphata:kup-hata/ 'be deep:be in a hurry',

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1. /w,y/ will be treated again in 2.12.

/sinmun:sannak/ 'newspaper:agreement'.

/e:a/ - /neson:nason/ 'your hand:my hand',  
 /tachelo:tachalo/ 'anyway:in a lending and borrowing  
 relation, /ane:anna/ 'inside:guide', /hwecuŋ(-sike):  
 twæci/ 'pocket (watch):pig', /kemo:kæmnita/ 'stepmother:  
 it's a dog', /heyʷsø:hæŋsø/ 'having swum:having done',  
 /kim:kum/ 'Kim(name):gold', /kin:kun/ 'urgency:a Korean  
 weight measure'.

/æ:a/ - /tæsin:tasi/ 'place, stead:again',  
 /kæmnita:kæmnita/ 'it's a dog:he goes', /molla:molla/  
 'secretly:don't know', /tak:tak/ 'residence:chicken'.

/æ:o/ - /citæ:cito/ 'region:map', /ttæ:tto/  
 'time, also', /cælyŋk:colyŋk/ 'financial power:assistance',  
 /nanta:nanta/ 'pull out:play', /pækup:pokup/ 'distribu-  
 tion:supply'.

/u:u/ - /usa:usan/ 'doctor:umbrella', /nuŋ:  
 nun/ 'royal tomb:snow', /ummul:umsik/ '(water)well:  
 food', /ummul:hanul/ '(water)well:sky', /sachun:  
 sachuŋ/ 'cousin: 4th floor', /kəmun:namun(ʷn)/  
 'black:as for the tree', /uichuŋ:uihyŋŋ/ 'upstairs:  
 adopted brother', /kəul:səul/ 'mirror:Seoul', /kunsa:  
 kun/ 'army, military:a Korean weight measure', /kui:  
 kui/ 'he:opinion', /kkunta:kkunta/ 'dream:turn off  
 (lights)', /nanta:nunta/ 'improve:lie down'.

/u:ø/ - /kuli:køli/ 'that way:way, road',  
 /kulum:kølum/ 'drawing:fertilizer', /unsa:ønsa/ 'teacher:  
 behavior', /ssanta:sønta/ 'uses, writes:stands', /unkup:  
 ønkup/ 'pension:reference'.

/u:o/ - /huk:hok/ 'soil:or', /ssum:som/ 'use:  
 cotton'.

/u:ø/ - /tul:tø1/ 'two:less', /put:pøt/ 'writing  
 brush:friend'.

/u:o/ - /sul:sol/ 'wine:(paint)brush', /puk:  
 pok/ 'drum:fortune'.

/a:o/ - /anta:onta/ 'knows:comes', /nam:nom/  
 'south:fellow', /sam:som/ 'three:cotton'.

/a:ø/- /sanpho-hanta:sønpho-hanta/ 'walk about:  
 declare (war, et c.)', /santa:sønta/ 'live, buy:stand'.

/o:ø/ - /com:cøm/ 'a little: point', /onta:  
 ønta/ 'comes:freezes', /koki:køki/ 'meat:there', /chon:  
 chøn/ 'rural area, gun:heaven(s)', /tol:tø1/ 'store:  
 less', /koi:køi/ 'gently, with care:nearly', /oso:  
 øsø/ 'come!:quickly', /phok:phøk/ 'fierce:very', /thoi:  
 thøi/ 'discussion:foundation', /pom:pømcwe/ 'spring:  
 criminology', /ahop:yøtøp/ 'eight:nine', /kyøŋchalsø:  
 pachulso/ 'police station:police booth', /coŋi:icøŋi/  
 'paper:cousin on mother's side', /soli:sø1thøŋ/ 'sound:  
 sugar', /sugmo:nøli/ 'father's younger sister:head',  
 /ton:wøn/ 'money: a Korean money measure', /yok:yøksa/

'insult:history', /poli:møli/ 'barley:head', /som:søm/  
'cotton:island'.

### 1.32 Consonant pairs

The consonant pairs are given in their final phonemicized forms as in 2.2.

/p:pp:ph/ - /pal:ppallæ:phal/ 'leg:laundrying: arm', /pyøk:ppyø:phyo/ 'wall:bone:ticket'.

/t:tt:th/ - /tal:ttal:thal/ 'month:daughter: sickness', /kot:kkok/ 'place:exactly', /tame:ttalo/ 'after:separate', /tøl:tøk/ 'less:rice cake', /tak: thæk/ 'residence:chin'.

/c:cc:ch/ - /can:ccan:chan/ 'cup:salty:food (other than rice)', /canta:ccanta:chanta/ 'sleep:weave (cloth): kick', /cim:ccim:chim/ 'baggage:massage:a kind of needle', /cøn:chønçøŋ/ 'cent:ceiling', /cali:ccali: cham/ 'place:worth:truth', /caŋ:chaŋ/ 'drawer space: window, cage'.

/k:kk:kh/ - /kal(kkø sita):kkal(ketta):khal/ '(will) go: (will) spread out:knife', /kæmnita: kkæmnita:kkæmnita/ 'folds:breaks:digs (out)', /khun: kun/ 'big:a weight measure', /inku:inkkita/ 'population: be popular', /nøkø:nøkko/ 'having eaten:eat and ...', /cakl:cakko/ 'self:repeatedly', /kakuk:kakkum/ 'opera: often', /koŋøp:khoŋ/ 'industry:peas, beans'.

/s:ss/ - /saŋ:ssaŋ/ 'table:pair', /sal:ssal/  
'arrow:uncooked rice'.

/th:ch/ - /thək:chək/ 'chin:book', /thəl:chəl/  
'hair:season'.

/k:h/ - /kwahak:hwahak/ 'science:chemistry'.

/t:k/ - /mat:mak/ 'first, last', /tasət:paŋsək/  
'five:cushion'.

#### 1.4 Stress and pitch contours

There is no clear indication that either pitch or stress is distinctive. However, informants may pronounce two forms which are otherwise identical with different pitch or stress patterns to keep them from being taken as homonyms. This purported difference in pitch and stress is not kept in context, however. Examples of quasi-pairs in isolation, differing in pitch-stress (a higher pitch seems to go with a stronger stress) are: /aní/ 'no', /áni/ 'the inside', /náтта/ 'be better', /nattá/ 'be lower', /kóngi/ 'air, social justice', /kongí/ 'bowl for boiled rice'. Although informants are not wholly consistent in giving these forms, one suspects there is some basis to a possible distinction. However, at least one informant has remarked that "whenever I don't feel the meaning, I don't make a difference in the **tone**." This makes sense, in

view of the fact that the underlying stems of /náтта/ and /nattá/, for example, are different, though in these forms, morphophonemic changes make them homonymous, at least so far as the consonants and vowels are concerned: /náтта/ is based on a stem /nas-/, while /nattá/ is based on a stem /nac-/.

It is most likely that stress is an automatic feature; however, this point will be glossed over in the present study since there is not enough data on the subject in our material to permit us to **make** specific statements here. The only general statements that can be offered are that a word spoken in isolation probably has equal or nearly equal stress on all syllables.

The question of pitch seems to be connected with utterance-contours. There are five main utterance-contours, as follows:

/./: falling contour, the pitch falls on the last syllable of the utterance. E.g., /cəkət mwəsinnikka./ 'What's that?', /kuke umsikcəm-innita./ 'That's a restaurant'.

/?/: rising contour, the pitch rises on the last syllable of the utterance. E.g., /ku-salam tasi okessunnikka?/ 'Will he come again?', /ilccøne ceka kumalssamal talyøcciyoy?/ 'Did I tell you that the other day?'.





the vowel of the verb stem) is somewhat long. E.g., /cham yøkito khun-cipi manhunteyo!/'There sure are a lot of big buildings (around) here!', /høsunika phøk kounteyo!/'Høsun sure is pretty!'. With sentences ending in /hanta, hanunya/, the contour rises in the middle of the utterance and then falls to a lower pitch and continues level to the end; the last syllable is long and may be extra loud as well (even so, the pitch stays level, or may even fall). /ya. konpu-hako itta!/'Hey, I'm studying!'.

/,/ level contour, the pitch is held level, or raised somewhat on the last syllable, and is followed by pause; this is a non-final contour. E.g., /com sicaŋ-hani, amoktto cosunnita./ 'I'm pretty hungry, so anything'll be all right.'. /ani, yongtugpho-yøkiyayo/'No, this is Yongdungpho station.'. There is an alternant of this contour in sentences composed of two parts, each one ending in /halkkayo/; the /,/ contour is over the first part, the last syllable of which is raised in pitch and made quite long. These sentences are questions offering alternatives: /søyaŋ-umsikul halkkayo, cosøn-umsikul halkkayo./ 'Shall we have Western food or Korean food?'.

## 1.5 Junctures

We set up three junctures. Two of these are clearly phonemic junctures in that they have a one-to-one correspondence with actual speech. These are an open juncture, /#/ or space, and a close juncture /∩/ or, simply, no space. There is only one variant of each of these junctures, and one can tell from a single rendition of an utterance where these junctures are in the utterance.

The third juncture differs from /#/ and /∩/ in that it cannot be recognized except after repetitions of the utterance. This is because this juncture represents an alternation between /#/ and /∩/. This juncture, /-/, is partially determined in its occurrence; there are morphological and syntactical conditions as to where it may occur; that is, there are positions, grammatically, not phonologically, determined, in an utterance where there may be an alternation between /#/ and /∩/ in repetitions of the utterance. However, this is a morphophonemic consideration, rather than a phonemic one. For the phonemic analysis, it seems convenient to set up the /-/ juncture as a repetition-relation between phonemes; it is not a phoneme in the same sense that /#/ and /∩/ are. Nor is /-/ an ordinary

morphophonemic element, even though it is an element such that, given the writing one can infer the actual utterance or the possible versions of it, but given the actual utterance, one cannot choose between alternative morphophonemic representations.

The problem of /-/ is like other problems of phonemic overlapping, where one can tell which phoneme is involved only by repetitions of the utterance. An example of this is the overlap between /q/ and /g/ in Moroccan Arabic.<sup>1</sup> In many utterances /q/ and /g/ contrast, while in some utterances /q/ and /g/ vary freely in repetition: /bqər/ and /bgər/ are two phonemic forms for 'cow'. /q/ can be set up to represent the alternation /q~g/. But any form with /q/ or /g/ in it needs to be repeated until the linguist is satisfied that it is always either /q/ or /g/, or else sometimes /q/ and sometimes /g/. Whereas a separate mark like q may not be of interest in a case like the above, the mark /-/ is useful in the Korean analysis because it will later be seen to correlate with some morpheme boundaries.

The junctures /#/ and /C/ are recognized simultaneously with the vowel and consonant phonemes. /#/ represents (1) possible pause, and (2) the occurrence of utterance-initial and utterance-final allophones.

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1. The Phonemes of Moroccan Arabic, by Z.S. Harris, Journal of the American Oriental Society, 62:4, 1942.

The juncture /∅/ represents (1) no pause, and (2) medial allophones. In addition, morphophonemic changes coming about as a result of the combining of morphemes are said to be a feature of close juncture. As has been pointed out, /-/ represents the variation between /#/ and /∅/; or, one could say that /-/ represents /∅/ intermittently.

Both /#/ and /-/ occur at a morpheme boundary.

CHAPTER II  
DISTRIBUTION OF THE PHONEMES

2.1 The Vowels

2.11 Restrictions of Occurrence

The vowel /a/ seems to be the most severely limited of all the vowel phonemes in its distribution. /a/ does not occur after /m,w,y/, and after /p/ it is often replaced by /u/ in the speech of some speakers, as in /pulanta ~ pulanta/ 'call'. /a/ occurs as the final phoneme of a number of bound morphemes, but it does not occur as the final phoneme in an independent form, except in loans from English: /mola-/ 'not know', /ka-/ 'that', /ppøssa/ 'bus'.

/a/ has other interesting features, too, as will be seen in the morphology, for this vowel is the first phoneme of many suffixes whose alternants differ in the presence or absence of this phoneme; in effect, the initial /a/ keeps consonant clusters from occurring, as they otherwise would.

The vowel phoneme /u/ does not occur after /w/, nor does /i/ occur after /y/. /i/ also does not occur after initial /n/, except for rare instances such as /nim/ 'dear one', used in songs and poems, e.g., /nimul kəliwø-hamnita./ 'I long for my beloved.'

In addition to these few restrictions on the vowels with respect to the consonants, we must also state the restrictions on the vowels with respect to the vowels themselves.

## 2.12 Clusters of Vowels

Vowels may precede or follow other vowels. The number of vowels in a vowel cluster usually doesn't exceed three: e.g., /aieke/ 'to the child'. It is possible to analyze long vowels as clusters of a repeated vowel, since there is no contrast, and double vowels do occur, as in /sipiil/ '12th day'. The status of many of these long vowels, or double vowels, is not clear; that is, whether they contrast with single vowels or not, for they seem to vary with the single vowels. We have to test such pairs as the following, which may demonstrate contrast, or may prove to be merely homonymous: /kiin/ 'long': /kin-(hata)/ '(be) urgent', /nassumnita/ 'it's low' : /naassumnita/ 'it's superior' (stems /nac-/ 'be low' and /nah<sup>\*</sup>-/ 'be superior'); /kannita/ 'go' : /kaannita/ 'he tills' (stems /ka-/ 'go' and /kal-/ 'tell'); /omnita/ 'comes' : /aannita/ 'knows' (stems /o-/ 'come' and /al-/ 'know'); /hæ/ 'sun, year': /hææ-cunta/ 'do for (someone)'; /mani/ 'only' : /maani/ 'much, many'. Other forms which may

have. long or double vowels are /aani/ 'no'; /miin/ 'pretty'; /moopsi/ 'very'; /anta/ 'know'; /paam/ 'chestnut'. There does not seem to be a phonemic distinction between "long" vowels and double vowels, that is, between a sustained vowel sound and a cluster of two vowels, each with its own pulse: this difference seems to be free. Indeed, in normal speech, length of vowels is probably connected with intonation, rather than the phonemic vowel structure. It may well be, also, that when there is morpheme boundary between two like vowels, there is little or no likelihood, except in certain cases, of free variation with a single vowel, as in the contrast /sipiil/ '12th day'; /sipil/ '10th day'. Many sequences of vowels up to three occur.

The following table shows which clusters of two vowels occur in the material of this study. Those points which are x'ed indicate occurring clusters.



<u>second vowel</u> <u>first vowel</u>	i	e	æ	u	ø	u	o	a
i	x	x	x	x	x	x	x	x
e	x	x				x		x
æ	x	x	x		x	x		x
u	x			x	x	x		
ø	x	x	x	x	x	x		x
u	x	x		x	x	x		
o	x	x		x			x	x
a	x	x		x	x	x	x	x

Examples of vowel clusters:

/ii/ : /sipiil/ '12th day (of the month)'

/ie/ : /ilkopsie/ 'at seven o'clock'

/iæ/ : /i-æka/ 'this child'

/iu/ : /yocium/ 'these days'

/iø/ : /twiømcil/ 'jumping'

/iu/ : /piutta/ 'deride'

/io/ : /pi-ot/ 'raincoat'

/ia/ : /mian-hata/ 'be sorry'

/ei/ : /yei/ 'manners'

/ee/ : /sahwee/ 'in society'

/eu/ : /seunta/ 'establish'

/ea/ : /asea/ 'Asia'

/æi/ : /næil/(~/neil/) 'tomorrow'  
 /æe/ : /kʌ-ttæe/ 'at that time'  
 /æp/ : /yæpnca/ 'prophet'  
 /æu/ : /kkaunta/ 'wake (someone) up'  
 /æa/ : /hæan/ 'seacoast'

/ui/ : /kui/ 'he'  
 /uæ/ : /kʌ-æKa/ 'that child'  
 /uu/ : /kuusinta/ 'draw a line'  
 /uø/ : /kuøtta/ 'drew a line'  
 /uu/ : /øtuum/ 'darkness'  
 /ua/ : /kʌ-atul/ 'the son'

/øi/ : /køi/ 'nearly'  
 /øe/ : /kwakøe/  
 /øæ/ : /cø-ænun/ 'as for that child'  
 /øu/ : /chøum/ 'the first time'  
 /øø/ : /cøø/ 'well, ...'  
 /øu/ : /søul/ 'Seoul'  
 /øa/ : /cø-ai/ 'that child'

/ui/ : /puin/ 'lady'  
 /ue/ : /nukueke/ 'to whom, to someone'  
 /uu/ : /chuun/ 'grace of God'  
 /uø/ : /cuøla/ 'give!'  
 /uu/ : /usuun/ 'funny'

/oi/ : /koi/ 'gently'  
 /oe/ : /hakkyoe/ 'inschool'  
 /ou/ : /coun/ 'good'  
 /oo/ : /oo/ 'comes'  
 /oa/ : /poatta/~pwatta/ 'saw'

/ai/ : /kwai/ 'too much'  
 /ae/ : /nalae/ 'in a country'  
 /au/ : /kaul/ 'autumn'  
 /æ/ : /caən/ 'mercy'  
 /au/ : /alɔmtaun/ 'beautiful'  
 /ao/ : /naonta/ 'come out'  
 /aa/ : /maani/ 'many, much'

### 2.13 Vowel glides, and /w, u/, /y, i/

There is usually a glide between certain vowels; a [y] glide between /i/ and any other vowel, or between /e/ and /o/; a [w] glide between /u/ and other vowel. In utterances spoken at a natural rate of speed, it is not possible to detect any phonetic distinction between [w] and [w̥] or between [y] and [y̥] between vowels. This is because the allophones of /w/ and /y/ between vowels have very weak articulations. Thus, /w/ has a stronger articulation in #\_\_\_\_\_ than it does in V\_\_\_\_\_V. The proper question here is whether the

sound {glide or semi-vowel} is phonemic or not. We may test this by having the utterance pronounced at a slower rate of speed. Thus, while it is not possible to say whether the intervocalic sounds in /pu-øk/ 'kitchen' and /ku-ø1/ 'September' are glides or semi-vowels phonetically--though we can say that, whatever they are, they sound the same in both utterances spoken at a natural rate - in slowed-down speech we get [p<sup>h</sup>u<sup>h</sup>øk<sup>h</sup>] and [k<sup>h</sup>uwø1], which phonemically are /puøk/ and /kuwø1/. In order to represent the maximum phonemic distinctions, we phonemicize utterances according to slowed-down speech, noting what distinctions are lost in more rapid natural speech. Thus, while we write /uø/ in contrast with /uwø/, it is noted that this is a slowed speech contrast which may be lost in rapid speech, so that both /uø/ and /uwø/ are [u<sup>w</sup>ø] in rapid speech. That is /uø/ or /uwø/ depending on whether we wish to consider the passage from /u/ to /ø/ an automatic glide or a phonemic segment. Further, while /oa/ varies with /wa/ in forms like /toa/~towa/~twa/, /oa/ does not vary with /wa/ in /cowa/ (i.e., there is no /coa/ or /cwa/ as a variant of /cowa/ - indeed, there is the contrast /cowa/ 'being good' : /cwau-hanta/ 'dominate'. We thus say that generally there is phonemic contrast between the sequences /VV/ and /VwV/,

/VyV/.

It is not feasible to put /u/ and /w/, and /i/ and /y/ into the same phonemes — i.e., to rephonemicize /w/ as /u/, and /y/ as /i/ because /y:/i/ contrast; e.g., in the phoneme sequences /aye:/aie/ or /aiye/; /ayo:/aio/ or /aiyo/, /y/ is not followed by /u, i/; /w/ is not followed by /u, u/.

/u, o/ vary with /w/ between vowels, and between a consonant and /a, æ, ø/; this correlates with the speed of the utterance, faster speech gives /w/. Examples of this (phonemic) alternation are: /muøt/~ /mwøt/ 'what, something', /toa/~ /twa/ 'helping', /uicaue/~ /uicawe/ 'on the chair', /koæcoŋ/~ /kwæcoŋ/ 'wall clock'.

However, /u, o/ contrast with /w/ between a consonant and a vowel other than /a, ø/, and also when they occur initially before a vowel. For example: /kui/ 'opinion'; /kwi/ 'ear', /ue/ 'above; on'; /we/ 'left', /nui/ 'older sister' : /nwio/ 'make (someone) lie down, /sui/ 'burial clothes' : /swio/ 'rests'. More precise phonetic data needs to be gathered on this point, but for the present it seems clear that /w, y/ have to be kept apart from /u, o, i/. This leads to some morphemes having two phonemic forms, as in the case of /muøt~mwøt/, depending on the speed and deliberation of the rendition of the utterance.

## 2.14 [ö, wö, we]

There is a vowel sound [ö], which is an [e] made with rounding of the lips. Besides [ö], there are the phonetically similar sequences [wö] and [we]. The phonetic differences among these sounds seems to be a difference in the timing and duration of the lip rounding. It is simultaneous with the mid-front vowel [e], in the case of [ö], beginning before the vowel and continuing with it in the case of [wö], and beginning before the vowel but not continuing with it, in the case of [we]. It is not yet determined whether this variation is completely free. There is a possibility that it may be at least partially determined; for example, [wö] seems to be more common after [h] than in other positions, and after [h], [wö] occurs more frequently than [ö] or [we]. Some of this variation may also be dialectal.

The general phonetic question here is whether vowel sequences involving a back vowel plus a front vowel, or [w] plus a front vowel, vary with a rounded front vowel. One other such instance recorded, besides [ö, wö, we] is [ui]~[ü] in /amuiyakito/~amüyakito/.

Both [we] and [ö] can be written /we/. This is of interest because we have here a single sound which is represented by a sequence of two phonemes.

It would seem that we would have to phonemicize [wo] as [wwe]; however, phonetically we assume [wo]~[we] which in turn varies with [o]. Besides, there is no other case of /ww/.

Examples of this variation are as follows.

(For this illustration, we write /o/ as a phoneme):

/ionun/ ~ /iwenu/ 'except for this, besides this'

/tohwoci/ ~ /tohweci/ 'urban area'

/hwo/ ~ /hwe/ 'meeting, society'

/tossunnita/ ~ /twessunnita/ 'it becomes'

## 2.2 The Consonants

### 2.21 Restrictions on occurrence

The heaviest restriction on the occurrence of the consonant phonemes is with respect to the consonants. The freedom of occurrence of the consonants with respect to the vowels is practically general.

We may state in a paragraph the few limitations which consonants have with respect to the vowels.

/n, w, y/ do not occur before /u, ʏ, w/ also does not occur before /u/, and /y/ also does not occur before /i/. Initial /n/ does not normally occur before /i/ or /y/.<sup>1</sup>

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1. Some words are spelled with initial /ny/ but pronounced only with initial /y/ after /#/ , e.g., /yøntə/ 'calendar' year'. /ye/ 'yes', in Seoul and S. Korea, but /ne/ in N. Korea. /ny/ does however occur in borrowings from English: /nyuyok/ 'New York'.

The situation is similar in the case of initial /ly/; many words are so spelled, but pronounced only with initial /y/ after /#/ , e.g., /yømnyø/ 'apprehension', /yaŋsik/ 'provision, food'.

/h, w, y/ do not occur after any vowel, and /h/ does not occur after any consonant except /m, n, ŋ, l/. /t/ occurs rarely, if at all, before /i/. It is doubtful, indeed, whether /t/ occurs before /i/ in Seoul speech; historically, also, most /ti, thi/ have become /ci, chi/ except in the northern dialects. However, pairs are offered distinguishing /ti/ and /ci/; whether these words are being kept apart by the speaker for the investigator on account of the difference in spelling or whether they are genuine pairs has not yet been determined: /titinta : cicinta/ 'step on : fry'. The occurrence of /T/ before /i/, however, is more frequent: /Ti/ 'belt'. Aside from these restrictions, the consonants occur before or after any vowel or sequence of vowels.

The limitations on the consonant phonemes, as we have tentatively identified them, are described in the following paragraphs.

The three series of stops and spirants all occur initially; but only the stops of the first series, /p, t, k/ occur in final positions; /c, s/ do not occur finally, nor do /P, T, C, K, S, p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/. All of these consonants, however, occur medially (between vowels).



/p, t, k/ each occur next to another stop, but not the same one, in medial position. In this position, /c/ comes after some other consonants — but not after another /c/ and not after /s, h, w, y/ — but it does not come before any consonant except /w/ (and /y/ if the dialect has the contrast /c : cy/ before a vowel). Medially also, /p, t, c, k, s/ do not come before /m, n, ŋ, l/, but do occur after /m, n, ŋ, l/. The consonant /s/ does not come before any consonant but /w/ in any position, and comes after only /p, k, m, n, ŋ, l/ medially.

/P, T, C, K/ and /P<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/ do not occur next to each other within #\_\_\_\_#. They are, however, followed by /w, y/ both initially and medially, except that /c, c<sup>H</sup>/ are not followed by /y/ (but see 2.221).

/h, w, y/ all occur initially and between vowels, but not finally. /h/ occurs after /m, n, ŋ, l/ medially; it does not come after any consonant in any other position. /w, y/, on the other hand, occur after all consonants, except another /w, y/ medially, and after all consonants except /ŋ, l/ at the beginning of an utterance. /w, y/ do not occur before any consonants.

/m, n, ŋ, l/ all occur medially and finally, but only /m, n/ occur initially. At the beginning of

an utterance, /m, n, ŋ, l/ do not occur after any consonant; /m, n/ do come before /w, y/ in this position. Medially, /ŋ, l/ do not occur after any consonant, but /m/ occurs after /m, n, ŋ, l/ and /n/ occurs after /m, n, ŋ/. Also, medially, /m, n, ŋ, l/ all occur before any consonant except /ŋ, l/ and /l/ does not occur before /n, ŋ/. It should be noted that many speakers do not have /nk : ŋk/ but only /ŋk/.

/L/ occurs only medially between vowels.

In general, then, there are certain strong restrictions on the occurrences of the consonant phonemes with respect to the consonants. Three consonants do not occur initially, namely /ŋ, l, L/. The two series /p, t, c, k, s/ and /p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/ do not occur at the end of an utterance; nor do /c, s, h, w, y, L/ occur finally. There are no final clusters of consonants at all, and initially only clusters of a consonant (except /ŋ, l/) plus /w/, and of a consonant (except /t, c, s, ŋ, l/) plus /y/ occur. Medially, other clusters are permitted besides these, mainly of /m, n, ŋ, l/ plus a consonant, or of /p, t, c, k, s/ plus another consonant of the same series or plus /w, y/, with conditions as stated above.

## 2.22 Rephonicization of the Consonants

The least generally occurring of these consonant phonemes are the series /P, T, C, K, S/ and /p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/, and the phoneme /L/. It would be convenient if these phonemes could all be re-defined in terms of the other already established phonemes, which would not only reduce the number of consonant phonemes but also increase the distributional generality of our final list of consonant phonemes. This we have done, and present the analysis and argument for it below.

In offering a re-definition of our phonemes, we first take up the consonant phoneme /c/, out of the first series of our tentative consonant phonemes /p, t, c, k/. Then we consider the problem of /L/, and finally the two series /P, T, C, K, S/ and /p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/.

### 2.221 /c/

/c/ has a large number of allophones ranging from alveolar affricate to palatalized affricate. The fully palatalized variant is certainly standard in the environment /-i/.

Can /c/ be analyzed as the cluster /ts/?

<u>Environments of /c/:</u>	<u>Environments of /t/:</u>	<u>Environments of /s/:</u>
#____/wV	#____V	#____V
#____V	____/t/V	# } ____/s/V
#____/c/V	V____V	V____V
V____V		
V { p t c k l m n ŋ } ____V	V { p k l m n ŋ } ____V	V { p k l m n ŋ } ____V
	V____/c/V	

Clusters of a consonant plus /s/ occur in V\_\_\_\_V, e.g., V/ps/V, V/ks/V, V/ss/V, but only /ss/ occurs in #\_\_\_\_V; /ps, ks/, etc., do not occur in #\_\_\_\_V. If we re-phonemecize /c/ as /ts/, then /ts/ would occur in V\_\_\_\_V, just as /ps, ks/ etc., do, but /ts/ would also occur in #\_\_\_\_V, where /ps, ks/, etc. do not. /ts/ would then be analogous only to /ss/, and this analogy is of even less force when we consider that any cluster of two repeated phonemes /pp, tt, kk, ss/ may occur in #\_\_\_\_V.<sup>1</sup> To re-phonemecize

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1. This is based on the consonant phonemes of 2.23.

/c/ as /ts/ would destroy the symmetry of the distribution of the stops /p, t, k/ and would also make the statements about clusters and their distribution less general; e.g., we would then have /tsh/ but not /psh, ksh/; it would also encumber morphophonemic statements. We therefore do not analyze /c/ as /ts/.

The question of analyzing /c/ as /ty/ should also be considered, if for no other reason than that /ty/ has some basis in the history of the language, and also in present-day dialects. Historically /tya/ : /cya/ : /ca/ : /ta/. In the standard Seoul dialect, /ty/ does not occur, but /ty/ plus vowel in contrast to /c/ plus vowel does occur in N. Korean dialects. In Seoul dialect, in general, original /ty/ changed to /c/; this is still shown in Korean spelling, especially in the reformed morphophonemic spelling which attempts to bring back and maintain in the writing at least, the original distinction /ty/ : /c/.

In standard Seoul speech, there is no contrast [ci] ([tsi]) : [či] ([tši]), but only [či]. [č] occurs in /-i/, while [c] occurs elsewhere in terms of various allophones ranging from alveolar to pre-palatal affricate. It is still not clear whether Seoul speech distinguishes /ci:ti/, i.e., [č<sup>h</sup>i:t<sup>h</sup>i]. We therefore cannot make use of the fact that if /ti/ occurs at

all, it occurs in only a very few words.

There is, however, the possibility that, for some speakers of the Seoul dialect, [ca] ([tʃa]), for example, contrasts with [ča] ([tša]). We could analyze [ča] as /cya/. If we analyze /c/ as /ty/, then we would have /tya/ for [ca] and /tyya/ for [ča]. If there is no contrast [ca] : [ča], i.e., no /ca/ : /cya/ (only /ca/ occurs), then we would rephonemicize /ca/ as /tya/. The phonemic representation would not be destroyed if /ca/ were written /tya/, and /ty/ would be analogous to /py, ky/. However, in dialects that have the contrast [ca] : [ča], the new representation would be /tya/ : /tyya/. The cluster /tyy/ would be a unique type of cluster, since there is no corresponding /py. ky/ plus /y/. This would presumably weaken the argument for writing /ca/ as /tya/ on grounds of symmetry. Furthermore, if /c/ were written /ty/, then we would be using up the representation /ty/ in contrast with /c/: this representation would be needed for dialects in which this contrast occurs.

Because of the above considerations, we keep the analysis of the affricate sounds in standard (i.e., Seoul) Korean as a unit phoneme /c/. This /c/ may or may not occur in the environment \_\_\_ /y/V, depending on the particular dialect.

We therefore do not reanalyze /c/ as /ts/ or as /ty/: in the first case it leads to clustering difficulties, and in the second it uses up a representation which might be needed for a phonemic distinction in one or another of the dialects of Korean.

### 2.222 /l, L/

In our tentative list of consonant phonemes, we have two lateral phonemes /l/ and /L/. In /l/ are included the main allophones [l] and [r]. [l] occurs in \_\_\_\_# and in \_\_\_\_C , while [r] occurs in V\_\_V (the second V may be preceded by /h, w, y/) and in #\_\_\_\_ in loan words. /L/ has but one allophone, [L], which occurs in V\_\_V. Upon assigning [r] to the /l/ phoneme, we make /l/ and /L/ contrast in the position V\_\_V. /L/ is not only a phoneme highly restricted in its distribution, but it also makes morphophonemic statements ungainly, for, to give an illustration, we would have to say that a morpheme like /kil/ 'road, way' become /kiL-/ when the suffix /-lo/ is added and that the /l/ of the suffix drops, yielding the form /kiLo/. It would be convenient, therefore, if /L/ could be eliminated as a separate phoneme; specifically, if /L/ could be reanalyzed as /ll/.

We can write /L/ as /ll/ without destroying the phonemic representation, for /ll/ would not otherwise occur. However, neither do certain other clusters of a consonant plus /l/, such as /n, ŋ/ plus /l/, occur.

We may re-represent /L/ as [l'] (phonetically similar to our established allophone [l])<sup>1</sup> and some other segment, symbolized by [x]. The phoneme /l/ occurs before all consonants except /n, ŋ, l/; and no consonant occurs before /l/. The segment [x] in the environment \_\_\_ /l/ after a vowel could be assigned to /n/, /ŋ/ or /l/ without conflicting with the phonemic representation. /n/, /ŋ/ or /l/ would then simply have an additional position of occurrence. We select /l/ as the phoneme to which to assign our [x], however, because of its phonetic similarity (if there were some nasalization, for example, we would have to consider whether to assign [x] to /n/ or /ŋ/, but [L] is a long, lateral, non-nasalized sound, and we can say that our [x] represents, phonetically, a non-nasalized lateral). By assigning our [x] to /l/, we grant /l/ a new position of occurrence, namely, in \_\_\_/l/, and we now have the new cluster /ll/. This makes the dis-

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1. And assigned to the /l/ phoneme.



tribution of /l/ more similar to /n/, for there is /nn/, and it eliminates the highly restricted phoneme /L/. Morphophonemic statements are simplified, for, in the example cited above, there is no need to make any morphophonemic statement at all: /kil/ + /-lo/ is simply /killo/.

### 2.223 /P, T, C, K, S/

The series /P, T, C, K, S/ may be re-analyzed as /pp, tt, cc, kk, ss/. This would eliminate a series of consonants whose distribution is very limited: these consonants do not occur in final position, nor in clusters with other stops or spirants. It would also expand the distributional range of the consonants in the series /p, t, c, k, s/. It is to be noted first of all that writing /P, T, C, K, S/ as /pp, tt, cc, kk, ss/ would not destroy the phonemic representation for /pp, tt, cc, kk, ss/ do not otherwise occur.

When we review the distributions of /P, K/ and of /p, k/, we see that they contrast in the positions /#\_\_\_\_V/ and in /V\_\_\_\_V/. The following lists show the allophones of /P, K/ and of /p, k/ and their general environments.<sup>1</sup>

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1. C is consonant, V is vowel.

/P, K/ occur in:

#[P, K]V

V[P, K]V

No allophones in

V \_\_\_\_\_ #

V \_\_\_\_\_ C

C \_\_\_\_\_ V

/p, k/ occur in:

#[p<sup>h</sup>, k<sup>h</sup>]V

V[b, g]V

V[p<sup>ʰ</sup>, k<sup>ʰ</sup>]#

V[p<sup>ʰ</sup>, k<sup>ʰ</sup>]C

C[p<sup>ʰ</sup>, k<sup>ʰ</sup>]V

It is to be noted further that the established allophones of /p, k/, [p<sup>ʰ</sup>, k<sup>ʰ</sup>], occur specifically next to the following relevant consonants.

[p<sup>ʰ</sup>] occurs in:

V \_\_\_\_\_ t<sup>ʰ</sup> V [hap<sup>ʰ</sup> t<sup>ʰ</sup>ida]

V \_\_\_\_\_ c<sup>ʰ</sup> V [hap<sup>ʰ</sup> c<sup>ʰ</sup>iyɔ]

V \_\_\_\_\_ k<sup>ʰ</sup> V [c<sup>h</sup>up<sup>ʰ</sup> k<sup>ʰ</sup> unyo]

V \_\_\_\_\_ s<sup>ʰ</sup> V [øp<sup>ʰ</sup> s<sup>ʰ</sup> øyo]

Vk<sup>ʰ</sup> \_\_\_\_\_ V [tøup<sup>ʰ</sup> k<sup>ʰ</sup> o]

[k<sup>ʰ</sup>] occurs in:

V \_\_\_\_\_ p<sup>ʰ</sup> V [hæk<sup>ʰ</sup> p<sup>ʰ</sup> u]

V \_\_\_\_\_ t<sup>ʰ</sup> V [šik<sup>ʰ</sup> t<sup>ʰ</sup> aŋ]

V \_\_\_\_\_ c<sup>ʰ</sup> V [møk<sup>ʰ</sup> c<sup>ʰ</sup> iyɔ]

V \_\_\_\_\_ s<sup>ʰ</sup> V [møk<sup>ʰ</sup> s<sup>ʰ</sup> øyo]

Vp<sup>ʰ</sup> \_\_\_\_\_ V [tøup<sup>ʰ</sup> k<sup>ʰ</sup> o]

Thus, [p<sup>ʰ</sup>, k<sup>ʰ</sup>] occur before [p<sup>ʰ</sup>, t<sup>ʰ</sup>, c<sup>ʰ</sup>, k<sup>ʰ</sup>, s<sup>ʰ</sup>], except that [p<sup>ʰ</sup>p<sup>ʰ</sup>] and [k<sup>ʰ</sup>k<sup>ʰ</sup>] do not occur. However, [p<sup>ʰ</sup>] occurs not only in V \_\_\_\_\_ [k<sup>ʰ</sup>]V but also in V[k<sup>ʰ</sup>] \_\_\_\_\_ V; analogously, [k<sup>ʰ</sup>] occurs not only in V \_\_\_\_\_ [p<sup>ʰ</sup>]V but also in V[p<sup>ʰ</sup>] \_\_\_\_\_ V.

Phonetically, [p<sup>ʰ</sup>, k<sup>ʰ</sup>] differ from [P, K] only in that [P, K] have the features of fortisness and some kind of pressure or tension in the throat (laryngeal or glottal constriction). We may therefore re-segment

[P, K] into [p̣, ḳ] plus [x], where [x] represents the phonetic difference from [p̣, ḳ] as noted in the preceding sentence. We may regard [x] as an allophone in the same sense as our other allophones, or regard it as a component. We next assign an order to the sequence of [p̣] and [x], and of [ḳ] and [x], namely [p̣x] and [ḳx], respectively. We may do this since it adds an environment to the distribution of [ḳ] and of [p̣] which is analogous to the ones already established; and in this position [x] contrasts with every other environment of [p̣] and of [ḳ].

As has already been noted, [p̣] and [ḳ] are not followed by any allophone of /p/ or /k/, respectively, although they are both followed by allophones of /t, c, s/, namely [ṭ, c̣, ṣ]. We may therefore assign [x] to /p/ when [x] occurs after [p̣] and to /k/ when [x] occurs after [ḳ]. We now have the phonemic sequences /pp/ and /kk/.

By re-analyzing /P, K/ as /pp, kk/, we not only have eliminated /p, k/ but we have also widened the range of /p, k/ so that they occur not only after other consonants (including /m, n, ŋ, l/ in addition to the ones stated above), but also after another /p, k/. Furthermore, this analysis simplifies the description of medial consonant clusters. We now

have clusters of like consonants as well as of different consonants medially. This is desirable because finally neither occur. Also, it increases the number of consonant clusters initially, for now not only do clusters of /p, k/ plus /w, y/ occur initially, but also clusters of /p, k/ and another /p, k/ may occur initially. We may regard each second occurrence of /p, k/ (after another /p, k/) as representing fortisness, non-aspiration and tension.

We use the same procedure in re-analyzing /T, C, S/ as /tt, cc, ss/. We now have, instead of our second series of consonant phonemes /P, T, C, K, S/ merely the sequences /pp, tt, cc, kk, ss/.

It should be noted that, phonetically, a sequence of unlike consonants, such as /pt/, is a cluster of two different voiceless, unaspirated consonants, while a sequence of like consonants, such as /pp/ is one voiceless, unaspirated tense consonant. The tenseness (together with the fortisness) is now a positional variant (our old [x]) of /p, t, c, k, s/, respectively. The other allophones, such as [t̚] which may come after /p/, for example, are also voiceless and unaspirated but lack the tenseness and fortisness of [x]; even so, however, it is still not clear, from our material, whether tenseness and/or fortisness may not be an intermittent feature of medial clusters like /pt/.

In phonemicizing the vowels, we have identified the tense variants of the vowels as allophones of the vowel phonemes occurring only after /P, T, C, K, S/. Re-writing these phonemes as /pp, tt, cc, kk, ss/ does not alter the phonemic classifications of the vowels, even though their environments are thereby changed, because in their new environments (either after [x] or after /pp/, etc.) they are still in complementary distribution with the non-tense, or less tense, variants of the vowels which do not occur after [x] or after /pp/, etc. As noted in the beginning of this argument, we may alternatively regard [x] as a component, and, in connection with the vowels, say that [x] goes over not only a consonant, but also over a following vowel.

2.224 /p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/

The aspirated series /p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/ may be re-analyzed as the sequences /ph, th, ch, kh/. We may do this by a re-segmentation of /p<sup>H</sup>/, etc. In reviewing the positions of occurrence of /p<sup>H</sup>/ and of /p/, we note that they contrast in the environments #\_\_\_\_V and V\_\_\_\_V. The phoneme /h/, it should also be noted, occurs in #\_\_\_\_V and in V\_\_\_\_V; furthermore, /h/ occurs after the consonants /m, n, ŋ, l/,

but not after the other consonants. The phonemes /p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/ may be re-segmented into [p, t, c, k] plus [<sup>H</sup>]; now, [<sup>H</sup>] is in complementary distribution with all allophones of /h/, since no allophone of /h/ otherwise occurs after any consonant but /m, n, ŋ, l/, and [p, t, c, k] are in complementary distribution with all allophones of /p, t, c, k/ since no allophones of these phonemes otherwise occur before /h/. Grouping /<sup>H</sup>/ in with /h/, and [p, t, c, k] in with /p, t, c, k/, results in our having clusters of /p, t, c, k/ plus /h/ instead of the unit phonemes /p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/, that is, /ph, th, ch, kh/. As in the case of re-analyzing /P, T, C, K, S/ as /pp, tt, cc, kk, ss/, by writing /ph, th, ch, kh/, we eliminate a series of phonemes and add to the ranges of other established phonemes, i.e., of /p, t, c, k/ and of /h/. This analysis also helps generalize, and in other ways simplify statements about clusters and morphophonemics.

## 2.23 Final List of Consonants and Their Distribution

Instead of the tentative consonant phonemes listed in 1.2 we now have the following final list of phonemes: /p, t, c, k, s, h, w, y, m, n, ŋ, l/.<sup>1</sup>

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1. For another analysis, see Samuel E. Martin, Korean Phonemics, Language 27.4, 1951, pp. 519-533.

The general restrictions on the occurrence of the tentative **consonant** phonemes, especially as to neighboring consonants, were described cursorily in 2.21. The re-analysis of the second and third series, /P, T, C, K, S/ and /p<sup>H</sup>, t<sup>H</sup>, c<sup>H</sup>, k<sup>H</sup>/ as clusters of other already established consonant phonemes clearly changes the picture of consonant clustering.

In this section, we offer a more detailed description of permitted consonant clusters in terms of our final list of consonant phonemes above.

Below is a concise statement of the types of clusters which occur. Following this are several tables which indicate the specific clusters which have been found in the informant material of this study.

## 2.231 Consonant Clusters

### I Initial clusters

#### (a) Two consonants:

1. The double consonants: /pp, tt, cc, kk, ss/
2. /p, t, c, k/ + /h/ : /ph, th, ch, kh/
3. /p, t, c, k, s, h, m, n/ + /w/ : /pw, tw, cw, kw, sw, hw, mw, nw/
4. /p, k, h, m, n/ + /y/ : /py, ky, hy, my, ny/ (but not before /i, e, u/).

## (b) Three consonants:

1. /ph, kh/ + /y/ : /phy, khy/
2. /pp, kk/ + /y/ : /ppy, kky/
3. /pp, tt, cc, kk/ + /w/ : /ppw, ttw, ccw,  
kkw/
4. /ph, th, ch, kh/ + /w/ : /phw, thw, chw, khw/

II Medial clusters

## (a) Two consonants:

1. All those under I(a) above.
2. Other double consonants (besides those of I(a) above):  
/mm, nn, ll/  
/mh, nh, ŋh, lh/  
/ŋw, lw, ŋy, ly/
3. Consonant + consonant: e.g., /pt, nt, lc, lm/
4. /m, n, ŋ, l/ + /h/
5. /ŋ, l/ + /w, y/

## (b) Three consonants:

1. All those under 1(b) above.
2. /m, n, ŋ, l/ + /pp, tt, cc, kk, ss/ : e.g.,  
/mpp, ltt, lss/
3. consonant + /ph, th, ch, kh/ : /kch, kph,  
nph/
4. /pp, tt, cc, kk, ss/ + /w/ : e.g., /kkw/, etc.



5. consonant + /h/ + /w/ : e.g., /phw, ɣhw/
6. consonant + consonant + /w/ : e.g., /mpw/,  
lsw/
7. double consonant + /y/ : e.g., /kky, lly/
8. consonant + consonant + /y/ : e.g., /mky/
9. consonant + /h/ + /y/ : e.g., /khy/

(c) Four consonants:

1. consonant + consonant + /h/ + /y/ : e.g.,  
/kphy/

### III Final clusters

None

The following tables show the explicit consonant clusters which may be found, in an arrangement convenient for the morphemic analysis of later chapters. In many if not most cases, the medial clusters (i.e., those between vowels) come about as a result of two morphemes combining with close juncture between them. In connection with this, we include the instances of /-/ (see 1.5), since /-/ represents close juncture at least intermittently. In the tables showing the medial clusters, the consonants or consonant clusters listed in the "y" axis may be taken as the final phoneme or phonemes of the first morpheme of a combination, and the consonants or consonant clusters in the "x"

axis may be taken as the first phoneme or phonemes of the second morpheme of the combinations. The resulting clusters also include those clusters which do not come about from the combining of two morphemes.

The tables do not exhaust the possibilities of consonants or consonant clusters which may occur as morpheme-final or morpheme-initial when the morpheme occurs in isolation, for if they were exhaustive, we would have some completely empty tables. Dashes indicate that the simply "additive" sequence does not occur. These dashes, plus the empty tables, are precisely the points of major morphophonemic interest.

In the case of initial clusters, there is no question of morpheme combinations, since no initially-occurring morpheme consists only of consonants. Nevertheless, the two-dimensional table diagram is used to show the combinations of consonants that do and do not occur in the context of the whole set of consonants, or of the relevant part of them.

## 2.232 Tables of Consonant Clusters

## I. Initial Clusters

	p	t	c	k	s	h	w	y	m	n	ŋ	l
p	pp	-	-	-	-	ph	pw	py	-	-	-	-
t	-	tt	-	-	-	th	tw	-	-	-	-	-
c	-	-	cc	-	-	ch	cw	-	-	-	-	-
k	-	-	-	kk	-	kh	kw	ky	-	-	-	-
s	-	-	-	-	ss	-	sw	-	-	-	-	-
h	-	-	-	-	-	-	hw	hy	-	-	-	-
w	-	-	-	-	-	-	-	-	-	-	-	-
y	-	-	-	-	-	-	-	-	-	-	-	-
m	-	-	-	-	-	-	mw	my	-	-	-	-
n	-	-	-	-	-	-	nw	-	-	-	-	-
ŋ	-	-	-	-	-	-	-	-	-	-	-	-
l	-	-	-	-	-	-	-	-	-	-	-	-
ph	-	-	-	-	-	-	phw	phy	-	-	-	-
th	-	-	-	-	-	-	thw	-	-	-	-	-
ch	-	-	-	-	-	-	chw	-	-	-	-	-
kh	-	-	-	-	-	-	khw	khy	-	-	-	-
pp	-	-	-	-	-	-	ppw	ppy	-	-	-	-
tt	-	-	-	-	-	-	ttw	-	-	-	-	-
cc	-	-	-	-	-	-	ccw	-	-	-	-	-
kk	-	-	-	-	-	-	kkw	kky	-	-	-	-

## II. Medial clusters

(1)	p	t	c	k	s	h	w	y	m	n	ŋ	l
p	pp	pt	pc	(pk)	ps	ph	pw	py	-	-	-	-
t	-	tt	(tc)	(tk)	-	th	tw	-	-	-	-	-
c	-	-	cc	-	-	ch	cw	-	-	-	-	-
k	kp	kt	kc	kk	ks	kh	kw	ky	-	-	-	-
s	-	-	-	-	ss	-	sw	-	-	-	-	-
h	-	-	-	-	-	-	hw	hy	-	-	-	-
w	-	-	-	-	-	-	-	-	-	-	-	-
y	-	-	-	-	-	-	-	-	-	-	-	-
m	mp	mt	mc	mk	ms	mh	mw	my	mm	mn	-	-
n	np	nt	nc	nk	ns	nh	nw	ny	nm	nn	-	-
ŋ	ŋp	ŋt	ŋc	ŋk	ŋs	ŋh	ŋw	ŋy	ŋm	ŋn	-	-
l	lp	lt	lc	lk	ls	lh	lw	ly	lm	-	-	-

(2)

ph	-	-	-	-	-	-	phw	phy	-	-	-	-
th	-	-	-	-	-	-	thw	-	-	-	-	-
ch	-	-	-	-	-	-	chw	-	-	-	-	-
kh	-	-	-	-	-	-	khw	khy	-	-	-	-
mh	-	-	-	-	-	-	mhw	mhy	-	-	-	-
nh	-	-	-	-	-	-	nhw	nhy	-	-	-	-
ŋh	-	-	-	-	-	-	ŋhw	ŋhy	-	-	-	-
lh	-	-	-	-	-	-	lhw	lhy	-	-	-	-

(3)	p	t	c	k	s	h	w	y	m	n	ŋ	l
pp	-	-	-	-	-	-	ppw	ppy	-	-	-	-
tt	-	-	-	-	-	-	ttw	-	-	-	-	-
cc	-	-	-	-	-	-	ccw	-	-	-	-	-
kk	-	-	-	-	-	-	kkw	kky	-	-	-	-
ll	-	-	-	-	-	-	-	lly	-	-	-	-

(4)

	ph	th	ch	kh
p	p-ph	p-th	p-ch	p-kh <sup>1</sup>
t	-	t-th	t-ch	- <sup>1</sup>
c	-	-	-	-
k	k-ph	k-th	k-ch	k-kh <sup>1</sup>
s	-	-	-	-
h	-	-	-	-
w	-	-	-	-
y	-	-	-	-
m	mph	mth	mch	mkh
n	nph	nth	nch	nkh
ŋ	ŋph	ŋth	ŋch	ŋkh
l	lph	lth	lch	lkh

---

1. The sequences with double consonants occur only with /-/ as indicated; with close juncture they change to /ph, th, kh/, and /t-ch/ changes to /ch/.



	pw	tw	cw	kw	sw	hw	mw	nw	ɲw	lw
m	mpw	mtw	mcw	mkw	msw	mhw	mmw	mnw	-	-
n	-	ntw	ncw	(nkw) <sup>1</sup>	nsw	nhw	nmw	nnw	-	-
ŋ	ɲpw	ɲtw	ɲcw	ɲkw	ɲsw	ɲhw	ɲmw	ɲnw	-	-
l	lpw	ltw	lcw	lkw	lsw	lhw	lmw	lnw	-	-

(7)

	py	ky	hy	my	ny	ly
p	ppy	(pky)	phy	-	-	-
t	-	(tky)	thy	-	-	-
c	-	-	chy	-	-	-
k	kpy	kky	khy	-	-	-
s	-	-	-	-	-	-
h	-	-	-	-	-	-
w	-	-	-	-	-	-
y	-	-	-	-	-	-
m	mpy	mky	mhy	mmy	mny	-
n	npy	nky	nhy	nmy	nny	-
ŋ	ɲpy	ɲky	ɲhy	ɲmy	ɲny	-
l	lpy	lky	lhy	lmy	-	lly

---

1. or /ɲkw/

(8)

	phy	khy
p	p-phy <sup>1</sup>	-
t	-	-
k	kphy	k-khy <sup>1</sup>
m	mphy	mkhy
n	nphy	nkhy
ŋ	ŋphy	ŋkhy
l	lphy	lkhy

Some consonant clusters (examples): /tachelo/ 'generally', /mwøsiyo/ 'what is it', /khata/ 'be big', /çøkta/ 'be small', /-imnikka/ 'is it?', /sanpo/ 'walk', /annankunyo/ 'it isn't', /pom çølttwelttæ/ 'when it is spring', /kkaci/ 'until', /olttæ/ 'when he comes', /supkiçlan/ 'humidity', /tøptaptita/ 'they say it's lost', /chipko/ 'being cold', /mollayo/ 'I don't know', /øccøthun/ 'anyhow', /kuløpsita/ 'let's do it', /ilccøne/ 'the other day', /çønhwa talyøttuni/ 'tried calling', /øttønttanun/ 'sometimes', /ttønallyønniçta-man/ 'although I have to leave', /pwayaketta/ 'I'll see', /sikan-phyo/ 'schedule', /pallupciyo/ 'it's quick', /chimtæ/ 'bed',

---

1. With close juncture, these become /phy, khy/.



/pantusi/ 'apparently', /cøncha/ 'street car', /kyøŋhøm/ 'experience', /cøŋmal/ 'truth', /ilki/ 'weather', /ømkinta/ 'move', /tohweci/ 'urban area', /mipki-hanta/ 'be ugly', /kyøŋce/ 'economy', /søŋnip-hanta/ 'build up', /kkatalaki/ 'reason', /cham-søk-hanta/ 'join', /thallyøtta/ 'had bad relations', /camkkan/ 'just (recently)'.

### 2.3 Phonetic Structure of Utterances

#### 2.31 What successions of vowels and consonants make an utterance?

We have described the limitations on occurrence of the vowels and consonants with respect to themselves, to each other and to the junctures, as the relevant environments. In this section, we wish to describe how the successions of vowels and consonants actually occur in speech. Or, to put the matter another way, we have described clusters of vowels and of consonants, and we now wish to describe clusters of vowels and consonants. The relevant environment here is #\_\_\_\_#, i.e., minimal utterances, bounded before and after by silence, or pause.

No utterance consists of a consonant (C) alone, (though there are bound morphemes like this, such as the **verb** suffix /-l/) but may consist of a vowel (V)

alone. A minimal utterance, then, may consist of one of the following successions of consonants and vowels: V, VC, VCV, CV, CVC. In place of the "V" or "C" can go any of the sequences (clusters) of  $\hat{V}$ 's or of  $\hat{C}$ 's as described in 2.11 and 2.23.

A medial single consonant syllabifies with the following vowel; that is, the vowel does not begin with a discernible onset, but is articulated smoothly after the consonant.

When there is a medial cluster of two different consonants (except where the second consonant is /h, w, y/,) the first consonant closes the preceding vowel and the second consonant opens the following vowel. Medial /pp, tt, cc, kk, ss/, and a consonant plus /h, w, y/, operate like a single consonant, going with the following vowel. Clusters consisting of these aspirate and geminate clusters plus /y, w/ also operate like single consonants in this respect. So do other clusters consisting of a consonant, such as /n/, plus /w, y/.

It is of interest to note that double stop consonant series - /pp, tt, kk/ (and the aspirate stop series - /ph, th, kh/) differ from corresponding clusters, as far as syllabification is concerned. /pp, tt, kk/, when they occur medially, go with the following vowel in normal rapid speech, as has been

pointed out. So do /cc/ and /ss/. But in slower speech, /pp, tt, kk/ may be /p = pp, t = tt, k = kk/,<sup>1</sup> that is, the preceding vowel is stopped in a way homorganic with the following consonant. In the case of /cc/, however, if the first consonant goes with the preceding consonant and the second consonant with the following consonant, the cluster becomes /t = cc/. Similarly /ss/ is /t = ss/ in slower speech. The case of /ll/ is like that of /mm, nn/: these are all syllabified, in rapid or slow renditions of an utterance, as /l=l, m=m, n=n/.

/ph, th, kh/, in slower renditions, syllabify as /p = ph, t = th, k = kh/, but /ch/ syllabifies as /t = ch/.

The various sequences typified by /pp : p = pp : p = p/ are phonemically the same, though they are phonetically different, similarly, /ph : p = h : p = ph/ are phonemically the same, representing but different ways of dividing the syllable according to the speed with which the utterance is rendered (or perhaps other gestural features).

In describing how sequences of consonants and vowels occur in an utterance, we have left out contour features of the utterance (stress, pitch), for we have not enough data showing the possible correlations.

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1. " = " in this discussion divides syllables.

### 2.32 Syllabification

These units of sequences of consonants and vowel may conveniently be called syllables, and the dividing of an utterance consisting of a succession of vowels and consonants will be referred to as syllable division, or syllabification. It is of phonetic interest that there is a difference in syllable-division of an utterance rendered slow as against fast. For example, (letting "=" mark syllable divisions) /sam-il-innita/ 'It's the third day' syllabifies in slow speech as /sam = il = innita/ and in rapid speech as /sa = mi = lim = ni = ta/. Other examples are: /sam-sipi/ 'thirty two', which is /sam = sip = i/ in slower speech and /sam = si = pi/ in more rapid speech; /mot-hæ/ 'can't do', which spoken slower is /mot = hæ/ and faster is /mo = thæ/.

In general, it seems clear that syllable-division in slower speech correlates with what turns out to be morpheme boundary to a very large extent, while in more rapid speech it operates as a purely phonetic feature of the succession of vowels and consonants, as described above. There is contrast between, e.g., /hap-hanta/ 'add' and /aphe/ (so far as the /p-h : ph/ sequences are concerned) only in slow speech:

/hap = han = ta/ and/ap = phe/. But in normal speech, they are /ha = phanta/ and /a = phe/. In slower speech, as has been pointed out, the sequences /pp, tt, cc, kk/ and /ph, th, ch, kh/ would syllabify as /p-pp, t-tt, t-cc, k-kk/ and /p-ph, t-th, t-ch, k-kk/. /ss/ would syllabify as /t-s/.

### 2.33 Morpheme-boundary signals

In the discussion on consonant clusters, we have noted that only certain clusters occur initially and finally in an utterance. If we assume that any word can begin and end an utterance - as it may, even if spoken only in isolation - then the restrictions on consonant clustering can serve as morpheme-boundary signals; forms with clusters which occur only medially may be suspected of being composed of a succession of morphemes. This provides a point of departure in finding the morphemes. For example, given the form /səŋhwal/, we may properly suspect a boundary between /səŋ-/ and /hwal/, since utterances may end with /ŋ/ and begin with /hw/, but none end with /s/, /h/ or /w/, nor do utterances begin with /l/ or /ŋ/.

However, this way of signalling of possible morpheme boundaries does not point out all the possible boundaries, and in some cases may signal falsely. E.g., given /siphun/, the possible boundaries, according

to the above mentioned morpheme-boundary signal, would be between /si/ and /phun/ or between /sip/ and /hun/; this would be a false lead, since the proper morpheme division happens to be /siph-/ and /-un/.

The situation is complicated by the difference in possible endings and beginnings for morphemes, as such, and for actual utterances. Thus, while no utterances end in /h/ or /ph/ or /u/<sup>1</sup>, for example, some morphemes do; while no utterances begin with /l/, some morphemes do. As was suggested in 2.27, this is what underlies the main facts of Korean morphophonemics.

Syllable-initial and syllable-final consonants and consonant clusters turn out, in general, to be the same as those which are utterance-initial and utterance final: an exception is /l/ (and /ll/) which may be syllable-initial but not utterance-initial. This is of some interest because it provides us with an aid in judging boundary indications in proceeding to discover the morphemes.

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1. /u/ may occur finally in English loans.

## CHAPTER III

## MORPHOPHONEMICS

When we come to identify morphemes as sequences of phonemes, we will find that certain different sequences of phonemes have grammatical properties as though they were the same morpheme. Therefore we will call each such set of different sequences of phonemes alternants of the same morpheme. The morpheme will then have two or more alternant phonemic forms in stateable environments. In some cases, we will want to use a special symbol for the phonemes which alternate in the different forms of a morpheme. This symbol will be called a morphophoneme (e.g., /p<sup>\*</sup>/). The different forms of a morpheme can also be viewed as being derived from a base form by replacing one phoneme by another.

## 3.1 The Types of Alternations

Some morphophonemic alternations in Korean are automatic, while others are not. By automatic, or regular, alternations we mean those which occur in all morphemes having a particular phoneme A in the environment of all morphemes having a particular phoneme B; in this case, the phoneme A is "replaced"

by some other phoneme C, so that instead of the phoneme sequence AB across morpheme boundary, we get the sequence CB. This happens in many cases where the language does not have the sequence AB, so that the change of A to C has the effect of preventing a new combination CB from occurring across morpheme boundary; or, we may say it has the effect of preserving the limitations on phoneme sequences in the language. For example, it has already been noted that the sequence /tm/ does not occur; the change of a final /t/ to /n/ before initial /m/, so that /-t/ + /m-/ is /-nm-/, is a regular morphophonemic rule in the language; e.g., /kot/ + /mata/ is /konmata/ 'every place'.

However, not all morphophonemic changes are merely preservative; for there is nothing in the structure of allowable clusters that would lead us to expect /t/ to change precisely to /n/ before /m/, since other clusters with /m/ also occur, such as /lm, qm/. Furthermore, there are cases of alternatives in some alternations. For example, in some verb stems ending in /p/, the /p/ changes to /u/ before a suffix beginning with /n/, as in /kup-/ + /-n/ which is /kuun/ 'boiled', while stem-final /p/ of other stems changes to /m/, as in /ip-/ + /-nun/ which is /imnun/ 'putting on



(clothes)'. In such cases, we have to distinguish between the two kinds of /p/ ; we can write the /p/ of stems like /ip-/ as /p\*/.

In most cases of regular alternation, the change is located in the M part of an MN sequence of morphemes, where "M" and "N" represent morphemes. In the irregular alternations, the change is more often located in the N part, or in both M and N.

There are also several kinds of non-automatic alternation. These do not necessarily have a preservative effect, so far as the structure of clusters is concerned. Among the non-automatic alternations are: (a) those which occur in only some cases—i.e., some, but not all of the morphemes ending in some phoneme A bring about or suffer a phonemic change when they come next to a morpheme beginning with some phoneme B; (b) or, different changes may come about for different morphemes even though the affected phoneme is the same. This is considered as being more irregular than the case of alternatives in regular alternations because of the greater variety of possible changes.

The larger part of these non-automatic alternations takes place in connection with verb stems when they are followed by certain suffixes which have alternant forms whose distribution is not simple.

Besides the various kinds of phonemic alternations, considered from the point of view of their regularity or generality, there are also some differences in the alternations found in noun stems and in verb stems. While some of the regular and general alternations apply to both noun stems and to verb stems, there are enough differences in the kinds of alternations that these classes of morphemes indulge in to make it seem convenient to describe the morphophonemics of the noun stems and of the verb stems separately. But we will note what similarities there are between them.

### 3.2 Alternations in Noun Stems

(1) Stems ending in /c, s/ have /t/ instead, before /#/ or before a consonant-initial morpheme. E.g., /kosi/ : /kot/ 'place'.

(2) Stems ending in a cluster of consonants, except where the first consonant in the cluster is /l/, drop all but the first consonant in the cluster. E.g., /myøchi/ : /myøt/ 'quantity', /kapsi/ : /kap/ 'price', /pakke/ : /pak/ 'outside', /iphi/ : /ip/ 'leaf' (cf. /ipi : ip/ 'mouth').

(3) Stems ending in a cluster in which the first consonant is /l/, drop the /l/. E.g., /talki/ :

/tak/ 'chicken', /kkatalke/ : /kkatak/ 'reason'.

(4) In stems whose final consonant (either original or after the above rules have been applied) is /t/, the /t/ is replaced as follows:

/-t/ is replaced by /-p/ before /p-/

/-k/ before /k-/

/-s/ before /s-/

/-n/ before /m-, n-/

/-c/ before /-i/; (and /th/ by /ch/)

E.g., /kot/ + /mata/ is /konmata/ 'every place', /path-/ + /-i/ is /pachi/ 'field'.

(5) In stems whose final consonant is /p/, the /p/ is replaced as follows:

/-p/ is replaced by /-m/ before /m-, n-/;

/pap/ + /mɔɣnunta/ is /pammɔɣnunta/ '(he) eats'.

(6) In stems whose final consonant is /k/, the /k/ is replaced:

/-k/ is replaced by /-ŋ/ before /m-, n-/

(7) The initial consonant of a morpheme added to another morpheme may be replaced.

Initial /n/ is replaced by /l/ after a stem ending in /l/. E.g., /sil + næ/ is /sillæ/ 'the room inside' is /sillæ-untogcaɣ/ 'gymnasium'.

(8) Many initial /p, t, c, k, s/ are replaced by /pp, tt, cc, kk, ss/ after many noun stems ending

in a vowel, or in /l, m, n/. E.G., /u + kɔt/ is /ukkɔt/ 'the upper one', /il + cɔn/ is /ilccɔn/ 'the other day'.

**Rules 1, 2, 3, 4, 6** apply also to verb stems, insofar as verb stems would enter into the conditions stated. For example, while a verb stem ending in /ps/, drops the /s/ before a consonant-initial suffix, it could not do so before /#/ , since verb stems do not occur before /#/.

Rule 5 applies to some verb stems ending in /p/, but not all; here, too, only the rule about /p/ before /n/ would be relevant to verb stems.

Part of rule 8 is applicable to verb stems: a consonant-initial suffix added to a stem ending in /m/ doubles its initial consonant: /kam-/ + /-ketta/ is /kamkketta/ 'will wash (hair, etc.)'.

### 3.3 Alternations in Verb Stems

Verb stems may undergo morphophonemic changes when suffixes are added. Of these suffixes, some have only one form, which is added to all stems, regardless of their phonemic form, e.g., the endings /kes-/, /-ta/ and there is occasion for changes in the phonemic composition of consonant-final stems here. Other suffixes have alternant forms, one (rarely

two) being added to stems ending in a consonant, and one being added to stems ending in a vowel. In the case of some suffixes having two alternants, the post-vowel one begins with a consonant while the post-consonant one differs from it only by having an extra vowel, /a/, at the beginning of the morpheme, as in /n~an/; in such cases, a stem ending in a consonant has no chance of undergoing any expected morphophonemic changes, since the possibility of consonants coming together across morpheme boundary is obviated by the initial /a/ vowel of the post-consonant alternant of the suffix. Even in this case, however, certain alternations in verb stems occur; specifically, in some stems ending in /l, p/, which go with the post-vowel alternant, dropping the /l/ or changing the /p/ to /u/. Further, in other cases of a suffix having two alternants, even the post-consonant one begins with a consonant, and morphophonemic changes in consonant-final stems will be found here; e.g., in the case of the suffix alternant /-so/ : /anh-/ + /-so/ is /ansso/ 'is not'. There is, lastly, the case of suffixes beginning with a vowel. In this case, there are several alternants of the suffix; and stems, whether ending in a vowel or ending in a consonant, suffer various changes in their phonemic forms.

### 3.31 Regular Alternations

The following discussions and tables describe the most common regular alternations suffered by consonant-final verb stems in the environment of consonant-initial suffixes. The "Y" axis lists the final consonant of the stem, while the "X" axis lists the initial consonant of the suffix. It will be seen that in general, the verb stem-final consonants suffer the same changes before the same initial consonant as do these consonants in noun stems; the main exception is that in some cases /p/ changes to /u/ before /n/, and in others to /m/ (as in the case of the noun stems); the second type of /p/ will be morphophonemically distinguished by being marked with an asterisk.<sup>1</sup> There are also a morphophonemic /l\*/ and a morphophonemic /h\*/. Dashes in the table indicate that the additive cluster occurs. A cross (x) indicates that the sequence does not come about.

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1. An alternative analysis is to consider the stem to end in /u/.

ALTERNATION TABLE A

	t	c	k	s	n
-p	-	-	pk~kk	-	un
-t	-	cc	kk	ss	nn
-c	tt	-	kk	ss	nn
-k	-	-	-	-	ŋn
-s	tt	cc	kk	-	nn
-h	th	ch	kh	ss	?
-l	-	-	-	s	n
-m	mtt	mcc	mkk	mss	-
-p*	-	-	pk~kk	-	mn
-h*	tt	cc	kk	ss	nn
-l*	tt	cc	kk	ss	nn

As in the case of noun stems, verb stems ending in /ph, th, ch, kh/ lose the /h/ before a consonant-initial suffix, and the remaining consonant, /p, t, c, k/ changes next to the consonant of the suffix according

to the rules indicated in the table. But stems ending in /lh, mh, nh/ undergo metathesis of the /h/ with the initial consonant of the suffix, if it is /t, c, k/ (just as in the case of stems ending in single /h/), and change the /h/ to /s/ before an /s/ initial suffix. To summarize: (We have no data on stems ending in /lh, mh, nh/ before a suffix beginning with /n/, which may be due to the fact that these are verbs belonging to a sub-class of verbs which do not take any of the suffixes beginning directly with /n/).

ALTERNATION TABLE B

	t	c	k	s	n
ph	pt	pc	pk~kk	ps	pn
th	tt	cc	kk	ss	nn
ch	tt	cc	kk	ss	nn
kh	kt	kc	kk	ks	kn
lh	lth	lch	lkh	lss	?
mh	mth	mch	mkh	mss	?
nh	nth	nch	nkh	nss	?



Also as in the case of noun stems, verb stems ending in the double consonants /pp, tt, kk, cc, ss/, or in a consonant plus /s/ - i.e., /ps, ks/, drop the second consonant, and the remaining consonant changes in accordance with table A.

ALTERNATION TABLE C

	<u>t</u>	<u>c</u>	<u>k</u>	<u>s</u>	<u>n</u>
pp	pt	pc	pk~kk	ps	mn
tt	tt	cc	kk	ss	nn
cc	tt	cc	kk	ss	nn
kk	kt	kc	kk	ks	qn
ss	tt	cc	kk	ss	nn
ps	pt	pc	pk~kk	ps	mn
ks	kt	kc	kk	ks	qn

And again as in the case of the noun stems, verb stems ending in /l/ plus a consonant or a cluster, drop the /l/, with the remaining consonant changing, except in the case of final /lk/ where an alternative result is possible (as shown below).

ALTERATION TABLE D

	t	c	k	s	<u>n</u>
lp	pt	pc	pk~kk	ps	mn
lt					
lk	kt	kc	kk~lkk	ks	qn
lm	mtt	mcc	mkk	mss	

There are also cases of stems ending in various other kinds of clusters, e.g., /nc/, as in /anc-/ 'sit'. In these cases, the clusters are not reduced, and the final consonant is the one which undergoes change just as if it alone ended the stem: /anc-/ + /-ta/ is /antta/, /anc-/ + /-nun/ is /annun/.

Stems ending in /l/ (but not /l<sup>\*</sup>/) in general (except for an alternative possibility in the case of the suffix /m/) take the post-vowel alternant of a morpheme, if there is one. The /l/ drops before this suffix (beginning with a vowel, /p/, /s/, /n/ or /m/) : /ao, anta, annita, asinnita/; stem /al-/ 'know'. But the /l/ remains otherwise: /alci, alko/.

Stems ending in /p/ (not, however /p<sup>\*</sup>/), also take post-vowel alternants, but only in some cases, and when they do, they change /p/ to /u/; e.g., /tøp-/ 'be warm' plus /-n/ is /tøun/ 'warm'.

Stems ending in /h/ in some cases drop the /h/ and operate like vowel-final stems: /kulø(h)-/ + /-psita/ is /kuløpsita/, and in other cases keep the /h/ and operate like consonant-final stems: /noh-/ + /-upsita/ is /nohupsita/.

### 3.32 Irregular alternations

In this section we take up alternations that verb stems undergo when there are added to them alternant forms of suffixes. It is better to consider these alternant forms of the suffixes as morpheme alternants rather than as instances of morphophonemic alternation in the suffix, since the alternations are not general.

As has been pointed out, some suffixes have alternants which preclude the possibility of changes in the verb stem, e.g., /-myøn~ammyøn~samyøn/. But there are a few suffixes which have alternant forms that do not completely have this effect.

There is a suffix /-ni/, which has an alternant /-uni/. The /-ni/ alternant is usually used for all verbs, and the changes in the verb stems are those outlined in 3.3. However, in the case of some stems ending in /h/ or in a consonant plus /h/, the /h/ is dropped and /ni/ is added, while in other such stems, the alternant /-uni/ is added, with no change in the stem; in still other such stems, either course may be followed: /kath-/ + /-ni/ is /kathuni/, /siph-/ + /-ni/ is /simni/ or + /-uni/ is /siphuni/. Also, some stems ending in /k/ add /-uni/, undergoing no

change, while others ending in /k/ add /-ni/, and change /k/ to /ŋ/: /cøk-/ + /-uni/ is /cøkuni/, while /møk-/ + /-ni/ is /møɲni/. The stem /anc-/ may take either /-ni/ or /-uni/, yielding /anni/ or /ancuni/.

There is a verb suffix /-m/, which has the alternant forms /-m~am~sam/. Verb stems ending in /l/ either (1) drop the /l/ and add the post-vowel alternant of the suffix /-m/, or (2) keep the /l/ and add the post-consonant alternant of the suffix /-am/, or (3) keep the /l/ and add /-m/ but only if another vowel-initial suffix follows: stem /sal-/ + /-m/ or /-am/ is /sam/ or /salam/, /sal-/ + /-m/ + /-i/ is /salmi/ 'life'. Stems ending in /p/, change the /p/ to /u/ and add /-m/: stem /təp-/ + /-m/ is /təum/ 'help'. Stems ending in other consonants add /-am/: /mit-/ + /-am/ is /mitam/ 'belief'. However, after a stem plus the infix /-əs-/, the alternant /-sam/ is added: /ka-/ + /-əs-/ + /-sam/ + /-alo/ is /kassamulo/ 'on account of (his) having gone'.

There is a suffix /-hi/, which has the alternant forms /-i~u~li~hi~ki~kki/, and also change of /a/ to /æ/ and of /o/ to /we/. Verb stems undergo the following changes before this suffix:

(1) Stems ending in /o, a/ change the vowel to /we, æ/; stems ending in /æ, ø/ or /u/ (except when

preceded by /l/), add /-u/, and stem-final /ø/ usually changes to /e/: /po-/ + change of /o/ to /we/ is /pwe-/ 'be seen', /kanna-/ + change of /a/ to /æ/ is /kunnæ-/ 'be finished', /kkæ-/ + /-u/ is /kkæu-/ 'wake (someone) up', /ssu-/ + /-u/ is /ssuu-/ 'dictate', /sø-/ + /u/ is /seu-/ 'stand (something) up, establish'.

(2) Stems ending in /p/ change /p/ to /u/ and add /-u/ (an /ø/ in the stem changes to /e/), or add /-i/ (then the /u/ of the stem may change to /w/: /tøp-/ + /-u/ is /teu-/ 'make (something) warm', /kakkap-/ + /-i/ is /kakkawi/ 'bring (something) near'.

(3) Stems ending in /l/ add /-li/: /al-/ + /-li/ is /alli-/ 'inform', /tol-/ + /-li/ is /tolli-/ 'turn (something) around'. Alternatively we could say that stems ending in /l/ add /-i/ and double the /l/; this analysis eliminates one alternant of this phoneme but requires an extra morphophonemic statement for the stem.

(4) Stems ending in /lla/ drop the /u/ and add /-i/: /ella-/ + /-i/ is /olli-/ 'raise'; if the stem ends in /-la/, the /l/ is also doubled: /malu-/ + /-i/ is /malli-/ 'dry (something)'.

(5) Stems ending in /k/ add /-i/, with change of a stem vowel /ø/ to /e/: /nøk-/ + /-i/ is /meki-/ 'feed', /cuk-/ + /-i/ is /cuki-/ 'kill'. Also, stems

ending in /ph/ add /-i/: /noph-/ + /i/ is /nophi-/ 'raise'.

(6) Stems ending in /s, ch, nh/ add /-ki/, with the /s/ or /h/ changing to /k/: /pøs-/ + /-ki/ is /pøkki-/ 'undress (someone)', /sinh-/ + /-ki/ is /sinkki-/ 'put shoes on (someone)'. Also, stems ending in /lm/ add /-ki/, with the /l/ of the stem dropping: /kulm-/ + /-ki/ is /kumki-/ 'leave (someone) hungry'.

(7) Stems ending in /lp, lk/, or in /p\*, t, c/ add /-hi/; a resulting /thi/ changes to /chi/: /hølp-/ + /-hi/ is /hølphi-/ 'broaden', /cap-/ + /-hi/ is /caphi-/ 'be caught', /pat-/ + /-hi/ is /pachi-/ 'give', /cøc-/ + /-hi/ is /cøchi-/ 'wet (something)', /anc-/ + /-hi/ is /anchi-/ 'seat (someone)', /palk-/ + /-hi/ is /palkhi-/ 'brighten'.

(8) Stems ending in /m/ add /-kki/: /kam-/ + /kki/ is /kamkki-/ 'bathe (someone)'.

There is a verb suffix /-ø/ with the alternants /-ø ~ yø ~ a ~ æ/. In effect, the major changes in verb stems when this suffix is added are as follows:

(1) Stems ending in /i/ (except when preceded by /s, c, ch/) or in /e/ or in /æ/ (see (3) below) add /-yø/; the /i/ of the stem is dropable: /huli-/ + /-yø/ is /huliyø/ or /hulyø/ 'having been cloudy', /iki-/ + /-yø/ is /ikiyø/ or /ikyø/ 'having won',

/twe-/ + /yø/ is /tweyø/ 'having become'.

(2) Stems ending in /i/ preceded by /s, c, ch/ add /-yø/, or, more commonly, drop the /i/ and add /-ø/: /hulyøci/ + /-yø/ is /hulyøciyø/ or + /ø/ is /hulyøcø/ 'having become cloudy', /chi-/ + /-ø/ is /chøø/ 'having hit', /machi-/ + /-ø/ is /machø/ 'having finished', /capsusi-/ + /-ø/ is /capsusø/ 'having eaten'.

(3) Some stems ending in /æ/ add /-æ/, and /ææ/ often becomes /æ/: /næ-/ + /-æ/ is /nææ/ or /næ/ 'having taken'.

(4) Most stems ending in /a/ take /-a/, and /aa/ often becomes /a/: /ka-/ + /-a/ is /kaa/ or /ka/ 'having gone'. But the stem /ha-/ may(1) add /-yø/ or /-ya/, or(2) change its /a/ to /æ/: /hayø, haya/ or /hæ/ 'having done'.

(5) Most stems ending in /ø/ add /-ø/, and /øø/ often becomes /ø/; but a few drop the /ø/ and add /-æ/: /nø-/ + /-ø/ is /nø/ 'having put in', /kølø-/ + /-æ/ is /køla/ 'having been so'.

(6) Stems ending in /o/ add /-a/ and often change /o/ to /w/: /o-/ + /-a/ is /wa/ 'having come'.

(7) Stems ending in /u/ add /-ø/, with the /u/ usually changing to /w/: /capsu-/ + /-ø/ is /capswø/ 'having eaten'.



(8) Most stems ending in /u/ preceded by a consonant other than /l/ drop /u/ and add /-ø/; a few such stems add /-æ/ instead of /-ø/: /ssu-/ + /-ø/ is /ssø/ 'having written', /nappu-/ + /-ø/ is /nappø/ 'having been bad'.

(9) Stems ending in /llu/ and having /o, a/ in the preceding syllable, drop the /u/ and add /-a/; stems ending in /llu/ but having some other vowel in the preceding consonant drop the /u/ and add /-ø/. If the stem has /lu/ instead of /llu/, it adds /-la/ or /-lø/; i.e., the /l/ is doubled. Many of these stems vary between /llu/ and /lu/: /mollu-/ or /molu-/ + /-a/ or /-la/ is /molla/ 'not having known', /pullu-/ or /pulu-/ + /-ø/ or /-lø/ is /pullø/ 'calling'.

(10) Stems ending in /p/ (but not /p\*/) change /p/ to /u/ and add /ø/; the /u/ may change to /w/: /komap-/ + /-ø/ is /komawø/ 'having thanked'. But /pop-/ + this suffix is /pwæ/ 'having seen'.

(11) Some stems ending in /h/ or /h\*/ preceded by a vowel drop the /h/ and operate like a vowel-final stem: /noh-/ + /-a/ is /noa/ or, more commonly, /nwa/ 'having put down', /øttøh-/ + /-æ/ is /øttæ/ 'having been how'. The stem /coh-/ , however, changes the /h/ to /w/ and adds /-a/: /coh-/ + /-a/ is /cowa/ 'having been good'. Such stems are quite irregular

not only in what happens with the /h/ but also in their selection of a form of this suffix.

(12) Stems ending in other consonants (including /l/, which is kept here) or in consonant clusters add /-ø/; some of these stems whose last syllable contains /a, o, æ/ add /a/ rather than /-ø/, but this varies: /nøk-/ + /-ø/ is /nøkø/ 'having eaten', /manh-/ + /-ø/ is /manhø/ 'having been much', /øps-/ + /-ø/ is /øpsø/ 'not having been'.

It should be noted that many stems having /a/ or /o/ take the /-a/ form of the suffix, rather than the /-ø/ form. While the selection of the /-a/ or /-ø/ form of the suffix is rather well fixed in the case of verb stems ending in /l/, there is variation in most stems having /a/ or /o/ and ending in a consonant, but the tendency seems to be toward selecting /-ø/ even if the stem vowel is /o/ or /a/. This seems to be a case of regularizing the pattern: according to G.J. Remstadt in his A Grammar of Korean,<sup>1</sup> this variation between /ø/ and /a/ in the suffix is a vestige of an ancient system of vowel harmony in the language. There are a few other examples of phonemic alternations which are of this type.

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1. Mémoires de la Société Finno-Ougrienne LXXXII, Helsinki, 1939.

### 3.4 Morpheme Alternants

The morphophonemic statements of Chapter III describe most of the alternations in morphemes which are noun stems or verb stems. That is, for most of these morphemes, we look upon alternations in their forms in different environments not as (morpheme) alternants of the morpheme as a whole, but as (morphophonemic) alternations of particular phonemes in these morphemes. There are a few stem morphemes, however, where the alternations are more conveniently described as morpheme alternants. In the case of all suffixes, their different forms will be described in terms of morpheme alternants.

#### 3.41 Noun stem alternants

Noun stems, as will be seen in 4.2, occur with a suffix or with no suffix.

There are some noun stems which have two alternants, one with /l/ or /n/ initially before /y/, and the other with only initial /y/. The /l/ or /n/ appears when the morpheme comes after another morpheme ending in a consonant, while the /y/ initial form is the one which comes after /#/ . This alternation might alternatively be described as a case of non-automatic morphophonemic alternation: initial /ly, ny/

alternates with initial /y/; thus, /il/ + /-lyøn/ is /illyøn/ 'one year'.

The number words /hana, tul, set, net/ 'one, two, three, four' occur in these **forms** when no morpheme occurs after them; they have the forms /chø s-, tul, ses-, nes-/ when the morpheme /-cæ/ follows: /chøccæ, tulccæ, seccæ, neccæ/ 'first, second, third, fourth'. It should be noted that /hana/ is replaced by /chø s-/: the doubling of the initial voiceless consonant of /-cæ/ after /l/, and the change of **final** /s/ before /c/ to /c/, are morphophonemic alternations which have already been discussed in 3.2. /hana, tul, set, net/ have the forms /han-, tu, se-, ne-/ when some other morpheme follows: e.g., /hanpøn, tupøn, sepøn, nepøn/ 'one time, two times, three times, four times'. The morphemes /set, net/ also have the forms /søk-, nøk-/ before certain nouns, in particular the numeral classifiers /tal/ 'month', /caŋ/ 'sheet', /can/ 'cup', /cuil/ 'week'.

There are three noun stems, used as pronouns, which have alternant forms; these are the stems /na/ 'I', /cø/ 'I', /nø/ 'you'. Before the suffix /-ka/, /na/ has the form /næ-/: /næka/ 'I'; /cø/ has the form /ce-/: /ceka/ 'I'; /nø/ has the form /ne-/: /neka/ 'you'. With the genitive suffix /-e/, the

complete forms are /næ/ (from /na/ + /-e/) 'my', /ce/ (from /cø/ + /-e/) 'my', /ne/ (from /nø/ + /-e/) 'your'. The form /cø/ with no suffix has also the form /ce/ in some dialects.

### 3.42 Noun-suffix alternants

There are several noun-suffix morphemes which have two alternant forms; one of these alternants is the one which is used with stems ending in a vowel, and the other is the one which is used with stems ending in a consonant, as shown in the following table (the two forms on the same line are morpheme alternants):

Post-vowel	Post-/l/	Post-consonant
-lo		-ulo
-lul	-ul	-ul
-nun	-un	-un
-ka	-i	-i

It should be observed that all of the post-vocalic alternants begin with a consonant, while all of the post-consonantal alternants begin with a vowel. This is the usual distribution of the alternants of a suffix. All but the last suffixes in the table

above show great similarity in their alternant forms, differing only in the initial phoneme. The way in which /-lo/ differs from /-ulo/ (that is, the post-consonantal alternant has the vowel /u/ initially) illustrates one of the most common differences between the alternants of a morpheme in verb suffixes (in keeping with the principle of a consonant-initial form after stems ending in a vowel, and a vowel-initial form after stems ending in a consonant), as will be seen in 3.44. The suffix /-lo ~ u lo/ differs from the other suffixes in the distribution of its two alternants, for the post-vocalic alternant /-lo/ is also the one used with stems ending in /-l/; /-ulo/, then, is post-consonantal, except when the consonant is /l/.

The alternants /-nan/ and /-lal/ are often replaced by /-n/ and /-l/ in rapid speech.

What are here described as post-consonantal alternants are used in some dialects with certain stems ending in a vowel, such as /hana/ : /hanai, hanaun, hanaul/.

There is a suffix /-ke/ (post-vocalic and post-consonantal) which is often used with another suffix /-e/ preceding it. But /-ke/ is also used with certain stems directly, and it has then the form

/-kke/: /apɔnimkke/ 'to (one's)father'.

There are two suffixes /-e/ which are added to both vowel-final and consonant-final stems. These suffixes, while they are homophonic should be distinguished, because 1) they differ in distribution and 2) one of them has alternants which the other does not. One /-e/ is a "locative" suffix, and the other /-e/ is a "genitive" suffix. A noun with the locative /-e/ is not necessarily followed by another noun, and when it is, there is usually /#/ juncture between them; on the other hand, a noun with genitive /-e/ is always followed by another noun and there is /-/ juncture between them. Also, in many cases, genitive /-e/ is substitutable by (or varies with) zero suffix, but locative /-e/ is not. The genitive /-e/ may have the alternant form /-ui/ in formal speech, and in reading; it has the forms /-u/ or /-i/ in various dialects; in standard Seoul speech, however, the genitive /-e/ usually has the form /-e/ or /-i/. E.g., /ku-cipe/ 'in that house', /ku-salam-e-cip/ 'that person's house'.

There is a suffix /-sɔ/, which is also both post-vocalic and post-consonantal. /-sɔ/ is also used with a preceding suffix, instrumental /-lo ~ ulo/ and locative /-e/. With /-e/, it has the form /-sɔ/,

but with /-lo ~ alo/, it has the form /-ssø/: /cipesø/ 'from the house', /haksagulosø/ 'as a student'.

Cases of morpheme alternants in which the alternation is of a unique or otherwise special type will be mentioned in the morphology. For example, the morpheme alternants of the noun-suffix /-wa ~ kwa/ 'and, with': /-wa/ is post-vocalic and /-kwa/ is post-consonantal.

### 3.43 Verb-stem alternants

Unlike the noun stems, which occur with or without suffixes,<sup>1</sup> verb stems are bound forms, occurring only with one or more suffixes. Some of these suffixes have but one form, while others have two or more alternants.

Replacement of phonemes in verb stems before suffixes has been described in terms of morphophonemic alternation (except for two cases) in 3.3. What remains to be described is alternation in the forms of suffixes, and these alternations, as in the case of noun stem suffixes, will be treated in terms of morpheme alternants.

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1. Unless we consider lack of a suffix to be an instance of occurrence of a zero morpheme.



Before we discuss verb suffix alternants, mention should be made of the verb stem /-i-/, which is a copula element. This /-i/, unlike other verb stems, does not occur except with a preceding noun stem. (We might well regard it as a noun stem suffix of a special sort.) The stem vowel /i/ is dropable in rapid speech when it comes after a noun stem ending in a vowel: /nuku/ + /innikka/ is /nukunnikka/ 'who is it?', /hana/ + /iyo/ is /hanayo/ '(it)'s one'. After stems ending in any consonant, /-i-/ is not dropped when it is followed by a suffix beginning with a consonant other than /y/: /chæk/ + /ita/ '(it)'s a book'. But if the suffix after /-i-/ begins with a /y/, then the stem vowel /i/ is dropable after noun stems ending in /m, l/: /salam/ + /iyo/ is /salamyo/ '(it)'s a person'.

### 3.44 Verb suffix alternants

Some reference to alternations in verb suffixes has already been made in 3.3; this was necessary in order to permit a treatment of the morphophonemics of the verb stems. The main reason for treating the suffixes in terms of morpheme alternants, rather than in terms of morphophonemic alternation is that the various forms of a suffix do not **differ** by a replacement

of a phoneme by some other phoneme but by the addition of one or more phonemes to a "basic" form. The extra phoneme is the vowel /u/, which is added to the beginning of a suffix (which is otherwise consonant-initial), yielding the post-consonantal variant of the morpheme, except that after the infixes /-kes-/ and /-ø̃s-/ one adds /su/ to the alternant. The use of the "binding" vowel /u/ to make the difference between the post-vocalic and the post-consonantal alternants of a suffix does not apply to a few suffixes which have alternant forms, particularly (1) those which begin with (in fact, consist of) a vowel and (2) those whose alternants are not strictly distributed in the usual post-vocalic and post-consonantal way.

The verb suffixes which have the most regular differences in their alternant forms are as follows:

<u>Post-vocalic</u>	<u>Post-consonantal</u>	<u>After /-kes-/, /-ø̃s-/</u>
-si-	-usi-	
-psita	-upsita	
-n	-un	-sun
-l	-ul	-sul
-ni	-uni	-suni
-na	-una	-suna
-myø	-umyø	-sumyø
-myøn	-umyøn	-sumyøn

Post-vocalic	Post-consonantal	After /-kes-/, /-ø s-
-ni	- <u>ni</u>	- <u>ni</u>
-nnita	- <u>nnita</u> ~ - <u>nnita</u>	- <u>nnita</u>
-nnikka	- <u>nnikka</u> ~ -- <u>nnikka</u>	- <u>nnikka</u>
-ptita	- <u>ptita</u> ~ - <u>ptita</u>	- <u>ptita</u>
-o (/ -yo/ after /i/)	- <u>o</u> ~ - <u>o</u>	- <u>o</u>

/-nnita, -nnikka, -o/ may be used in place of /-nnita, -nnikka, -o/ directly after a verb stem.

In the suffix /-ni/ mentioned in 3.32 there are two alternants /-ni ~ ni/; this suffix is not the one in the table above which has the alternants /-ni ~ ni ~ ni/. Of the alternants /-ni ~ ni/, while /-ni/ is post-consonantal as expected, it is so used only in certain cases, for /-ni/ is generally post-consonantal as well as post-vocalic. See 3.32 for the use of /-ni ~ ni/.

In the above table, stems ending in /l/ are included in the post-vocalic stems, for with these suffixes, these stems drop their final /l/ and take the post-vocalic suffix alternants (see 3.3).

The alternants of the verb suffixes /-ø/ and /-hi/ were discussed in 3.32.

Cases of morpheme alternants in which the alternation is of a unique or otherwise special type will be taken up in the morphology. The analyzing of the longer morphemes into sequences of shorter morphemes entails setting up of morpheme alternants which have not been discussed in this section, but will be taken up in the morphology. An example of this is the possible analysis of /-mnita/ as composed of several morphemes (5.561).

## CHAPTER IV

## MORPHEME CLASSES

The morphemes may be grouped into several large classes: (1) noun stems, (2) verb stems, (3) noun-stem suffixes, (4) verb-stem suffixes, (5) adverbs, (6) connective particles.

These classes are set up simultaneously, i.e., we recognize as a class those morphemes which combine with members of another specific list of morphemes (but not with any other morphemes), and at the same time we recognize as a class the latter list of morphemes which combine with the first set of morphemes (but not with any other morphemes). Thus, we recognize N, Ns, V, Vs (i.e., noun stems, noun-stem suffixes, verb stems, verb-stem suffixes) simultaneously, for N occurs only with Ns, and Ns only with N; V occurs only with Vs, and Vs only with V.

In the class "adverbs" are included those morphemes which do not share all of the morphological features of noun stems (i.e., do not occur with all noun-stem suffixes, or occur with none of them) and also occupy characteristic positions in the clause.

In the class "connectives" are included those

morphemes which also do not share all of the morphological features of noun stems and which, in addition, have positions in the clause which are different from those of the adverbs.

In Chapters IV and V, we treat the basic structure of the noun word and of the verb word. In Chapters VI and VII, we treat noun constructions and verb constructions. In Chapter VIII, we treat the morpheme classes adverbs and connectives. In Chapter IX, we treat the clause .

#### 4.1 The Basic Structure of the Noun Word

Noun stems occur with one or more suffixes, including a zero morpheme alternant. They also occur in structures consisting of noun stem plus noun stem, or of an adjectival (also called participial) or other form based on a verb stem (5.34) plus a noun stem. These combinations occur with suffixes, just as the single noun stems do.

Noun stems also occur before the copula verb stem /i-/ 'be (something)', as in /khan-cip-innita/ 'It's a big house'.

In 4.3, a list of the noun stem suffixes is given, and in 4.4, the combinations of these suffixes are discussed. These suffixes occur after single

noun stems, and after the above mentioned structures consisting of noun stem plus noun stem, or of an adjectival or other form based on a verb plus a noun stem. Such structures will be called noun compounds or noun phrases.

There are sub-classes of noun stems, depending on which of the following positions they occur, in, and on whether they occur with /-/ juncture or close juncture with the next stem: (1) in first position of a noun-noun structure, (2) in last position of a noun-noun structure, (3) after an adjectival form, and (4) in both last position of a noun-noun structure and after an adjectival form. These sub-classes are taken up in Chapters VI and VII.

#### 4.2 Formal:Informal (honorific) Pairings of Noun Stems

Some noun stems may occur directly before the suffix /-ke/ (in the alternant form /-kke/; see 3.42 and 4.4); we will call this suffix the "formal" noun suffix. We will also call these noun stems "fôrmal" noun stems. Many noun stems do not occur directly with the suffix /-ke/; we will call them "neutral" stems or "informal" stems. Furthermore, certain of the noun stems having informal suffixes (i.e., suffixes other than /-ke/) can be paired with noun stems having

the formal suffix on the basis of their occurring with the same range of larger environments. E.g., /pap/ (informal): /cinci/ (formal) 'cooked rice, food, meal'; /cip/ (informal) : /tæk/ (formal) 'house, household, home'. The formal and informal members of such a pair of noun stems have the same meaning aside from the difference in formality or honorific level.

There is in most instances agreement between subject noun and certain verbs in this respect, also: a formal noun will occur with a particular verb, while its informal pair will occur with the informal pair of that verb. For example, the formal /apønim/ 'father' and /kesimnita/ '(he) is' in /uli-apønimto sɔule kesimnita/ 'My father is in Seoul, too.', as against informal /apøci/ 'father' and /issumnita/ '(he) is' in /uli-apøcito sɔule issumnita./ 'My father is in Seoul, too.'.

Many nouns which do not have a formal pair (i.e., a noun stem which has a completely different phonemic form) can be used with the formal verb (i.e., can be made formal) by having a special morpheme added to them. An important one is /-nim/, which is added to neutral or formal stems denoting a human being; in the latter case, the stem is made still more formal, e.g., /wisa/ 'doctor, physician' : /uisanim/, /sønsaŋ/ 'teacher' : /sønsaŋnim/. But /-nim/ is not added to



all noun stems: these stems are only informal and are not made formal, e.g., /nom/ 'fellow'.

The fact that such pairs as /*aisa*/ : /*aisanim*/ exist allows us to approach this problem from another direction. We could say that for other pairs of formal and informal stems, such as /*pap*/ : /*cinci*/; which do not differ merely in that one has /-nim/ while the other does not, but which differ completely in their phonemic composition, we have cases of suppletion. This would be like *go:went* and *see:saw* in English, having once established the regularity exemplified in *walk:walked*.

It is also reasonable to consider the formal: informal stem pairings not as noun stem sub-classes, but rather as a feature of the syntax.

Aside from the few suffixes that go only with formal noun stems, and aside from the fact of agreement between noun and verb, the morphology of the noun is generally the same for both formal and informal noun stems, so that it is not necessary to treat them separately. We include statements that apply only to formal noun stems as asides or footnotes to the general statements about noun morphology. The informal : formal dichotomy is anyhow applicable only to a relatively small part of the total number of

noun stems, and is not, as pointed out above, of great morphological interest, though it is important stylistically.

#### 4.3 The Noun-Stem Suffixes

There is a small list of suffixes which are added directly to noun stems, or to noun compounds or to noun phrases. These suffixes are as follows (where two alternant forms are given, the first is the post-consonantal one, the second is the post-vocalic one):

/-i ~ ka/ (subject), /-un ~ nun/ (topical) (i.e., 'as for'), /-al ~ hal/ (object), /-ulo ~ lo/ 'with, by, to, toward', /-e/ (locative and dative) (i.e., 'to, in, at, for, by'), /-e/ (genitive connective), /-sø/ 'from, at, in', /-to/ 'too, also, even'.

The suffix /-ke/ occurs in the combination /-eke/ 'to, for, by', and is used with noun stems denoting human beings only, /-ke/ added directly to a noun stem has the form /-kke/ 'to, for', and is added to honorific noun stems only.

Examples of nouns with the above suffixes are:  
 /-i ~ ka/ : /chukkuka ceil inkkita./ 'Soccer's the most popular sport'.; /cosøni konp-kukan an-iciyo?/ 'Korea's not an industrial country, is it?', /samnyøn-

cøne kattøn-ili issunnita./ 'I was there three years ago.'<sup>1</sup>

/-un ~ nun/ : /i-ilun him-tunnita./ 'This work is hard.', /cø-punan nukusiciyo?/ 'Who's that person?', /i-cipun pulan-hata./ 'This area is unsafe.', /nanun kuløkhe saŋkakci anssunnita./ 'I don't think so.', /toŋnanun pusansø samsimail twennita./ 'Tongnae is thirty miles from Fusan.'. The suffix /-un ~ nun/ has the effect either of merely pointing out what the sentence will talk about, as in the above examples, or else of contrasting the noun with some other noun, as in the following examples: /nesi innante, hananun kyølon-hæssunnita./ 'I have four children and one is married.', /hanpunun wønsane kesiko, hanpunun cikun cuŋkuksø kesinnita./ 'One's in Wonsan, and the other's in China now.', /kwasikan halopta./ 'Too much is no good (i.e., hurts).'

/-ul ~ lul/ : /taŋsinun kukøsul cowa-hannikka?/

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1. Very often, Korean sentences do not contain explicit words as subject or object of the verb; these sentences are translated into English with a pronoun subject or object. Since the translation for such an example sentence is a permissible one, and since, in Korean sentences, a pronoun subject or object is implied in the verb, we do not place parentheses around the English translation of the pronoun subject or object.

'Do you like it?', /munul thatuseyo./ 'Close the door.',  
 /cø-salantulkke chakul cusiyo./ 'Give them the book.',  
 /kiin-phyøncilul ssøssummita./ 'I wrote a long letter.',  
 /mikukul kalthente, øccitul hamyøn, yøhæjkwøðni nao./  
 '(I'm thinking of going to America - how can I get  
 a passport?'

/-ulo ~ lo/ : /pyøllo cochi antha./ 'It's  
 not especially good.', /køki kichalo kalssu isso/  
 'Can we get there by train?', /sikanulo pillimmita./  
 'It's rented by the hour.', /nuka hwecayulo ppophikesso?/  
 'Who will be appointed chairman?', /ililo osiciyo./  
 'Come this way, please.', /nanun yønphillo ssuko issammita./  
 'I'm writing with a pencil.', /pyøllo halkkøt øpta./  
 'I don't have anything in particular to do.', /ku-cipe  
 tachalo salko icciyo./ 'He's living in that house  
 as a tenant.', /chamulo/ 'really, truthfully.'

/-e/ (locative or dative): /mocaka palame  
 nallø-kassummita./ 'My hat blew away.', /pothoŋ hancuile  
 hwalttoŋ-sacinkwane hanpønun kammita./ 'I usually  
 go to the movies once a week.', /cosøne oncika mechil  
 twasso./ 'I've been in Korea a few days.', /nanun  
 page talø-wassummita./ 'I entered the room.', /cønyøkun  
 yøssøssie nøgnan-køsi pothoŋ-innita./ 'We usually have  
 supper at six o'clock.'

/-e/ (genitive): /ku-salamən uli-atule-chin̄kunnita./  
 'He's my son's friend.', /ku-salame-soktusul cəŋmal-  
 ilako?/ 'Do you believe in his sincerity?', /nanən  
 chin̄kue-cipe øce kattassunnita./ 'I had gone to my  
 friend's room.', /ku-salamtule-calinən uli-twin̄nita./  
 'Their seat is behind ours.'

Note: The genitive /-e/ differs from all  
 the other noun suffixes treated here in that any noun  
 stem plus this /-e/ is always followed by another  
 noun stem, with /-/ juncture between. This /-e/ is  
 thus a connective morpheme; this is a position also  
 occupied by /-kwa ~ wa/ (see 4.5).

/-ke ~ kke/: /ceka ap̄ninkke konpu-machin-  
 hue kyølon-han̄anke cokhettako malssum-hassunnita./  
 'I said to my father that it would be better to get  
 married after I finished studying.', /kim-sønsəŋnimeke  
 (sønsəŋninkke) cən hal-malssum issunnita./ 'I have  
 a message for Mr. Kim.'

/-sø/: /cosønsø wassunnita./ 'I'm from Korea.',  
 /cø-itulən yøkisø konpu-hannita./ 'They study here.'

/-to/: /ku-salamto wassunnita./ 'He came, too.',  
 /ap̄nimto kesiko, ømøn̄imto kesinnikka?/ 'Are both  
 your father and mother living?'

The suffixes /-i ~ ka/ and /-ul ~ lul/ are  
 fairly often left out; or, we can say that they are

replaced by zero; whether the zero replaces /-i ~ ka/ (subject) or /-ul ~ lul/ (object) can be seen from the position of the word in the clause. The use of the subject and object endings often seems to have the effect of emphasizing the noun or of making it definite. In some cases, zero even replaces /-e/ or /-esø/.<sup>1</sup> If a regular difference in meaning could be established between the occurrence of zero, and the occurrence of the other suffixes, then we would have to set up zero as a separate morpheme, rather than a morpheme alternant.

/cønyøk nøkke twassunnita./ 'Supper is ready.',  
 /ton nanikka, kot pattunteyo./ 'He took the money immediately, when I paid him.', /ilpon kasøttan-ili isso?<sup>?</sup> 'Have you ever been to Japan?', /caton-cha cip-twie sewøssunnita./ 'The car is parked behind the house.', /ku-salam sakwalul nøkumyønsø, chakul iksumnita./ 'He's eating an apple and reading a book.', /pihaniki thassulcøke sonamumani pwasso./ 'While riding in the airplane, I saw many pine trees.', /apønini wæ køki kanci case moløkessunnita./ 'I don't know exactly why my father went there.', /cakcøn hasøssøyo?/ 'Have you made up your mind?', /ku-salam tonul mani pøleiyo./ 'He's earning good money.'

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1. But since /-ul ~ lul/ and /-e/ are in some cases substitutable for each other, we can say that zero replaces only /-ul ~ lul/.

#### 4.4 Suffix Combinations

Certain combinations of these suffixes occur, and some of these combinations seem to be more frequently used than the single suffixes. /-i ~ ka/ does not combine with any other suffix; in fact, /-i ~ ka/ always signals the end of a sequence, whether it be phrase or word. /-ul ~ lul/ only rarely combines with the other suffixes. The freest suffix, so far as combining is concerned is /-un ~ nun/, which may be added to any suffix (except /-i ~ ka/ and /-ul ~ lul/), e.g., /-enun, -ulo~nun/. The most commonly used combinations are with the locative suffixes, /-esøputhø, -puthøssø, -eke, -ekesø, -kkesø, -(u)lossø, -elo, -(u)loputhø/.<sup>1</sup> It was noted in 3.42 that in the combination /-ulossø ~ lossø/, the /-sø/ doubles its /s/ (though it is written in Korean with a single /s/); this doubling of the /s/ does not happen in the other combinations with /-sø/.

As has been mentioned, the form of /-ke/ directly after a noun stem is /-kke/; this /-kke/ may combine with /-sø/, giving /-kkesø/, honorific element. To all these combinations may be added /-to/ or /-un ~ nun/; the latter is always the last in any kind of morpheme sequence: /-esønun, -ekenun, -elonun, -kkesønun/.

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1. For /-puthø/, see 4.5 below.

/-esø/ is substitutable for /-sø/ in many contexts; /-esø/ is also usually substitutable for /-e/ alone, but it depends on the verb in the clause. With some verbs, the noun may have only either /-e/ or /-esø/. After stems ending in a vowel, however, especially /i, e, a/, /-sø/ is more likely to be used: /cunkukesø samnita./ 'He lives in China.', /cø-paŋesø il-hanta./ 'He's working in that room.', /ka-cipesøn ølin-alul nahøttako salantul-hante allyøsson./ 'They announced the birth of their child.', /yøkwanesø cøŋkøcaŋ-kkaci ølmana mønci annikka?/ 'Do you know how far it is from the hotel to the station?', /pakkathesø nolko inna-pamnita./ 'They're probably playing outside.', /chaesø com cannayo./ 'I guess I slept a little on the train.', /ønu-tahakesø iphakhøkaka wasso?/ 'Did you get admitted by a university yet?', /takuelo takuelo kassamnita./ 'Everybody was going to Taegu.'

/-eke and /-ekesø/ are not substitutable for /-e/ and /-sø/; they are used with nouns denoting human beings; /-eke/ means 'to', /-ekesø/ means 'from': /cip-salameke mulø-polita./ 'I'll ask my wife.', /i-kutu naeke nøŋø khata./ 'These shoes are too big for me.', /tagsinun nukuekesø kakøstul øtøssamnikka./ 'Who did you get that from?'. These combinations are less honorific than /-kke/ and /-kkesø/: /puinkkesøwa økital-man



kachi kesimyon, twekekkunyo./ 'It would be fine if your wife and children were with you.', /sønsægnikkəsø cham manun-sukolul hasøssumita./ 'You (sir) have gone to a lot of trouble.', /hwecəkkəsø i-toɟilul həlak hasikessumikka?/ 'Will the chair permit this motion?'. It may be of interest to note that /-kkəsø/ marks the subject noun, just as /-i ~ ka/ does; /-kkəsø/ is formal, while /-i ~ ka/ is neutral.

/-lossø ~ əlossø/ 'with, by means of, as':  
 /haksəɟəlossø kaləlssuka innənka./ 'As a student, how can he do that?', /kwəlliləlossø kwəlljəkəl nanyəɟchi malla./ 'Don't abuse your power as an official.'

#### 4.5 Other Affixes of the Noun

There are a few morphemes which are added to noun stems but which are not themselves either bound noun stems or members of the suffix class of 4.12.

We distinguish these elements from suffixes proper because of (1) their distribution and (2) their morphological constituency.

/-kwa ~ wa/: This suffix has **three** main positions of occurrence. It is always added to a noun stem, but:

(a) A noun stem plus this suffix is followed by another noun construction, but there is /#/ junc-

ture between them. In this use, /-kwa ~ wa/ means 'and, together with'. Examples: /tansine-nabiwa cikɔpɔl mal-hasiyo./ 'What's your name and profession?', /sɔŋhankwa kesinɔn-kosul sukɔkpue ssɔ-cuseyo./ 'Write your name and address in the register.', /kalɔssamɔta. tto tosiwa ku-kyowe-saito kalɔchiyo./ 'Yes, and also between cities and their suburbs.', /malssum-hasinɔn-kɔkkwa alɔtalasinɔnkɔkkwa ɔnɔ-phyɔni ɔlyɔusiciyo./ 'Which is harder, speaking or listening?', /i-poksugawa phototo tto poki cham cossamɔta./ 'These peaches and grapes look very good, too.', /naka kaci, hɔpakkwa oi ta issɔya-twekesso./ 'I need eggplants, squash and cucumbers.'.

(b) A noun stem plus this suffix may also be followed by a **form** based on the verb stem /kath-/ 'be similar' with /-/ juncture between them; with the form /kachi/, the combination means 'with'; with the form /kathan/, it means 'like': e.g., /nawa-kachi kaci ankhemni?/ 'Aren't you going with me?'.

(c) Noun stems plus this suffix are also used without either a following noun or noun phrase or /-kachi/, and may take the suffixes /-nan, -lal/: e.g., /ku-salame kusakoe tahan-iyakinɔn ku-puinkwanɔn ttanphanimɔta./ 'His account of the accident is different from hers.'.

/-puthø/ 'from': This suffix may be added to a noun stem, with /-/ juncture between them; the suffix /-sø/ may be added to /-puthø/, and /-puthøssø/ means 'from'. /-puthø/ may also be added to a noun stem plus /-essø/ and /-essø-puthø/ means 'from'. Or, it may be added to a noun stem plus /-alo ~ lo/, and /-(a)lo-puthø/ means 'to, toward'. E.g., /nal-mata acham-ahopsi-puthø chu-tasøssi-kkaci yøki issunnita./ 'I'm here every day from nine to five.', /hakkyolo-puthø tola-olkkøsiannita./ 'He'll be coming back from school.'

We separate /-kwa ~ wa/ and /-puthø/ from the noun suffixes listed in 4.3 because they have ranges of distribution which are quite different from those suffixes using this consideration; we might also list the genitive /-e/ here, rather than in 4.3, for it too, differs from the rest of those suffixes. But, even though this /-e/ is syntactically a noun phrase infix, morphologically it is a noun suffix.

It may be of interest to point out here that /-puthø/ looks like a certain form based on verbs. There are, in fact, a fair number of forms which appear to be verb forms but which are used as affixes to preceding nouns, e.g., /hako/ 'and, with', /wi-haya/ 'concerning', /poko/ 'to, for'. We describe these

under the verb forms and in the discussion of the clause. We list */-puθø/* here, however, as an affixal morpheme because there is no living verb stem with which it can be connected, although it is historically probably a verb form.

In some cases, it is not so clear how to analyze an element, whether as a verb form, a noun stem, or a noun suffix.

There is an element */-iya ~ ya/* which could be analyzed either as a unit morpheme which is added to noun stems, or as a form based on the copula stem */i-/* (the stem vowel drops after noun stems ending in a vowel). The second alternative seems to be very attractive, because of the */i/* vowel in the post-consonantal variant of this element, since, aside from the copula verb, the post-consonantal variant of a noun suffix usually begins with */a/*. However, there is no other verb form consisting of a verb stem plus */-ya/*, and while the copula verb stem is special in many ways, this would seem to be too special. There is a morpheme */-ya/* which is a bound noun stem added to adjectival forms of verbs, as in */nø cuinun mwøsinya./* 'What's your opinion?'. But it would not be very neat to say that this */-ya/* has an alternant */-iya/*, since no other bound noun stems have alternants differing

by an initial /i/ - in fact, alternant forms of bound noun stems are usually describable in terms of regular morphophonemic alternations. Furthermore, /-iya ~ ya/ does not occur with any noun suffixes, as most bound noun stems do. In addition, it is interesting that the stem /na/ 'I' which has the form /næ-/ before the suffix /-i ~ ka/ (i.e., /naka/), has this same form before /-iya ~ ya/ (i.e., /naya/). /-iya ~ ya/<sup>1</sup> is illustrated in the following sentences:

/kɔya pɔlssɔ yɔkilal nyɔttal issunikkayo./

'That's because I've been here a few months already.',

/munpɔpiya chakesɔ polssu ikkoyo./ 'You can get names

from a book.', /namu-ilumiya chakesɔ ɔtalssu ichanɔyo./

'You can get names of trees from a book, too.', /namiya

cuktana matana caki yɔksim-man pulimnita./ 'He always

shows greediness whether others die or not.', /him

calanante-kkaciya./ 'I'll do what I can.', /ku-cipal

ta sakattani, cɔnsin ɔnman-soliya./ 'You're foolish

(to say that you want) to buy that house.', /kukɔsiya.

ɔnu-nalaesɔna ta kakkecciyo./ 'It might be the same

in any country.', /naya cal-not-hacci-manun, nɔnan

kulɔci mala./ 'I made a mistake, but don't you.'.

Another problem of this type is the analysis of /-ina ~ na/. In this case, analysis as a form of the copula stem /i-/ is quite feasible, since there

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1. Meaning 'only'.

are verb forms consisting of a verb stem plus /-na/. However, the copula stem /i-/ ordinarily occurs only after a noun stem, or a derived noun stem, and not after noun suffixes. It would be hard, then, to account for a form like /nalaesøna/ if we analyze /-ina ~ na/ as a copula form. But, aside from this deviation, such an analysis is perhaps not only possible but neater, considering the whole system of verb morphology and the syntax of the clause. Examples of /-ina ~ na/<sup>1</sup> follow:

/kəkøsiya. ønu-nalaesøna ta kakkecciyo./

'It might be the same in any country.', /myøssina tweyøcciyo./ '(About) what time is it?', /yøkiø ølmana mømnikka./ '(About) how far is it from here?', /hantalina pika ocil anøssøyo./ 'It hasn't rained for about a month.', /ølma-tojanina yu-hasiciyo?/ '(About) how long are you staying?', /yøpokena/ 'Hello, there!', /simpuløm-hantun namcana yøcaeke cumuntal hasiko./ 'You give your order to a waiter or waitress.'

There is an element /-eta ~ ta/ which may be analyzed (1) as a unit suffix with these two alternants, (2) as a combination of genitive /-e/ plus a noun stem /-ta/, (3) as a combination of /-e/ plus a noun suffix /-ta/ or (4) as a combination of /-e/ (genitive or locative) plus the /-ita/ form of the copula verb

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1. Meaning 'about'.

/-i-/, with the /i/ vowel dropping after a vowel.

The form /-eta/ is used after stems ending in a consonant, (e.g., /səlhapeta/ 'in the drawer') and also sometimes after a stem ending in a vowel (e.g., /chaeta/ 'in the car') /yøkita ~ yøkieta/ '(in) here'. /-ta/ occurs only after vowel-final stems.

/-eta ~ ta/ is usually substitutable in a sentence by the suffix /-e/ (locative), but /-e/ is not always substitutable by /-eta ~ ta/. /-eta ~ ta/ usually signifies movement of something from one place to another, while /-e/ may, besides this meaning, signify being stationary in a place.

/-eta ~ ta/ is, however, very often if not always substitutable in a sentence by /sokc/ (the noun stem /sok/ 'inside' plus locative /-e/).

/-eta ~ ta/ may occur with /-ka/ and /-nun/.

The main obstruction to considering /-eta ~ ta/ a noun suffix (whether a unit suffix or a combination of suffixes) is that it also occurs in combination with a following /-ka/ or /-nun/: /taŋsinun yøkitaka catonchalal sewø-tuci not-hannita./ 'You can't park your car here.'. The addition of these elements seems to be free. The question is: is the /-ka/ the subject suffix /-i ~ ka/? If so, then the combination /-eta ~ ta/ plus /-ka/ would be a unique instance of

/-i ~ ka/ combining with another noun suffix.

The possibility of considering /-eta ~ ta/ as a combination of the genitive /-e/ suffix followed by a noun stem /-ta/ (or if we take /-eta ~ ta/ as a unit noun stem morpheme) is weakened by the fact of the distribution of /-eta/ and /-ta/, if we maintain that they are alternants of one another. /-ta/ is added only to stems ending in a vowel, while /-eta/ is added to stems ending in a consonant, and to stems ending in a vowel. In noun compounds, as will be seen in Chapter VI, this kind of distribution of morpheme alternants in compounds is not usual elsewhere (i.e., according to whether the first stem in the compound ends in a consonant or in a vowel). Also, while a genitive /-e/ may often be substituted by zero, this does not have any connection with whether the noun stem ends in a vowel or in a consonant.

Finally, we consider a verb stem suffix /-taka ~ ta/ (see 5.42). It also seems reasonable therefore to consider /-eta ~ ta/ ultimately as the suffix /-e/ plus /-(i) ta (ka)/, i.e., the /-ta(ka)/ form of the copula verb. The trouble with this analysis is that we would not ordinarily expect the copula verb to come after a noun suffix; it does come after some noun suffixes under certain conditions but usually



not in the /-ta(ka)/ form (see 5.6). Similarly, there is a verb suffix /-tanun/.

Examples of /-eta ~ ta/: /ku-køsul chaeta tusipsiyo./ 'Put it in the car'., /ku-køsul køkieta (ka~nun) polici mao./ 'Don't throw it there.', /kuløntetaka tomaqciil-kkaci hayøssanniba./ 'In addition, he escaped.'

## CHAPTER V

## THE STRUCTURE OF WORDS BASED ON VERB STEMS

Verb stems are a set of morphemes which occur with one or more verb suffixes; they do not occur independently of these suffixes, although certain words look like the verb stems on which they are based because of morphophonemic changes. Thus, /ka/ 'having gone' is composed of the stem /ka-/ plus the suffix /-ɛ ~ yɛ ~ a ~ ɔ/.

We distinguish two main classes of verb stems, which we may call "action stems" and "description stems." These two classes differ morphologically: description stems do not occur with some of the suffixes that the action stems occur with (although action stems occur with all the suffixes that description stems occur with).

Verb suffixes may be grouped into three classes: (1) stem extenders, which make verb stems out of verb stems e.g., /-si ~ ɔsi/ in /basi-/, (2) nominalizers, which make syntactic nouns out of verb stems e.g., /-ki/ in /baki/, and (3) clause-final and sentence-final suffixes, which make syntactic verbs out of verb stems, e.g., /-ta ~ nta ~ nanta/ in /nɔɔnanta/.

Words based on verb stems are thus of two types, syntactic nouns and syntactic verbs. The basic structures of words based on verb stems are:

- (1) Verb stem (+ extender) + nominalizer (+ noun suffix or noun stem or copula verb stem) yields syntactic noun.
- (2) Verb stem (+ extender) + clause-final or sentence-final suffix yields syntactic verb.

The verb suffixes, and words based on verb stems, are taken up in the following sections.

Constructions containing another stem (noun stem or verb stem) besides the first verb stem, are taken up in detail in Chapter VII.

### 5.1 Formal:Informal Pairings of Verb Stems

Parallel with the honorific noun stems, there are also honorific verb stems. There are verb stems whose last syllable is /-si ~ usi-/. This /-si-/ we call a "formal" suffix and when stems contain /-si-/ they are called formal stems. Most, if not all, of these formal stems with /-si-/ are paired with stems which do not have /-si-/. In most cases, a stem without /-si-/ is phonemically identical with a stem with /-si-/ (except for the /-si-/), e.g., /ha-/ : /hasi-/

'do'. Such stems are neutral, and they are made formal by adding /-si-/.

In other cases of formal and informal pairings, however, there is no similarity between the two stems, e.g., /iss-/ : /kesi-/ 'be', /møk-/ : /capsusi-/ 'eat'. Some of these stems with /-si-/ also occur without the /-si-/ and are still formal, though perhaps less formal than with /-si-/, e.g., /capsu-/ : . (This is like the case of formal noun stems with or without /-nim/, such as /moksa/ : /moksanim/.) But other verb stems with /-si-/ do not occur without /-si-/, e.g., /kesi-/ 'be', /masi-/ 'drink', /cumusi-/ 'sleep'. In the case of any pairing in which the two stems are phonemically different (aside from the presence or absence of /-si-/), the stem without /-si-/ is informal, rather than neutral, for /-si-/ is not addable to them, e.g., /møk-/. (This is like such noun stems as /nom/ to which /-nim/ is not addable.)

So far as the suffixes which are added to verb stems is concerned, there is no difference between formal and informal verb stems. They do not constitute sub-classes of verb stems from the morphological point of view, ~~ex~~cept with respect to the addability of the stem formalizer /-si-/. Formal and informal stems are of interest in the description of the clause, in

## Chapter IX.

## 5.2 Verb Stem Extenders

The suffixes of this group are added to verb stems and have the effect of making new verb stems. These suffixes do not occur in any other position, and they are never final in a word, but are always followed by one or more other suffixes.

## 5.21 The extender /-hi-/

The morpheme /-hi/, with alternants /-ki ~ kki ~ hi ~ li ~ i ~ u/ and /a>æ, o>we/, is added to many stems, but not to all. The distribution of the alternants of this morpheme, and the morphophonemic changes which verb stems may undergo when this affix is added, have already been described in 3.32.

The addition of this affix to a stem simply yields another verb stem, to which the suffixes described below are added. This affix is added directly to a stem; no other suffix intervenes.

The addition of /-hi/ has the effect of (1) changing an action stem which can take an object, to an action stem which does not take an object (i.e., is "passive"), (2) changing an action stem which does

not take an object to an action stem which may take an object (i.e., is "causative"), and (3) changing a description stem to an action stem which can take an object. E.g., /mulli-/ 'be bitten' from /mul-/ 'bite', /seu-/ 'stand (something) up' from /sø-/ 'stand (up)', /cuki-/ 'kill' from /cuk-/ 'die', /poi-/ ~ /pwe-/ 'be seen, appear' from /po-/ 'see', /caphi-/ 'be caught, be arrested' from /cap-/ 'catch, arrest', /((twi) ciphi-/ 'be turned (over)' from /((twi) cip-/ 'turn (over)', /pulkhi-/ 'make red' from /pulk-/ 'be red'.

Examples are: /poiketta./ '(It) will appear.', /chøum pwepkessummita./ 'I'm glad to meet you.', /yøkyøcinta./ 'I was made to think.', /pamssaie caphiyøssummita./ 'He was arrested during the night.', /pyøncøgtuli kulal cukyøssummita./ 'The soldiers killed him.', /ølkulal pulkhinta./ 'He blushes.', /chaka twi-ciphyøtta./ 'The car was turned over.', /ølamal nokhinta./ 'He lets the ice melt away.', /akilal phoksungeke øphyøla./ 'Put the baby on Phoksung's back.'

## 5.22 The formalizing extender /-si-/

The morpheme /-si-/ (with variants /-si ~ usi/) has already been discussed in 5.1. As was pointed out there, the addition of /-si-/ yields another stem (formal). /-si-/ may be added to a stem to which /-hi-/ has already been added.

## 5.23 The tense stem extenders: /-ø̃s-/, -kes-/

The two important extenders are /-ø̃s-/ and /-kes-/. /-ø̃s-/ has a number of alternants which differ in the vowel in just the same ways that the /-ø̃/ morpheme described in 5.33 differs among its various alternants. Thus, /-ø̃s-/ has the alternants /-yø̃s-, -as-, -æs-/. (The analysis of /-ø̃s-/ and /-kes-/ into /-ø̃/ plus /-s-/ and /-ke/ plus /-s-/ is discussed in 5.331 below.)

To these suffixes are added other suffixes; the suffixes which are added to stems with /-ø̃s-/ and /-kes-/ are the same, on the whole, as those which are added directly to the verb stem. Furthermore, /-ø̃s-/ and /-kes-/ are added to stems plus /-si-/ and /-hi/ as well as to stems without /-si-/ and /-hi/. We regard stems with /-ø̃s-/ and /-kes-/ as extended stems. /-ø̃s-/ is the past tense marker; /-kes-/ is the future tense marker. Stems with /-ø̃s-/ we call "past" stems, those with /-kes-/ we call "future" stems. Stems without /-ø̃s-/ or /-kes-/ we call "simple" stems, or refer to them merely as stems.

The past marker /-ø̃s-/ and the future marker /-kes-/ may be added not only to simple stems, but also to past stems. The final /s/ of a past stem

changes to /ss/ before /-ø̥s-/ and /-kes-/, or, /-ø̥s-/ added to /-ø̥s-/ has the alternant /-sø̥s-/. E.g., /hæssø̥ssum̄nita/ 'I had thought', /kotan-hasø̥kkessum̄nita/ 'You must have been tired.'

Note: It is also possible to say that the simple stems have a zero tense suffix, analogous to /-ø̥s-/ and /-kes-/.

#### 5.24 /-tæs-/

Analogous to the tense extender /-ø̥s-/ is the extender /-tæs-/, as in /hasitæ̥sso, hatæ̥cciyō, ssutæ̥cciyō./ /-tæs-/ seems to give a "perfective" effect to the tense of the verb often translatable by 'used to' (Cf. /-tø̥/ in 5.25). E.g., /tæ̥gsini ku-salam-poko olako hæ̥ssø̥yo?/ 'Did you tell him to come?', /ne. ceka olako hatæ̥cciyō./ 'Yes, I said I told him to come. '; /tæ̥gsini ku-salamul olako hatæ̥tako hæ̥ssø̥yo?/ 'Did you say that you told him to come?', /ø̥ceccø̥neke ponyø̥kul hatæ̥ssum̄nita./ 'Last night I was translating.', /cønchalul thako-kanun-toḡane chakul potæ̥ssø̥yo./ 'While I was riding on the street-car I was reading off and on.'

/-tæs-/ (and the gerund suffix /-tæ̥/ discussed in 5.331-2) is a feature of N. Korean speech, perhaps in particular a feature of the dialect of Pyongyang,



but not of Seoul. In Seoul speech, the past tense suffix /-ø̥s-/ repeated seems to be used instead of /-tə̥s-/, e.g., /hatətta : hayø̥ssətta/ 'used to do'.

5.25 /-tø̥-/<sup>1</sup>; /-no-~ nŋ/

The morpheme /-tø̥-/ has a more limited distribution than the verb suffixes so far described. The distribution of this morpheme is best seen in the form of a chart. /-tø̥-/ never occurs without at least one other morpheme added to it.<sup>2</sup>

Verb stem	ø̥s	tø̥	kunyo ita	
			la~ læ	myøn
			ni na	
	n	Noun stem		

1. See also 5.332

2. In charts like this one, read from left to right, picking up one item in each column (the item may be zero). Items in the same column are mutually exclusive. Do not cross any horizontal line; but an incompleting horizontal line leaves a passageway to move above or below it in going on to the next column. An item written astride a horizontal line may be picked up above or below that line.

The morpheme /-tø-/ has two variants, /tø/ and /tu/; this seems to be a dialectal variation. In Seoul and the south, the form /hattamyøn/ is apparently considered more "correct" than /hattømyøn/, but /hatani, hatana/ are more "correct" than /hatøni, hatøna/. There seems to be a great deal of variation in other forms with /-tø-, too, as in /hatø lato ~ hatu lato ~ hatu lato/ (/la ~ lu/).

The morpheme /-la/ in the chart above may be identified with the /-la/ which may be added to the /-ø/ gerund form of verbs (see 5.33).<sup>1</sup> The morphemes /-myøn, -ni, -na/ are the clause-final suffixes discussed in 5.7. We can regard forms with /-tø/ as being deverbal noun stems, or else as being extended verb stems, but having a more limited use than stems extended with /-ø-s-, -kes-/ have. The morpheme /-n/ can be regarded as the /-n/ participle suffix (5.4).

/-tø-/ seems to give a "perfective" effect on the tense of the verb.

The sequence /-tøita/ is sentence-final; it is very formal and literary, e.g., /kacako mal-hatøita./ 'He asked to go.'

The sequence /-tøla/ is also sentence-final, but it is archaic, though it is sometimes used in

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1. /-la/ is more fully discussed in 5.57.

telling narratives to children. It gives an exclamatory affect to the sentence. The subject of a verb in this form is always a third person, e.g., /ku-ttæneni salani cowattøla./ 'At that time, he was a good fellow.', /pochølan kihuka cothøla./ 'The weather is nice in the springtime.'

The sequence /-tølato/ (varying with /-tulato, -tulato, tølato/) means 'although, even if' : /pika otølato, osiyo./ 'Come even if it rains.', /chiptølato pakkess untoqul hayøla./ 'Exercise outside even if it's cold.', /haci an-hattulato, cowassalkkøliyo./ 'I shouldn't have done it.'

The sequence /-tana/ is apparently much more rarely used than /-tamyøn/ or /-tani/:, in particular, it occurs in expressions like the following: /pika otana matana/ 'whether it rains or not', /cuktana matana/ 'whether they die or not'.

/-tani/ is probably more commonly used than /-tamyøn/; /-tamyøn/ is usually added to the past stem, expressing a contrary-to-fact hypothesis.

The sequences /-tamyøn/ 'if', /-tani/ 'since, and', /-tana/ 'although', are clause-final (see 5.4). Examples of /-tamyøn/ and /-tani/ are:

/canyøne pika wattamyøn, kamyønan øamyøni tweyøssal kkesimnita./ 'If it had rained a lot last

year, we'd have had a good harvest this year.', /chakul  
 pillyø-cuøttøni, tollici anssumnita./ 'He doesn't  
 return the books he borrows.', /ku-salamun kosəɣul  
 mani hatøni, cikuman cal tweyøssumnita./ 'He used to  
 have a hard life, but now things are all right.',  
 /papul məktøni, katøla./ '(Once) he ate, he went away.'

/-tula/ plus /-myøn, -ni, -na/ are rare; the  
 only such sequence which seems to occur (usually added  
 to past stems) is /-tulamyøn/, expressing a contrary-  
 to-fact hypothesis, as in /kuløkhe hættulamyøn, cowakkessupsiyo./  
 'It would have been fine if you would have done so.'

The sequences /-tun, -øttun/ varying dialect-  
 ally with /-tøn, -øttøn/ are adjectival, i.e., come  
 only before noun stems (see 5.34). E.g., /ku-ika  
 nəka mal-hatun-salam-innita./ 'That's the person I  
 talked to' or 'That's the person I'm talking about.',  
 /cø-salamun ilul cal hatun-salam-innita./ 'That's  
 the person who used to work hard.', /sanul nəmtun-ili  
 səɣkak-namnita./ 'I recall that I once passed over  
 this mountain.', /cø-salami kənpaɣ-citun-ili səɣkak-  
 namnita./ 'I recall that he used to be very haughty.',  
 /cal chinatun-sicøli issøssumnita./ 'There was a time  
 when I was happy.', /mochøləm osøttun-kəsul sillyə-  
 hayøssumnita./ 'I'm sorry that I couldn't be hospitable  
 enough (to your kind coming).', /məlli kassøttun-ilun

cal tweyøssu~~up~~nikka?/ 'Did the thing you wanted to do (far away) turn out all right?', /kalitun-kalimal poyø-cuptita./ 'He showed me a picture which he was drawing.', /i-kuntato cal ssahwattun-ili issumnita./ 'This army once fought well.', /onulan kølie salam aco øptøkunyo./ 'There wasn't anybody in the streets today.'

/-no- ~ na/ is similar to /-tø-/ in distribution, though there are some important differences. /-no ~ na/ is always followed by /-la/. The breaking down of /-nola/ into two morphemes may be an extreme analysis. However, we do so because of the distributional similarities of /-no ~ na/ with /-tø-/, and because /-la/ is found elsewhere as well as with /-no ~ na/.<sup>1</sup> /-nola/ is sentence-final; it indicates a statement sentence with some affect.

/-nola/ may also be followed by certain other suffixes, such as /-ko, -nan, -myøn, -køtun, -ni/, and these sequences are non-sentence final (see 5.58).

As for the alternants /-no-/ and /-na-/ of this morpheme, only /-na-/ occurs before /-ko/; elsewhere, they seem to be in free variation, except that /-no-/ is perhaps more literary.

/-nola/ as a sentence-final sequence is added to simple, past and future stems of action verbs,

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1. See 5.571.

but with a following suffix it is usually added only to simple stems.

/-no ~ nu/ may also have the "binding" vowel /u/ prefixed to it after certain stems ending in a consonant; these are the same stems which take the /-uni/ variant of /-ni/ (see 3.32 and 3.43).

Examples of /-nola/:

/nanun cøllyøkul ta hako innola./ 'I'm doing my best.', /nanun halssu innun-ilun ta hayøssuni, hani ømnola./ 'Since I did everything in my power, I've no regrets.', /kalttæ-kkacinun ka-pwannola./ 'I tried as much as I could.', /halssu innun-ilun ta hakennola./ 'I'll do as much as I can.'

Examples of /-nula/ 'while doing' or 'in doing' or 'since':

/kicha thanula, tagninul mot-pwasso./ 'I couldn't see you, as I was getting on the train.', /ppalli cina-kanula, uli pocito mot-hæssumnita./ 'She went by us so fast, she didn't even see us.', /nanun il-hanula sonul thachæssumnita./ 'I hurt my hand while working.', /iyaki hanula michøsaŋkakul mot-hayæssumnita./ 'I didn't notice while we were talking.', /ppalli hanula tullici mot-hayæssumnita./ 'I couldn't drop in to see you, because I was in a hurry.'

/koŋpu hanulako hayøssumnita-man, silphæ-hassumnita./

'I failed even though (I) tried to study hard.'

Examples of other forms with /-nola/:

/koŋpu-hanolamyøn, talun-il halssikanun cokomto øpsumnita./ 'If we want to try to study hard, we can't have time for other things.', /kuka koŋpu-hanola<sup>h</sup>køtun, musun-koŋpu-hanunyakø mulø-posiyo./ 'If he says he's studying, ask him what he's studying. (i.e., he's just fooling around).'

#### 5.26 /-p-/

An extender /-p-/ may be added to stems when the gerund suffix /-ci/ (see 5.33) is added. This /-p-/ has the alternants /-p, -up, -sup/. The sequence /-pci/ is usually followed by /-yo/, as in /popciyo, møkupciyo ~ møksupciyo, cohupciyo, cowassupciyo, pallupciyo/. They are formal sentence-final forms (see 5.5). The /-pciyo/ forms seem also to be used in sarcastic or ridiculing ways (i.e., when used in speaking to an equal or intimate).

/iløn-ilun hunhi popciyo (pociyo)./ 'We can see these things frequently.', /øcøkke kukcage kassupciyo?/ 'You went to the theater last night, didn't you?'

This /-p-/ also appears in combination with

the element /-si/. This /-si/ cannot be identified with the stem formalizer /-si ~ usi/, because the /-usi/ variant of the latter suffix is the one which occurs after consonants.

The sequence /-psi-/ does not finish a word off, but is followed by /-yo/ or /-ta/. /-psi-/ is added to simple stems of action verbs only, yielding the sequences /-psiyo, -psita/, as in /kapsiyo, kapsita/.

Forms with /-psiyo/ are polite request forms; /-psiyo/ is frequently added to stems with /-si/, making a still more polite request form: /kapsiyo, kasipsiyo/ 'Please go.'

Forms with /-psita/ are polite hortative forms: /kapsita, kasipsita/ 'let's go'.

The extender /-p-/ is discussed again in connection with the analysis of certain other suffixes in 5.561.

### 5.3 Syntactic Nouns : Nominalizing Suffixes

Certain suffixes which are added to noun stems make forms which are syntactically noun stems. To the verb stem plus nominalizing suffix may be added the usual noun stem suffixes.



## 5.31 /-ki/, /-m/

The morphemes /-ki, -m/ are added to simple stems; less frequently to past and future stems. /-ki, -m/ are added to stems of both action and description verbs; but /-ki/ is less frequently used with description verbs. /-ki/ has no other alternants. /-m/ has the alternants /-m ~ um ~ sum/; for the distribution of these alternants, see 3.43 .

Forms with the suffixes /-ki, -m/ are nominal; they occur with noun suffixes and last-position noun stems. In general, they occur in the same positions as noun stems; they may be the subject or object of a verb. /-m/ forms occur in fewer different uses than do /-ki/ forms.

/-ki/ forms are generally equivalent to English "ing" or "to" forms of verbs; they express the activity or state of the verb as a concrete thing. With different suffixes or in combination with different noun stems following them, /-ki/ forms have somewhat different translations in English. E.g., /pika oki sicak-hamnita./ 'It's starting to rain.', /na-ttønaki-cøne cønhwa-haciyo./ 'Suppose I phone before I leave.', /uli oki-kkaci kitalici masiyo./ 'Don't wait for us to come.', /nan næ-page ikkilo hassumnita./ 'I decided

to stay in my room.', /kachi kakinun kato, ulinun  
 ilccuk waya-hamnita./ 'We can go with you, but we'll  
 have to come back early.', /ssakito hako, cokhito  
 hamnita./ 'It's both good and cheap.', /cham chupkita  
 chupso./ 'It's very cold.', /tto pwepke tweekilul palamnita./  
 'I hope to see you again.', /cøncægi ilønaci ankhilul  
 palamnita./ 'I hope war won't break out.', /ku-salam  
 pølssø kakki-ttamune poci mot-hayøssø./ 'I couldn't  
 see him because he had already gone.', /kot kakekki  
 tø mal-haci anøssø./ 'I didn't say anymore because  
 I was going soon.', /næka pokienun, Kim-sønsægi cham  
 cohun-pun-irnita./ 'The way I look at it, Mr. Kim  
 is a very nice person.', /panucil-hakie cønsini  
 øpsunnita./ 'They are terribly busy sewing.',  
 /cipe-ømønina acumunituli sinpu kuhæ-cukie punci-  
 hassunnita./ 'My mother and aunts were busy looking  
 for a bride for me.', /cø-nampaŋcaŋchinun i-paŋ-anul  
 tøppke hakienun pucøk-hamnita./ 'That radiator is  
 too weak for warming this room.', /siŋcaŋnoka ikkinun  
 haci-man, .../ 'There is a highway, but....'.

Forms with /-m/ express the abstract action  
 or state of the verb (warmth, difficulty, etc.). A  
 number of verb forms are sometimes or usually preceded  
 by an /-m/ form based on the same stem, as in /chum  
 chu-/ 'dance (dancing)', /cam ca-/ 'dream (dreams)'.

While /-m/ forms with zero suffix, or with /-i ~ ka, un ~ nan, -ul ~ lul/ are not too literary for spoken use, /-m/ forms with /-ulo/ are more highly literary. Forms with /-mulo/ are often translated by 'because, since'.

/kyøulenən chuumi sim-hamnita./ 'The cold in winter is severe.', /kulin-pakke øpsumnita./ 'There's nothing but a drawing of it.', /kuinun mitumi cossumnita./ 'His belief is strong.', /Kim-sønsæg-kølumən cham nølimnita./ 'Mr. Kim's walk is very slow.', /kuinun ølyøø-puthø ølyøumul mani taq-han-salam-imnita./ 'He's a man who has faced many difficulties since he was young.', /toni øpsumul kokcøŋ mala./ 'Don't worry about not having money.', /cinan-pamttoqan olattoqan chalul thako wacci-manun, chaesø cassumulo sikan kanuncilul mollassumnita./ 'I had a long ride here on the train last night, but I slept, so I didn't know the time was passing.'

Verbal nouns with /-m/ are used at the end of a sentence in announcements and signs, e.g., /ipcaqul øluneke-man hanham./ 'Admittance to adults only.', /soanan tain toqpane-man hanham./ 'Children must be accompanied by adults.'

## 5.32 /-i/

The suffix /-i/ is added to consonant-final simple stems of action verbs, and also to those stems consisting of a noun stem plus /ha-/ (see 5.7). Stems ending in /p/ change /p/ to /w/ before this /-i/, as in /tøuwi/ ~ /tøwi/ from /tøup-/ ~ /tøp-/ 'warmth'; stems ending in /-lu-/ or /-llu-/ drop the /u/, and in the case of /-lu-/, double the /ll/, when /-i/ is added, as in /palli/ 'quickly' from /pallu-/ 'be quick'; stems ending in any other consonant add /-i/ with no changes, except that /th/ becomes /ch/ before /-i/ (a regular morphophonemic change); stems ending in /l, m, n, ŋ/ plus /h/ often lose the /h/ when /-i/ is added, e.g., /manhi ~ mani/ 'much' from /manh-/. Stems consisting of a noun stem plus /ha-/ drop the /a/ of /ha/ and add the /h/ to the noun stem when /i/ is added, as in /wancøni ~ wancøni/ 'completely'.

This suffix /-i/ is not so productive as are /-ki, -m/. Not only is /-i/ added only to stems of the types mentioned above, but also not all stems of these types occur with /-i/.

Forms with /-i/ may occur with certain noun suffixes, such as /-i ~ ka/, /-e/, but perhaps more frequently they occur without any suffix. In the latter case, they are usually translated by English

adverbs (-"ly"), especially those based on noun stem plus /ha-/. (In this use, they are perhaps less conversational than /-ke/ gerund forms, for which see 5.33).

The difference in meaning between verbal nouns with /-i/ and with /-ki/ (5.31) may be seen in the pairs /chuwi : chupki/ 'cold : feeling cold', /cohi : cokhi/ 'easily, well : goodness'.

E.g., /phyøn̄an(h)i/ 'comfortably', /øpsi/ 'lacking, without', /kaman(h)i/ 'quietly', /mukøwi/ or /muki/ 'heaviness, weight', /talli/ 'difference, differently', /capi/ 'capture', /køli/ 'walk, road', /nophi/ 'height', /kachi/ 'similarity, like, with'.

/øce saŋcømesø pon-chæksaŋ-mukika ølmana twekessuptikka./ 'About how heavy was the table we saw in the store yesterday?', /usim øpsi/ 'doubtless', /com-tø nophi kyøn̄yaŋ-hasiyo./ 'Aim higher.', /øceppamun hancamto moccata siph̄i hæssø./ 'I was awake most of the night.', /ankyøn̄ øpsinun ku-salamun cal poci mot-hao./ 'He can't see well without his glasses.', /køcø uyøn̄hi iløn-ili sæŋkyøssø./ 'This happened purely by accident.', /kilami chuwiø ølø-kutøssø./ 'The oil caked in the cold (weather).', /talun-køsun mal-halkkøtto øpsi toni pucok-hamnita./ 'We haven't got enough money, not to mention other things.'.

/siphi/ (from /siph-/) is used in many expressions such as the following: /asita siphi/ 'as you know', /mal-hata siphi/ 'as they say', /cukta siphi/ 'as if he were dead'. Examples are: /kunən cukta siphi ilul hayøssumnita./ 'He worked himself nearly to death.', /ku-cipaŋ-salamtuli kuløkhe hata siphi, kui hæptonun cham nappøssumnita./ 'His bad actions justified what the people of the area did.', /kanən ku-ølyøun-ilul pammøkta siphi hæssumnita./ 'He did it as if it were as easy as pie.', /ata siphi, ku-salamun yumyøŋ-han hakcaae-atul-immnita./ 'As you know, he's the son of a famous scholar.'

### 5.33 The gerunds:suffixes /-ø, -ko, -ke, -ci, -tæ/<sup>1</sup>

(1) The morphemes /-ø, -ko, -ke, -ci/ are added to all verb stems; /-tæ/ is added to simple stems. The alternants of /-ø/ have been described in 3.32 (in addition it has the alternant /-sø/ when added to past and future stems). The morpheme /-ko/ has the dialectal variant /-ku/, which is perhaps more common than /-ko/ in ordinary speech. The morpheme /-ci/ sometimes has the free variant /-uci/ when added to simple stems ending in certain consonant clusters, as in /kophuci ~ kopci/. We call these suffixes the "gerund suffixes" and we call forms con-

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1. As mentioned in 5.24 the stem extender /-tæs-/ is dialectal. Similarly, /-tæ/ is probably more common in Phyangyang than in Seoul.

sisting of a verb stem plus a gerund suffix "gerunds".

These suffixes are added to all stems - simp<sup>h</sup>e, past and future stems of both action and description verbs.

(2) The gerund forms with /-ø, -ko, -ci, -ke/ occur in clause-final and sentence-final position. /-tæ/ also occurs sentence-final. However, while /-ø/ and /-ci/ gerund forms occur frequently in sentence-final position, they occur in clause-final position more often if some other element is added, such as /-sø, -to/ in the case of /-ø/, and /-man/ in the case of /-ci/. While /-ko/ gerund forms occur commonly in clause-final position, they occur less commonly in sentence-final position.

/-ø/ and /-ci/ gerunds occur commonly with /-yo/ in sentence-final position; see below.

Examples of sentences whose final verb is in the /-ø/ gerund form: /pølssø məkønna-pwa./ 'Maybe he has already eaten.', /ca, kamani issø./ 'Be still!' or 'Wait a minute!', /pakke naka./ 'Go outside!'.

/-ci/ forms in sentence-final position:  
/cønyøk-hue hæ-cuci./ 'Do it after supper.'

/-tæ/ : /kuløkhe hatæ./ 'Oh, he did it!'.

Clauses ending in a /-ke/ gerund form indicate a state or activity at the same time as that of the

following clause. /-ko/ clauses are translatable in English by 'and'.<sup>1</sup> In some sentences, the /-ko/ clause indicates an action that takes place just before that of the following clause:

/chaksan hana ikko, ucato tul issumnita./  
 'There's a desk and two chairs, too.', /khan-ainan  
 yølssal-iko, cøkun-ainan yøtølssal-umnita./ 'The older  
 child is ten, and the younger one is eight years old.',  
 /kyøulen cham chupko, nunto mani umnita./ 'It's very  
 cold in the winter, and it snows a lot, too.', /nanan  
 mikuksø oko, ku-salamun cuøkuksø wassumnita./ 'I come  
 from America, and he comes from China.', /kuløm pul  
 kkuko, ale-chuøulo nalyø-kasiciyo./ 'Suppose we turn  
 out the lights and go down stairs.', /otto com kalø-  
 ipko, nakaciyo./ 'I'd better change my clothes before  
 we go out.', /kichalul thako, søule kanta./ 'He's  
 going to Seoul by train.', /køki ancci malko, yøki  
 ancusipsiyo./ 'Don't sit there; sit here.', /apønim-  
 hako, ce-anæ-hako, khun-atule-sikku set-hako, ku-  
 alælo aika sesumnita./ 'There's my father, my wife,  
 three in my oldest son's family and my three younger  
 children.'

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1. The /-ko/ forms of certain verbs are frequently used in place of certain of the noun suffixes; e.g., /hako/ 'and, with', /poko/ 'to, for'.



Sequences of a /-ko/ gerund form followed by /malko/ (which is the /-ko/ gerund form of /mal-/ 'avoid') are common emphatic statements. E.g., /salami cokho malko./ 'No need to discuss whether he's good or bad.', /øpko malko./ 'There aren't any at all.', /kuløkhu malku./ 'Certainly.'

As has been mentioned above, there is a dialectal variant /-ku/ of this suffix. These sequences are probably more commonly heard with the /-ku/ variant.

/-ke/ gerunds used in sentence-final positions are informal imperatives:

/yø-poke. canen ince kuman cake./ 'Listen, you'd better go to bed now.', /ili osike./ 'Come here!', /tampalul phisike./ 'Have a cigarette!'

/-ke/ gerunds in clause-final position indicate a state or action following that of the following clauses, and are translatable by 'so that' or 'in order to' in English:

/øtisø wannuncito moluke, kapcaki ku-salami wassumnita./ 'I don't know **where** from, but he arrived suddenly.', /cim cem nælyø oke ppoi hansalam ollyø-ponæsiyo./ 'Please send a boy up for my luggage.'

/-ke/ gerund forms also occur in adverb posi-

tion, translatable in English by an adverb or by 'in order to' or 'so that':

/ku-yaki khake com ilkusiyo./ 'Read the story aloud.', /nan i-potam tɔ nakkenun mot-hamnita./ 'I can't do better than this.', /com-tɔ khake malssum-hasipsiyo./ 'Please speak a little louder.', /i-chakun cham ssake sannunteyo./ 'This book was a great bargain.', /ssantuwichilul mantake ppaɣul piya-hakesso./ 'I have to cut the bread for the sandwiches.', /mwɔi kulɔkhe usɔupso?/ 'What are you laughing at (like that)?', /kilul kɔnnuke hayɔsso./ 'I helped him across the street.', /nake wassumnita./ 'I came late.', /ku-salame-hɛntɔɣul nanun olkhe sɛɣkak an-hamnita./ 'I don't think his conduct is right.', /ku-solika on-tɔɣnilul nollake hayɔsso./ 'The noise alarmed the whole town.', /aphake hayɔssumnikka?/ 'Does it hurt?', /cɔn mot-kake twæssumnita./ 'It turned out that I couldn't go.', /ku-salamtulun ta ɔttɔkhe tweyɔsso?/ 'What became of them all?', /kaul-kkacinun yɔki ikke twekessiyo./ 'I presume I will be here until fall.', /mɔci anɔ com ta pyɔnwaka ikke twekilul palamnita./ 'We hope to bring about a change soon' (we hope it will turn out that there will be a change soon).

(3) The gerund forms are noun stems; they occur with the usual noun suffixes, although not all

combinations occur. The following table shows which combinations occur in the material of this study. (The form /-yo/, which is a form based on the copula stem /~~ti~~-/ (see 5.6), is included in this list as a noun suffix):<sup>1</sup>

∅	ke	ko	ci	tæ	Noun suffix
x	x	x	x		un ~ nan
x	x		x		i ~ ka
			x		ul ~ lul
	x				ulo ~ lo
x					sø
x	x	x			ya
x	x				to
x		x	x		man
x	x	x	x	x	-yo (copula verb)

It is worth noting that /-tæ/ has the most limited use of all these suffixes, occurring either with nothing following it, or only with /-yo/ following it at the end of a sentence. When we refer to gerund forms from here on, we do not include /-tæ/ in our statements, unless it is specifically included.

Combinations of a gerund plus /-to/, /-sø/,

1. The combinations which occur are indicated by x in the table.

/-man/ are clause-final forms.

Forms with /-ci-man/ are translatable in English by 'even though' or 'but':

/neyo. mian-haci-man, kalssu øpsunnita./ 'I'm sorry, but I can't go.', /cikun hæ-culssu øpci-man, kitaleyo./ 'I can't now; wait (a while).', /pagun manchi-man, chimkunun nøgnøkci mot-hamnita./ 'We have enough rooms but not enough bedding.', /pika oci-man, kalæto kapsita./ 'It's raining, but let's go anyway.', /an-kamyøn molækecci-man, manyak kantamyøn, yøtøssi-cøne kaciyo./ 'I'll be there at eight, if I go at all.'

The suffix combination /-øto/ (i.e., the /-ø/ gerund suffix plus /-to/) is translated by 'even though' in English. The /-to/ may be added to /-øso/ as well as to /-ø/. E.g., /mø, com nøløto, uli kølø-kaciyo./ 'Well, even if it's a little far, let's walk.', /i-køt aman kkupulyøto, an-puløcinnikka./ 'How much will this bend without breaking?', /amo sunsa-hante muløto, amnita./ 'Any policeman can direct you (i.e., having asked any policeman, you will know).', /næka kato cowayo?/ 'May I go?' (i.e., even though I go, is it all right?), /tæke-kkaci masiko kato, kwæanchanssunnikka?/ 'May I accompany you home?'

The suffix combination /-øso/ (i.e., the /-ø/ gerund suffix plus /-so/) places the action or state

of the verb before that of the verb in the following clause. It may mean simply an earlier action (translatable in English by 'and' or 'and then') or it may imply cause of the action in the following clause (translatable in English by 'since' or 'because' or '... so'). /-øss/ forms are also translatable in English by 'having been...' or 'having done'. Examples are:

/cønpu ta hap-hæss, ølmamnikka./ 'How much is it (added) all together?', /phyønci hayæss, muløposiyo./ 'Write and ask about it.', /cø-chuŋchuŋtalo nælyø-kasø, wen-ccokulo kasipsiyo./ 'Go down that stairway and then go to the left.', /malssum-com muløpolkkøsi issæss, wassumnita./ 'I came because I had something to ask you.', /pollili issæss, phyønyaŋ-com kanun-kil-imnita./ 'I'm on my way to Phonyang to see about some business.', /onun-kile sakoka nasø, iløkhe nukke wassumnita./ 'I had an accident on the way, so I got here late.', /i-køt na wi-hæss com cunpi hæ-nolssu ikkessumnikka?/ 'Can you arrange this for me?', /sosikul olæ mot-tulæss, cham æathasso./

'I was worried (about you) because I hadn't heard from you in a long time.', /talkæl kəsø, nøsiyo./  
 'Beat the egg before putting it in.', /ku-salamun aphøssø, an-wassumnita./ 'He didn't come because he was sick.', /nømø pissasø, an-sassumnita./ 'It was too expensive, so he didn't buy it.', /mollasø kulæssumnita./ 'I didn't know.', /alechuge kasø møkciyo./ 'Let's go downstairs and eat.', /kəsoŋ kasøssø olæ kesikessumnikka?/ 'Are you going to stay long in Kəsong?', /kasøssø, manun-cæmi posipsiyo./ 'If you go, you'll have a good time.', /ama kəpi nasø, talø-nanna pociyo./ 'He must have run away because he was afraid.', /cø-kil mothoŋilul/cinasø, ku-cipi issumnita./ 'The house is beyond the bend in the road.', /cochi anhan-umsikul møkøssø, pyøŋi nassumnita./ 'He got sick from eating bad food.'

Examples of /-ke/ plus /-man/, /-to/: /motun hyøŋphyøni uli-hante an-tweke-man tweyø-issøssø./ 'The breaks were against us.', /onul achamen øttøkheto pappunci sinmunto mot-ilkøssø./ 'This morning I was too busy to read the newspaper.', /i-kochukkalan øttøkheto mæunci nunmuli kkok namnita./ 'This pepper burns my tongue.'

/-ø, -ko, -ke/ plus /-ya/: forms with /-øya, -koya/ occur only in combination with a following

verb. Forms with /-keya/, however, occur in any position that /-ke/ forms may occur. /-øya, -koya/ are treated in more detail in Chapter VII. An example of /-keya/ is: /pam nəkkeya calie nuøssumnita./ 'I went to bed late.'

/-ø, -ko, -ci, -ke, -tæ/ plus /-yo/: this is a very common kind of combination, yielding /-øyo, -ciyo, -koyo, -keyo, -tæyo/. We analyze /-yo/ as the /-o ~ yo ~ so/ form of the copula verb /-i-/, with the /i/ of the stem dropping when added to a vowel-final morpheme (i.e., /-(i)yo/).

Sentences ending in these forms are statement or question, depending on intonation. They may also be used as imperatives. /-øyo/ and /-ciyo/ are perhaps more frequent than the others.

/-øyo/<sup>1</sup> : /çøli kayo./ 'Go there.', /kaman-kamani mal-hæyo./ 'Speak quietly.', /pøp mollayo// 'Don't you know the law?', /yøki salami phøk manøyo./

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1. See also 5.61 for /-(i)yøyo/.

'There are a lot of people here.', /nali tto tɔwɔyo./  
 'It's hot again.', /kulussɔssɔyo?/ 'Is that so?',  
 /yɔkwani pulphyɔn-haci anɔsɔyo?/ 'Isn't the hotel  
 comfortable?', /cami mani posɔssɔyo?/ 'Did you have  
 a very good time?', /phyɔnyɔne mechil kesikessɔyo./  
 'How many days will you stay in Phyongyang?', /ta  
 capsusɔssɔyo?/ 'Have you finished eating?', /kulayo?/  
 'Is that so?'

/-ciyo/: /kaman-kamani hæcciyoy./ 'We did it quietly.',  
 /ilkopsi-ini, ince tatul kot osikecciyoy./ 'It's seven  
 o'clock, so they'll probably come soon.', /cɔ, cha-  
 hancan hasiciyoy / 'Will you have a cup of tea?',  
 /kumnyɔne messal-iciyoy?/ 'How old is he?', /i-ɔlin-  
 ænan nukuciyoy?/ 'Who is this child?', /cikam il-hako  
 icciyoy./ 'He's working now.', /kot tola-ociyoy./ 'I'll  
 be right back.'

/-tɔyo/: /kulɔkhe hatɔyo?/ 'Oh, he did that!',  
 /ku-yɔghwanan cham cothɔyo./ 'The movie was very good.'

The /-ɔ/ gerund (of the simple stem) also  
 occurs with an element /-la/: /hayɔla, mɔkɔla/. /-ɔla/  
 is a sentence-final suffix sequence, and indicates  
 an informal imperative. For certain stems, there  
 are irregular forms besides the regular formations  
 with /-ɔla/: /kala/ or /kakɔla/ 'go!'; /cakɔla/ 'go  
 to sleep!'; /hæla ~ hayɔla/ or /hala/ 'do'. The form



/onøla/ 'come!' is used instead of a regular formation consisting of /wa/ (the /-ø/ gerund form of /o-/) plus /-la/. E.g., /nø sonim-anthe wasø, insa tulyøla!/' Say "how do you do" to the guest!', /nø ince pakke naka-nølala!/' Go out and play now!', /chansuya. i-calulul taløla!/' Chansu, carry this bag!', /kamani issøla!/' Be quiet!', /yøki ancøla!/' Sit here!', /søla!/' Stand up!', /ulci maløt!/' Don't cry!'.

(4) The gerund forms with /-ø, -ci, -ko/ also occur in sequences where they are followed by another verb stem. These combinations are treated as constructions involving more than one stem and are described in Chapter VII.

### 5.331 Reanalysis of /-ø-s-, -kes-, -tæs-/

The similarities between the tense extenders /-ø-s-, -kes-, -tæs-/, on the one hand, and the gerund suffixes /-ø, -ke, -tæ/, on the other make it reasonable to consider breaking up the tense extender morphemes as sequences of the gerund suffixes plus /s/. However, this /s/ occurs in no other position but in /-ø-s-, -kes-, -tæs-/. This alternative analysis of /-ø-s-, -kes-, -tæs-/ may not be advantageous from a pedagogic point of view, but it makes the reanalysis of another set of elements, /-tø/ and /-tæ/, a possibility.

This is taken up in the following section.

### 5.332 Reanalysis of /-tø, -tæ/

In considering the distributions of /-tø/ (5.25) and /-tæ/, on the one hand, and of /-ø/ on the other, an analogous relation is seen to exist between the total distribution of /-tæ/ and /-tø/, and of /-ø/. /-tæ/ and /-tø/ are in complementary distribution with one another; their ranges together match, in some significant points, the range of distribution of /-ø/ alone. I.e., in /\_\_\_\_yo/ : /ssøyo, ssutæyo/, /\_\_\_\_la/ : /ssøla, ssutøla/. Furthermore, /-tæs/ more or less matches /-ø s-/ in distribution; while there is /-tæ/ plus /s/, there is no /-tø/ plus /s/. It seems reasonable, then, to consider /-tø/ and /-tæ/ as morpheme alternants.

### 5.34 The Participle Suffixes /-n, -l, -nan, -tun/<sup>1</sup>

The morphemes in this group, are /-n, -l, -nan, -tun/. /-nan/ and /-tun/ have no other alternant forms, but /-n/ and /-l/ have the forms (a) /-n, -l/

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1. /-tun/ is discussed here as a unit morpheme, although it has been shown to be composed of /-tø ~ tu/ plus /-n/ in 5.25. /-tun/ varies dialectally with /-tøn/.

after vowel-final or /l/ final stems, (b) /-tun/ and /-ul/ after consonant-final stems; /-l/ has the form /-sul/ after past stems. /-n/ does not occur after past and future stems, while /-tun/ occurs after all three types of stems, but least commonly after the future stem.

The suffix /-nun/ does not occur after all verb stems. This is the basis for the classification of verb stems into action and description stems. Those stems which do not occur with /-nun/ are called "description" stems. In some cases, we are presented with a problem of class intersection, for in some occurrences, /-nun/ may be added to a stem but not in others. There is always a difference in meaning, however, e.g., the stem /khu-/ 'be big'; with the suffix /-nun/, /khanun-/ means 'growing'. This is like the problem of those verbs in English which have transitive and intransitive uses, and have different meanings. However, not all stems in the description group occur with /-nun/ with a consequent different meaning. /-n, -l, -tun/ are added to both action and description stems.

/-n, -l, -nun// -tun/ are always followed by a noun stem, with /-/ or close juncture between them. In the case of /-l/, there is in nearly all cases

only close juncture, and a following noun stem, if it begins with /p, t, c, k, s/, changes that consonant to the corresponding double consonant. When there is /-/ juncture between the verb form and the following noun stem, we call the sequence a phrase; when there is close juncture, we call it a compound.

Forms with /-n, -l, -nan, -tan/ have some attributive relation to the following noun stem. We call these suffixes variously participle, adjectival, or relative suffixes. /-n/ is the past participle suffix, /-l/ the future, /-nan/ the present, and /-tan/ the perfect participle suffix. Structures consisting of such a participle form and a noun stem are called attributive phrases and compounds. Syntactically, the participle forms of verbs are nouns.

Most attributive phrases and compounds are syntactically nominal constructions; but certain ones are syntactically verbal constructions. These are discussed in more detail in Chapter VII.

Examples of attributive phrases and compounds follow:

/olssonim/ 'the guest who will come', /masilkkøt/ 'something to drink', /uncøn-halccu/ 'knowing how to drive', /ton nan-salam/ 'the man who paid', /khun-paŋ/ 'the large room', /tøunte/ 'warm situation,' or 'since it's warm', /søki innnan-salam/ 'the person

over there', /sinmun ignun-salam/ 'the person reading a newspaper', /nakanun-kil-immnita./ '(I) am going out', /øce wattun-salam/ 'the person who came yesterday', /wøn-hatun-køt/ 'something (I) wanted', /mwøsitunci/ 'whatever, anything', everything'.

5.341 /-l/ participle forms plus copula verb /i-/:  
 /-li, -lita, -likka, -liyo/

There are verb forms which end in /-li, -lita, -likka, -liyo/. There seems to be no clear way of analyzing these forms because of homonymity. It seems feasible to identify the /l/ as the /-l/ participle suffix; the problem is with the remaining parts. They may be analyzed as forms of the copula verb /i-/, which occurs elsewhere in the forms /-immnita, immnikka, ita, iyo/, but not /ikka/. Also, it would be unusual for the copula verb to follow a participle form directly; however, there are analogous occurrences of the copula verb, such as coming after noun stems with a suffix.

An alternative is to analyze /-li/ (alternants /-ali, -suli/) as analogous to /-ni ~ uni ~ suni/ and /-na ~ una ~ suna/ (which will be taken up in 5.41). We might do this if we wish to say that /-ni ~ uni ~ suni/ is composed of the /-n/ participle suffix plus an element /-i/ (5.411). However, we would then have

to say that /-n/ occurs not only after simple stems, but also after past and future stems (where it has the alternant form /-sun/) provided however, that this /-i/ follows (/a/ in the case of /-na ~ una ~ suna/). Further, there is no /-l/ participle suffix plus /-a/ combination; this would leave the /a/ of /-na ~ una ~ suna/ as a unique and dependent element. In addition to the **assymetrical** morphology of these elements, while there is a /-nikka/ (which we can break up into /-ni/plus /-kka/), there seem to be no regular occurrences of /-ni/ or /-na/ plus /-ta, yo/, analogous to /-lita, -liyo/.

We consider the /-li-/ forms to be composed of the /-l/ participle plus the copula.

/-li/ occurs without a following /-ta, -kka, -yo/ only in poetry; e.g., /tagsin øpsi, øcci hali./ 'Without you, what shall I do?'.

Forms with the suffix sequences /-lita, -likka, -liyo/ come at the end of the sentence. They are somewhat literary. They indicate future or probability. Added to past stems(/wassulita/), they are used in the apodosis of a contrary-to-fact sentence.

/-lita/ indicates a statement, while /-likka/ and /-liyo/ indicate questions. /-liyo/, however

is more literary and poetic. Examples are: /øpsulita./ 'There won't be any.', /cohulita./ 'It will be all right.', /ku-ilul mannamyøn, iyaki-halita./ 'If I see him I'll speak to him.', /cokhom issamyøn, pika olita./ 'It'll rain soon.', /ilølthø-imyøn, tajsini øcci. wassuliyø./ 'Why did you come if you knew that?', /i-chækul ilkusimyøn, cosøn-yøksalul asilita./ 'You can learn about the history of Korea from this book.', /cønchaka ppallassamyøn, opun-cøne wassulita./ 'If the streetcar had been quicker, I'd have been here five minutes before.', /kumnyønun kamalita./ 'This year will be dry.'

Examples of /-liyo/ are as follows (/ -li/ alone is also used, poetically, as has been mentioned above): /øttøkhe saliyø./ 'How can I live?', /ønce tasi oliyø./ 'When will I ever come back again?', /ønce oli./ 'When will I come?'

/-likka/ is used in addressing superiors, or one's self: /chækul kaci olikka./ 'May I bring the book?', /phyøncilul ssulikka, sinmunul polikka./ 'Should I write a letter, or read the newspaper?', /tajsini kuchøløm noyøwø-hasi leøul aløttamyøn, øcci næka wassulikka./ 'If I had known you'd be made angry, I wouldn't have come (i.e., how could I have come to see you now?)'.

Some speakers also have the sequences: /-limnita, -limnikka/, used in addressing another person:  
 /kachi an-kalimnikka?/ 'Won't you come with me?',  
 /an-iyo, kachi kalimnita./ 'Yes, I will.'

### 5.342 /-lyø/

Forms of the type /halyø/ are analyzed in a way analogous to forms of the type /halita/ etc. We may consider the /yø/ to be the /-ø/ gerund form of the copula verb /-i-/, with the /l/ of the verb dropping when added to /l/ (see 5.6). Various other suffixes may be added to /-lyø/, chiefly /-ko/, yielding /-lyøko/, and /-taka/, yielding /-lyøtaka/.

The vowel /ø/ varies with /a/, and /l/ varies with /ll/. The precise conditions for this variation have not been discovered on the basis of the material of this study.

All these forms containing /-lyø/ are non-sentence final. They indicate a following action or purpose. E.g., /kainun yøki misul konpu-halyø wassumnita./ 'He came here to study art.', /suyøgul halyøko hamnita./ 'We're going to go swimming.', /mikuk hallyøtaka anwasso./ 'I intended to go to the U.S., but didn't.', /papun øttøkhe hasillyamnikka./ 'What about dinner?', /ku-salami ilul øttøkhe hasillyamnikka./ 'How's he



going to do it?' or 'What does he say he was going to do?', /cɔnyɔk mɔkallyako hæcci-man, an-mɔkɔssumnita./ 'I intended to eat supper, but didn't.', /ceka yɔki mechil tɔ issullyako hamnita./ 'I'm thinking of staying here a few more days.', /cɔ-ppɔssul thallyɔmyɔn, øsø ppalli hæyo./ 'If you want to catch that bus, hurry up.', /kukyɔŋul kallyamyɔn kalssuto ikkecci-man, nan kako sipci anso./ 'We could go to the movies, but I don't want to.', /caŋnæ mwɔsi twellyɔko sæŋkak-hasiyo./ 'What do you aim to be?', /kyɔŋchali ku-salamul capulyɔko ttalɔ tanimnita./ 'The police are after him.', /cina-kalyɔmyɔn, momul kkupulyɔya-hamnita./ 'You'll have to bend down to get through here.'

#### 5.4 The Syntactic Verb : Clause-Final Suffixes

The clause-final suffixes mark the end of a clause; there are only a few other morphemes which may be added to them. The clause-final suffixes indicate various kinds of relations between clauses, such as "if, and, but, although, when, because, while." These clauses are generally dependent clauses, i.e., are followed by another clause in the same sentence.

##### 5.41 The clause-final suffixes /-ni, -na, -myɔ(n)(sø), -kɔtun/

These suffixes are added to all verb stems. /-køtun/ has no other alternant, but /-ni, -na, -myø/ have the alternants (1) /-ni, -na, -myø/ added to vowel-final stems (hani), or to /l/ final stems with loss of /l/; (2) /-uni, -una, -umyø/ added to consonant-final stems /patuni/; (3) /-suni, -suna, -sumyø/ added to past and future stems (/hakesuna/).

The suffix /-ni/ may have added to it another element /-kka/, yielding the sequence /-nikka/, as in /hanikka/.

The suffix /-myø/ is literary. To /-myø/ is added an element /-n/, yielding the suffix sequence /-myøn/, as in /hamyøn/. Further, to /-myøn/ may be added an element /-sø/, yielding /-myønsø/, as in /hamyønsø/; /-myønsø/ is the more common replacement for /-myø/ in speech.

/-ni/ and /-nikka/ mean 'because, since, as', /-na/ means 'although, but', /-myø/ and /-myønsø/ mean 'while, simultaneously', /-myøn/ means 'if, when', /-køtun/ means 'when'.

While /-nikka/ may finish a sentence (often with /-nyo/ or /-yo/ added, the other clause-final suffixes usually do not finish off a sentence, except under special circumstances.

/nan tonun manuni, kɔcɔŋ malɔla./ 'Don't worry about me; I've enough money.', /aika cani, coyɔŋ-hasiyo./ 'The child's asleep, be quiet.', /ince nɔmɔ olɛ issɔssuni, kayakessumnita./ 'I've stayed too long; I have to go.'

/cip-aphe ancɔnikka, salamɔl mani pociyo./ 'When I sit in front of my house, I can see many people.', /naka sesie anikka, ku-puni pɔlssɔ nakassumnita./ 'When I came at three o'clock, he had already gone out.'

/chakul ilkumyɔ, kulssilul ssumnita./ 'I'm reading a book and writing characters.'

/kɔcɔ camkan nakasintako kulɔsimyɔnsɔ, nakassumnita./ 'He just said that he was going out for a while, and left.'

/chalul mɔkɔssumyɔn, cokhessumnita./ 'I'd like to drink some tea.', /kulɔkhe twemyɔn, tahɔŋ-ikennante./ 'If so, I'll be glad.', /yakkan hamyɔn, sɔŋul namnita./ 'He's made angry very easily.', /pomyɔn, anpulul cɔn-hɛ-cukessumnita./ 'If I see him, I'll give him your regards.', /nappassumyɔn, pakkusiciyo./ 'If you think it was bad, change it.'

/-myɔn/ and /-kɔtan/ are often interchangeable, but one is usually preferred in any particular sentence, for /-myɔn/ has a rather weaker conditional meaning.

Examples of /-køtun/: /posikøtun anpulal cøn-hæ-cusiyo./ 'If you see him, give him my regards.',  
 /chipkøtun tulø-osiyo./ 'Come in if you feel cold.',  
 /cami ikkøtun kacisiyo./ 'Keep it if it's interesting.',  
 /nappatkøtun, pakkusiciyo./ 'Change it if you think it was bad.'

#### 5.411 /-tuni, -tuna, -tamyøn/

These elements (with the /u/ vowel varying dialectally with /ø/) have been analyzed as /-tø ~ tu/ plus /-ni, -na, -myøn/ in 5.25. As mentioned there, these suffix sequences are "perfective" in tense (carried by the /-tø ~-tu/), and concessive or conditional (carried by the /-ni, -na, -myøn/). For examples, see 5.25. An additional example is:

/pilul macøttuni, cham citok-han-kankie køllyøssumrita./  
 'I caught a bad cold in the rain.'

#### 5.412 Reanalysis

Reanalyzing /-ni ~ uni ~ suni/ as the participle suffix /-n/ plus /i/, and /-na ~ una ~ suna/ as the participle suffix /-n/ plus /a/ would require a rather tail-chasing kind of statement: (1) /-n/ has the additional alternant /-sun/ (beside /-un/) when it comes after past and future stems; (2) the range of distribution

of /-n/ is extended from occurrence only directly after a simple verb stem to occurrence also after past and future stems, but only if /i/ or /a/ is added; (3) /-n/ now occurs not only before noun stems, but also before /i/ and /a/.

/-n/ occurs elsewhere as a morpheme; /i/ and /a/ do not. However, we could consider /i/ and /a/ as bound noun stems, like /-ta/, but occurring only with preceding /-n/.

Such an analysis would destroy the symmetry of the elements /-ni, -na, -myø /, however, since /-myø / would presumably not be broken down into a sequence of morphemes.

#### 5.42 Other clause-final suffixes: /-taka, -ca, -tolok/

The elements /-taka/ and /-ca/ are added to simple stems of action verbs, and to their past stems. /-taka/ has the variant /-ta/; the noun suffix /-un ~ nun/ may be added to the /-taka/ variant, though not to the /-ta/ variant. /-ta/ is probably the more frequently used variant, but we refer to this morpheme as /-taka/ in order to distinguish it from a morpheme /-ta/ described in 5.52.

Forms with /-taka/ and /-ca/ come at the end of a clause. In a few, but frequently occurring phrases,

consisting of the past stem of an action verb plus the morpheme /-taka/ followed by a form based on the verb stems /cu-/ 'give' or /tali-/ 'offer', the variant /-ta/, rather than /-taka/ is used. E.g., /mul-com katta-cusiyo./ 'Please bring me some water.', /yølmuhantatman sata-cusiyo./ 'Get (buy) me a couple bunches of radishes.'

Verb forms with /-taka/ have the meaning of 'when...' or 'while...'. Often, they indicate some activity which is followed by, or interrupted by another activity.

Verb forms with /-ca/ usually have the meaning of 'as soon as...', 'just as...'.  
 Examples of /-taka/ and /-ca/ are:

/suŋkaŋki thako olla-kataka, ku-salam mannasso./  
 'I met him (while) going up on the elevator.',  
 /hantalccum ittaka osiyo./ 'Come again in about a month.',  
 /kattaka palo osiyo./ 'Come back right away.'

/nupca camitäløssø./ 'As soon as I lay down, I fell asleep.',  
 /papul møkøcca salami wassummita./  
 'Just as I had eaten, a man came.'

Forms consisting of /-ca/ added to the simple stem of action verbs also occur at the end of a sentence. These forms are informal hortatives: /kaca./ 'Let's go.'

The element /-tolok/ is added to simple stems of action and description verbs. It has no alternant forms. /-tolok/ expresses 'in order to' or 'so that', and /-tolok/ and /-ke/ are often substitutable for each other.

E.g., /nanun naccalal an-hatolok, konpu-hayakessumnita./ 'I have to study hard so I won't fail in the examinations.', /taqsinnun kulul potolok ankyonul ssusipsiyo./ 'Use your glasses to read it.', /taqsine-kehweki silhaq twetolok him-ssukessumnita./ 'We'll try to carry out your plan.'

### 5.5 The Syntactic Verb: Sentence-Final Suffixes

The sentence-final suffixes indicate two things: (1) whether the sentence is a statement or question, and (2) the formality level of the whole sentence. While the verb stem indicates the formality relation between the speaker and the person spoken about, the sentence-final suffixes indicate the formality relation between the speaker and the person spoken to. Thus, any combination of formal or informal verb stem, and formal or informal sentence-final suffix may be made. E.g., /kim-sønsæq osøssumnikka?/ 'Is it you, Mr. Kim?' (formal verb stem, formal sentence-final suffix), /cokkom-cøne osøtta./ 'He came a little while

ago.' (formal verb stem, informal sentence-final suffix),  
 /na mikuksø watta./ 'I'm from America.' (informal  
 verb stem, informal sentence-final suffix), /næka  
 pæchu saki wøn-hao./ 'I want to buy (some) cabbages.'  
 (informal verb stem, mid-formal sentence-final suffix).

### 5.51 /-o ~ yo ~ so/

The suffix /-o/ has the alternant forms /-o ~  
 yo ~ so/, which have been discussed in 3.43. The  
 form /-uo/ is a free variant of the alternant /-so/.<sup>1</sup>  
 The suffix /-o/ is added to all stems. Forms with  
 /-o/ occur only at the end of a sentence and are mid-  
 formal. /-o/ indicates a question when the intona-  
 tion is a rising one, and a statement when the intona-  
 tion is a falling one. E.g., /nukuyo?/ 'Who is it?',  
 /øpso/ 'There isn't any.'. This suffix is mid-formal.

#### 5.511 /-so/

There is a /-so/ suffix which has to be kept  
 separate from /-o ~ yo ~ so/ because of the difference  
 in distribution. In some positions, these may be  
 homophonic, as in /møkso/, but not in others, as in  
 /hao/ : /møkso/. /-so/ is added to simple stems,  
 both vowel-final and consonant-final, of action verbs,  
 e.g., /oso, møkso/. It indicates an informal impera-

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1. Except after /-kes-, -ø s-/, where only /-so/ occurs.



tive, as in /øʂø oso./ 'Come quickly!', /pammøkso./ 'Eat!'.

There is also an element /-soita/ which is added to simple stems and also to past and future stems. /-soita/ is added to both vowel-final and consonant final stems, e.g., /hasoita, hakessoita/. Just as we analyze the suffix /-tøita/ as being composed of /-tø/ plus /-ita/ (see 5.25), so may we analyze /-soita/ as /-so/ plus /-ita/.

Forms with /-soita/ come at the end of a statement sentence. They indicate a high degree of formality, and are used in praying and in poetic expressions. Frequently, /-soita/ is either flattering to the person spoken to, or sarcastic.

/pika osoita./ 'I pray that it will rain.' To the employer who says to an employee /nuka iløkhe hanna./ 'Who did (it like) this?', the employee may answer /ceka hassoita./, which may be interpreted as either a fearful 'I did it, sir.' or a sarcastic 'Yeah, I did it. So what?'. The polite but even reply would be /ceka hassumnita./ 'I did.'.

#### 5.52 /-ta/

The suffix /-ta/ has the alternants /-ta ~ nta ~ nanta/. The alternant /-ta/ is used with the

simple stems of description verbs, including the copula stem /i-/, and with all past and future stems. E.g., /khuta/ 'it's big', /aphuta/ 'it hurts', /cotha/ 'it's good', /mønteta/ 'it's a far place', /osøtta/ '(he) came', /haketta/ '(I) will do (it)'. The alternant /-nta/ is used with simple stems of action verbs ending in a vowel, and those ending in /l/, which drops; e.g., /hanta/ 'do', /anta/ 'know'. The alternant /-nanta/ is used with simple stems of action verbs ending in a consonant, except /l/; e.g., /pannanta/ 'I receive', /ømnanta/ 'there isn't', /innanta/ 'I read', /imnanta/ 'he puts (clothes) on'.

Forms with /-ta/ occur at the end of the sentence, and indicate a statement, with informal relation between speaker and person spoken to. In written material, however, as in books or articles, /-ta/ is the normal statement suffix, and is a-formal, so to speak.

/an-ita./ 'No.', /molanta./ 'I don't know.', /ne-ipoki phøk kopta./ 'Your dress is very pretty.', /na kwanchantha./ 'I'm all right.', /cokkom-cøne osøtta./ 'He came a little while ago.', /khøphika nømø talta./ 'The coffee's too sweet.', /ølin-ælo chæimyøn, cal ssøtta./ 'For a child, it's well written.'

The suffix /-o/ may be added to sentence-final /-ta/ forms; e.g., /øptaο/ in /toni øptaο./ 'Sorry, I've no money.', /toni øpta./ is a matter-of-fact 'I've no money.'

Forms with /-ta/, also occur with the /-ko/, /-nun/ or /-n/ (quotative, see 5.58). Forms with /-tako/ occur before verbal constructions, with /#/ juncture between them; and forms with /-tanun/ or /-tan/ occur before noun constructions, with /-/ or /#/ between them. Forms with /-tako/ and /-tanun/ or /-tan/ indicated that the preceding part of the sentence is a quoted statement. For examples, see 5.58.

An alternative analysis of the elements /-ta, -nta, -nanta/ would be to regard the /-n/ and /-nun/ as the participle suffixes (see 5.34). This would make /-ta/ different from all other suffixes which are added to verb stems, in that those suffixes which are added to verb stems are not also addable to other kinds of form, such as participle forms. For now /-ta/ would have the following distribution: directly added to a verb stem, when it is the simple stem of an action verb, or to the **past** or future stem of any verb; added to the /-n/ participle form of action verbs ending in a vowel and to the /-nun/ participle

form of action verbs ending in a consonant. If we were to identify the /-ta/ of /-taka/ (see 5.42) with this /-ta/, the distribution of /-ta/ would be still more different from the other sentence-final suffixes.

### 5.53 /-ni/, /-ne/

The suffixes /-ni/ and /-ne/ are added to all verb stems. These suffixes have the alternants /-ni ~ uni/ and /-ne ~ une/. The distribution of the alternants of /-ni/ has been discussed in 3.32 and 3.43. The same statements apply to /-ne ~ une/.

Both /-ni/ and /-ne/ make informal sentence-final verb forms on a parallel with /-ta ~ nta ~ nunta/. /-ni/ indicates a question sentence, while /-ne/ indicates a statement or half-question ('it is, isn't it'). /-ne/ also may have /-yo/ added to it; the added /-yo/ raises the formality level somewhat.

Examples of /-ni/:

/ilkønni?/ 'Have you read it?', /konpula  
hani?/ 'Are you studying?', /kakenni?/ 'Will you go?',  
/øлма patuni?/ 'How much do they charge?', /nø mikuki  
øtenci ani?/ 'Do you know where America is?', /cal  
issønni?/ 'How are you?' (i.e., have you been well?).

/saŋcøme mulkøn sala kachi kakenni?/ 'Do you want to go with me to the store to buy something?'.  
 Examples of /-ne/:

/næka chækul pone./ 'I'm looking at a book now.', /papul møyne./ 'I'm eating.', /cø-salami kuløthane./ 'He says it is so.', /ku-cipun tətani khune./ 'That building is very big, isn't it?', /onulan tətani chiune ~ chimne./ 'It's very cold today, isn't it?', /kaŋi khimne ~ kiphune./ 'The river's deep, isn't it?', /øceppame ku-salamul pwanne./ 'I saw him last night.', /neil tasi-pokenne./ 'I'll see you tomorrow again.', /kuløkhe hayø<sup>~</sup>ssumyøn, cokhenne./ 'It'd be fine if you did that.'.

#### 5.54 /-na/

The suffix /-na/ is added to all simple and past stems, but only rarely to future stems. It has the alternants /-na ~ una/; the statements for /-ni ~ uni/ in 3.32 and 3.43 also apply to /-na ~ una/.

Forms with /-na/ occur at the end of sentences; in this use, /-na/ is a very informal interrogative sentence marker (to children). /-na/ also occurs with a following /-yo/; /-nayo/ is also an informal interrogative sentence marker, but used between equals.

(For /-yo/, see 5.6).

In other positions, forms with /-na/ (but without /-yo/) are found before certain verb stems, such as /po-/ 'see', /ha-/ 'do, think'. In these cases, /-na/ translates as 'maybe, probably' with /po-/ and as 'whether' with /ha-/ and has no formality function. Examples:

/cømsimul mæŋna?/ 'Is he eating lunch?', /kicøkul pulønnayo?<sup>1</sup>/camika innayo?/ 'Is it interesting?', /phyønci wanna com ka-posiyo./ 'Go see if the mail has come.', /kuito kanayo?/ 'Is he going, too?'.  
 /paŋi hana inna hæø, mulø-pølyø wasso./ 'I came to inquire about a room.', /phyønci wanna com ka-posiyo?/ 'Will you go after the mail?', /saŋ-haci anønna posiyo./ 'See if anything is (n't) damaged.', /yølnna-pwa./ 'Maybe I opened it.', /kanna-pwa./ 'Maybe he left.', /ona-pwa./ 'Maybe he's coming.', /nato kalkka-pwa./ 'I'll probably go, too.'.

Note: As has been suggested in 4.5, it is possible to regard the element /-ina ~ na/ as the /na/ form of the copula verb /i-/.  
 5.55 /-se ~ use/

This element is added to simple or past or future stems of action verbs. After past and future

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1. 'Has the whistle blown?'.

stems, /-se/ is always followed by /-yo/. With simple stems, /-se/ may be used alone, with a following /-yo/, or with /-na/.

A form consisting of a simple stem plus /-se/ is an informal imperative; with /-na/ it is an informal hortative. These forms are used by men and women.

The /-seyo/ forms are considered "polite," and are used by women in speaking to men. They are declarative, interrogative or imperative depending on intonation, as in the case of the /-o ~ yo ~ so/ suffix alone.

It is possible to analyze the /-se/ which occurs after /-kes-, -øʂ-/ as a dialectal variant of the /-ø/ gerund suffix, which occurs in the alternant /-sø/ after /-kes-, -øʂ-/. However, /-se/ also occurs directly with simple stems, a position not otherwise occupied by the /-sø/ variant of the gerund /-ø/: in this position, the form of the gerund /-ø/ is usually /-ø ~ yø/.

The vowel /e/, as against /ø/, seems generally to identify women's speech forms. There such alternations as /poyøyo ~ poyeyo/, /kathøyo ~ katheyo/, in which the /e/ clearly seems to be a dialectal variant of the /-ø/ gerund suffix. The alternation /-sø ~ se/ (as variants of the gerund suffix /-ø/ after /-kes-,

-ø s/) may account for the forms consisting of stem plus /-kes, -ø s/; this would mean that /-se/ in a form like /haseyo/ (stem plus /-se/), would be a similar dialectal variant of the honorific /-si ~ usi/ before /-yo/.

Examples of /-se/ : /kasena/ 'Let's go!', /il-hase./ 'Let's work.', '(You) work!', /il-haseyo./ 'You'd better work.', /com kitaliseyo./ 'Wait a minute.', /tansin hwesaesø onul il mani hayø sseyo?/ 'Did you work hard in the office today?', /panusil mani hakesseyo./ 'I'll sew a lot.', /manitul capsuseyo?/ 'Please eat a lot.', /cami poseyo?/ 'How are things?', /kulø sseyo?/ 'Really?', /ta<sup>h</sup>luseyo?/ 'Is it different?', /pulusseyo./ 'You may call me.', /cal cinasseyo./ 'Fine' (i.e., things have been going well), /kachi kaseyo?/ 'Do you want to go with me?', /yonsø-haseyo? wassuni./ 'Excuse me - he's here.', /neilun ku-salami okessunikka, kkok oseyo./ '(I urge you to) come tomorrow, because he will surely be here.'

#### 5.56 /-mnita, -mnikka, -ptita, -ptikka/

The suffixes /-mnita, -mnikka, -ptita, -ptikka/ are added to all verb stems. They have the post-vocalic alternants /-mnita, -mnikka, -ptita, -ptikka/ and the post-consonantal alternants /-sumnita, -sumnikka,



-suptita, -suptikka/. After simple stems ending in a consonant, /-mnita, -mnikka/ also have the alternants /-umnita, -umnikka/ as free variants of /-sumnita, -sumnikka./<sup>1</sup>

Forms with these suffixes occur at the end of a sentence. /-mnita, -ptita/ indicate statements with formal relation between speaker and person spoken to. /-mnikka, -ptikka/ indicate questions on the same formality level. While forms with the suffixes /-mnita, -mnikka/ may refer to the speaker or to the person spoken to, forms with /-ptita, -ptikka/ refer only to someone other than the speaker or person spoken to. Very often, the present form (/haptita/) is used in place of the past form (/hæssuptita/). Examples of forms with these suffixes are: /møkulssu issuptikka./

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1. A women's speech variant of /-mnita, -mnikka/ is /-mnata, -mnækka/. The latter forms are used by mature and educated women. These forms express some emotion, unlike /-mnita, -mnikka/ which are matter-of-fact. E.g., /pølssø kassumnækka?/ 'Going already?'. (indignant)

The vowel /æ/, like /e/, seems to be a women's speech device. E.g., /kapsæta/ for /kapsita/ 'Let's go.' (formal). Also, the /-(i)yæyo/ variant of /-(i)yeyo/ (see 5.55).

'(how) can (anyone) eat (it)?', /øte<sup>h</sup>ittako haptikka./  
 'Where does he say it is?', /annyøŋ-hasimnikka?/ 'How  
 are you?', /chøum pwepkessummita./ 'I'm glad to meet  
 you.', /cæmi ikke twæssummita./ 'It turned out to  
 be interesting.'

To /-mnita/ may be added the morpheme /-man/  
 'only', yielding /-mnitaman/ 'but, although.'  
 /-mnitaman/ is in turn followed by another sentence,  
 or by /-yo/, ending the sentence and giving it an  
 effect of doubt: /onulun ilkika cæssummitamanyo./  
 'The weather is nice today (but maybe not tomorrow).',  
 /nunimun an-kesimnitaman, nui-tonsaŋi hana issummita./  
 'I don't have any older sisters, but I have one younger  
 sister.'

To /-mnita/ may also be added the element  
 /-kulyø/, which is also addable to /-ta/ (see the  
 beginning of this section and the following section).  
 /-mnitakulyø/ indicates an emphatic statement, and  
 makes the sentence slightly less formal, e.g., /ceka  
 acu khun-silsul hæssummitakulyø./ 'I sure made a very  
 big mistake!'

### 5.561 Reanalysis

It is possible to reanalyze the elements  
 /-mnita, -mnikka, -ptita, -ptikka, -psita, -pciyo/.

in terms of the suffix /-p-/ (see 5.26) and morphemes /-ni/, /-ti/, /-ci/, /-ta/, /-kka/. We may consider this /-ni/ as the suffix /-ni/ discussed in 5.53; its position after /-p-/ is an additional position of occurrence. However, /-ti-/ occurs nowhere but after /-p-/ and before /-ta/ and /-kka/. We may identify the /-ci/ as the gerund /-ci/ in 5.33. We may also regard the /-ta/ in the above elements as the same /-ta/ discussed in 5.52; again, as in the case of /-ni/, this would be a special additional point of occurrence. It is not neat that these extra positions of occurrence for /-ni/, /-ta/ should be so different from one another. As for /-kka/, we may consider it to be the same /-kka/ as occurs in /-nikka/ (see 5.41). But /-si/ in /-psita/ cannot be identified with the stem formalizer /-si ~ usi/, for it does not have the alternant form /-usi/.

It is necessary to say that /-p-/ after vowel-final stems has alternant forms: (1) /-p-/ after vowel-stems, (2) /-sup-/ after stems ending in a consonant; after simple stems ending in a consonant /-sup-/ varies freely with /-up-/, but after past and future stems only /-sup-/ occurs. Furthermore, the /p/ phoneme of all these morpheme alternants changes to /m/ before

/n/ (a regular morphophonemic change). It is also necessary to add that /-ni/ has the form /-ni/ after /-p-/, and that /-ta/ has the form /-ta/ after /-ti-/.

The following chart shows the arrangements of these morphemes with respect to one another and to the verb stem.

Verb stem	si~ usi	∅s	∅s			
				p	ni	
			kes		ti	
						ta
				p	si	yo
		∅s	∅s		ci	
			kes			

Note: This chart really has the geometric property of a cylinder, as can be seen from the necessity of repeating the stems in columns 3, 4, 5 at top and bottom.

## 5.57 /-la ~ ula/

The suffix /-la/ is added directly to simple action stems, and to the copula stem /i-/. It has the alternant /-la/ after vowel-final stems, or /l/ final stems with the /l/ remaining. It has the form /-ula/ after consonant-final stem.

To forms with the suffix /-la/ is added /-ko/, /-nun/; or /-n/; /-nun/ and /-n/ seem to alternate freely here. The actual forms which occur are thus forms like /((i)lako, (i)lanun, halako, tulyø-tallako, olanun/. Such forms ending in /-lako/ are followed by a form based on a verb stem, or by a clause; such forms ending in /-lanun/ or /-lan/ are followed by a noun-copula phrase, /-lako/ and /-lanun/ or /-lan/ are both followed by noun-verb (other than copula) phrases: /kitalilako kuløssøcciyø./ 'He told me to wait.', /ama mømchalanunka pociyø./ 'Maybe he wants us to stop?', /cuñyo-han-il-ilako sañkak twennita./ 'I think it's important.'

The sequences /-lako, -lanun, -lan/ indicate that that part of the sentence preceding them is a quoted request (imperative) or a copula sentence. E.g., /nukulako kuløssøcciyø?/ 'Who did you say he is?', /coyoñ-halako kuløsiyø./ 'Tell them to be quiet.'

/nail olanun phyønci patøssø?/ 'Did you get a letter (telling you) to come tomorrow?', /næka halanuntalo-man hasiyo./ 'Do just as I tell you.', /kũ-salam cakunun-hupoca anilako puin hayøssø?/ 'Has he denied that he's a candidate?'.  
 The difference in meaning between /-lako/ and /-lanun, -lan/ may be seen in the following pair of sentences: /kunun mikuk-salam-ilako mal-hæssumnita./ 'He said that he is an American.' : /kunun mikuk-salam-ilan mal-ita./ 'It is said that he is an American.'.

5.571 Other instances of /-la/

As has been mentioned, a morpheme /-la/ occurs with /-tø ~ tũ/ and /-no ~ nu/, and with the /-ø/ gerund.

In addition there is a /-la/ in the forms /-nila, -nunila/. /-nila/ is added to simple stems of description verbs, while /-nunila/ is added to simple stems of action verbs. /-nila ~ -nunila/ marks the end of a sentence, and is used in proverbs, truisms, etc. E.g., /salami nalkumyøn, cunnila./ 'Man gets older, he dies.'.

Another instance of /-la/ is in the clause-final word /anila/ 'not... but...'.  
 Another instance of /-la/ is in the clause-

/-la ~ ula/ occurs without /-ko, -nun, -n/ and marks the end of a clause and means 'not... but...': /ike pothoŋ hulki anila, sakum-immnita./ 'This isn't just ordinary dirt; it's gold dust.', /i-iln̄n ølyøulppunman anila, wihøm-han-il-immnita./ 'This is not only difficult work, but dangerous also.', /ssnun-køso anila, kul-inun-køsimnita./ 'It's not writing, but drawing.'

The identification of these various instances of /-la/ as the same morpheme cannot be shown here. They may well be homonyms.

#### 5.58 Quotative /-ko, -nun, -n/; other quotative forms

It is possible to regard the elements /-ko, -nun, -n/ mentioned in the preceding section as the same morphemes as the /-ko/ gerund suffix (5.33), and the /-nun/ and /-n/ participle suffixes (5.34). In addition to this use with /-la ~ ula/, they are also used with other forms with (1) /-ta ~ nta ~ nunta/, (2) /-ca/, (3) certain forms consisting of a participle (adjectival) form plus noun stem, such as /hallyøko, kannunyo/. The selection of /-ko/<sup>1</sup> or /-nun/ ~ /-n/

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1. /-ko/ has the variant /-kko/ at least after the /-ta/ forms; the /-kko/ variant seems to prevail in S. Korea.

depends on what kind of expression follows (see 5.57).

For example:

/ku-salami kacako kulæsso./ 'He said "let's go!".', /ku-salami kakanun mal-iyó./ 'He means "let's go!".', /Kim-sønsæŋi caki-samusile kantako haptita./ 'Mr. Kim said that he was going to his (own) office.', /øte hasikettako kulæcciyó?/ 'You said you wanted to go someplace, didn't you?', /øte hasikettanun malssum-imnikka./ 'Where is it that you want to go?', /iløkhe hanun-køsi nattako ku-ika malssum-hamnita./ 'He says it's better to do it this way.', /onul pika okettako sinmune poto-hæssumnita./ 'The newspaper reported that it will rain today.', /sacín-kukyøŋe camilul pwannunyako naka mulæsso./ 'I asked him how he liked the picture.', /sæ-ipokul sallyøko hamnita./ 'I'm planning to buy a new suit.', /kocip pulintako cokomto iloulkkøn øpsó./ 'Being stubborn won't help you a bit.'.

Forms with the suffixes /-ta, -ca, -lyø, -la/ often occur directly with the clause-final suffixes, mostly with /-myøn/, and the sentence-final suffixes /-mnita, -mnikka, -ptita, -ptikka, -ciyo/. E.g., /hantamyøn, hantamnita, hacamyøn, halamnikka/. Such forms usually express a quoted sentence (analogous to /hantako hamyøn/, etc.), and are often used when



the source of the report is unspecified. It is not clear, however, whether verbs of the form /hantamyøn/, for example, can be substituted for expressions of the type /hantako hamyøn/ in all cases (allowing for the change in meaning).

/sønsæpnimi kasintamyøn, cøto kachi kalkka hamnita./ 'If you (say that you) are going tomorrow, I think I'll go with you, too.', /ceka i-calu-we tø talako kalamnikka?/ 'Should I carry something besides this boy?', /cøŋ chæki pakkwintannita./ 'There will be a change in policy.', /kuløssøttaciyo?/ 'Is it true?', /manyak kantamyøn,.../ 'If he goes...', /mal-hacamyøn,.../ 'For example,...' or 'If I may say so.'.

#### 5.59 Forms containing /ku/

The element /-ku/ occurs in the following sequences: /-kun, -kuman, -kunøn, -kul, -kunyo, -kumanyo, -kumønyo, -kulyo ~ kulyø/. These sequences beginning with /-ku/ are added to all verb stems; they have variants beginning with /-ku/ after all stems except stems of simple action verbs, where they have variants beginning with /-nunku/. That is, /-ku/ and /-nunku/ are alternants of one morpheme /-ku/, if we break up these sequences in

the following way:

Description verb stem Copula stem		ku	na	
	ø s		n m man møn	
Action verb stem	kes			
	tø~ta			*yo
mnita	nun		l	yø

Presumably, /yo/ may be analyzed as /-(i)yo/; however, it should be noted that after /-kul/, /yo/ varies freely with /yø/. Rather than consider /yo/ and /yø/ to be variants of one morpheme, it is perhaps neater to consider /yø/ to be /-(yø)/, i.e., the /-ø/ gerund form based on the copula verb stem /i-/. The /-ø/ gerund form of verbs may, in general, occur in sentence-final position. The variation between /yo/ and /yø/, then, is a variation between two different verb forms, i.e., the form with /-o ~ yo ~ so/ and the form with /-ø/.

While /man/ occurs elsewhere as a noun stem, the identification of /n/ is not clear. /-nyo/ occurs elsewhere as a substitutable element for /-yo/, added to certain forms, e.g., /issunikanyo ~ issunikayo/ 'because there is'.

The identification of /-møn/ is also not clear; it could perhaps be regarded as a free variant of /-man/, but only in the environment /-ku\_\_\_\_/.

/-ku/ itself might be identified with the /-ko/ gerund suffix, since the latter has the form /-ku/ as a dialectal variation. But the gerundive /-ko/ ~ /-ku/ elsewhere does not have the alternant /-nunku/ after simple action stems. For this reason, it is not possible to identify these two elements as the same morpheme. It is also of interest to note that in these forms /-ku/ has the dialectal variants /-kũ/ and /-kø/.

Forms with /-kun, -kuman, -kumøn, -kul/ come at the end of a sentence; they indicate a statement expressing surprise, dismay, wonderment. When ended off by /-yo/ (/or -yø/), the sentence is presumably being addressed to someone other than the speaker himself, with expectation of an affirmative answer. When not ended off by /-yø/ or /-yø/, the speaker is not addressing anyone else.

/unhelakonun molununkun./ 'He doesn't understand gratitude.', /o, kunun makculul mani masinunkun./  
 'Oh, he sure drinks a lot of beer!', /naka ilttuq halppøn-iyøkkun./ 'I should (would) have been first.',  
 /cham kuløkkekkun./ 'Oh, that's true.', /cham chupkun onulun./ 'It's awfully cold today.', /cham ippukun./  
 'Oh, it's very beautiful.', /i-køsun naka chattøn-køsikuna./ 'Oh, this is what I was looking for!',  
 /cø-salami pølssø wakkumøn./ 'Oh, he's here already!',  
 /salami cokhumøn!/'He's a nice person (after all).',  
 /kkwe tøupkun!/'Boy it's hot!', /ikøsi phøk pissakunyo./  
 'These are very expensive.', /cham tjani møgnunkunyo./  
 'He sure eats a lot.', /onul nali tøwøssø, cakko tami nanunkunyo./ 'It's so hot today, I'm sweating.',  
 /ceka acu khan-silsul hæssumnita<sup>o</sup>kulyø./ 'I sure made a big mistake!', /nuka mwølako kuløna pokulyø./

## 5.6 Noun Stem Plus Verb Stem

### 5.61 Noun stem plus copula

As has been mentioned earlier, the copula verb stem /<sup>o</sup>si-/ occurs only with a preceding noun stem; this noun stem may be an ordinary noun stem or one based on a verb stem, such as the gerund forms. No other verb stem is dependent on any preceding element. We might look upon /-i-/ as a noun stem suffix, perhaps

as a kind of verbalizer of noun stems.

The element /-yo/ occurs very frequently as a sentence-final element, added to various kinds of forms, such as gerunds and noun stems. We have chosen to regard this /-yo/ as being the /-o ~ yo ~ so/ form of the copula stem /i-/ whose vowel drops after morphemes ending in a vowel, or in /l, m, n/.

While the copula verb is ordinarily never preceded by anything but a noun stem, with no (other) noun suffixes intervening, the /-(i)yo/ form is often used after a noun stem plus suffix, especially in response utterances. E.g., /toŋmuekeyo?/ 'To your friend?', /cøtøyo./, /natoyo./ 'Me, too.', /ku-salamunyo ð/ 'You mean him?', /kənanunyo ð cip cikinun-køsicì, aitul toŋmuka aniyeyo./ 'The dog? It's for guarding the house, not for being a pet for the children.', /cipħaŋiloyø?/ '(What?) With a cane?', /cina-kanun-salamulyo?/ '(He bit) the passerby?', /amyø./ 'Sure.', /kulømunyo, øttøkhe halikka./ 'Then what should I do?', /ole-kan maniyo./ 'It's been a long time (since I saw you).', /makchaka yølttusinikkayo./ 'Because the last train is at 12 o'clock.', /mwøllyø./ 'Don't mention it. (i.e., what is it?)', /hakoya malkkølyø./ 'We'll do it anyway.'

In connection with substantives based on verb stems, /-yo/ occurs after /-ci, -ø, -ko, -ke, -ki, -m/. In connection with the clause-final suffixes, /-yo/ occurs after /-nikka/, but not after /-ni, -na, -myø, -myøn, -myønsø, -køtan/. In connection with sentence-final suffixes, /-yo/ occurs after /-mnita, /-se, -na/, but not after /-ta, -ca, -la/.

There are also the variant forms /-(i)yøyo, (i)yeyo, (i)yæyo, (i)yayo/. It is reasonable to suppose that the variations /ø ~ e ~ æ ~ a/ in these forms are all variations of the vowel of the copula form of the copula verb /-(i)yø/. /-(i)yeyo/ seems to be most common; /-(i)yæyo/ seems to be very frequent in women's speech. /-(i)yøyo/ means the same thing as /-(i)yo/ but expresses more affect. Examples are: /aniyeyo./ 'No.', /musun kkataalkiyeyo?/ 'What was the reason?', /øccøn-iliyeyo?/ 'What happened?', /anyeyo. ttan-køsiyeyo./ 'No, I mean the other one.', /ssunøn-køt malyeyo./ 'I mean writing.', /ku-køsun ceka philyo-han-køsiyøyo./ 'This is what I need.'

#### 5.62 Noun stems plus the verb stem /ha-/

A very common sequence which occurs in the position of a verb stem consists of a noun stem plus the verb stem /ha-/. The stem /ha-/ is used elsewhere

with a wide range of meanings, such as 'do, make, say, tell, think'. Following are examples of noun stem plus /ha-/, with /-/ juncture between them (we give the present tense form with /-nta/ if it is an action verb or with /-ta/ if it is a description verb): /sæŋkək-hanta/ 'think', /pa-hata/ 'be hungry', /mal-hanta/ 'say, tell', /cowa-hanta/ 'like', /səŋ-hanta/ 'hurt', /nolæ-hanta/ 'sing', /sanpho-hanta/ 'walk around', /phyøŋan-hata/ 'be safe', /thunthun-hanta/ 'be strong', /yøncu-hanta/ 'play', /siøm-hanta/ 'exercise', /uncøn-hanta/ 'drive', /siwøn-hanta/ 'be refreshing', /coyøn-hata/ 'be quiet', /il-hanta/ 'work', /wøn-hanta/ 'want', /mian-hanta/ 'be sorry', /kønpy-hanta/ 'study', /wancøn-hanta/ 'be complete', /køcøl-hanta/ 'refuse', /sok-hanta/ 'include'.

Many of these noun plus /ha-/ phrases occur also in contracted forms, i.e., the /h/ of the stem /ha-/ is added to the last phoneme of the noun stem, and the /a/ vowel of /ha-/ drops. These forms are thus verb stems ending in a vowel or consonant plus /h/: /sanphochi/ from /sanpho-ha-/ plus /-ci/, /sæŋkəkci/ from /sæŋkək-ha-/ plus /-ci/, /cumunchi/ from /cumun-ha-/ plus /-ci/, /phyøŋanchi/ from /phyøŋan-ha-/ plus /-ci/, /køcølchi/ from /køcøl-ha-/ plus /-ci/, /mantha/ from /man-ha-/ plus /-ta/.

However, these contractions are not freely made. Fewer of the vowel-final noun stems seem to permit contraction with the following /ha-/ than of the consonant-final stems. Some consonant-final stems do not permit this contraction. E.g., there is only /kaŋ-hata/ 'be strong', /koŋpu-hanta/ 'study'. In a few cases, a noun-plus /ha-/ phrase and a verb form which looks like its contracted form are in contrast, i.e., are different morphemes: /il-ha-/ 'work' and /ilh-/ 'lose' in /il-haci anøtta./ 'I didn't work' and /ilchi anøtta./ 'I didn't lose'.

In most of these noun plus /ha-/ phrases, the noun stem has a zero suffix; sometimes it has the object suffix /-al ~ lul/. There is a difference in meaning: /apøcinun nolæ-hæssumnita./ 'My father sang.' and /apøcinun nolælal hæssumnita./ 'My father sang a song.'.

Note: The verb stem /ha-/ has the dialectal variant /hø-/; e.g., /haki siphumnikka?/ ~ /høki siphumnikka?/ 'Do you want to do it?'.

### 5.63 /an, mot/ plus a verb stem

The morphemes /an/ and /mot/ occur not only in /anh-/ or /an-ha-/ (e.g., /antha/ or /an-hanta/, and /mot-ha/), but also with other verbs besides /ha-/.



Those verbs with which /an/ and /mot/ occur are, on the whole, the same verbs which occur in the /-nun/ participle form, ~~or~~ which have the /-nta, -nunta/ alternants of the sentence-final verb suffix /-ta ~ nta ~ nunta/. That is, /an/ and /mot/ occur with the class of verbs we call "action" verbs, but not with the class of verbs we call "description" verbs. However, there are some verbs which have other characteristics of action verbs but do not occur with /an/ and /mot/ e.g., /iss/ 'be, exist'. Also, the copula verb /-ita/, while it is a description verb in many respects, does occur with /an/, though not with /mot/, e.g., /ani, anita, aniyo, anyeyo/ 'it isn't' or 'no'.

The /t/ of /mot/ undergoes regular morphophonemic changes before consonant-initial verbs, e.g., /mossunta/ 'cannot use' from /mot-ssunta/, /monnalinta/ 'cannot go down' from /mot-nalinta/.

The /n/ of /an/ generally does not undergo any morphophonemic changes before consonant-initial verbs.

Both /an/ and /mot/ make a verb stem negative; /an/ is translatable in English by 'not' while /mot/ is translatable by 'cannot'.

Some verbs which do not take /an/ or /mot/ are paired with another verb in the same way that a verb without /an/ or /mot/ is paired with the same verb preceded by /an/ or /mot/. For example, the negative of /al-/ 'know' is /moln ~ mollu-/ 'not know'.

Examples of verbs with /an/ and /mot/ are: /an-ita/ 'is not', /an-kesinta/ 'is (exists) not', /an-onta/ 'does not come', /mokkanta/ 'cannot go', /monmasinta/ 'cannot drink'.

Most action and description verbs can, however, be made negative by being put into the /-ci/ gerund form of the simple stem followed by /anh-/ or /mot-ha-/. For example: /cochi antha/ 'is not good', /mølci antha/ 'is not far', /manchi antha/ 'is not much, many', /tøupci antha/ 'is not warm', /kaci annanta/ 'does not go', /kaci mot-hanta/ 'cannot go', /icci annanta/ 'is not (present)'. This is further discussed in Chapter VII as a verb construction.

## CHAPTER VI

## NOUN PHRASES AND NOUN COMPOUNDS

Noun stems very frequently occur in structures consisting of a noun stem plus a noun stem, or of an adjectival form based on a verb plus a noun stem. These structures may have /-/ juncture or close juncture between the two members. In the first case, we call the structure a noun phrase, while in the second case we call the structure a noun compound or compound noun.

Whether a combination is a noun phrase or a noun compound depends on the morphemes involved, or in some cases on the final or initial phonemes. (1) A structure involving a noun stem which does not occur except in these positions (i.e., before or after another noun stem, or after an adjectival form) is a compound; e.g., /-si/ 'hour' in /hansi/ 'one o'clock', /amo-/ 'any, some' and /-te/ 'place' in /amoteko/ 'anyplace, some place', /-ka/ 'question' in /kesinka/ 'question of being'. (2) A structure in which some morphophonemic change takes place in the final consonant of the first morpheme or the initial consonant of the second morpheme is also called a compound; e.g.,

/yølam/ 'summer' plus /toŋan/ 'period of time' is /yølamttoŋan/ 'during the summer; /hantal/ 'one month' plus /cum/ 'approximation' is /hantalccum/ 'about a month'; /hal/ (future participle or adjectival form) plus /-su/ 'ability' is /halssu/ 'possibility of doing', /kal/ (future participle or adjectival form) plus /salam/ 'person' is /kalssalam/ 'person who will go'.

Other cases of adjective-noun and noun-noun sequences may be compounds or phrases: which one, has to be determined by repeated renditions of the sequence.

### 6.1 Adjective-noun Compounds and Phrases

Generally speaking, adjective-noun sequences are nominal constructions, e.g., /kan-salam/ 'person who went', /khun-køt/ 'large thing', but some of these sequences are syntactically substitutable for verbal constructions, e.g., /innante/ 'There is, and...'. Which kind of construction is yielded by an adjective-noun sequence depends on the noun stem. There are a few bound noun stems which are not added to noun stems but only to forms based on verbs, such as /-ci, -ka, -te/. This special sub-class of noun stems is treated in the discussion on verbs (see 5.34 and Chapter VII).

## 6.2 Noun-noun Compounds and Phrases

There may be structures consisting of more than two nouns. The stringing together of two or three noun stems to form compounds or phrases is characteristic of the language: /cosøn-salam/ 'Korean (person)', /cosøn-salam-chiŋku/ 'Korean friend', /cosøn-salam-chiŋku-hansalam/ 'a Korean friend', /kunkukcui/ 'militarism', /cøkhwa-sasaŋ/ 'leftism', /kukhwe-uiwøŋ/ 'member of the national assembly'.

Similarly, there may be structures involving an adjectival form plus not only a single noun but a noun phrase consisting of two or more nouns or of a noun compound, as in /khun-pyøktol-cip/ 'big brick building.' Two adjectival forms do not occur together, however, since the adjectival forms are always followed by a noun stem, as pointed out in 5.34.

The usual noun suffixes and other suffixes may be added to the last noun stem in noun phrases and noun compounds.

The first noun in a noun-noun phrase or compound usually has an attributive relation to the following noun, just as the first member of an adjective-noun sequence does.

## 6.21 Chinese and Korean nouns in compounds

In considering noun compounds, it is necessary to recognize two classes of noun stems which we may call Chinese stems and Korean stems. Generally speaking, noun stem morphemes which are historically Chinese combine in compounds only with each other; Chinese stems are, on the whole, not found combined in compounds with noun stem morphemes of Korean origin. E.g., /coŋ/ 'bell' + /lo/ 'street, way' in /coŋno/ 'Bell St.' (in Seoul), /hæ/ 'sea' + /pyøn/ 'coast' in /hæpyøn/ 'seacoast', /mi/ 'beautiful' + /nam/ 'male person' + /ca/ 'person' in /minamca/ 'handsome man', /un/ 'carry' + /toŋ/ 'move' + /caŋ/ 'place' in /untoŋcaŋ/ 'playground', /um/ 'drinking' + /nyo/ 'staff' + /chøn/ 'fountain' in /umnyochøn/ 'drinking fountain'. In some cases, however, we find a Chinese compound in combination with a Korean stem which means the same thing as the head of the Chinese compound, e.g., /coŋno/ 'Bell Street' + /kkøli/ 'street' in /coŋnokkøli/.

Chinese stems used as adjectives, however, are substitutable by Korean adjective forms based on a verb stem, e.g., /no/ (Chinese) or /nalkun/ (Korean) 'old' + /untoŋka/ 'athlete' in /nountoŋka/ or /nalkun-

untoŋka/ 'old athlete', /tə/ (Chinese) or /khun/ (Korean) 'big, famous' + /hakca/ 'scholar' in /təhakca/ or /khun-hakca/ 'famous scholar'. That a Korean adjective may combine with a Chinese compound noun does not destroy the general principle of Chinese stems combining only with Chinese stems in compounds, for the construction of an adjective form based on a verb stem plus a noun stem may be a noun phrase, as well as a noun compound (see above), and these are instances of noun phrases.

Probably most Chinese stems can be paired with a Korean stem semantically; i.e., the Chinese stem is said to be the "sound" of a Chinese character, from which there is a Korean stem which is the "meaning" of it. E.g., /i/ (Chinese) and /pæ/ (Korean) 'pear', /hwa/ (Chinese) and /kkot/ (Korean) 'flower'. (See also the number words in 6.51.) But not all Korean stems can be paired with a Chinese stem; e.g., there is no Chinese stem for /pusulpusul/ 'soft(ly)'.

It is not possible at this point in our study to tell whether a stem is Chinese or Korean from its phonemic composition (we rely on informant testimony, i.e., on the reading of Chinese characters, for this until such a study can be made). However, it seems likely that some such analysis may be possible; e.g.,

it may well turn out that stems beginning with morphonemic /l/ are of Chinese origin.

The Chinese stems are highly productive, so far as combining in noun compounds is concerned. We give below an example list of such compounds. (See also the number words in 6.51.)

/lo/ 'street' : /coŋno/ 'Bell Street',  
/ulccilo/ 'Ulji Street'.

/caŋ/ 'ground' : /hwecaŋ/ 'meeting place',  
/cøŋkøcaŋ/ 'train station', /untoŋcaŋ/ 'playground'.

/chwe-/ 'first place' : /chwekune/ 'recently',  
/chwekokup/ 'highest quality'.

/hak/ 'science' : /haŋmun/ 'science', /suhak/  
'mathematics', /chølhak/ 'philosophy', /hwahak/ 'chemistry',  
/mullihak/ 'physics', /təsuhak/ 'algebra',  
/haksæŋ/ 'student', /hakkyo/ 'school'.

/waŋ/ 'king' : /waŋca/ 'king, prince', /waŋyø/  
'princess', /waŋppi/ 'queen', /waŋson/ 'king's grandson'.

/pyøŋ/ 'disease' : /pyøŋca/ 'patient', /pyøŋwøn/  
'hospital', /pyøŋsil/ 'hospital room'.

/cui/ 'ideology, -ism, opinion' : /kunkukcui/  
'militarism', /cekukcui/ 'imperialism', /koŋsancui/  
'communism', /sahwecui/ 'socialism'.

/ik/ 'wing' : /coaik-sasaŋ/ 'leftist', /~~wik~~  
sasaŋ/ 'rightist'.



/kyøŋ/ 'glass' : /aŋkyøŋ/ 'eyeglasses',  
 /maŋwøŋkyøŋ/ 'binoculars', /yocikyøŋ/ 'kaleidoscope',  
 /sik/ 'style, ceremony' : /kusik/ 'old style',  
 /sinsik/ 'new style, modern', /hyøŋsik/ 'formal style,  
 ceremonial'.

/sahwe/ 'society' : /sahwecui/ 'socialism',  
 /sahwecilsø/ 'social system', /sahwe-muncæ/ 'social  
 problem'.

/kan/ 'while' : /sikan/ 'hour', /cuŋkan/ 'middle  
 of a space or period (i.e., between)'.

/pu-/ 'negation' : /putaŋ/ 'injustice',  
 /pucui/ 'carelessness'.

/pul-/ 'negation' : /pulman/ 'dissatisfaction',  
 /puløn~pulwøn/ 'not far', /pulli/ 'disadvantage'.

/kuk/ 'drama' : /hikuk/ 'comedy', /pikuk/  
 'tragedy', /sokuk/ 'farce'.

/kyo/ 'religion' : /kitokkyo/ 'Christianity',  
 /pulkyo/ 'Buddhism', /yukyo/ 'Confucianism'.

/kuk/ 'country' : /kukcæ yøn-hap/ 'international  
 union (UN)', /kukcæ-sacøŋ/ 'international affair'.

In the above examples, we can speak of an  
 attributive relation between a noun stem and the one  
 following it: the last noun stem is the head of the  
 sequence and is modified by the stem preceding it.

There are some compounds, however, in which the semantic relation between the two noun stems is one of conjunction, 'and': e.g., /wøɫssu/ 'Monday and Wednesday', /sosulle/ 'ox and wagon', /macha/ (N. Korea) 'horse and wagon' (/mal/ 'horse' plus /cha/ 'wagon') or /mal-sulki/.

Besides the noun constructions discussed above, there are also sequences of two noun stems with the connective /e/ added to the first noun stem (see 4.3). There is /-/ juncture between the first noun stem plus /e/ and the following noun stem. The second noun stem may have added to it any of the usual noun stem suffixes: /hwewøne-panun/ 'as for half of the members', /name-cip/ 'someone else's house', /name-nala/ 'foreign country'.

## 6.22 Reduplication

A fairly common kind of noun-noun sequence is reduplication, e.g., /salam-salam/ 'every person'; they may also occur with the last-position noun stem /-mata/, as in /cip-cimmata/ 'every house'. Some of these reduplicated phrases or compounds occur with the noun suffix /-i/, e.g., /yønnyøni/ 'every year', /nal-nali/ 'every day'. Some reduplicated forms also occur with other suffixes, especially /-lo ~ ulo/,

added to each occurrence of the stem, e.g., /ttalo ttalo/ 'separately', /takuelo tæ uelo kassumnita./ 'Everybody was going to Taigu.'

Reduplicated phrases or compounds often have the meaning of 'every' or are adverbs syntactically (and also in their English translations): /sølsø/ 'slowly', /ttalo-ttalo/ 'separately', /ssulssul/ 'loneliness'.

### 6.3 Pre-noun Stems

There are noun stems which occur only as the first member of a noun compound or noun phrase. Some important ones among these are /i-/ 'this', /ku-/ 'that', /cø-/ 'that (yonder)', /yø/ 'many', /ønu-/ 'which', /amo-/ 'some, any', /sæ/ 'new', /mak-/ 'last', /on-/ 'every, all', /mæ-/ 'every'. The stems for the numbers (6.51) are also included in this group, though the both the Chinese and the Korean numbers occur independently in counting, and the Korean numbers may occur after a noun in a noun phrase. Many morphemes included in this class are translatable in English as adjectives. This is not strange, since in any Korean compound or phrase, the first member modifies the following member, or has some attributive relation to it; this is so in the case of noun-noun compounds or phrases, and in phrases

consisting of certain forms based on verb stems plus a noun stem.

It seems preferable to consider the prepositional morphemes as members of the noun class, rather than to set up a class of adjective morphemes, because (1) some of these morphemes sometimes, if rarely or under special circumstances, take noun suffixes directly, and (2) when followed by a noun stem they pattern in longer sequences like the first noun of a noun-noun combination.

These prepositional noun stems or "pre-noun stems" usually have /-/ juncture with a following noun stem, but certain ones of them have close juncture, e.g., /amo-/ in /amoteto/ 'any place'.

Some of these morphemes, e.g., /i-, ku, cø-/, may be put into a small class by themselves. These never occur without a following noun stem, and they have a wider range of uses than do most of the other members of this sub-class. They are used not only before single noun stems, but also before noun compounds and noun phrases. E.g., /ikøsun cham cohunteyo./ 'This is very good.', /ku-chaki yøki øpsumyøn, talun-kose issulkkøt kathayo./ 'If the book isn't here, it might be someplace else.', /o, kunun mækculul maani

masinunkun/ 'Oh, he sure drinks a lot of beer.', /ku-salami kotan-hatako hæø, ilcøk nawassumita./ 'He said he was tired so he left early.'. These three would usually be translated into English as articles.

The construction /i-, ku-, ø/ plus a noun phrase or noun compound yields the sequences noun-noun-noun and noun-adjective-noun.

#### 6.4 Bound Noun Stems

There are certain noun stems which occur only with other noun stems which may be of this group, and which form noun compounds. These stems are probably largely Chinese, but this remains a problem for further investigation. While many of these stems occur after a preceding stem, some occur as the first stem, and some as either first or second. In some cases, the positions of two of these stems (which we will call bound noun stems) in a compound are freely reversible, as in /silkwa ~ kwasil/ 'fruit'.

There are other bound stems which we put into a different class because of a difference in distribution from the ones being discussed here (see also 6.5).

Examples of some of these bound noun stems follow:

/-kwan/ 'building' in /paŋmulkwan/ 'museum',  
 /-ssi/ (term of address) in /kimssi/ 'Mr. Kim', /-pu/  
 'person who does something' in /kwanpu/ 'miner', /-sik/  
 'style, ceremony' in /coløpsik/ 'graduation exercises',  
 /-ca/ 'thing, small thing, person, person in authority'  
 in /chakca/ 'booklet', /kisulcaa/ 'engineer', /annæca/  
 'guide', /caønca/ 'adviser', /-wøn/ 'building' in  
 /pyøŋwøn/ 'hospital', /-ka/ 'person who does something'  
 in /umakka/ 'musician', /-hak/ 'science, study' in  
 /haksæŋ/ 'student', /suhak/ 'mathematics', /-taŋ/  
 'building' in /yepetaŋ/ 'chapel, church', /-sa/ 'person  
 who does something' in /ipalsa/ 'barber', /-ø/ 'language'  
 in /yøŋø/ 'English (language)', /-su/ 'matter' in  
 /cwesu/ 'crime'.

This list can be extended much farther than  
 the examples given here, depending on how far one  
 wishes to go in analyzing sequences into separate  
 morphemes, but these examples include some of the  
 more commonly occurring ones, in addition to some  
 listed in 6.2.

Included in this class, though perhaps in  
 a sub-class, are morphemes which are analyzed as  
 numeral classifiers, taken up in 6.5.

## 6.41 /tul/, /man/

The morpheme /tul/ has a rather special distribution. Its most common position is after a noun stem, with all suffixes free to occur after it. However, /tul/ also occurs as an independent noun, with /i-, ku-, cø-/ , and it occurs after a noun stem plus a suffix /-e/ or /-lo/.

/tul/ indicates 'several, many' and is often used to translate English plural. Examples:

/kutulan umakul tululø omnita./ 'They come to listen to music.', /uli-tuli silssupun mæ-cuil wølssu kumyoile issumnita./ 'We have lab on Mondays, Wednesdays, and Fridays.', /musun-iyakitulal hako issøssumnita./ 'What were you (pl.) talking about?', /søullo søullotul kassumnita./ 'Everybody was going to Seoul.', /sanetal ittæn-nuni/ 'the snow on the mountains'.

The morpheme /-man/ 'only, just', also has a distribution wider than the first group of suffixes. It can come directly after a stem, or after a stem plus a locative suffix (/ -e, -eke, -esø, -lo/), but not /-i ~ ka/, /-un ~ nun/ or /-ul ~ lul/. Examples are:

/camkkan-man kitalisiyo./ 'Wait [just] a minute.', /kuman hamyøn, twelkkayo?/ 'Just like that?', /yøqø-

man anun-ika olttæ soyoŋ-twemnita./ 'Some of the people who come (in) speak only English.'

## 6.5 Numeral Classifiers

### 6.51 The Number stems

Before discussing the numeral classifiers, we make some remarks on the number stems. Number stems are noun stems, and there are two sets of number stems. One set, which forms compounds with certain noun stems, but not with others, we call Chinese numbers; the other set we call the Korean numbers (see 6.21). These two sets are as follows (the forms given here are the forms used in counting).

<u>Korean Numbers</u>		<u>Chinese Numbers</u>
/hana/	'one'	/il/
/tul/	'two'	/i/
/set/	'three'	/sam/
/net/	'four'	/sa/
/tasøt~tasut/	'five'	/o/
/yøst~yøsat/	'six'	/yuk/
/ilkop/	'seven'	/chil/
/yøtø1/	'eight'	/phal/
/ahop/	'nine'	/ku/
/yø1/	'ten'	/sip/



The morphophonemic changes and the morpheme alternants relating to these stems have been noted in 3.2 and 3.41.

For Chinese numbers above 10, the tens are made by compounds consisting of the stem for an integer plus the stem for "ten". The units of each ten are made by compounds consisting of the stem for "ten" plus the stem for an integer. For example: /<sup>h</sup>si<sup>h</sup>pi<sup>h</sup>l, sipi, sipsam, sip<sup>h</sup>sa, isip, isipil, isipi, samsip, sasip, osip, yuksip, chilsip, phalsip, kusip/ 'eleven, twelve, thirteen, fourteen, twenty, twenty-one, twenty-two, thirty, forty, fifty, sixty, seventy, eighty, ninety'.

Besides the stems for 'one' to 'ten', the only other Chinese number stems are those for 'hundred, thousand, ten thousand': /pæk, chøn, man/. Multiples of 100 and units in the hundreds are formed in the same way as in the tens: /ipæk/ 'two hundred', /ilchøn<sup>h</sup>il/ 'one thousand one', /ilmanil/ 'ten thousand one'.

The Korean numbers are used only up to 99; from 100 up, the Chinese numbers are used. The units are made in the same way as the Chinese numbers. The tens, however, are not compounds, but different stems: /yølhana, yølttul, yølsset/ 'eleven, twelve, thirteen'; /sumul, sølhun, mahun, swin, yeswin, ilhun, yøtan,

ahun/ 'twenty, thirty, forty, fifty, sixty, seventy, eighty, ninety'; /sumulhana, sumulttul, ahunahap/ 'twenty-one, twenty-two, ninety-nine'.

Even for the numbers 20-99, the Chinese numbers are often used rather than the Korean numbers.

The Korean numbers and the Chinese numbers differ in two respects: (1) The Korean numbers may occur as the last member of a noun phrase, e.g., /paŋ-hana/ 'one room', or as the first member in a noun compound, e.g., /hantal/ 'one month' /hancim/ 'one load' (carried by animals or people), while the Chinese numbers occur only as the first member in a noun compound, e.g., /ilwɔn/ 'one "won" (unit of money)', except for compounds with /ce-/ preceding them, and except for compounds involving the Chinese numbers themselves. (2) The Korean and Chinese numbers are used with different stems, e.g., with the stems /wɔn/ 'won', /wɔl/ 'month', only Chinese numbers are used (see 6.2).

The Chinese numbers used before a following noun stem are translated in English as ordinal numbers: /sam-il/ 'third day', /sam-il untoŋ/ 'March 1st Movement (1919 revolt)', /yuwɔl isipo-il/ 'June 25th affair (outbreak of the Korean War)', /ilsa chɔlthwe/

'January 4th Retreat'.

The Chinese numbers may be preceded by /ce-/ yielding expressions which are translated as ordinal numbers: /ceil, cei, cesam, cesa, ceo, ceyuk, cechil, cephal, ceku, cesip, cesipil, ceisip, ceillppak/ 'first, second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth, eleventh, twentieth, hundredth'. (The nature of the juncture between /ce-/ and a following morpheme in this list is not clear from our material.)

The Korean numbers are used in compounds with the morpheme /-cæ/ (also /-ce/) in last position. Before /-cæ/, as has been mentioned in 3.41, /hana/ is replaced by /chø-s-/: /chøcca, tulcca, secca, necca, tasøcca, yøsøcca, ilkopca, yøtølcca, ahopca, yølcca/ 'first, second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth'.

Other stems used in compounds and which can replace the number words, are /myøch-/ or /mech-/ 'few, some', /yølø-/ 'several', /tuø-/ 'a couple', etc.: /myøchil/ 'how many days, a few days'.

#### 6.52 The numeral classifiers

As we have mentioned, number stems plus a noun stem form noun compounds: /tupun/ 'two persons', /yølssal/ 'ten years of age', /sawøn/ 'four won'.

Some noun stems which occur in last position in these compounds also occur elsewhere, e.g., /salam/ 'person' in /nesalam/ 'four persons' and /ku-salam/ 'he' (i.e., that person); certain other nouns never occur in such compounds, e.g., /mul/ 'water'. A third group of noun stems is used only in these compounds, e.g., /-kæ, -si, -tæ, -wøn, -sal/ 'piece, hour, vehicle, won, years of age.'

Noun stems which are used only in last position in a number compound we will call "numeral classifiers"; the stems in the first group mentioned above (i.e., which occur in these number compounds but also elsewhere) we will also include in the numeral classifiers when they are so used.

The compound consisting of a number stem plus a numeral classifier is the last member of a phrase whose first member is a noun stem, e.g., /sulppyoŋ-tukæ/ 'two bottles of wine.' The number compound may also occur by itself, e.g., /meppun/ 'how many persons'.

In phrases of the type mentioned above, there is agreement between the first noun and the numeral classifier; that is, different nouns occur with different numeral classifiers. Some nouns may occur with more than one numeral classifier, depending either on different contexts or on stylistic considerations, e.g., /chimtæ/





Some noun stems do not occur in numeral classifier phrases or compounds, but only in phrases consisting of the stem and a following (Korean) number stem: /kaŋ-tul/ 'two rivers', /sikthak-hana/ 'one dinner table'.

Ordinarily, suffixes are added to the numeral classifiers, as in /cim yŏlchaphanul silŏ-watta./ 'We brought ten carloads of goods.', but the first noun stem may take the suffix, if to the numeral classifier is added one of the other suffixes /-ina ~ na, -kwa ~ we, -hako, -iya ~ ya/ etc., as in /cimul tuchana silŏtta./ 'We loaded about two carloads of goods.'. Even where the numeral classifier has no such suffix, the ordinary subject, object, etc. suffixes may go either with the numeral classifier or with the first noun stem, or with both, e.g., /salam hansalami/ or /salami hansalmi/ 'one person', /cim tukakæ/ 'two pieces of baggage'. Whether this is free or at least partly determined has not yet been made certain.

Finally, it should be noted that most noun stems which can occur in phrases consisting of one of these noun stems followed by a number stem plus numeral classifier may also occur in phrases consisting of the noun stem followed by the number stem, e.g., /cip-hanchæ/ or /cip-hana/ 'one house'.

## 6.6 Last Position Noun Stems

### 6.61 Those which occur mainly or only after noun stems

Some noun stems which we will call  $N'$  or last-position stems differ from the other noun stems (in varying degrees) in the following group of respects: (a) they rarely occur as the only stem (and some never do, i.e., are bound stems), but occur usually (or in some cases, only) as the last noun stem of a sequence of two or more noun stems; (b) the combination ending in one of these last-position stems usually has (except for a few stems) one or more of the suffixes  $/-e, -sø, -lo \sim ulo, un \sim nun/$ , but not the other suffixes; (c) combinations consisting only of two of these last-position stems do not occur; (d) if we consider a combination  $N, N'$  (where  $N,$  is any ordinary noun stem and  $N'$  is one of these last-position stems), then the larger sentence environments of  $N,$  (plus its suffixes) alone are more likely to be similar to the larger environments of the  $N, N'$  combination than to the environments of the sequence  $N, N,$ ;  $N'$  usually translates into English as prepositions. In short,  $N'$  plus locative suffixes syntactically substitute for the locative suffixes alone.

Most of these last-position stems have  $/-/$  juncture with the preceding noun stem, so that the



combination N,N' is usually a noun phrase.

This class of noun stems is not fixed, for, as has been suggested, some of them are relatively more frozen in the post-noun stem position as substitutable elements for the noun suffixes than are others. However, it is possible to list those which do seem to be most restricted to this position and having this syntactic function. We illustrate these stems with the suffixes that they most frequently occur with, in example sentences. We list these stems in isolation with the locative suffix /-e/, but most of them also occur with /-esø/ and /-lo/; a few usually occur with no suffix other than /-un ~ nan/ (which may occur after the other expressions as well).

Note: /hant(e), anth(e), kkaci, kkili, ccum, mata/ have not been found in any positions other than post-noun stems. The other stems listed here are found elsewhere, e.g., /twi/ in /ku-salam ile twi ttøløçssunnita./ 'He's fallen behind in his work.'. When one of these nouns occurs independently before a verb, it is usually an adverb, syntactically and in semantic effect, as in the preceding example.

/hante/ 'to, for' : /na-hante/ 'to me',  
/chacaq-nante mulø-posiyo./ 'Ask the conductor.'

/anthe/ 'to, for' : /ku-salam-anthe mulø-posiyo./ 'Ask him.', /ku-salam-anthenan amosoyonto

øpta./ 'He's of no use at all to us.', /nø acøssi-anthe phyønci hani?/ 'Do you write letters to your uncle?', /acøssi-anthesøn phyøncika nul omnita./ 'We always get letters from my uncle.'

/ane/ (stem /anh-/) 'in' : /yønsøl-hataka cuŋ-ane/ 'in the middle of my speech.'

/soke/ 'in, inside' : /i-soke tunke mwømnikka./ 'What's inside?', /ku-sølyutal-soke posiyo./ 'Look among the papers.', /kathun-kønmul-soke tusamusili ta issømmita./ 'Both offices are in the same building.'

/ue/ 'over' : /chæksaŋ-ue/ 'on the desk'.

/alæ/ 'under' : /chæksaŋ-alæ/ 'under the desk'.

/kkaci/ 'to, tall' : /ceka yøkwan-kkaci mosiko kakessømmita./ 'I'll go with you to your hotel.', /øce-kkaci/ 'until yesterday', /him calanunte-kkaciya./ 'I'll do what I can.', /chølttoka søpue-kkaci noin-køsun ønceciyo?/ 'When were the roads to the west paved?'

/aphe/ 'in front of, before' : /koccaŋ-aphulo kasiyo./ 'Go straight ahead.'

/-ilæ/ 'since' : /køŋkuk-ilæ/ 'since the foundation of the nation', /kækyo-ilæ/ 'since the foundation of the school'.

/kkili/ 'among' : /cakinetal-kkili ssam-hæssømmita./ 'They quarreled among themselves.', /ikøt

taqsintul-kkili nonakacisiyo./ 'Divide this among yourselves.', /uli-kkil-ini/ 'Just among ourselves.'

/mithe/ 'beneath' : /cha-iphatika can-mithe issosso./ 'There were tea leaves at the bottom of the cup.', /i-panun ku-toli-mithulo cina-kalssu isso./ 'This boat can pass beneath the bridge.'

/ccum/ 'approximately' : /tusalam-ccum nananthelo kot com panəsiyo./ 'Send about two men over to me right away.', /yøssøssi-ccum cipe tola-kamnita./ 'I'll be home around six.'

/yøphe/ 'next to' : /ku-kul-yøphulo nanə tamcøqi isso./ 'A fence runs along the road.', /cøŋkøcaŋ-yøphe yøkwani hana isso./ 'There's a hotel by the station.'

/pakke/ 'outside of' : /cip-pakkesø/ 'outside the house'.

/mata/ 'every' : /konmata/ 'every place', /nal-mata/ 'every day'.

/kane/ 'between' : /tutosi-kane/ 'between the two towns'.

#### 6.62 Those which may occur after noun stems and after adjective forms

There is a group of these last-position noun stems which occur not only after noun stems, but also

after adjectival forms based on verbs. These are discussed and illustrated in their post-adjective occurrence in Chapter VII. But we give here some examples of these stems after other noun stems:

We list the stems in isolation with no suffix, although in the sentences they usually occur with /-e/ or /-ulo ~ lo/:

/twi/ 'behind, after' : /catoŋ-cha cip-twie sewøssummita./ 'The car was parked behind the house.',  
/ahopsi-twie osiyo./ 'Come after nine o'clock.'

/hu/ 'after' : /pansi-hu/ 'after half an hour'.

/taum/ 'next' : /kutaume/ 'after that'.

/sai/ 'between' : /taŋsin cikam taŋsin-chiŋku-saie isso./ 'You're among your friends now.'. /ku-cip-sailo kəlø-kassummita./ 'We walked between the buildings.', /yøssøssi-hako ilkopsi-saie mannapsita./ 'Let's meet between six and seven o'clock.'

/cøn/ 'before' : /i-cøne ulinan sɔpue saløssummita./ 'At one time, we lived out west.', /kyøu sippun-cøne tahøssummita./ 'I just got here ten minutes ago.', /ilccøne ceka malssummul tulyøcciyø?/ 'Did I tell you that story the other day?'

/te/ 'place' : /ka-catoŋcha øce-kkacito amoteto saŋ-hante øpsøssummita./ 'The car didn't break down until yesterday.'

/toŋan/ 'while' : /olæ-toŋan ilkika cham  
nappamniŋa./ 'The weather has been bad for a long time.'

/cuŋ/ 'midst' : /chiŋku-cuŋe/ 'among friends'.

/-tælo/ 'according to' : /maum-tælo hasipsiyo./  
'Do as you wish.', /kanyaŋ kataŋlo næpølyø-tusiyo./ 'leave  
it as it stands.'

/ttæ/ 'time' : /amottæko ahopsi-twie osiyo./  
'Come any time after nine o'clock.'

#### 6.63 Those which occur mainly or only after adjective forms

As has been mentioned in 6.1, there is a sub-class of last-position noun stems which are added mainly or only to adjectival or other forms based on verb stems. These include such common ones as /ci, ka, ya, su, cul/. These noun stems are treated in 5.34 and in Chapter VIII.

## CHAPTER VII

## VERB CONSTRUCTIONS

Two forms based on verb stems combine in phrases or compounds with a following verb stem or noun stem:

(1) the gerunds (5.33) occur in phrases or compounds with a following verb stem; and (2) the participle forms of verbs (5.34) occur in phrases or compounds with a following noun stem.

## 7.1 Constructions Involving the Gerund Forms

## 7.11 The /-ci/ gerund

/Vci anh-/, /Vci mot-ha-/, /Vci mal-/:<sup>1</sup>

/-ci/ gerund forms based on a simple stem may be followed by the verb stems /anh-/ 'not be, not do', /mot-ha-/ 'cannot be, cannot do'. A /-ci/ gerund form based on a simple action stem may be also followed by /mal-/ 'avoid', but in the case of description verbs, these are put into the /-∅ gerund form/ which is in turn followed by /haci/ (/ -ci/ gerund of /ha-/) and then by /mal-/, as in /napp∅ haci mal-/.

The /-ci/ gerund form may have the object

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1. V means verb stem.

suffix /-ul ~ lal/ or the subject suffix /-i ~ ka/ when followed by /anh-/. It may have the object suffix /-ul ~ lal/ when followed by /mot-ha-/. The conditions under which a /-ci/ gerund form may take either of these endings have not been determined yet; however, a /-ci/ gerund form with no suffix seems to be always acceptable. The /-ci/ gerund form may also have the topical suffix /-un ~ nan/; this is especially common when followed by /anh-/ or /mot-ha-/ in the clause-final /-na ~ una ~ suna/ form.

In view of the fact that the /-ci/ gerund forms may have these suffixes when followed by /anh-/ and /mot-ha-/, we might say that these sequences are merely special cases of the common sequence of object or subject-noun and verb.

The juncture between /-ci/ and following /anh-/ is frequently close, resulting in a blending, so that /-ci anh-/ often is heard as /-cianh-/ or /-canh-/: /kwanchanssumnita./ from /kwanchi anssumnita./ 'It's all right.'. Those speakers who have the phonemic contrast /cia : ca/ probably have /-cianh-/, while those who do not have this contrast, have /-canh-/ (i.e., the /i/ of /-ci/ is lost). In such cases, we can properly speak of a new verb stem deriving from a combination of two stems.

/pyøllø cochi antha./ 'It's not especially good.', /nan tampæ phici anssumnita./ 'I don't smoke.', /phyønci oci anøssumnikka?/ 'Hasn't the mail come?'

/kuløkhe mølci anssumnita./ 'It's not so far.', /nuku na køli-com annæ-hæ-culssalam kuhæ-cusici mot-halkkayo?/ 'Can't you get someone to show me around?', /kuløkhe nømø ppalli uncøn-haci maløyo./ 'Don't drive so fast!', /cøncæñi ilønaci ankhilul palamnita./ 'I hope war won't break out.'

/maani caci(lul) mot-hæssumnikka?/ 'Didn't you get much sleep?', /cami oci (ocilul, ocika) anøssumnita./ 'I couldn't sleep (i.e., sleep didn't come).', /nanun øceppan tasøssikan-pakke caci(lul) anøssumnita./ 'I only slept five hours last night.'

/iløkhe cochinun anssumnita./ 'It's not as good as this.'

/i-køsun cochinun anna, patø-cusipsiyo./ 'Even though it's not very good, please accept it.'

/kipuni nappø haci maløla./ 'Don't feel bad.', /soksaq-hæ (hayø) haci maløla./ 'Don't feel bad.'

## 7.12 The /-ø/ gerund

/Vø-V/:

An /-ø/ gerund form based on a simple stem plus another verb stem (with /-/ juncture between them)



constitutes a compound verb stem which works like any ordinary verb stem.

(1) Certain particular verb stems occur with certain other particular verb stems in this construction: e.g., /al-/ 'know' plus /tut-/ 'hear, listen' in /alø-tut-/ 'understand'. E.g., /alø-tukkessumnikka?/ 'Do you understand?', /nøn cølyulal ta thawø-pølyøssumnita./ 'They burned all their old papers.'.

(2) As a special case of (1) above, there are certain stems which frequently occur as the second one in this construction (i.e., they occur with many first stems which are in the /-ø/ gerund form). Common ones of these are: /ka-/ 'go', /o-/ 'come', /po-/ 'give', /tali-/ 'offer', /ha-/ 'do, make, think'.

Usually, the meaning of the resulting compound stems can be inferred from the meanings of the stems as they are used alone. But the meanings of some of the "second" stems are specialized in this construction; e.g., /po-/ which means 'see, look, read' when used alone, has the meaning 'try' when used in this construction, as in /møkø-po-/ 'taste' from /møk-/ 'eat' and /po-/.

Other examples of this construction involving these second stems are: /kølø-ka-/ 'go (by foot), walk',

/tulø-o-/ 'enter', /tola-o-/ 'return', /mulø-po-/ 'ask about, inquire', /kønnø-iss-/ 'be across', /halyøci-/ 'get cloudy', /cowa-ha-/ 'like', /hæ-cu-/ 'do for someone (a request)', /hæ-tuli-/ 'do for someone (an offer)'.

Some sentence illustrations are as follows:

/Vø-po-/: /chacø-posiyo./ 'Find him.', /ku-yøkwanulo ka-posipsiyo./ 'Try that hotel.', /kitalyø-popsita./ 'Let's wait and see.'

/Vø-ka-/: /Vø-o-/: /ppoli kullø-kassumnita./ 'The ball rolled away.', /uli yøkisø kilul kønnø-kapsita./ 'Let's cross the street here.', /ku-cimtul næ-paḡulo com ollyø-kasiyo./ 'Take my baggage up to my room.', /ku-salame-ilun cømcøm tø nappø-kamnita./ 'His affairs are going from bad to worse.', /com møløto, kølø-kaciyo./ 'Even if it's a little far, let's walk.', /cəphancəḡ-aphulo kkullyø-kassumnita./ 'He was taken before the judge.', /nophuntelo com olla-kasipsita./ 'Let's go up to the higher place.', /silkwa hankwaḡculilul kacø-wasso./ 'He brought a basket of fruit.', /chan-supak com kacø-osiyo./ 'Bring us a cold watermelon.', /ca, supak kacø-on-køt capsusiciyo./ 'Come on, let's eat the watermelon he brought.', /nacøssuna, chacø-kassumnita./ 'Even though I was late, I went to see him.'

/Vøci-/: /ta øpsøcøssumnita./ 'It's all gone.',  
 /myøchil tø issumyøn, tøwøcikecciyø./ 'It'll become  
 warmer in a few days.', /nali com hulyøcimnita./ 'It's  
 getting a little cloudy.', /nali cowacimnita./ 'The  
 weather's getting better.', /ku-salamun kapcæki yumyøŋ-  
 hæcøssumnita./ 'He suddenly became famous.'

/Vø ha-/: (see 7.1).

/Vø iss-/: /ku-salam acukto sala isso?/ 'Is  
 he still alive?', /ku-puinan cikun osul pakkwø innun-  
 cuŋ-imnita./ 'She's changing her clothes now.', /san  
 kkok tækienun nuni ssayø issumnita./ 'The top of the  
 mountain is covered with snow.', /palo nuø isso./  
 'He's lying flat.', /yøkisø han samsip khilomethøna  
 ttøløcø issumnita./ 'It's about thirty kilometers  
 from here.', /sæka cø ceil nophun-kacie ancø isso./  
 'The bird is (sitting) on the highest branch.',  
 /salamtuli kichøke caselo sø issøssumnita./ 'The men  
 were standing at attention.', /i-pagenun mokyokthanto  
 tallyø issumnikka?/ 'Does this room have a bath?',  
 /ku-yøkwanenun motun-køsi ta kachwø isso?/ 'Is the  
 hotel well provided with everything?', /pamsætholok  
 ku-kænun capø-mæwø issøssumnita./ 'The dog was chained  
 up all night.'

/Vø-cu(si)-/ indicates that the recipient is  
 someone other than the person addressed, usually the

speaker (i.e., 'do for me'): /catoncha com thæwø-cusikessumnikka?/ 'Will you give me a ride in your car?', /næ chaetanun sælthaq nøøssø-cusipsiyo./ 'I'd like some sugar in my tea.', /i-køt-com chøtulø-cusiyo./ 'Lift this up for me.', /ilkopsie kkæwø-cusipsiyo./ 'Please wake me up at seven o'clock.', /sønhamul ssø-cusipsiyo./ 'Please sign your name.', /kuløkhe hæ-cusipsiyo./ 'Please do that for me.', /nuku na køli-com annæ-hæ-culssalam kuhæ-cusici mot-halkkayo?/ 'Can't you get someone to show me around?', /i-tulchaq-com yølø-cusipsiyo./ 'Please open this window for me.', /cø, cim-com nalyø-cusikesso?/ 'Oh, would you please get my baggage down for me?'

/Vø-tuli-/ indicates that the recipient is someone other than the speaker, usually the person spoken to (i.e., 'do for you'): /ceka samusillo into-hæ tuliciyo./ 'I'll take you to his office.', /achame kkæwø-tulilkkayo?/ 'Shall I wake you up in the morning?', /ceka cohun-annæca hansalamul kuhæ-tulikessumnita./ 'I'll get you a good guide.', /pul khyø-tulilkkayo?/ 'Should I turn the lights on?', /ku-phyønci ilkø-tulilkkayo?/ 'Do you want me to read that letter to you?'

(3) There is the combination of an /-ø/ gerund form based on a simple or past stem plus the element

/-ya/ (e.g., kaya) followed by the verb stems /ha-/ 'do' or /twe-/ 'become'. The combination means 'have to, must, should'. /ha-/ and /twe-/ are frequently in the future form in this use. In the case of /ha-/, there is often a contraction of the syllables /ya-ha/ to /ya/, e.g., /kaya hakessummita/ or /kayakessummita/ '(I) have to go.'. Examples are:

/ince kaya halkka pomnita./ 'I'm afraid I have to go now.', /nail tto osøya halkka pomnita./ 'I'm afraid you'll have to come back again tomorrow.'

/ka-pwaya hakessummita./ 'I'd better be going.', /kapcølun tøø issøya hakesso./ 'We need at least twice that much.', /kassøya halkkemnita./ 'I should have gone.', /malssum talyøssøya halkkøsul./ 'I should have told (you)', /saqsarjnyøki manøya hamnita./ 'You must have a lot of imagination.', /cikumccumun yøki tæssøya halthø-inte, wønil-inci molukesso./ 'He should have been here by now.'

### 7.13 The /-ko/ gerund

∗Vko V/:

There are sequences of a /-ko/ gerund form (based on the simple stemofan action verb) plus a small number of verb stems. There is usually open juncture between the /-ko/ gerund form and the following

verb stem. Among the most commonly used verb stems with /-ko/ gerund forms are: /siph-/ 'want, desire', /silh-/ 'not want', /iss-/ 'be, exist', /ha-/ 'do', /mal-/ 'avoid', /ka-/ 'go'.

/nan mwøt-com nøkko siphumnita./ 'I'd like to have something to eat.', /nanun catonchalul uncøn-hako sipci anssumnita./ 'I don't like to drive a car.'

/kuløkhe alko issumnita./ 'I know that.', /ku-salam mocalul ssuko issøssø./ 'He was wearing a hat.', /i-sønsəŋ cikum kicha-sikanul mukko issumnita./ 'Mr. Lee is asking about the train schedule.', /nanun kaciko issumnita./ 'I have it.'

/take-kkaci mosiko kato, kwanchanssumnikka?/ 'May I accompany you home?'

The /-ko/ gerund suffix is usually in the alternant form /-ku/<sup>1</sup> when /malku/ (the /-ko/ gerund form of /mal-/) follows. /-ku-malku(yo)/ comes at the end of the sentence and expresses emphasis:

/kuløku-malkuyo./ 'Certainly I'll do that!', /alku-malkuyo./ 'Sure I know it!'

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1. As was mentioned in 5.33, there is the dialectal variation /-ko ~ ku/ for this morpheme in general.

## 7.2 Participle Plus Noun-Stem Compounds

Certain noun stems occur only, chiefly, or very frequently in compounds with the participle forms. These participle compounds are all nouns morphologically; they may take the usual noun suffixes, although some of them seem to occur with certain ones of the suffixes and not with others. Syntactically, these participle compounds may occur in the usual noun positions in the sentence, e.g., as subject or object of the verb. Some of the participle compounds, however, may also occur in certain syntactic verb positions, as sentence-final or clause-final: this is stated in this way because they substitute position-wise for the sentence-final and clause-final verb suffixes (5.4, 5.5). Even in these positions, the participle compounds may occur with certain noun suffixes, (as well as with zero suffix), such as /-to/ or /-un ~ nan/. Thus, the participle compounds, while they are nouns, have a different distribution from ordinary nouns, (and from participle phrases or compounds involving other nouns than those illustrated by the list given below).

Besides the fact that some of these participle compounds occur in sentence-final and clause-final

position, the occurrence of some of these participle compounds in syntactically ordinary noun positions is also of interest, for particular ones of these compounds seem to be limited to particular usages.

The syntactic role, and the "usage role" played by these compounds seem to depend not so much on the particular participle form involved as on the particular noun stem (which we may hereafter refer to as participle noun stem). This will be seen in the examples in 7.21 below.

The following table lists those noun stems (many of them bound stems) which are commonly used after the participle forms. Some of these noun stems go with all the participle forms, e.g., /-ci, -te/, while others go only with certain ones of the participle forms, e.g., /-thø, -sulok/. The checks (x's) indicate those combinations of participle form and noun stem which occur in the material of this study.

In the following sub-sections, we give examples of the participle compounds. Since all of the participle compounds may be used as ordinary nouns, we group the examples according to what other syntactic or usage roles they may play; within each sub-section, we group the examples according to the noun stems. The examples illustrate the uses of the participle compounds as



<u>-tan</u>	<u>-nun</u>	<u>-n</u>	<u>-l</u>	<u>Noun Stem</u>
x	x	x	x	ka
x	x	x		ya
x	x	x	x	te
x	x	x	x	ci
		x		twi
		x		taum ~ tan
		x		hu
		x		sai ~ sæ
	x		x	ttæ
			x	ccæ
			x	ccøk
	x		x	talo
	x	x		kolo
		x		cuk
	x			kil
	x			cuj
	x	x	x	moyaŋ
			x	thø
			x	su
		x	x	cul
			x	ø ~ a
			x	sulok
			x	chøk

<u>-tan</u>	<u>-nan</u>	<u>-n</u>	<u>-l</u>	<u>Noun Stem</u>
	x	x		ttut
x	x	x	x	il
x	x	x	x	ke
x	x	x	x	kø
x	x	x	x	kø t
x	x	x	x	pa

ordinary nouns, as well as the other syntactic uses.

Although English translations are given for the noun stems, they are not intended to be taken completely literally, since in the compounds, the semantic range seems to quite wide, in terms of English translations, at any rate.

#### 7.21 Sentence-final and clause-final: /ka, ya, te, ci/

/-ka/ 'question': sentence-final, indicates informal question, may have /-yo/ added to it, and this makes the sentence slightly more formal.

/kim-sønsæŋi mwølake malssum-hatunka./ 'What did Mr. Kim say?', /kyølkuk kuman tun-iyuka mwøsinka./ 'What's the reason you finally quit?', /kyoyukun ølmana patønnunka./ 'How much education do you have?', /næ-catoŋchae kilami næŋnøk-hanka com posiyo./ 'Check the oil in my car.', /kuinan cham kanan-hanka pomnita./

'He must be very poor.', /pika onunka pota./ 'It looks as if it's raining.', /pika olkka pota./ 'It looks as if it will rain.', /cøto kachi kalkka hamhita./ 'I think I'll go with you, too.', /cikam søul kesinkayo./ 'Is he in Seoul now?', /onulppame mwøt-hasilkkayo./ 'What shall we do tonight?', /uli yøkisø mwø-com mækko kalkkayo, køki kasø mækalkkayo./ 'Shall we eat something here, or eat after we go there?', /myøchillal-inkan mal-iyø./ 'What day (of the month) is it (said to be)?'.

/-ya/ 'question' : sentence-final, signifies informal question, is not followed by /-yo/:

/mwønya./ 'What is it?', /ilumi mwønyako mullø-pwassumnikka?/ 'Did you ask what his name was?', /myøchillal-inya./ 'What day (of the month) is it?'.

/-te/ 'place, fact' : clause-final and sentence-final; in sentence-final position it is informal, and it may have /-yo/ added to it. It signifies a statement.

/tampæ phanuntenu øteciyo?/ 'Where do they sell cigarettes?', /øtita cimcom mækkiltte øpso?/ 'Where can I check my baggage?'.

/ku-haŋku tulø-anunte talilal nwassumnita./ 'They built a bridge across the bay.', /nali iløkhe chuunte, øtel kasumnikka./ 'Where are you going on a

cold day like this?', /uchun-paun khunte, wa i-paun iløkke øksunnikka./ 'The upstairs room is big, so why is this one so small?', /kulønte,.../ 'By the way,...' or 'Then...', /i-køn nømø økunteyo./ 'This one is too small.', /i-chakun chamssake sannunteyo./ 'This book was a great bargain.', /halø tø issulkka hæssønnunte,.../ 'I was thinking of staying another day, but...', /kalkka hanunte,.../ 'I'm thinking of going, so...' /chimtælo wannunte, chimtæka cowasø, cal cassunnita./ 'I came by sleeper, and the berth was comfortable, so I slept well.', /nesi innunte, hananun kyølhon-hæssunnita./ 'I have four (children), and one is married.', /uli tøunte, chan-køt-com halkkayo?/ 'Since it's so warm, how about having something cold?', /sicaun-hanteyo./ 'I'm hungry.', /taluntelo kanun-køsi cohalkkemnita./ 'We'll be better off if we move.', /yøki puchæ innunte./ 'Here's a fan.', /kasøun kanunten kili øtuløchiyo?/ 'How was the trip to Kaesong?', /næka achume ilccuki wannunte, taysini øpsøsseyo./ 'I came earlier this morning, but you weren't here.'

/-ci/ 'fact' : clause-final and sentence-final; as a sentence-final form it signifies an informal half-question. /-yo/ may be added to it in sentence-final position. A common use is with the verbs /al-/

'know' and /molu-/ 'not know', where /-ci/ means 'whether':

/uncøn-hæ-poncika olæ twæssumnita./ 'It's a long time since I tried to drive.', /hakkyoe tanincika olæ twæsø, cham mani icæssumnita./ 'I've forgotten a lot since I went to school.', /cosøne oncika mechil twasso./ 'I've been in Korea a few days.', /øtincinun mollato, i-kunpaŋ øtemnita./ 'It's somewhere around here.', /cokom nuculcci<sup>o</sup>nun molato, kakessumnita./ 'I'll be there, though I may be late.', /nonulako sikani kanuncito mollassumnita./ 'I was playing so I didn't even know the time was passing.', /cø-putæ mwøsi innuncilul naeke poyø-cusiyo./ 'Show me what's in the sack.', /nukunci asimnikka?/ 'Do you know who he is?', /mwøsinci molumnita./ 'I don't know what it is.', /næka hatunci taŋsini hatunci saŋkwan ta øpsumnita./ 'Whether I do it or you do it doesn't make any difference.', /ku-salam øtesø sanunci molumnita./ 'I don't know where he lives.', /apønim wæ kœki kanci case molukessumnita./ 'I don't know exactly why my father went there.', /ikø1 saya-halcci cøkø1 saya-halcci molukesso./ /aissukhulimina hana kalcciyø./ 'I think I'd like to have ice cream.'

There is also the sequence /-llunci/ added

to simple stems, as in /hallunci/. The /-ci/ may be the post-participle /-ci/ (/hanunci/), the /hal/ may be the /l/ participle form of /ha-/. The problem concerns the middle part /-lun/. If we take the /-ci/ to be the post-participle /-ci/, then /-lun/ must be a participle suffix. We may identify /-lun/ with the /-nun/ participle suffix whose initial /n/ changes to /l/ when added to the /-l/ participle (an expected morphophonemic change of /ln/ to /ll/). There does not, however, seem to be any other case of two participle suffixes combining. /-llunci/ often has /-to/ added to it; the verb /molu-/ nearly always occurs after it.

/-llunci/ gives the sense of 'may, might', 'whether'; it is used like /-nunci/.

/nanun kuika kalluncito molumnita./ 'I think he may go.' (i.e., I don't know whether he will go.),  
 /kuika onul-cønyøke kalssu øpsullunci molumnita./  
 'He may not be able to go this evening.', /mun yølmyøn,  
 sønsøn-hæcilluncito molumnita./ 'Opening the window  
 might make it cooler.'

7.22 Clause-final: /twi, taum ~ tam, hu, sai ~ sæ,  
 ttæ, ccæ, ccøk, tælo, kolo, cuk/

These compounds usually occur with the locative

/-e/ suffix when they are used in clause-final position.

/twi/ 'behind, after' : /nakasin-twie wassøssumnita./  
 'He came after you left.', /cinci capsusin-twie na  
 camkkan posilssu ikkessumnikka?/ 'Will you be able  
 to see me for a moment after you eat?', /øлма cinan-  
 twienun cowacøssumnita./ 'After a while, it became  
 better.'

/taum ~ tam/ 'after' : /nøli pisan-tame  
 yanchi-hæssø./ 'After he combed his hair, he brushed  
 his teeth.', /næ kan-tame nuka wassumnikka?/ 'Did  
 anyone come after I left?', /yølssi cokom cinan-taum-  
 kkaci kitalitaka kassumnita./ 'He waited until ten  
 and then left.'

/-hu/ 'behind, after' : /næka cømsim nøkun-  
 hue, .../ 'After I ate lunch, ...', /sønsuka tahakkyo  
 coløp-han-hu, .../ 'After Songsu graduated from the  
 university, ...'.

/-tojan/ 'during' : /an-kesin-tojan nuka chacø  
 wassøssø./ 'Someone called while you were out.'

/sai ~ sæ/ 'between' : /pakke na-kan-saie  
 nuka wassøssulkkayo./ 'Who could have called while  
 I was out?', /næka ømnun-saie cønhwaka omyøn, com  
 patø-cusipsiyo./ 'If there's a phone call for me while  
 I'm out, please take it for me.'

/ttæ/ 'time' : /cipe kalttæka an-twassumnita./  
 'It's not time to go home.', /papul mækalttæ nuka  
 watta./ 'Someone came while you were eating.', /yø lame  
 kølø-kalttæ, sonækika olmoyaŋ-imyøn, pi-osul ipumnita./  
 'In the summer, when you walk, and it looks like rain,  
 you wear a raincoat.', /tulø-olttæ nuku pwassumnikka?/  
 'Did you see anyone as you came in?', /ulika talttæ-  
 kkaci kitalici masiyo./ 'Don't wait until we arrive.',  
 /osilttæn mili allisipsiyo./ 'Let me know in advance.',  
 /neil osiyo. cikun hancham pappalttæ-innita./ 'Come  
 tomorrow, I'm very busy right now.'

/ccæ/ 'time' : /copan-mækulccæ sinmun  
 iksumnikka?/ 'Do you read a newspaper when you eat  
 breakfast?', /søul issulccæ kim-cipe tucuilttoŋan  
 issøssumnita./ 'When I was in Seoul, I stayed at Kim's  
 house for two weeks.'

/ccøk/ 'while' : /pihæŋki thassulccøke sonamu  
 mani pwasso./ 'While riding in the plane, I saw many  
 pine trees.', /kalccøke pulul kkuko kasiyo./ 'Blow  
 out the lamp before you go.', /cipe kasilccøke naka  
 usan pillyø tuliciyo./ 'You may borrow my umbrella  
 to get home.', /cosøne-kyøŋcelul mal-halccøke mikuk-  
 kyøŋcelul phyocun hæ mal-halssunun øpso./ 'In speaking  
 of the Korean economy we can't take the U.S. economy  
 as a standard.'



/-təlo/ 'according to'; (the /-lo/ may be the instrumental suffix /-lo ~ ɫo/, but /-tə/ does not occur elsewhere):

/halssu innuntəlo ppalli kaya-hakessumnita./  
 'I have to go as soon as possible.', /anun-təlo allyø-cusiyo./ 'Tell me as much as you know.', /malssum-hæ-cusintəlo hakessumnita./ 'I'll do as you tell me.', /salamtul tulo-onuntəlo sesiyo./ 'Count the people as they come in.'

/-ko/, usually in the form /kolo/ 'by reason of' (literary): /onul nuni onun-kolo tø chipso./  
 'It's colder today because it's snowing.'

/-cuk/ 'reason' : /kələncuk ku-twie mwøsi innunci əø-pwaya-hakesso./ 'For that reason, we should try to see what's behind it.'

7.23 Before the copula verb: /kil, cuŋ, moyaq, thø/

These participle compounds occur directly with a form of the copula verb /-i-/ following. The copula verb itself may presumably be in any form that it ordinarily has elsewhere, i.e., sentence-final, clause-final, participle compound, gerund, etc.

/-kil/ 'road, way' : /na-kanun-kil-innita./  
 'I'm going out.', /achuqe olla-kasinun-kile ku-pul com kkø-cusipsiyo./ 'Please put out the lights as you go upstairs.'

/cuŋ/ 'midst' : /na cikum cim ssanun-cuŋ-iyɔsso./

'I was in the midst of packing.'

/-moyaŋ/ 'form, model, shape' : /naka cami taløttun-moyaŋ-immnita./ 'I must have been asleep.', /ama sonakika olmoyaŋ-immnita./ 'It looks as if there will be a shower.', /talun-moyaŋe kutunun antwekessumnikka?/ 'Wouldn't some other style (model) shoe do?'

/-thø/ 'supposition (?)' (/thø-i-/ varies with /the-/, which seems to be the more common form):

/ku-ika catoncha thako kot olthø-inte, yøki acuk-kkaci oci anøcciyø./ 'He's supposed to come by car, but he hasn't shown up yet.', /naka søŋsulul kitalilthø-inte, kot okilul palao./ 'I'll wait for Songsa, I hope he comes soon.', /cimul ssaya-halthø-inte, com tø khun-saŋcaka issøya-hakessumnita./ 'We need a larger box for packing.', /møncø kasipsiyø. ince kot ttalø kalthø-immnita./ 'Go on ahead. I'll catch up with you right away.', /cikumccumun yøki taøssøya halthø-inte, wønilinci molukesso./ '(He) should have been here by now.'

7.24 Before other verb stems following: /su, cul, -ø~a/

These participle compounds occur with a following verb stem, usually with /#/ juncture between.

/su/ 'effort, possibility' (with simple /-l/ participle of action verbs, followed by /iss-/ 'be' and /øps-/ 'not be'; the /su/ may take the /-nun/ or /-ka/ suffix):

/cønun kalssu øpsunnita./ 'I can't go.',  
 /i-yanpokto-cem talilssu ikkesso?/ 'Can you press  
 this suit, too?', /kuløllsuka øpci anøyo?/ 'You can't  
 mean that, can you?'

/-cul/ 'ability' may have /-un/ or /ul/ suffix,  
 and is often followed by certain verbs such as /al-/  
 'know', /molu-/ 'not know':

/cosøn-mal halccul asimnikka?/ 'Can you speak  
 Korean?', /ku-salami ku-il hancul annita./ 'I know  
 he did that work.'

/-ø ~ a/ (the participle compound /-lø ~ la/  
 expresses purpose; see also 5.343):

/nanun køcø tətulø on-salam-iyo./ 'I've merely  
 come to listen.', /kim-sønsəŋ com polø wasso./ 'I  
 came to see Mr. Kim.', /amsikcømulø chiqku mannala  
 kassunnita./ 'He went to a restaurant to meet a friend.',  
 /kukul pulø sikhisiyo./ 'You can blow on your soup  
 to cool it.'

## 7.25 Other Participle Compounds

We illustrate here a group of participle compounds

which do not seem to play any syntactic role other than that of ordinary nouns (even though their English translations do not always bear this out).

/sulok/ 'purpose' : /ppalli kamyøn, kalssulok cosso./ 'The sooner you go there, the better **it** will be.'

/chøk/ 'side' : /molun-chøk hako cina-katunteyo./ 'He passed by me.', /næka haqilal hayøssana, ku-salamun tutun-chøkto an-hassumnita./ 'He brushed my protests aside.'

/ttut/ (ttus-) 'similarity, likeness' : /øttøkhe ku-cha thalssu issul ttut hamnikka?/ 'Is there any chance of catching the train?', /ku-lø-han-ttusulo hasin-malun an-iciyo?/ 'You can't mean that, can you?'

/il/ 'work, thing' : /ilpon kasøttun-ili isso?/ 'Have you ever been to Japan?'

/ke/ 'thing' : /pyøllo an-hanunke øpsumnita./ 'There's hardly anything we don't do.', /øtil kanunkeyo?/ 'Where the hell are you going?', /ssunkemnikka, tankemnikka./ 'Is it sweet or bitter?', /nøgnøk-halkkemnita./ 'It'll probably be enough.', /ama ku-køt cohalkkemnita./ 'I'm pretty sure it'll be all right.', /an-tulø olkkemnita-man, øti kulato kitalyø-popsita./ 'He may not be in, but we'll take a chance.'

/kø/ 'thing' : /ku-salam kassulkkøyo./ 'I'm sure

he's gone.', /chalali i-køsi cohalkkø hakkunyo./ 'I think this one is better.'

/-køt/ (/kø s-/) 'thing' : /mwøt talun-køt sasilkkøt øpsumnikka?/ 'Isn't there anything else you want to buy?', /pyøllo halkkøt øpsumnita./ 'I've got nothing in particular to do.', /ku-chakun pullansø-salami ssun-køsimnita./ 'That book was written by a Frenchman.', /chøn-køt tweyøssø./ 'He was appointed.', /pølssø kaya-hæssalkkøsimnita./ 'We should have gone before.', /ama onul-cønyøke yasicanø phalkkøt kassumnita./ 'Maybe we can get it at the night market tonight.', /næilun nali com kælkøt kathumnikka?/ 'Does it look like the weather will clear up tomorrow?', /hælopçi analkkøcita./ 'It won't hurt.'

/pa/ 'thing' (literary) : /i-køsun naka wøn-hatun-pannita./ 'This is the thing I wanted.', /ulika citoe panunpawa-kachi, .../ 'As we see on the map (like that which we see on the map), ...'.

## CHAPTER VIII

## ADVERBS, PARTICLES

## 8.1 Adverbs

There is a small group of morphemes which seem to be sufficiently different in their distribution from those so far considered, to justify setting up, at least tentatively, a separate morpheme class. These morphemes, such as /acu/ 'very', /phøk/ 'very', /cal/ 'well', /acuk ~ acik/ 'still, yet', /kkok/ 'just, exactly', /kot/ 'immediately', occur before verb stems; in the material of this study, they do not occur before verb suffixes or before the copula verb, or before noun suffixes. E.g., /onulun ilkika acu cossunnita./ 'The weather is very fine today', /kkok almasso./ 'It's just right.', /cal kasiyo./ 'So long!'. We call this class of morphemes "adverbs."

Similar to morphemes like the above, but differing in that they may also occur at the beginning of a clause, are morphemes such as /ama/ 'perhaps', /tto/ 'also, too, in addition'. Some of these, such as /tto/, also occur with the noun suffix /-un ~ nun/: /ama onulun yøllahulelkkennita./ 'Today is probably the 19th.', /mwøsi tto soyon-twennikka?/ 'Do you need

anything else?'. Whether these two groups differ sufficiently to be classified as different morpheme classes, rather than as sub-classes of one class, remains a moot question at this point. We may refer to them as introductory adverbs.

In addition to the adverbs discussed above, there is also a group of forms which occur in the same positions as they do but which are patently verb forms, chiefly the /-ø/ gerund and /-ko/ gerund forms, such as /øssø/ 'quickly', /køcø/ 'just', /møncø/ 'first, ahead', /pølssø/ 'already', /cakko ~ cakku/ 'repeatedly'; there are also such forms as: /mili/ 'beforehand', /hato/ 'very', /han/ 'approximately'. From the material of this study, however, the verb stems apparently underlying these forms do not occur otherwise. It is very likely not coincidence that these forms resemble verb forms; they probably represent verbs which historically have come to survive only in these forms (cf. /puthø/ and other verb-like forms in Chapter IV). The possibility that the underlying stems do occur elsewhere, however, should not be discounted entirely. Also, as the case of the verb-like forms discussed in Chapter IV, it may be reasonable to consider these forms as morphological verb forms, only having a special standing.

It may be of interest to note here that the /-i/ form of verbs (in Chapter V) makes syntactic adverbs out of verb stems, e.g., /kamanhi/ 'quietly'.

Some examples of the above forms are: /mɔncɔ kasipsiyo./ 'You go on ahead.', /ɔsɔ ppalli hɔyo./ 'Hurry up!', /ceka kɔcɔ myɔt-malssum tuliko siphunte, kwanchanssumnikka?/ 'May I give you a bit of advice?'

### 8.2 Particles

There is a group of morphemes which occur as independent utterances, or as introductory particles; for example, /ye ~ ne/ 'yes', /uŋ/ 'yes', /o/ 'oh', /cɔ/ 'well', /mɔ/ 'well', /ca/ 'say, oh', /cham/ 'oh', /aiku ~ aku/ 'oh', /yɛ/ 'hey'. These usually have an independent intonation contour. Some examples are: /ye. kulɔkessumnita./ 'Yes, I'll do that.', /cɔ, onulan coun-pɔsɔtto issumnita./ 'Oh, we have nice mushrooms today, too.', /aiku, i-kɔsi phɔk pissakunyo./ 'Oh, they're very expensive, aren't they?', /yɛ. saŋcɔme nawa-kachi mwɔt-com sala kaci ankhenni?/ 'Aren't you going with me to buy something at the store?'

There is also a morpheme /-a ~ ya/ which is added to personal names; the alternant /-a/ is added to names ending in a consonant, while the alternant



/-ya/ is added to names ending in a vowel. It is used in calling someone, presumably on an informal level; e.g., /ca. høsuna!nø-ince pakke naka-nolala./ 'All right, Hosun! Go out and play now!', /chansuya i-calulul tuløla./ 'Chansu, carry this bag!'.

This morpheme /-a ~ ya/ could be analyzed as a noun suffix, or as an alternant of /yæ/ (see above), for they are complementary and have similar meanings: /yæ/ when used independently, but /-a ~ ya/ when used with a preceding morpheme (names).<sup>1</sup>

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1. Such a distribution of morpheme alternants would exist also in the case of the elements /-to/ 'too, also, even' and /tto/ 'too, also', for /-to/ occurs added to a noun stem, while /tto/ occurs independently.

## CHAPTER IX

## THE CLAUSE

## 9.1 The Order of Elements Within the Clause

We give here a very brief description of the order of elements within the clause. For this purpose, we define clause<sup>1</sup> as the stretch from one clause-boundary to the next. Clause-boundary is either utterance-boundary or (1) a clause-final or sentence-final verb form (such as those with the suffixes /-ni, -na, -myzn, -ta, -o/), (2) certain occurrences of the gerund forms, i.e., those which end a contour of the kind that ends on clause-final or sentence-final verb forms and such that the sequence of elements before the gerund form is the same as that which precedes a clause- or sentence-final verb form,<sup>2</sup> or (3) certain participle plus noun stem compounds in certain occurrences (i.e., under the same conditions as stated above for clause-

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1. In using the term clause in this discussion, we mean either a dependent clause or an independent clause, for the syntax within each is identical.

2. See 5.33 for clause-final occurrences of gerund forms.

final occurrences of the gerund forms), such as /-nte/.<sup>1</sup> There are also instances of clauses ending with other noun forms, besides the cases of gerunds and participle compounds, but these are relatively rare.

The word or compound, or other construction, which contains a verb stem and occurs at the end of a clause we may call the verb of the clause; for convenience in describing the syntax of the clause, we also call clause-final gerund and participle forms verbs of the clause.

The other elements in the clause are the noun constructions (noun phrases, noun compounds, unit nouns) and adverbs. The noun constructions are identifiable by their suffixes, except for the instances when they have zero suffix. Some adverbs are identifiable by their form (the /-i/ form of verbs), others only by position.

As implied above, the verb of the clause has the most fixed position, i.e., at the end of the clause.<sup>2</sup> The order of the other elements with respect to each

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1. See 7.22 for which participle compounds may occur in clause-final position.

2. This does not always hold, but it is the normal case.

other is more variable. Basically, however, the order may be stated as follows (we represent the nouns of the clause by their suffixes, particles by P, adverbs by D, introductory adverbs by D'; the /-e/ here is the locative /-e/, for ", " read and/or; the vertical bars separate successive elements):

P | -un ~ nan | D' | -i ~ ka | D, -ulo ~ lo, -e, -sø |  
-ul̄ ~ lal | Verb.

The order of D, /-ulo ~ lo/, /-e/ and /-sø/ relative to each other is variable. The order of these elements relative to /-i ~ ka/ is also variable; they may come before or after /-i ~ ka/. The position of /-un ~ nan/ at the beginning of the clause is rather stable but not completely fixed; similarly, /-ul̄ ~ lal/ comes as close to the verb of the clause as possible (i.e., just before it) but it is also found before D, and before /-ulo ~ lo, -e, -sø/.

The subject suffix /-i ~ ka/ and the object suffix /-ul̄ ~ lal/, as has been observed in Chapter IV, may be replaced by zero under certain conditions (which have not been completely established in this study).

The minimum clause consists of the verb alone; e.g., /kul̄ko/ 'it is so and ...', /kh̄s̄to/ 'even after (they've) grown up', /kul̄assumnita./ 'That's true.'.

The absence or occurrence of one element does not require the absence or presence of some other element.

There are many instances in which a noun with /-i ~ ka/ (or its zero alternant) is lacking in the clause. In this case, we assume, for purposes of translation into English, that a subject is implied by the verb itself. Such clauses are translated in English with a pronoun subject. This is discussed further in 9.3 below.

Any form based on a verb stem (except, probably, the adverbial /-i/ form) may have its own "complement" of noun constructions and adverbs. Thus, the elements of one clause may be included in another, except that the verb of the included clause is not in one of the clause-final forms.

These included clauses are in some nominal form, that is, with the verb in a nominal form, such as /-ki/ or /-m/, or in a participle compound. Clauses are very frequently nominalized by having the verb put into a participle compound, such as /-nci, -lkkøt/.

The included clause may simply precede the including clause; i.e., letting C stand for clause, the succession may be  $C_1C_2$  or  $C_2C_1C_2$ . E.g., /næka

mal-han-køt cønpuka chammal-iyøssumnita./ 'All I said was true.', /apønim wæ køki kanci case meløkessumnita./ 'I don't know exactly why my father went there.', /cikum cøncæŋ-hanun-kosenun salami cakko cukko issumnita./ 'Many men are dying on the battlefield now.', /kø-salami cakika næil nyuyoke kantako hamnita./ 'He says he is going to New York tomorrow.'

## 9.2 Agreement in the Clause, Formality Level

As has been mentioned in Chapter V, verb stems are informal, formal or neutral with respect to formality level. Sentence-final suffixes are also informal, formal or neutral. Non-sentence-final suffixes have no formality function. The formality of the verb stem refers to the subject of the verb stem, that is, there is agreement between a formal noun and the verb whose subject it is. The formality of the sentence-final suffixes refers to the person addressed; there is no agreement between the sentence-final verb and any noun which is its subject. Strictly speaking, we should perhaps regard the sentence-final suffixes as suffixes to the whole sentence, rather than to the verb stem alone, at least when we consider the formality function of these suffixes.

The grading of sentences according to their

formality level involves rather detailed statements concerning the relationship between the speaker and the person spoken to. Various factors help determine which formality level is "correct" in any situation, factors such as the relative ages, occupations, social positions and sex. A full grading would presumably be a continuum of shadings, rather than a clear-cut division into two or three levels into which we fit all sentences. We give here only the most general indication of the levels, however, using formal, mid-formal (or non-committal) and informal (or intimate) as categories.

In the following table, we summarize the most common verb forms which occur in sentence-final position, noting also whether they indicate a statement of question.

The addition of /-(i)yo/ to /-ne, -na, -se/ makes these somewhat more formal.

In addition to the forms listed below, the gerund forms (/ø, -ci, -ko, -ke, -tæ/) and certain participle compounds (such as /-nte, -nci, -lkka/) also commonly occur sentence-final, as has been noted. These are, on the whole, informal or intimate. The addition of /-(i)yo/ makes them somewhat more formal.

Verb-form	Statement	Question	Formal	Mid-formal	Informal
-ta	x				x
-ne	x				x
-na		x			x
-ni		x			x
-se	x			x	
-o ~ yo ~ so	x	x		x	
-mnita	x		x		
-mnikka		x	x		
-ptita	x		x		
-ptikka		x	x		

Another case of agreement between subject noun and verb is in connection with a verb in the /-ptita, -ptikka/ forms. Here, the subject noun is one which refers to a third person.

### 9.3 Subject of the Verb

The subject of a verb, as has been indicated above, can be said to be implied (for purposes of English translation) by the verb form itself. Frequently, no subject noun (i.e., a noun with the suffix /-i ~ ka/) occurs in a clause. In such cases, the



context may determine what the subject of the verb is, from the point of view of an English translation. Or, the form of the verb may help in eliminating what the subject may not be. Thus, a formal verb form (i.e., one based on a formal stem with /-si/) would, in most cases, be translated by a pronoun in English which is not 'I', i.e., 'you, he, she, they' and occasionally 'we'. Forms with the suffix sequences /-ptita, -ptikka/ would have only a third person pronoun as subject in an English translation.