

Korean Verb Inflection: A Tagmemic Study of the Verb *ka*-*

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I . INTRODUCTION

1) Parts of Speech System and Phonemes in Korean

According to Samuel Martin,¹ on the basis of internal structure, the words of Korean clearly fall into two classes-- inflected and uninflected. Each inflected word contains the immediate constituents BASE+ENDING. The base belongs to a large but limited class of constituents which do not occur except attached to one of a much smaller class of endings, which in turn do not occur except attached to some bases. On the other hand, there is no such restriction on the occurrence of uninflected words. He further divides the uninflected words into three main classes according to external environments: nouns, particles, interjections. Inflected words are grouped into two categories: transitive and intransitive, both including processive and descriptive verbs.

On the other hand, Fred Lukoff² sets up six form-classes in Korean as follows: noun, verb, noun suffixes, verb suffixes, adjective, and connective particle. Lukoff's noun suffixes correspond to Martin's particles, adjectives to descriptive verbs, verbs to processive verbs, and connective particles to interjections. Fred Lukoff further divides verbs into active verbs,

* This paper was read at Language Research Seminar sponsored by Seoul National University in September, 1968. I would express my sincere appreciations to Professor Frederick B. Bosco who has helped me to formulate and clarify my material and my ideas. And also my greatest debt is owed to my teacher, Professor Walter A. Cook, S.J., whose invaluable instructions made this knowledge available to me.

¹ Martin, Samuel E. *Korean Morphophonemics*. Baltimore: Linguistic Society of America, Special Pub. 1954.

² Lukoff, Fred. *A Grammar of Korean*. University of Pennsylvania Doctoral Dissertation, Pub. No. 8564, 1954.

descriptive verbs, and copula. The processive verbs denote actions and the descriptive verbs denote description, the former comparable to verbs in English, the latter to adjectives in English based on the lexical meaning of the words.

The phonemes of Korean, according to Fred Lukoff, are the following:

Consonants

Stops	/p/	/ph/	/pp/
	/t/	/th/	/tt/
	/c/	/ch/	/cc/
	/k/	/kh/	/kk/
Fricatives	/s/	/ss/	
	/h/		
Laterals	/l/		
Nasals	/m/	/n/	/ŋ/
Semi-vowels	/w/	/y/	

Among the consonant phonemes, /pp/, /tt/, /kk/, /cc/, /ss/ stand for the glottalized stops and fricatives: they are not sequence phonemes, but unit phonemes. /h/ is realized as glottal fricative whereas /h/ in /ph/, /th/, /ch/, /kh/ represents an aspiration.

Vowels

i	i	u
e	ϕ	o
æ	a	

2) Objective

Neither has any attempt been made to give a clear and unified account of Korean syntax as a whole, nor has any partial descriptions of Korean structure been completely achieved. Standardization of the order and nomenclature of verbal forms has not yet been completely established. Consequently, in this thesis, verbal forms will be named according to their functions in order to achieve a working terminology-at the risk of possible misinterpretation. This is in keeping with tagmemic theory which sets up the tagmeme as a grammatical unit and characterizes it in terms of the correlation of form and function. Only one verb *kata* 'go' will be stated and analyzed in this thesis. I hope that the results will have general applicability for all the inflections of Korean verbs.

3) Procedure

In Korean a verb consists of a base plus an ending. The total number of paradigmatic

endings for modern Korean is over 400.

In analyzing the verb forms in Korean, Samuel Martin classed the parts which occur in the endings of the verb forms into rough semantic categories.³ He distinguishes the following: status, tense, aspect, style, and mood. The status morpheme is the honorific marker. It indicates that the speaker considers as honored the social status of the subject of the inflected forms. Two tense markers and several combinations of these markers are distinguished: past, past-past, future, past-future, past-past-future. In the aspect morphemes Martin sets up five morphemes: indicative, subjunctive, retrospective, prospective, and progressive. At least 54 mood morphemes are also distinguished. Because of the complexity of the problem, he states⁴ "The number of mood morphemes is much larger, and it is sometimes difficult to decide whether to add to the number by counting as a separate mood an element which can perhaps be broken into smaller parts. I have preferred a rather atomistic analysis. The term 'mood' is used very loosely to cover the grammatical meaning of the final morpheme in each inflectional ending."

In examining Samuel Martin's work, I found several inadequacies: he overdifferentiates the functions of tense morphemes and his separation of aspect and mood morphemes are unhappy conclusions. Moreover, not all relevant problems are analyzed. In this thesis, within the given corpus, verb structures occurring in independent clause types will be dealt with. A complete analysis of the structure of verb endings would be far too ambitious, thus is beyond the scope of this thesis.

4) Pitch

Not much study has been done concerning the part the accentual system plays in distinguishing verbs in Korean. Samuel Martin⁵ points out that "the distinctive length of Standard Korean corresponds to distinctive pitch or a combination of pitch and length in certain areas of Korea." Thus speakers from Seoul and from most of the North and West do not differentiate words by pitch alone. But many speakers from the South and East retain their native pitch distinctions even after they have adjusted their speech habits to the standard language quite well in other respects.

As the problems of pitch are complicated, and moreover are not immediately relevant to the subject under discussion here, the problems of accent will not be dealt with.

³ Martin, Samuel. *op. cit.*, pp. 35-38.

⁴ *Ibid.*, p. 36.

⁵ Samuel, Martin. *op.cit.*, p. 9.

5) Style of Speech

In every society, speakers use such signals as gestures, tones of voice, word-choice, etc., to show that they understand their personal relationship (equality, dominance, subordination) and the situation (polite-casual, formal-informal, etc.) in which they find themselves. Sometimes, in our democratic society we like to pretend that these things do not exist; but they do: very few of us can talk to our boss the way we talk to our best friend. In Korean, the personal relationship signals are built into the language.

In Korean there are several levels and/or styles of speech which show the relationship between the speaker and the person spoken to and/or about. They are divided into the Polite and Plain Speech and each in turn into Formal and Informal. Formal Polite Speech is the polite style of speech commonly used between adults who have a casual relationship; Informal Polite Speech is no less polite than Formal Polite Speech but is considered more casual and friendly. Another commonly used speech level or style spoken to or used among children is known as Plain Speech. The distinction between Formal Plain Speech and Informal Plain Speech is not as marked in terms of level of usage as that between Informal Polite Speech and Formal Polite Speech. The former distinction is formally signalled by the inflected forms of verbs at the end of sentences.

The distinctions of speech level are signaled primarily by the verb inflection. In this paper only the Formal types (Polite and Plain) will be discussed; the others do not differ significantly from those under consideration.

6) Inflected Suffixes

Each inflectional form consists of a base+an ending. It is possible to classify bases and endings into groups according to the ways in which alternant shapes are attached to each other. We find two kinds of ending; one-shape endings (like *-ko*, *-ta*, *-ci*, *-nin*, *-kess-*, *-φss-*, *-kka*, *-φ*) and two-shape endings (like *-simnita/-mnita*, *-so/-o*, *-ina/-na*, *-ninta/-nta*, *-in/-n*, *-il/-l*, *-im/-m*). The two-shape endings have one shape which is attached to a base ending in a consonant and another shape which is attached to a base ending in a vowel. The one-shape endings do sometimes have more than one shape—the infinitive has a number of shapes, but the choice of alternants is not correlated with the type of final sound of the base.

On this basis we can set up classes of verb bases. Those bases which attach the shapes *-simnita*, *-ninta*, *-so*, etc., are consonant bases. Those which attach the shapes *-mnita*, *-nta*, *-o*, *-na* etc., are vowel bases. Vowel and consonant bases both attach one-shape endings

like *-ko*, *-ko*, *-ta*, *-ci*, *nin*, etc., in the same way. In addition to consonant and vowel bases, there are a few ambivalent bases, and some with minor irregularities which we can lump together as irregular bases.

All those alternations will be covered in chapter IV. I include the auxiliaries *-iss-*, *-ka-*, *-twe-*, *an-*, in the inflectional paradigm which have been excluded from the previous mentioned work. There is, of course, justification for excluding the forms of the causative, passive, and negative since these forms are in turn inflected. On the other hand, inclusion of these auxiliaries is advantageous, especially in presenting a description for use in language teaching. Knowledge of the particular auxiliaries that follow certain inflectional forms of the verb in Korean is as essential as knowing the word-order and function of the modal auxiliaries in English.

7) Tetra-Model Hierarchy: MOOD, ASPECT, TENSE, VOICE

The inflectional system, as here conceived, consists of a tetra-modal hierarchy of MOOD, ASPECT, TENSE, and VOICE. All four are necessary components of the Korean verb. A

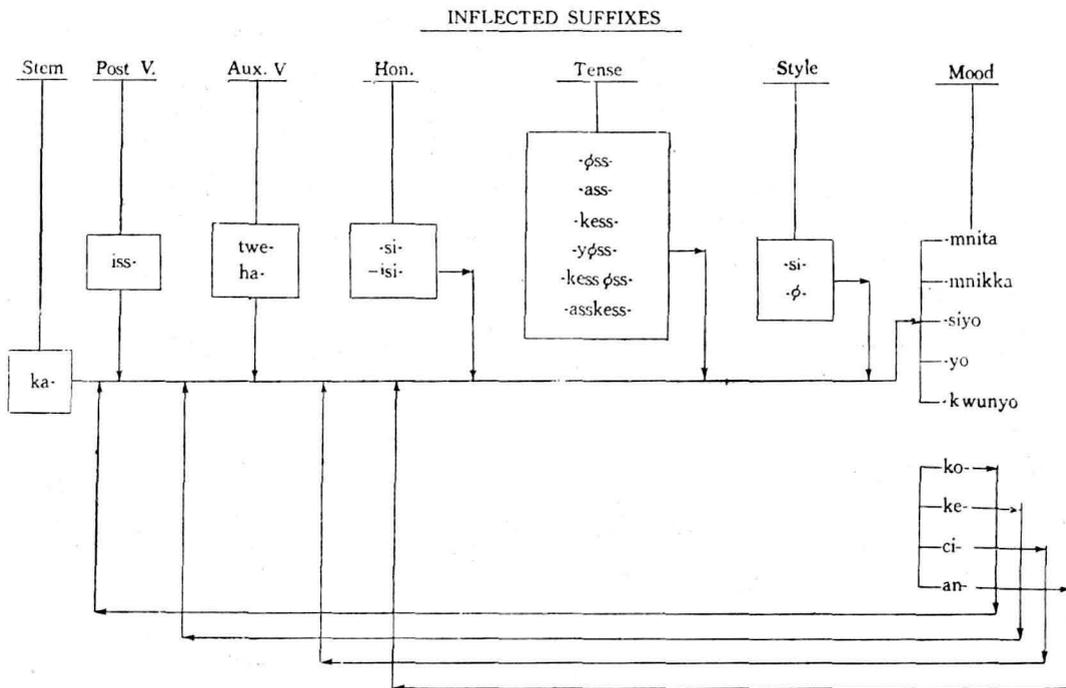


TABLE 1.

schematic representation of this hierarchy is given below. It reifies the various processes through which a verb must pass in order to convey a desired meaning.

A. Mood

Mood is defined as the "distinction of form or a particular set of inflectional forms of a verb to express whether the action or state it denotes is conceived as fact or in some other manner (as command, possibility or wish)." Elson and Pickett⁶ affirm that mood in verbs has to do with "the psychological attitude toward the action, or with the degree or kind of reality".

The actions expressed by Korean verbs fall into five principal groups and several subordinate groups. The assertive mood refers to statements of fact. The denoted acts or states are related as objective events. The interrogative mood produces forms which can be called 'question'; they await a verbal response on the part of the listener. The propositive mood produces a form which can be called 'suggestion' -it asserts a proposition or suggestion, or shows an immediate sequence. The apperceptive mood indicates a sudden realization on

TETRA-MODAL HIERARCHY

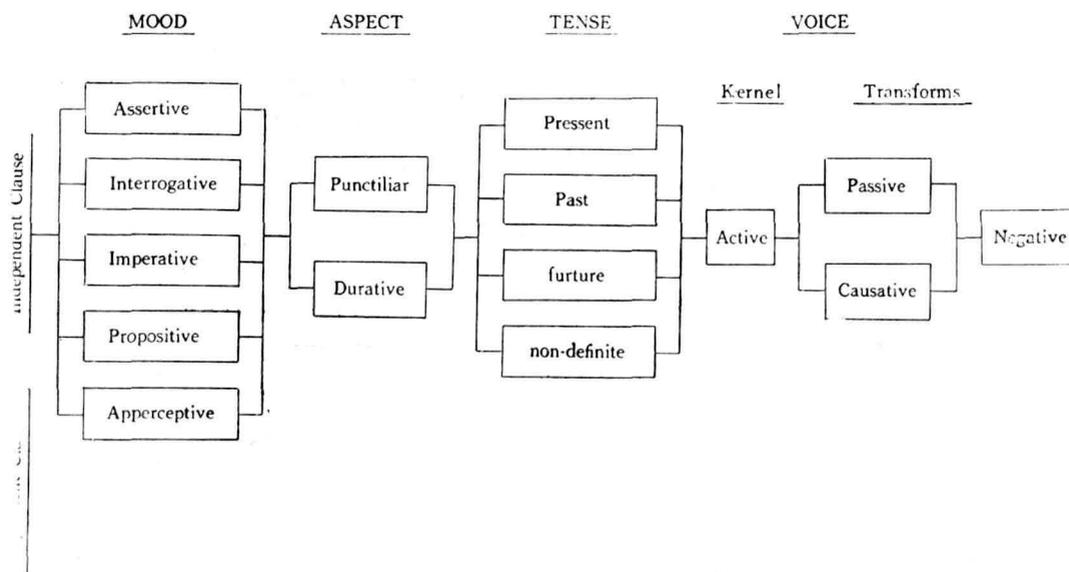


TABLE 2

⁶ Elson, Benjamin, and Pickett, Velma, *An Introduction to Morphology and Syntax*. Santa Ana: Summer Institute of Linguistics, 1964. p.24.

the part of the speaker; 'Oh, I see, or surprise. The five moods just described can be perceived in two dimensions: two aspects and four tenses.

B. Aspect

An action is said to be in the punctiliar aspect when it expresses an activity or a state as taking place at a certain point in time, either actual or habitual.

The durative aspect is expressive of action which takes place over a period of time. This notion includes actions begun at some time in the past, but the results of which are sometimes called progressive or repetitive.

C. Tense

Tense is defined as "a particular inflectional form of a verb expressing a specific time distinction." In grammatical system, tense refers to distinctions of time expressed by differences of form in a verb.

The past tense refers to definite, completed action or state in the past. The future tense shows incompleting action and is used for a definite future and a probable present or past with a combination of the past and the future tense. The present tense is used in the case of an historical statement or a plain description of facts or affairs at the present moment. On the other hand, the action or state or past future (here I may call it non-definite tense) is either future perfect or probable past and we can hardly pinpoint specific time-distinction.

D. Voice

Voice is signalled by a system of inflectional markers attached to the verb. Such markers signify both the relationships existing between the subject and the verb and the specific relation of the subject to the action that the verb expresses. The relationship of the subject to the action of the verb may include the following categories: active, passive, negative, causative.

In the active verb, the subject, even when not overtly expressed, performs the action represented by the verb. This is indicated in the inflectional part of the verb. In the causative verb, the subject operates as a cause or agent of the state or action. A passive verb indicates that the subject is acted upon, subjected to, or affected by the action represented by the verb.

This thesis treats of two levels of speech: Polite Formal and Plain Formal styles. In keeping with this distinction, honorific forms will not be analyzed.

Special Terminology

Base: the core of the verb, that which expresses the basic meaning, e.g., *ka-*.

Stem: an element used as a basis for further inflection.

Stem Inflection: the part of a stem which follows the base. e.g., *-ss-* of *kass-*.

Verb: a) Main verb: a free form with full meaning.

b) Subsidiary Verb: an auxiliary verb such as *tweta*, *hata* which can stand alone as a full verb and whose meaning is somewhat reduced in the secondary position. The subsidiary verb follows the first continuative stem and is thus distinguished from the post-verb which follows the second continuative stem. Only a limited class of verbs can appear in this position.

c) Auxiliary Verb: Both the preceding subsidiary verb and the following post-verb are auxiliary verbs, but the term will be reserved for two specific categories.

AVv: bound forms, e.g., *ha-* of descriptive and processive verb origin.

AVc: *ita* in non-copular form, i.e., functioning as auxiliary after *V+an...*, as opposed to *ita* in copular form. In the latter case it is used as the main verb with an accompanying noun or adjective in statements of question e.g., *cip ita* 'it's a house.'

d) Post-verb: a verb, such as *issta*, having auxiliary uses in addition to independent meaning. In the durative construction, *issta* loses its real meaning value. It comes after another verb (with intervening particle), and it is used functionally to assist in expressing the notion of the durational aspect. *Issta* represents a closed class of postverbs such as *ϕpta*, etc.

II. CLAUSE LEVEL

In tagmemic analysis, a construction, or a syntagmeme, is defined as "a potential string of tagmemes whose manifesting sequence of morphemes fills a grammatical slot."⁷

The Korean verb can be characterized as an agglutinative type of construction consisting of a stem which is highly affixed, and whose inflected suffixes can in turn be inflected. A distinguishing feature of Korean is the fact that a succession of formative elements governing the preceding verb or adjective can be added after it. Thus a series of inflected endings, each with its own special meaning or connotation, may follow a single verb and modify its meaning. These inflected endings always are closely bound to each other and to the verb itself. The stem of the verb is determined solely by the nature of the first inflected ending, the form of which is determined in turn by the second inflected ending, and so on down the line. The form of the final inflected ending is determined by the verbal postposition

⁷ Elson and Pickett. op.cit. p.59.

which follows it, if there be one, or by the use of the verb with its endings in the sentence as a whole.

A major type of Korean sentence is that of a unit of predication which has as its minimum form some kind of predicate. This predicate consists of an inflected form as its nucleus. A grammatical subject may be expressed, but very often not.

A tagmemic notation of this type of sentence can be expressed as follows: +S+P in which the subject is optional and the predicate is obligatory. A sentence is a unit of grammar, a construction in which the constitute is an isolated utterance with final intonation contour, and in which the constitutes are the various clauses and connecting particles, together with the intonational patterns that accompany them. The sentence level is that level on which clauses combine into large units, according to Longacre, "The Notion of Sentence".⁸ For example, in independent sentences, the only operation at the sentence level is the separation of the base from its intonation. A tagmemic notation of this definition would specify:

Sent= +Base: Ind. Cl-Into.: ICF

Read: A sentence level construction consists of a base slot, filled by an independent clause, and an intonation slot, filled by a final intonation contour. (The "minus" sign means suprasegmental)⁹

The objective of this thesis is a tagmemic study of the inflection of the Korean verbs. The corpus which follows give^s a sampling of all the inflectional possibilities of one verb *ka-* 'go'. An analysis of these forms will serve as a basis for the classification of all Korean verbs.

In Korean a verb often skips levels. As an independent clause, the predicate fills the obligatory slots of sentences. It is thus simultaneously both clause and sentence. This chapter will deal with the verb form at the clause level, inasmuch as without the feature of intonation, an independent clause and a sentence are homologous. Dependent clauses are not treated at this level even though they enter into larger constructions which fill slots in a sentence constructions.

In tagmemic analysis, the clause is defined as "a string of tagmemes which consists of or includes one and only one predicate or predicate-like tagmeme among the constituent tagmemes

⁸ Longacre, Robert E. "The Notion of Sentence", *Georgetown Monograph Series No. 20*. Washington, D.C., 1967. p.1.

⁹ Cook, Walter A., S.J. *An Introduction to Language Analysis*. Washington, D.C.: Georgetown University Pre-Publication Edition, 1967. p.151.

of the string, and whose manifesting morpheme sequence typically but not always fills slots on the sentence level."¹⁰

1. Clause level constructions typically fill slots on the sentence level. In a normal mapping of lower structures into higher levels, the clause fills slots at the sentence level; it acts as a sentence base, to which intonational patterns are added. However, atypical mapping may occur, in which clauses occur within clauses or clauses occur at lower levels.

2. Clause level constructions typically include only one predicate. In the counting of clause structures, there are as many clauses as there are predicate slots. A single clause may, however, have a compound verb filler within the one predicate slot. On the other hand, the clause may consist entirely of a predicate, filled by an independent verb form.

3. Clause level constructions may have a predicate-like tagmeme. In most constructions, the predicate slot may be obligatory, but in equational type constructions, in which the main verb is a linking verb, the predicate slot may be optional. In this case, the predicate function is taken over by the predicate attribute, a predicate-like tagmeme. The predicate attribute tagmeme, filled by noun, adjective or adverb, then becomes the obligatory predicate, with linking verb optional. By their distributions on other structures and by certain features of internal structure described above, clause types are of two major kinds: independent and dependent. An independent clause is a clause that can stand alone as a sentence and does not contain a subordinating feature among their constituent tagmemes. A dependent clause is not in proper shape to stand as a sentence but it may fill nominal, adjectival or adverbial slots in the clause frame.

The assertive mood constitutes an eight by five system in which forty clause types result from the intersection of series and orders. Eight orders of clause types indicate the relationships and transformations on the voice parameter. These vertical rows describe transformations from active to passive, causative, and negative clauses, the active being the kernel structure and the others, transforms.

Four series of clause types show the interrelationships of the assertive mood is subordinated first into punctiliar and durative aspects. A second dimension of tense restricts these actions or states to present, past, future, or non-definite. Each of the clause types is minimally manifested as a predicate-word construction which may occur syntactically as a complete sentence-forming construction. In their minimal citation forms, the verbs are irreducible utterances, i.e., those from which no tagmeme can be deleted without changing the

¹⁰ Elson and Pickett, *op. cit.*, p.64.

concurrent morphological meaning.

1. kata/kamnita
2. kassta(kass ϕ ssta)/kassimnita(kass ϕ ssimnita)
3. kakessta/kakessimnita
4. kass ϕ sskessta/kass ϕ sskessimnita
5. kanyi/kamnikka
6. kassnyi(kass ϕ ssnyi)/kassimnikka(kass ϕ ssimnikka)
7. kakessnyi/kakessimnikka
8. kass ϕ sskessnyi/kass ϕ sskessimnikka
9. kala/kasipsiyo
10. kaca/kasipsita
11. kaninkwun/kasininkwunyo
12. kasskwun/kasi ϕ sskwunyo
13. kakesskwun/kasikesskwunyo
14. kass ϕ sskesskwun/kass ϕ sskesskwunyo
15. kakoissta/kakoissimnita
16. kakoiss ϕ ssta/kakoiss ϕ ssimnita
17. kakoisskessta/kakoisskessimnita
18. kakoiss ϕ sskessta/kakoiss ϕ sskessimnita
19. kakoissnyi/kakoissimnikka
20. kakoiss ϕ ssnyi/kakoissimnikka
21. kakoisskessnyi/kakoissimnikka
22. kakoiss ϕ sskessnyi/kakoiss ϕ sskessimnikka
23. kakoisskwun/kakoisskwunyo
24. kakoiss ϕ sskwun/kakoissisi ϕ sskwunyo
25. kakoisskesskwun/kakoisskesskwunyo
26. kakoiss ϕ sskesskwun/kakoiss ϕ sskesskwunyo
27. kakehata/kakehamnita
28. kakehay ϕ ssta/kakehay ϕ ssimnita
29. kakehakessta/kakehakessimnita
30. kakehay ϕ sskessta/kakehay ϕ sskessimnita
31. kakehanyi/kakehamnikka

32. kakehay ϕ ssnyi/kakehay ϕ ssimnikka
33. kakehakessnyi/kakehakessimnikka
34. kakehay ϕ sskessnyi/kakehay ϕ sskessimnikka
35. kakehaninkwun/kakehaninkwunyo
36. kakehay ϕ sskwun/kakehay ϕ sskwunyo
37. kakehakesskwun/kakehakesskwunyo
38. kakehay ϕ sskesskwun/kakehay ϕ sskesskwunyo
39. kaketweta/kaketwemnita
40. kaketwe ϕ ssta/kaketwe ϕ ssimnita
41. kaketwekessta/kaketwekessimnita
42. kaketwe ϕ ssta/kaketwe ϕ ssimnita
43. kaketwenyi/kaketwemnikka
44. kaketwe ϕ ssnyi/kakete ϕ ssimnikka
45. kaketwekessnyi/kaketwekessimnikka
46. kaketwe ϕ sskessnyi/kaketwe ϕ sskessimnikka
47. kaketweninkwun/kaketweninkwunyo
48. kaketwe ϕ sskwun/kaketwe ϕ sskwunyo
49. kaketwekesskwun/kaketwekesskwunyo
50. kaketwe ϕ sskesskwun/kaketwe ϕ sskesskwunyo
51. kaciaanta/kaciansimnita
52. kacianassta/kacianassimnita
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58. kacimala/kacimalisiyo
59. kacimalca/kacimalipsita
60. kacioninkwun/kacioninkwunyo
61. kacionasskwun/kacionasskwunyo
62. kaciankesskwun/kaciankesskwunyo
63. kacionasskesskwun/kacionasskesskwunyo
64. kakoisscianta/kakoissciansimnita

65. kakoisscianassta/kakoisscianassimnita
66. kakoissciankessta/kakoissciankessimnita
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78. kakehacianta/kakehaciansimnita
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103. kakoisskehacianassta/kakoisskehacianassimnita
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127. kakoisskehacianasskesskwun/kakoisskehacianasskesskwunyo
128. kakoissϕla/kakoissisipsiyo
129. kakoissca/kakoissipsita
130. kakoisscimala/kakoisscimalisiyo

131. kakoisscimalca/kakoisscimalipsita
 132. kakoisskehala/kakoisskehasipsiyo
 133. kakoisskehaca/kakoisskehapsita
 134. kakoisskehacimala/kakoisskehacimalisiyo
 135. kakoisskehacimalca/kakoisskehacimalipsita
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 137. kakoissketweca/kakoissketwesipsita
 138. kakoissketwecimala/kakoissketwecimalisiyo
 139. kakoissketwecimalca/kakoissketwecimalipsita

The corpora on the left of the slant bars are Plain forms and those on the right are Polite forms. Glosses are not given: they can be extracted by reading the text.

ASSERTIVE MOOD

The Polite Formal form of the active punctiliar present tagmeme is manifested by a simple verb with the inflectional conclusive stem ending *-mnita* *-simnita*. The *-mnita* is added to a verb stem ending in a vowel and the other to a verb stem ending in a consonant. The formula which represents this syntagme is App: V (-mnita) in which App stands for assertive predicate in the punctiliar aspect and present tense, and V (-mnita) stands for a verbal base with the inflectional ending *-mnita*. The past tense of the punctiliar tagmeme is distinguished from the preceding by its inflection. The formula Apt: V (-*ϕssimnita*/*-ssϕssimnita*) indicates that the punctiliar past predicate tagmeme is manifested by a verbal base marked by the tense suffix *-ϕss* or *-ssϕss* and overt mood marker. The morphophonemic changes are explained in chapter IV. The corresponding Plain Formal forms are obtained by replacing an inflectional conclusive ending *-ta* instead of *-mnita*. The future and non-definite tense of the punctiliar tagmeme is indicated by the formula Apf: V (-*kessimnita*) and Apn: V (-*ϕsskessimnita*) respectively, in which the Apf and Apn stand for assertive predicate in the punctiliar aspect and future, non-definite tenses, and V (-*kessimnita*) and V (-*ϕsskessimnita*) stand for verbal bases with the future, non-definite tense inflections, *-kess-* and *-ϕsskess-* and overt conclusive endings.

The durative aspect of a verb in the present is represented by the formula Adp: V (-*ko*) + *pvv*(-*mnita*), in which Adp stands for durative present predicate, V (-*ko*) stands for the second continuative verb stem followed by the particle *-ko* and *pvv* is the conclusive ending of the post-verb *-issimnita*. In the past and future, the formula is the same except for the last item in which *-ϕss*/*-ss* *ϕss* and *-kess* are inserted between the post-verb stem and *-mnita*.

The Plain Formal counterparts of durative aspect verbs are obtained by replacing *-ta* instead of *-mniita*.

INTERROGATIVE MOOD

The punctiliar aspect of the interrogative predicate tagmeme is manifested by the formula Ipp: V (-mnikka) in which Ipp stands for the punctiliar present predicate, V (-mnikka) stands for a verbal base with the inflectional ending *-mnikka*. The other remaining forms, Polite or Plain, are obtained from the assertive mood by replacing *-mnikka* for the Polite form and *-nyi* for the Plain form instead of *-mnta* and *-ta*.

IMPERATIVE MOOD

The notion of command inherent in this mood is manifested by the suffixation of *-sipsiyo* for the Polite forms, *-la* for the Plain forms to the corresponding forms of the assertive, which is indicated by a formula Mpp: V(-la/-sip-siyo).

PROPOSITIVE MOOD

The notion of suggestion inherent in this mood is manifested by the suffixation of *-ipsita* for the Polite forms and *-ca* for the Plain forms to the corresponding forms of the assertive, which is indicated by a formula Ppp: V (-ca/-ipsita).

APPERCEPTIVE MOOD

The notion of apperceptive mood is manifested by the suffixation of *-kwunyo* for the Polite forms and *-kwun* for the Plain forms to the corresponding forms of the assertive mood, which is indicated by a formula Cpp: V (-kwun/-kwunyo).

VOICE

Any active clause type may be transformed into its corresponding causative type by the suffixation of the infinitive form of *-ha* and the causative inflection *-ke* within the predicate, immediately after the base of the main verb. The transform from any active clause type to a corresponding passive type is obtained by an identical process except *-twe* instead of *-ha*. The negative form can be obtained in two ways with slight differences in meaning: by the suffixation of the suspensive inflection *-ci* and the negative *an-* just before the conclusive ending or simply by adding the negative *-an* just before the main verb. The transform from any active clause type to a corresponding causative, passive or negative type is obtained by a similar process in each case and can be summarized by the formula: (+ke+C/P) representing the component which is inserted in the sequence.

With regard to the distinction of voice, Samuel Martin states as follows:¹¹

¹¹ Martin, Samuel. *op. cit.*, pp. 55-56.

There are related pairs of Korean verbs which differ in voice. We find two types: PASSIVE related to ACTIVE, and CAUSATIVE related to ACTIVE. The relationship is both semantic and formal. The underlying root is usually the same; the base of the passive or causative contains some derivative suffix.

There are a closed class of verbs which shows this distinction by the voice-deriving suffixes. The morpheme of the causative suffixes has a number of shapes which are identical with shapes of the passive suffix. As a result, convergence occasionally produces homonymous causative and passive forms from the same active base: *cap-* 'catch', *ca(y)phi-* 'get caught', *ca(y)phi-* 'cause to catch'; *ilk-* 'read', *ilkhi-* 'get read', *ilkhi-* 'cause to read'; *po-* 'see' *poi-* 'get see' *poi-* 'cause to see'; etc.

Since the voice-related bases are limited in number and not productive, they are excluded in this paper. The voice-related verbs and all other verbs can be transformed from any active types into the corresponding passive and causative by the suffixation of voice-deriving suffix *-ke* and auxiliary verbs *-ha* and *twe-*.

DEPENDENT CLAUSE

As stated in the chapter I, Samuel Martin distinguishes at least fifty-four mood morphemes with their proper semantic equivalents.¹² All the mood morphemes except those five which can be used in the independent clauses can be added to the base plus various inflectional suffixes and can also be followed by another verb, a phrase or a sentence. Thus the kinds of dependent clause types which result from the combinations of the various mood morphemes with verb stems can be at least more than fifty.

It would be uneconomical if we were simply to list a large number of dependent clause types in the description of Korean as has been previously treated. Thus far no adequate solution has been suggested, we shall not enter into the problem of the dependent clause in detail, but merely suggest direction in which a solution might be found.

Among the numerous mood morphemes, *-a*, *-ke*, *-ci*, *-ko*, *-nin*, which are used in building complex moods with other mood morphemes need special treatment. They may be put into the category of particles. The other mood morphemes may reasonably well be grouped into smaller numbers of headings according to their syntactic uses, i.e., nominal, adjectival, adverbial, and they are now limited numbers of particles which are used in building dependent clauses out of independent clauses.

¹² Martin, Samuel. *op.cit.*, pp. 36-37.

In the following tables, only plain forms are illustrated in their minimal manifestations as kernel structures and as transforms. The corresponding Polite forms are obtained by replacing the final mood morphemes with some morphophonemic changes which will be discussed in chapter IV.

CIATION PARADIGM

ACTIVE	CAUSATIVE
App ka-ta	ka-ke-ha-ta
Apt ka-ss ϕ ss-ta	ka-ke-ha-y ϕ ss-ta
Apf ka-kess-ta	ka-ke-ha-kess-ta
Apn ka-ss ϕ sskess-ta	ka-ke-ha-y ϕ sskess-ta
Adp ka-ko-iss-ta	ka-ko-iss-ke-ha-ta
Adt ka-ko-iss- ϕ ss-ta	ka-ko-iss-ke-ha-y ϕ ss-ta
Adf ka-ko-iss-kess-ta	ka-ko-iss-ke-ha-kess-ta
Adn ka-ko-iss- ϕ sskess-ta	ka-ko-iss-ke-ha-y ϕ sskess-ta
Ipp ka-nyi	ka-ke-ha-nyi
Ipt ka-ss ϕ ss-nyi	ka-ke-ha-y ϕ ss-nyi
Ipf ka-kess-nyi	ka-ke-ha-kess-nyi
Ipn ka-ss ϕ sskess-nyi	ka-ke-ha-y ϕ sskess-nyi
Idp ka-ko-iss-nyi	ka-ko-iss-ke-ha-nyi
Idt ka-ko-iss- ϕ ss-nyi	ka-ko-iss-ke-ha-y ϕ ss-nyi
Idf ka-ko-iss-kess-nyi	ka-ko-iss-ke-ha-kess-nyi
Idn ka-ko-iss- ϕ sskess-nyi	ka-ko-iss-ke-ha-y ϕ sskess-nyi
PASSIVE	NEGATIVE
ka-ke-twe-ta	ka...ci-an-ta*
ka-ke-twe- ϕ ss-ta	ka...ci-an-ass-ta
ka-ke-twe-kess-ta	ka...ci-an-keess-ta
ka-ke-twe- ϕ sskess-ta	ka...ci-an-asskess-ta
ka-ko-iss-ke-twe-ta	ka...ci-an-ta
ka-ko-iss-ke-twe- ϕ ss-ta	ka...ci-an-ass-ta
ka-ko-iss-ke-twe-kess-ta	ka...ci-an-kess-ta
ka-ko-iss-ke-twe- ϕ sskess-ta	ka...ci-an-asskess-ta
ka-ke-twe-nyi	ka...ci-an-nyi
ka-ke-twe- ϕ ss-nyi	ka...ci-an-ass-nyi
ka-ke-twe-kess-nyi	ka...ci-an-kess-nyi
ka-ke-twe- ϕ sskess-nyi	ka...ci-an-asskess-nyi
ka-ko-iss-ke-twe-nyi	ka...ci-an-nyi
ka-ko-iss-ke-twe- ϕ ss-nyi	ka...ci-an-ass-nyi
ka-ko-iss-ke-twe-kess-nyi	ka...ci-an-kess-nyi
ka-ko-iss-ke-twe- ϕ sskess-nyi	ka...ci-an-asskess-nyi

*In the negative., the three dots(...) after the verbal base indicates that any of the preceding three voices can be transformed to the corresponding negative voice.

ACTIVE		CAUSATIVE	
C _{pp}	ka-nin-kwun		ka-ke-ha-nin-kwun
C _{pt}	ka-ss ϕ ss-kwun		ka-ke-ha-y ϕ ss-kwun
C _{pf}	ka-kess;kwun		ka-ke-ha-kess-kwun
C _{pn}	ka-ss ϕ sskess-kwun		ka-ke-ha-y ϕ sskess-kwun
C _{dp}	ka-ko-iss-kwun		ka-ko-iss-ke-ha-nin-kwun
C _{dt}	ka-ko-iss- ϕ ss-kwun		ka-ko-iss-ke-ha-y ϕ ss-kwun
C _{df}	ka-ko-iss-kess-kwun		ka-ko-iss-ke-ha-kess-kwun
C _{dn}	ka-ko-iss- ϕ sskess-kwun		ka-ko-iss-ke-ha-y ϕ sskess-twun
M _p	ka-la		ka-ke-ha-la
M _d	ka-ko-ss- ϕ -la		ka-ko-iss-ke-ha-la
P _p	ka-ca		ka-ke-ha-ca
P _d	ka-ko-iss-ca		ka-ko-iss-ke-ha-ca

PASSIVE		NEGATIVE	
	ka-ke-twe-nin-kwun		ka...ci-an-nin-kwun
	ka-ke-twe- ϕ ss-kwun		ka...ci-an-ass-kwun
	ka-ke-twe-kess-kwun		ka...ci-an-kess-kwun
	ka-ke-twe- ϕ sskess-kwun		ka...ci-an-asskess-kwun
	ka-ko-iss-ke-twe-nin-kwun		ka...ci-an-nin-kwun
	ka-ko-iss-ke-twe- ϕ ss-kwun		ka...ci-an-ass-kwun
	ka-ko-iss-ke-twe-kess-kwun		ka...ci-an-kess-kwun
	ka-ko-iss-ke-twe- ϕ sskess-kwun		ka...ci-an-asskess-kwun
	ka-ke-twe-la		ka...ci-mal-la*
	ka-ko-iss-ke-twe-la		ka...ci-mal-la*
	ka-ke-twe-ca		ka...ci-mal-ca*
	ka-ko-iss-ke-twe-ca		ka...ci-mal-ca*

*This is the only exception in the negative: *mal-* is used instead of the expected *an-* in the imperative and propositive.

III. WORD LEVEL

In this section Korean verbs are treated at the word level. "A word-level construction consists, potentially, of two or more tagmemes one of which will be manifested by a stem (or root) and the other of which will be manifested by an affix. Word-level constructions are manifested by words."¹³

¹³ Elson and Pickett. *op. cit.*, p.76.

In charting the relevant positions of verb-affixes, the preferred order is to begin with the stem and proceed in a linear fashion. Making use of the restricted corpus introduced in the preceding chapter, we proceed to make a preliminary grouping of utterances according to stem inflections which cause morphophonemic changes in the stem, thus bringing into prominence the complexity and diversity of the following forms.

By reversing the priority of the above arrangement, i.e., by working inwards from the end of the utterance, the stem is more sharply delineated. The fixed, consistent pattern of the verbs, and the relationships and generative power inherent in this schema are brought into focus.

Transform potential becomes apparent in the formation of causative, passive, and negative clauses.

THE WORD-UNIT

According to Sapir, the word is "one of the smallest completely satisfying bits of isolated meaning into which the sentence resolves itself."¹⁴ Yet the word, as a language unit, is difficult to define in a way that is applicable to all languages of the world. Thus delimiting the boundaries of the word-unit is one of the most difficult problems of morphology. Definitions abound, but the application of these concepts to specific language makes a crucial area of disagreement. The word has been defined by Bloomfield as "a minimum free form; a free form which does not consist entirely of two or more lesser free forms."¹⁵

Nida distinguishes two kinds of criteria for determining what the words of a given language are: phonemic and grammatical.¹⁶ Juncture is a common marker of word-boundaries, though perhaps there is no language where every sequence that one would want to regard as a word is marked off, in every occurrence, by the occurrence of a juncture both at its end. In many languages certain phonemic patterns signify the presence or absence of a word-boundary: for instance, Japanese has an accent phoneme whose non-automatic occurrence in any one word is at most one. But it has been widely known that these phonemic indices of word-boundaries are incomplete.

In any case, the grammarian sets about to formulate his criteria explicitly, to modify them in case they conflict, and to supplement them if they are insufficient to decide for any

¹⁴ Sapir, Edward. *Language*. New York: Harcourt, Brace & World, Inc., 1921. p.34.

¹⁵ Bloomfield, Leonard. *Language*. New York: Holt, Rinehart & Winston, Inc., 1933. p. 178.

¹⁶ Nida, Eugene A. *Morphology: A Descriptive Analysis of Words*. Ann Arbor: University of Michigan Press, 1949. pp. 102-106.

given occurrence of any sequence, whether it is a word or not.

Samuel Martin's definition of the word in Korean is "a class of word alternants in complementary distribution and with the same meaning."¹⁷ He further notes that "with very few exceptions (notably *-i/-ka*, the subject particle) the alternants of a word show partial phonemic congruence they have some stretch of phonemic makeup in common."¹⁸ Since he excludes shape and shape environment in the definition of the word, it is implied that a word need not have any alternant which is pronounceable (i.e., congruent to the shape of an element which is sometimes pronounced in isolation, i.e., bounded by pause. The distinguishing feature of this method is that for some languages, a comparison of all the occurrences of each immediate constituent in all representative samples of the utterances of the language reveals that a great many immediate constituents are constant, wherever they occur. Such a constant constituent is a word alternant.

TAGMEMIC DEFINITION OF THE WORD

In tagmemic analysis, the word is defined as "a class of syntagmemes of a comparatively low hierarchical order, ranking below such syntagmemes as the phrase and clause and above such syntagmemes as the stem.... Words tend to be rigidly ordered linear sequence containing tagmemes which (aside from those manifested by stems) are manifested by a closed class of morphemes unexpandable into morpheme sequences and giving only stereotyped bits of information."¹⁹

A verb is a word that characteristically fills the role of the grammatical center of a being. In various languages, the verb is inflected for tense, voice, mood or aspect. In the system of suffixes in Korean, the ultimate distinctive feature is mood. Without this property a form cannot be called a verb. The corollary to this statement delimits the independent verb in Korean: any word (form) that contains a mood suffix will be called a verb. Kernel structures are listed below:

Pain forms	Polite forms
kata	kamnita
kassta	kassimnita
kakessta	kakessimnita
kassøsskessta	kassøsskessimnita

¹⁷ Martin, Samuel. *op. cit.*, p. 3.

¹⁸ *Ibid.*, p. 3.

¹⁹ Longacre, Robert E. *Grammar Discovery Procedures*. The Hague: Mouton & Co., 1964. p.101.

kanyi	kamnikka
kassnyi	kassimnikk
kakessnyi	kakessimnikka
kass ϕ sskessnyi	kass ϕ sskessimnikka
kala	kasipsiyo
kaca	kasipsita
kaninkwun	kasininkwunyo
kasskwun	kasskwunyo
kakesskwun	kakesskwunyo
kass ϕ sskesskwun	kass ϕ sskesskwunyo

POSITION CLASSES OF SUFFIXES

Besides the arrangement of order, which indicates the linear arrangement of the suffixes, conventions are used to express the relationships of tagmemes in constructions. These conventions are algebraic symbols which indicate whether the suffixes are obligatory, designated by a + sign, or optional by a \pm sign. They may occur in the following combinations, to express concatenation:²⁰

1. $+A \cdots \cdots \mp B$ Tagmemes A and B are both obligatory.
2. $+A \cdots \cdots +B$ Tagmeme A obligatory, but B optional.
3. $+A \cdots \cdots +B$ Tagmemes A and B in an "either...or" relation. One must occur, either A or B, but not neither A nor B, not A and B, not A and B. More involved combinations are possible by using parentheses such as:
 4. $+(\pm A \pm B \pm C)$ where the included set () must occur.
 5. $\pm(\pm A \pm B \pm C)$ where the included set () need not occur.

The included set within the parentheses can be any combination of the obligatory and optional tagmemes, but the symbol outside the parentheses refers to the set as a whole, and to any one element. The algebraic sign outside the parentheses may also be placed upon a tie bar, which joins all of the elements concerned.

²⁰ Cook, Walter A., S.J. *op. cit.*, p. 125.

PLAIN FORMS
PUNCTILIAR STEMS

+ Aspect ± Tense ± Style + Mood

ϕ	-ϕss-	ϕ	-ta
	-ssϕss-	-nin-	-la
	-kess-		-nyi
	-ϕsskess-		-ca
			-kwun

DURATIVE STEMS

+ Apect + (Part. Post V.) ± Tense + Style + Mood

-ko	iss-	-ϕss-	ϕ	-ta
		-ssϕss-		-la
		-kess-		-nyi
		-ϕsskess-		-ca
		-ass-		-kwun
		-yϕss-		
		-asskess-		
		-yϕsskess-		

TRANSFORMS

CAUSATIVE/PASSIVE

+ Asp. + (+Part. + Post V.) + Inf. + (±C/P ± AVv) ± Tense + Mood

-ko	iss-	-ke	-ha-	-ϕss-	-ta
			-twe-	-ssϕss-	-kwun
				-kess-	-nyi
				-ϕsskess-	-ca
				-ass-	-la
				-yϕss-	
				-asskess-	

NEGATIVE

+ Asp. + (+Part. + Post V.) + Inf. ± (±C/P ± AVv) + Sus. ± Neg. ± Ten. + Mood

-ko	iss-	-ke	ha-	-ci an-	-ϕss-	-kwun
			twe-		-ass-	-la
					-kess-	-ca
					-yϕss-	-ta
					-ϕss-	-nyi
					kess-	
					-asskess-	

IV. MORPHOPHONEMICS

Hockett defines morphophonemics as the study of "every phase of the phonemic shape of morphemes: the typical shapes of alternants, the types of alternation, and the various environmental factors (phonological and grammatical) which elicit one alternant or another of those morphemes which appear in more than one shape."²¹

In this chapter the alternations of all the Korean verbs are organized and stated: they account for the subword layer of a larger tagmemic formula.

Each inflectional form consists of a base+an ending. It is possible to classify bases and endings into groups according to the ways in which alternant shapes are attached to each other. We find two kinds of ending: in rough terms, one-shape endings (like *-ko*, *-ta*, *-ci*, *-φss-*, *-kess-*, *-kka*, *-φ*) and two-shape endings (like *-sinnita/-mnita*, *-ninta/-nta*, *-isi-/si-*). The two-shape endings have one shape which is attached to a base ending in a consonant and another shape which is attached to a base ending in a vowel. The one-shape endings do sometimes have more than one shape—the infinitive has a number of shapes, but the choice of alternants is not correlated with the type of final sound of the base.

On this basis we can set up classes of verb bases. Those bases which attach the shapes *-sinnita*, *-isi-*, *-nin-ta*, etc., are consonant bases; those which attach the shapes *-mnita*, *-nta*, *-si-*, etc., are vowel bases. I will call the former C-bases and the latter V-bases. Vowel and consonant bases both attach one-shape endings like *-ko*, *-ta*, *-ci*, etc., in the same way. In addition to C-bases and V-bases, there are a few ambivalent bases (or *h*-dropping) bases, and some verbs with minor irregularities which we can lump together as irregular bases.²² Among C-bases we distinguish bases ending in *h*, *w*, *l* and *s*-dropping bases which involve a special type of alternation. Among V-bases we can distinguish the sub-classes of *l*-extending V-bases, *l*-doubling V-bases, and *l*-inserting V-bases.

1.1. C-bases.

Here are examples of some occurring types of final in C-bases: *ip-* 'wear', *tat-* 'close', *mφk-* 'eat', *ilk-* 'read', *sin-* 'wear on foot', *cφlm-* 'be young', *kam-* 'shampoo', *kakkaw-* 'be near', *noh-* 'put', *til-* 'hear'.

1.1.1. Bases ending in typically voiced consonants. A typically voiceless consonant (*p*, *t*,

²¹ Hockett, Charles F. "Peiping Morphophonemics". *Language* 26. pp. 6385(1950). p. 63.

²² For further details with regard to Korean morpho-phonemic alternations, see Samuel Martin's *Korean Morpho-phonemics*.

s, c, k) is reinforced (*pp, tt, ss, cc, kk*) after a base-final *m, n,* or *l*:

BASE		nam- 'remain'	sin- 'wear'
GERUND	-ko	nam-kko	sin-kko
FORMAL STATEMENT	-simnita	nam-ssimnita	sin-ssimnita
SUSPECTIVE	-ci	nam-cci	sin-cci

Here are some of these bases: *anc-* 'sit', *halth-* 'lick', *cplm-* 'be young', etc.

1.1.2. Bases ending in *h*.

When attaching a consonant, a base ending in vowel+*h* treats the *h* as *t* (which is then subject to automatic alternation),²³ unless the attached consonant is *t, c,* or *k*, with which the *h* undergoes methathesis. When attaching a consonant, a base ending in a typically voiced consonant+*h* (i.e. *lh, nh*) drops the *h* unless the attached consonant is *t, c,* or *k*, with which the *h* undergoes methathesis.

BASE		noh- 'put'	kkinh- 'cut'
GERUND	-ko	nokho	kkinikhho
SUSPECTIVE	-ci	nochi	kkinchi
FORMAL STATEMENT	-simnita	nossimnita	kkin-ssimnita
	-ta	notha	kkin-tha

Here are some of these bases: *caah-* 'weave', *caih-* 'pound', *alh-* 'ail in', *ilh-* 'lose', *kkonh-* 'mark down graphs', *cimcanh-* 'be dignified'.

1.1.3. Bases ending in *w*.

Base-final *w* alternates with *p* before a consonant and coalesces with a following *u* in the vowel pheneme *wu*. The basic *w* is heard only before the infinitive suffix and the past-tense element deriving from the infinitive.

BASE		kakkaw- 'be near'	cwu- 'give'
GERUND	-ko	kakkap-ko	cwu-ko
INFINITIVE	-a	kakkaw- ϕ	cwu- ϕ
FORMAL STATEMENT	-simnita	kakkap-simnita	cwu-mnita

Here are some of these bases: *kiw-* 'mend', *kwuw-* 'cook, broil', *tow-* 'help', *t ϕ w-* 'be warm', *pankaw-* 'be happy'.

1.1.4. Bases ending in *l*.

In attaching a consonant, *l*-bases treat the final consonant *l* as if *t*. Compare:

²³ Martin, Samuel. *op.cit.*, p.18.

BASE		til- 'hear'	pat- 'get'
GERUND	-ko	tik-ko	pak-ko
INFINITIVE	-a	til- ϕ	pat- ϕ
FORMAL STATEMENT	-simnita	tis-simnita	pas-simnita

Here are some of these bases: *c ϕ l-* 'get salty', *tal-* 'run,' *c ϕ l-* walk.

1.1.5. *S*-dropping bases.

These consonant bases end in a basic *s* when attaching a shape beginning with a consonant, but the *s* drops when attaching a shape beginning with a vowel.

BASE		with <i>s</i> cis- 'build'	without <i>s</i>
GERUND	-ko	cik-ko	
SUSPECTIVE	-ci	cic-ci	
FORMAL STATEMENT	-simnita	cia-simnita	
INFINITIVE	- ϕ		ci- ϕ

Here are some of these bases: *is-* 'link-up, join', *nas-* 'be better'.

2. *V*-bases.

Here examples of bases with each vowel: *swi-* 'rest', *kitali-* 'wait for', *toy-* 'become', *ssi-* 'use, write', *sa-* 'buy', *cwu-* 'give', *po-* 'see'. The only vowel bases which end in the vowel ϕ are the abbreviations *il ϕ -*, *kil ϕ -*, etc., which are classed with irregular bases because of the infinitive forms which parallel those of *ha-*. Most endings are joined to vowel bases in a simple fashion, but there are a number of complexities involving both ending and base for the infinitive. These are covered in 4.3.

2.1. *L*-extending vowel bases.

The *L*-extending vowel base selects the appropriate alternant of a two-shape ending in the same way as an ordinary vowel base, but it adds an *l* to the base before certain endings: before all one-shape endings beginning with a typically voiceless consonant or with a vowel (*iko-*, *-ta*, *-ci*, *-kess-*, *- ϕ* , *- ϕ ss*, etc.) and before those two-shape endings which begin with *l* or *m* followed by a vowel or by *y* (*-la*, *-ly ϕ*). Here are examples of *L*-extending bases: *ki-l-* 'be long', *ti-l-* 'enter', *l ϕ -l-* 'hang up', *no-l-* 'play'.

2.2. *L*-doubling vowel bases.

The *L*-doubling vowel base has a shape which ends in a vowel+*li*. When the infinitive ending (*- ϕ* , *-a*, etc.) or the past tense element (*- ϕ ss-*, *-ass-*, etc.) is attached, the vowel *i* drops, and the remaining *l* doubles: *puli-*, *pull- ϕ* 'call'; *moli-*, *moll-a* 'do not know'. Examples of these bases are: *ili-* 'narrate', *pali-* 'be right', *puli-* 'call', *oli-* 'rise', *pali-* 'be right'.

2.3. *L*-inserting vowel bases.

The *L*-inserting vowel base ends in a vowel+*li*, like the *L*-doubling base, but instead of dropping the *i* and doubling the *L*, it adds an *l* before the infinitive ending or past tense element: *nwuli*, *nwulil-φ* 'be yellow', for instance: *ili-* 'reach', *phuli-* 'be blue'.

3. Ambivalent bases.

Ambivalent bases are treated as C-bases ending in *h* before *-simnita* and before one-shape endings not beginning with a vowel, but as vowel bases before two-shape endings other than *-simnita -mnita*. Compare:

BASE		kilφh- 'be like that'	kilφ- 'do, say like that'
GERUND	-ko	kilφkho	kilφko
INFINITIVE	-φ	kilay	kilay
FORMAL STATEMENT	-simnita	kilφssimnita	kilφmnita
SUSPECTIVE	-ci	kilφchi	kilφci

Here are some of the ambivalent bases: *ilφ-h-* 'be this way', *cφlφ-h-* 'be that way', *φttφ-h-* 'be what way'.

4.1. Irregular bases: *ha-* and derivatives.

The base *ha-* have irregular infinitives: *ha-y*, *ila-y*, *kilay*, *amola-y*. The infinitive of the base *ha-* itself has a literary variant *ha-yφ*. (The past-tense forms, as always, follow the pattern of the infinitive: *ha-yss-* or *ha-yφss*, *ila-yss*, etc)

4.2. Irregular bases: *K*-inserting and *N*-inserting.

A base of this type has two infinitive forms: a regular one, formed as expected, and a special one used only the imperative particle *-la*.

The vowel bases *ca-* 'sleep', *na-* 'exist', and *ka-* 'go', together with the consonant base *iss-* stay, insert *k* before attaching this secondary infinitive ending: *cakφ (la)*, *nakφ(la)*, *kakφ(la)*, *ikkφ(la)*. The vowel base *o-* 'come' inserts *n*: *onφ(la)*.

4.3. The infinitive and its variants.

The typical shape of the infinitive ending is *-φ*, but the shape is *-a* if the last vowel of the base is *o* or *w* which is a reduction of a basic *o*. The following alternations of base and ending call for special comment.

(1) Bases of more than one syllable which end in *i* reduce the *i* to *y* before attaching *-φ*: *kitali-*, *kitalyφ-* 'wait for'. But if the *i* is preceded by *c*, *ch*, or *s*, it completely disappears, since the combinations *sy*, *cy*, and *chy* do not normally occur: *kaci*, *kacφ* 'hold'; *kalichφ* 'teach'; *-isi-*, *-isφ* (honorific infinitive). Bases of one syllable which end in *i* simply add *φ*.

and this is the way the standard orthography treats them: *t̄ti-*, *t̄tiφ* 'wear belt'. *ch̄i-*, *ch̄iφ* 'hit', *swi-*, *swiφ* 'rest'; *ph̄i-*, *ph̄iφ* 'smoke'; *i-*, *iφ* 'equals' (copula).

(2) The inseparable processive auxiliary verb *ci-nta* 'become, incline toward', which is used after adjective infinitives, has the infinitive *cφ*; this is a common desyllabication of the type, but it is about the only one so recognized in the orthography.

(3) Bases which end in *i* drop *i* before adding *-φ*: *ssi*, *ssφ* 'write'; *it̄i-*, *tt̄φ* 'float' *pabbu-*, *pappφ* 'is busy' *ippi-*, *tppφ* 'is pretty'. One-syllable bases ending in *wi* retain the *i* and add *-φ*: *cwiφ*, gives. Choice of *-φ* or *-a* for the shape of the ending depends on the vowel of the actual preceding syllable: *moli*, *molla* 'do not know'; *kophi* *kopha* 'is hungry'.

(4) Bases which end in *-ey* or *-oy* add zero to make the colloquial infinitive: *sey-*, *seyO* 'count'; *toy-*, *toyO* 'be-come'.

(5) Bases which end in *a* or *ay* add zero to form the infinitive: *ka-*, *kaO* 'go'; *nay-* *nayO* 'put out, pay'. The base *ha-* has the irregular infinitive *hay*. The only bases which end in *-φ* are *ilφ-*, *kilφ-*, *cφlφ-*, *φttφ-*, and *amolφ-* 'do or say this way', 'that way', 'that way over there', 'what way', 'any way', and these have the infinitives *ila-y*, *kila-y*, *cφla-y*, *φtta-y*, and *amola-y*.

(6) *L*-inserting bases insert an *-l-* before adding the infinitive ending: *ili*, *iliφ* 'reach.'

The above six points all apply correspondingly to the attachment of the past morpheme (typically *-φss-*) as well as the infinitive (typically *-φ*). The following statements do not apply to the past morpheme. The *K*-inserting bases have a regular infinitive, and in addition a special one used only before the imperative particle *la*, with the shape *-kφ* or *-nφ*. Contrast *iss-kφla* 'stay' and *issila* 'stay' (in a quotative construction), *onφ-la* 'come' and *ola* 'come' (in a quotative construction).

(8) When the infinitive is followed by the polite-style particle *-yo*, in relaxed speech the final *-φ* is usually pronounced *-ey* if preceded by *ss*, *ps*, *i*, *y* or the *s* of the honorific marker: *issey yo=issφ yo* 'there exist', *mφkφssey yo=mφkφssφ yo* 'we have eaten', *hakeyssey yo=hakeyssφ yo* 'I'll do it', *φpsey yo=φpsφ yo* 'there is'nt any'.

(9) In the intimate style, the copula infinitive *iφ/-yφ* or *iφy/-yφy* is often pronounced *ia/-ya*, especially in the speech of woman: *nay chayk ia=nay chayk iφ* 'It's my book', *nay moca ya=nay moca yφ* 'It's my hat'.

(10) The variant polite copula *iey yo* is often shortened to *ey yo*: *chayk ey yo=chayk iey yo* 'It's a book'. In the abbreviated probable future construction which consists of the prospect modifier *-il+ko+copula*, the copula base usually takes the variant subphonemic

shape of *y*: *hal kke* -(*y*)-*ey*=*hal kkɕs iɕ*=*hal kkɕ-y*. *hal kkɕs ia*, 'will probably do'; *al kkɕ -yyo*=*hal kkɕ -(y) ey yo*=*hal kkɕs ey yo*, *hal kkɕsiey yo*, *hal kkɕs iey yo*, *hal kkɕs ie yo*, 'will probably do' (polite style).

The subject of morphophonemics has by no means been exhausted in this paper, but I believe the major patterns and problems have been covered.

V. CONCLUSION

This thesis has been an attempt to describe the inflectional system of the Korean verb *ka-* from a tagmemic point of view at the clause level, word level and in its morphophonemic alternations.

A corpus containing utterances at two levels of usage-Polite Formal and Plain Formal-was used.

Matrices at the clause level demonstrated the generative potential inherent in a dimensional analysis. The active clauses were shown to be the kernel structures from which were derived the transforms: the causative, passive, and negative constructions.

In the word-level analysis, the criterion for delimiting the Korean verb was established: mood was found to be the essential element. Form-classes were set up and the position of suffixes in their obligatory and optional relation to the stem was depicted in tabular form.

The section on morphophonemics dealt with the alternations, both phonological and morphological, in the stem. In this section the alternations of all the Korean verbs rather than just one verb *ka-* were organized and stated.

The subject of Korean verb inflection has by no means been exhausted in this paper. A number of interesting points-the problem of dependent clauses and the boundaries between mood morphemes and particles-remain to be explored.

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