FUNCTIONAL LOAD OF ENGLISH TENSE-ASPECT MODIFICATIONS

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The concept of social utility as a principle in general curriculum theory has two basic assumptions which are complementary. The first assumption states that language activities which the child as a learner in a given social group needs most to prepare him for effective living should have precedence over those which are not so useful. This assumption necessarily implies that the general objectives of the language program should be determined. To illustrate the point, a hierarchy of importance must be given for such desirable goals as (a) ability to speak in conversation, (b) ability to write correctly, (c) ability to read, (d) ability to write friendly letters, (e) ability to write letters of complaints, (f) ability to write letters of application, and other social situations in which letter-writing is one normal necessary activity. The second assumption states that the materials of instruction must be properly sequenced and adapted to suit the needs of students according to their ages and grade placement. The more socially useful specifics of language should be given preference over those which are less useful. Regarding the criterion of social utility, Lyman says:

> ... The need for particularized objectives— "specifies" — of language instruction can best be met by activity analyses and investigations of errors such as the studies reported....First, the *socially useful language specifics and the rhetorical minimums indispensable for the daily communications of the average man and woman must be discovered;* second, the types of expressions used naturally and normally by children of advancing ages must be ascertained. (9:39) (Italics supplied)

He goes on to say:

> ...The criterion of "social utility" for the various activities comprising the English curriculum is assuming prominence. The best curriculum researches attempt to ascertain the language needs of practical life. (9:69)

The same principle of social utility applies to the teaching of foreign languages. Huse has this to say:

> ...The beginning language text or method should present units of expression... in the *appropriate order of their importance as measured by a frequency count.* (6:24) (Italics supplied)

Similarly. Thompson says:

> ...Likewise, the material must be presented in an ordered sequence based on two major points: the *importance of the items within the system of English and its difficulty for Thai speakers* (13:18) (Italics supplied)

George explains the rationale for an extensive verb-frequency count in the following words:

> ...the verb-frequency count stems from the idea that, speaking generally, *use indicates usefulness.* We are finding out the actual use English people make of the verb-forms in the language (5:45) (Italics supplied)

This is the rationale underlying this particular part of the present investigation. While it is true that, as a form class, the verb is very important in English, it has its own modifications which must be analyzed for their usefulness as shown in a frequency count of these modifications.

Statement of the problem. This phase of the investigation deals with the following problems:

1. What are the most useful English tense-aspect modifications? That is, which ones have the highest functional load?

2. What are the most common sentence patterns in which these modifications occur?

3. What are the more common transformations by which the source strings get embedded into the resultant transforms as clauses?

Limitation of the problem. It was not the purpose of this phase of the investigation to establish a distinction between the type of English used in technical or non-technical materials by means of a comparison of the kinds of tense-aspect modifications used. Neither were the tense-aspect modifications which are used exclusively in conversation or in writing identified. If comparisons were made, the purpose was to show the trend in the use of the tense-aspect modifications which were analyzed for functional load.

Definition of terms. Important and critical terms which have been used in this investigation are defined herein.

(1) *Tense-aspect modifications.* Tense refers to the time described by the verb in reference to a given prime point or moment of speaking (2:5) whether it is a part action or whether it is a non-past one. It is to be noted as stated above that an English verb is inflected for two tenses only. The fact that a continuous action in the present time may be expressed in English grammar by *pres-be* + V + -ing 'is eating' does not mean that this is another tense of the verb. Presentness is carried by the auxiliary *is* and continuity by -*ing*. In a similar manner, the combination *pres-have* + V + -*en* 'has eaten' and *past-have* + V + -*en* 'had eaten' are not additional tenses of the English verb. They belong to a category called *aspect*.

Aspect in a general sense refers to a description of the nature of the action carried by the expanded form, apart from tense.

(2) *Primary modifications.* The different inflected forms of the verb without auxiliaries as in *eats* and *ate*, the aspectual inflected forms involving the use of the two English auxiliaries *have* and *be* as in *is eating, have eaten,* or *was eaten,* as well as other combinations like *is being*

eaten, has been eaten, or *was being eaten,* are called primary modifications. There are sixteen such primary modifications in Twaddell's analysis, which has been adopted for purposes of this investigation. (14:2).

(3) *Secondary modifications.* When an expanded form of a verb occurs with *can (could), may (might), will (would), shall (should)* or *must,* the term *secondary modification* is applied. These are called the modals in English. The term *modal modification* is synonymous with the term *secondary modification.* It is to be noted that modals do not inflect for *-s as in *cans[1] or *shalls unlike the auxiliaries *have* and *be* but they do inflect for pastness as in *can —» could, shall —» should, will —» would,* and *may —» might. Must* is a defective modal in the sense that it is not inflected for pastness. Some examples of secondary modifications are *can* + V 'can go' and *could + have* + V + *-en* 'could have eaten'.

(4) *Special modifications.* There are a number of aspectual modifications which carry special meanings. For example, the modification *pres-have + to + V* 'has to eat' has a special meaning different from the meaning carried by *pres-have + V + -en* 'has eaten'. Another example is the modification *pres-be + going + to + V* 'is/am 'are going to eat' which carries the proposed or future action. These are classified under special modifications.

(5) *Functional Load. Functional load* refers to the usefulness of a given modification as determined from a frequency count of its occurrences in a given corpus. If, for example, Modification *a* has been used 1,000 times in a given corpus and Modification *b,* 100 times, the former has a higher functional load than the latter.

(6) *Native language* (NL) refers to the first language of the learner.

Survey of the literature of the subject. Several tense frequency counts in modern languages have been made. One

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[1] Asterisks (*) before any word or phrase means that the construction is not permitted in English or Hiligáynon.

of the first was made by Arnold (1:234-35). Using about 22,000 running words from five Spanish plays and five Spanish novels, he found that the present indicative ranked first in both sources; the infinitive, second; the preterite indicative, third; the imperfective indicative, fourth, and the present subjunctive, fifth. The author did not suggest any conclusions regarding theory except to present the facts as he found them.

Sudran made a syntax count of the French verb using four contemporary novels and found that the past descriptive ranked first; the present tense, second; the perfect tenses, sixth; and the future perfect ranked last in twenty-three categories of verb syntactical phenomena. (12.164).

Arnold extended his 1929 study (6) into three languages, French, Italian, and Spanish. In these three languages he found the present indicative ranking first. The author pointed out a great difference between the drama and the novel in each of these languages. The past tenses made up 45.2%, 44.6%, and 51.1% of the total number of tense occurrences in French, Spanish and Italian novels respectively; while they made up 17.2%, 16.2%, and 18.2% of the total in the drama. He then concluded:

> ...The present, future, imperative, and perhaps the conditional... are primarily conversational tenses. (4:153)

Lake studied the syntactical frequency of tense phenomena in three school French texts for students of French as a foreign language and found that 24.3% were in the past descriptive, 14.0% in the compound tenses and the indicative, and 2.1% in infinitive forms. (4:161).

Brennard and Coleman undertook a project in French syntax and found in all available sources that 25.57% were in the past tense, descriptive; 14.88% were in reflexive forms; 7.13% were in the compound tenses; 1.42% were in the future tense; and 5.25% were in the present tense. They found a rather high correspondence with the studies of Lake and Sudran with special reference to the past des-

criptive, reflexive, and infinitives without prepositions. They concluded:

> ....Where the chief aim of the course is the development of the ability to speak or write the language with some facility and in accordance with current usage, the material here presented is pertinent to the extent that such speaking and writing knowledge will be in conformity with usage in standard French. (3:291)

Keniston made a syntax count of contemporary Spanish for the purpose of providing an authoritative statement of the relative importance of the most common Spanish constructions as a guide for textbook makers and teachers of Spanish. He found the same frequency of the present indicative tenses that Arnold had found and stated:

> ...It is probable that a range of sixty units will be sufficient to establish the relative range and frequency of all constructions which are of sufficient importance to warrant a place in the basic materials presented in a course in Spanish. (4: 352)

Bonifacio in a study of the most common tense in English material found the present and past tenses to be the most frequent in expository and non-expository material. (2)

Olshtain found that 35% of 462 occurrences in non-technical materials were in the present tense, 52% were in the past tense, and the rest in other modifications. In technical materials 49% out of 437 occurrences were in the present tense and 28% were in the past tense. While only 2% were in the present passive in non-technical materials, 11.5% in the same modifications were found in technical materials. (10).

A comprehensive and significant eight-year study was conducted by Stormzand in an effort to determine what present-day usage of the most important grammatical categories should be given priority in a program of English teaching. He analyzed a large mass of contemporary, classical, and non-classical writing, letters written by adults, compositions of students from Grade VI through

College. One of the most significant statements, which perhaps influenced course-of-study construction after the publication of the report, is as follows:

> ...We cannot judge on the basis of frequency of the different parts of speech which should receive the chief emphasis or what relative importance should be given to each in constructing a course in grammar. Complexity of form, variation in inflection, and the chances of error in each case must all be taken into consideration. (9:25).

George made a preliminary report of an extensive count on the frequency of verb forms in English. The count covered all verb forms, whether they appeared as finite or non-finite constructions. The author says that "by the time this article appears, three groups of trainees at the Central Institute of English will have been counting frequencies in various types of English, of verb-forms in all kinds of phrases, clauses, and sentence constructions. They will have noted some 80,000 successive occurrences, each of which will have been assigned to one of 180 sections of a schedule." (5:45-53).

The materials used were two novels, two plays, three books of a popular, factual nature, an issue of an English newspaper, and the conversational section of MacCarthy's *English Conversational Reader*. Every occurrence of a verb in the material was noted, except that in the case of the *Chamber's Encylopedia*, of which four volumes were sampled, all occurrences on every fifth page were counted.

Preliminary findings in this study are:

Plain stem (V)	36.7%
to + stem	9.6%
Stem + -ed	41.5%
Stem + -ing	12.2%

Total — 100.0% (50,901 occurrences)

George makes this statement, which explains the rationale of the study:

> ...There are two kinds of priority in teaching: one determines the sequence of teaching points;

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the other the amount of work the teachers and learners direct to each of the teaching points. (5:45).

Procedure.

1. *Rationale of procedure.* It was mentioned at the beginning of this chapter that the concept of social utility is a basic criterion for the selection and arrangement of grammatical categories to be taught to second-language learners or to be included in a course of study in English. This concept was the main reason why the frequency of occurrence of the tense-aspect modifications in English had to be counted. However, in the preparation of teaching materials for the teaching of second language, the basic units which should be sequenced are sentence patterns, not the tense-aspect modifications as such. (8:92-94). It is for this reason that two other problems were included in this frequency count. The first of these problems is the tabulation of the common basic sentence patterns where these modifications were found. The second problem is the tabulation of the common transformations in English which involve the use of the tense-aspect modifications. Knowledge of the basic sentence patterns where the tense-aspect modifications found and of the two-string transformations has a two-fold value: (a) it helps in making the sequencing of the materials realistic, and (b) it enables the teacher to prepare the teaching materials such that they are oriented to the more common and more useful two-string transformations.

2. *Procedure proper.* The procedure in this phase of the investigation involved the following steps: (a) choice of approach to the problem; (b) selection of the sources from which to make the frequency count; (c) choice of description of English tense-aspect modifications; (d) trial tabulation; and (e) preparation of the final data sheets.

a. *Choice of approach to the problem.* There were two possible approaches to the problem of what to tabulate: (1) a *functions* approach, in which the uses of the different modifications were counted. For instance, in the

present tense, the so-called uses, such as 'habitual action', 'present fact', 'permanent condition', 'historical present', might be the things to tabulate. In the case of the so-called 'present perfect', such uses as 'action continuing from a given time in the past to the present', or 'indefinite past time'. or 'action just completed' might be counted.   This approach, it was thought, had the following disadvantages: (a) There is a great deal of confusion in saying that the present tense may be used to express the historical present for past events, or to describe past events in headlines as *President Kennedy Meets MacMillan.* (b)   There is just as much confusion in figuring out whether the verbs in such sentences as *The wall paints easily* and *The meat cooks quickly* are passive or active, if by active is meant that the subject is the doer of the action. (c) There is no way of telling whether *He reads French* is habitual or present fact or even potential. (d) The functions approach would have involved too much subjectivity and personal equation in the choice of which functions or uses the writer of the sources of materials had in mind, and this would have reduced the validity of the study. (2) The other possible approach was the *forms approach,* in which the structural forms of the modifications are to be tabulated, irrespective of functions intended. This approach is free from personal equation, subjectivity, and by its nature, it avoids the 'confusions' mentioned above. The tense-aspect modifications as such carry their own functions or semantic content.

In this connection, George says:

...Two kinds of attribution are involved, formal and notional. The validity of the formal attribution must be high, as only recognition is involved. The notional attribution must be of more doubtful validity, as personal judgments are involved and the language itself does not always recognize the compartments into which we try to accommodate it. (5:48)

Twaddell gives another reason:

...Much of the difficulty and confusion in des-

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cribing the signalling function of English verb
construction has arisen from attempts to assign a
meaning to the lack of one or more of the primary
modifications. Thus, it has been a common error
to assign some meaning like "present, non-past"
to a construction which lacks the past modifica-
tion, or a meaning like "active" to a construction
without *be* + participle. (14:3).

Therefore, the second approach, which involves the tab-
ulation of the forms of the modifications, was adopted in
this study.

      b. *Selection of sources from which to count modifi-
cation occurrences.* The frequency counts of Thorndike,
Thorndike and Lorge, the semantic count of the West, the
study of Stormzanad, and that of George, all of which were
cited at the beginning of this chapter, were based on a
variety of sources such as textbooks, encylopedias, novels,
dramas, and newspapers. Bonifacio used expository and
non-expository materials; (2) Olshtain drew her materials
from technical and non-technical writing (10).

The choice of sources is at best dependent upon the
purpose of the count. If the purpose of the count is to
make a comparison of the syntactical phenomena of tense-
aspect modifications in novels and plays, the materials
should be novels and plays. Similarly, if the purpose is to
make a comparison of such syntactical phenomena in tech-
nical and non-technical material, the sources of materials
should precisely be those.

The purpose of this study was to make a count of
the occurrences of the tense-aspect modifications in Eng-
lish. In the trial tabulation, it was noted that normally
the tenses or aspect of verbs seemed to be dependent upon
the nature of the articles. For instance, professional art-
icles of an expository nature were observed to nave been
written in the present tense, with variations of other
tenses or aspects as contexts demanded, and narrative ma-
terials showed a tendency towards the use of the past
tense, also with variations depending on contexts, which
required obligatory use of other tense-aspect modifica-
tions. Since the purpose of this study was to determine

the most commonly used English tense-aspect modifications, the only way to get a fair sampling was to include as wide a variety of sources as possible. Conversational materials were included in much greater number than any other single source so as to give spoken English good representation in the sample. The final sources included the following:

		No. of usages
I. Technical material		
A. Children's Encylopedia		1,000
B. Professional magazine (*Journal of Higher Education*)		1,000
C. Textbook in English, First Language (Roberts, *Understanding English*)		1,000
D. Textbook in English, Second Language (*Fries American English Series for the Study of English as a Second Language, Book VI*)		1,000
II. Non-technical material		
A. Newspaper (*Los Angeles Times*)		1,000
B. Popular magazine (*Life Magazine*)		1,000
C. Contemporary novel (Drieser, *Sister Carrie*)		1,000
D. Letters (business and friendly)		1,000
E. Sentences gathered from students		1,000
III. Recorded conversations, including TV programs of unrehearsed nature and radio interviews, actual conversation		3,000
	Total	12,000

c. *Selection of a description of English tense-aspect modifications.* There are a number of descriptions of verbs in English with reference to tense-aspect, as well as the modals and special modifications (14:7; 17; 11; 39; 25). Twaddell's classification (14) was chosen because of its trichotomy of (a) primary modifications, (b) secondary

modifications, and (c) special modifications. The presentation of these modifications is clear and concise, and this made for easy tabulation. Besides, it was necessary to use the same modifications which were used in the tabulation of errors in the use of tense-aspect modifications.

d. *Trial tabulation.* In order to make sure that no tense-aspect modification would be missed in the final data sheet, a trial tabulation of about 600 to 700 verb usages from all the samples was first made. Extra holes for any rare form that might have appeared in the corpus during the tabulation were provided on the data sheet. The trial forms were not included in the final tabulation of the data.

e. *Preparation of the final data sheets.* The data sheets were so prepared that it would be possible to indicate the (a) sentence patterns in which the modifications were found, (b) types of transformations in which the source strings get embedded into the resultant tranforms as clauses, and (c) type of tense-aspect modifications encountered.

(1) *Sentence patterns.* The basic sentence patterns used in the tabulation of errors in the students' compositions were also used in this phase of the investigation.

(2) *Two-string wh-transformations.* There are two-string transformations in English in which the source strings as embedded in the resulting transformations involve tense-aspect modifications because they are clauses. There are also others in which the sources are embedded in the resultant transforms without verbs. The following examples illustrate what is meant.

> Consumer: The boy is here.
> Source: The boy is good.
> Result: —» The *good* boy is here.
> Or
>   Consumer: The boy is here.
>   Source: The boy has a hat.
>   Result: —» The *boy with a hat* is here.
> On the other hand:

Consumer: The boy is here.
Source: The boy has a hat.
Result: —» The boy *who has a hat* is here.

Who has a hat is just one type of clause that is em-
bedded in the result. There are a number of transforma-
tions where the clause is introduced by *who, when, what,*
or *that,* all identified by the label *wh*-transformations, but
they are different from one another. The reason for classi-
fying these under different categories is explained in the
succeeding sub-sections.

(a) *Wh-1 transformation.* The following sentence
types were classified under this category because in all
of them a noun or pronoun in the source string is re-
placed by *who, that, which,* or *whom,* and because the
clauses occur in adjective positions.

1) Consumer: The man went home.
   Source: The man was sitting here.
   Result: —» The man who was sitting here
   went home.

2) Consumer: The remarks hurt my feelings.
   Source: The remarks came from her.
   Result: — The remarks which came from her
   hurt my feelings.

3) Consumer: The man is my cousin.
   Source: The man saw you.
   Result: —» The man who saw you is my
   cousin.

4) Consumer: The man bought the house.
   Source: The house was beautiful.
   Result: —» The man bought the house which
   was beautiful.

5) Consumer: The man is my cousin.
   Source: You saw the man.
   Result: —» The man (whom) you saw is my
   cousin.

(b) *Wh-2 transformation.* The following sentence types were classified under this category because the source strings become relative clauses and because they take noun positions. It is to be noted that they may be introduced either by *who, whose, whom,* and *which,* or by *what, whatever, whoever, whenever,* or *whomever,* but not by *that.*

1) Consumer: He is my friend.
   Source: He called you.
   Result: —» Whoever called you is my friend.
2) Consumer: The teacher gave him a prize.
   Source: He won it.
   Result: —» The teacher gave whoever won it a prize.
3) Consumer: I know it (something).
   Source: The boy said that remark.
   Result —» I know who said that remark.
4) Consumer: I remember it.
   Source: He wrote a letter.
   Result: —» I remember what he wrote.

(c) *Wh-3 transformation.* The following sentence types were classified under this category because the source strings become relative clauses and because they take noun positions. They differ from *Wh-2* transformations in that nothing is omitted.

1) Consumer: I know it (something).
   Source: The boy stole the money.
   Result: —» I know (that) the boy stole the money.
2) Consumer: The man answered it.
   Source: He was in Manila.
   Result: —» The man answered that he was in Manila.
3) Consumer: It (something) was true.
   Source: They won the game.
   Result: —» That they won the game was true.
4) Consumer: The trouble is (something)
   Source: He did not study.

> Result: —» The trouble is (that) he did not
> study.

The type of sentence below was classified under this category although it was analyzed to have undergone an additional transformation. (See example (3) above.)

> 5) Consumer: It (something) was true.
> Source: —» They won the game.
> Result: —» That they won the game was true.
> Result: —» It was true that they won the game.

(d) *Subordinatives.* The following sentence types were classified under this category because of the subordinating conjunction.

> 1) Peter stayed *because* John went.
> 2) I shall stay *if* you tell me to.
> 3) He went *where* there are many people.

But:

> 4) *He went to a place where there are many* people was classified under *wh-1* transformation.

(e) *Compound sentences.* In addition to the foregoing sentence types, compound sentences were classified under another group. There were regarded as derived from two sentences. Thus:

> 1) Consumer: The boy ran.
> Source: The girl walked.
> Result: —» The boy ran and the girl walked.

(f) *Sentences with two or more predicates.* Sentences with two or more predicates were classified under a different kind of transformation and therefore categorized under a different group. Thus:

> 1) Consumer: The boy ran.
> Source: The boy jumped.
> Result: —» The boy ran and jumped.

Gathering of corpus. Each successive sentence from the different sources was copied on 3 × 5 sheets of paper, with at least one verb on each sheet, although in some cases there were two or more. The copying went on until 1,000 sheets, which were numbered serially, were used.

1. *Sampling of corpus.* In the final tabulation of the data, every odd-numbered sheet was selected. If there happened to be two or more verbs on any given sheet, only the first one was used. In the conversational material, where response utterances were without verbs, the sheet was disregarded and the next odd-numbered one was selected. Verb substitutes were not included. For example:

(1) Did you go to the party last night?
      No, I didn't. (Yes, I did).

Didn't and *did* were regarded as substitutes for 'did not go' and 'went.'

2. *Increasing the goal to 6,000 primary modifications.* It was originally proposed to obtain 6,000 tense-aspect modifications for all three groups, primary, secondary, and special modifications. This was the number obtained as a result of a random sampling of the entire corpus of 12,000 sentences on the basis of one for every two. However, in order to achieve a more equitable representation of the nine sources of written materials used, the number of tense-aspect modifications was increased to 500 each. The number of tense-aspect modifications for the conversational materials was increased to 1,500. This yielded a grand total of 6,000 primary modifications. It was not necessary to copy more sentences from additional sources. All that was required was to go over the odd-numbered sheets in the corpus once more. The second verb in those sheets which had two or more verbs was tabulated. If this second verb was a secondary modification, it was added to the samples in Group II; if this second verb happened to be a special modification, it was added to the sample in Group III. This was done until the goal of 500 tense-aspect modifications for each of the nine sources was reached. The final sample came up to 7,403 tense-aspect modifications.

Explanation of the use of the data sheets. If a *V-ed* modification was found on a given odd-numbered sheet, Hole *B* on the left side of the data sheet was cut open to identify it. If this modification was used in a Pattern I type of sentence, Hole I, top row was cut open. If it happened to

be used in a dependent clause, the corresponding hole, bottom row, was cut open.

The same procedure was followed in the tabulation of the modals and the special modifications, except that another form was used. In the case of the modals, if a *can* + *V* was encountered, the hole beside *can* + *V* was cut open; but if a *can* + *be* + *V-en* was encountered, the hole beside *can* + *V* was cut open and, in addition, the item was checked to identify which form was encountered.

Presentation and discussion of findings.

1. *Total number of tense-aspect modifications by groups.* Table IV-A present the total number of tense-aspect modifications tabulated from the written and conversational materials.

TABLE IV-A

TOTAL NUMBER OF MODIFICATIONS BY GROUPS

Grp.	Written Material				Conversation		Grand Total	
	Tech-nical	Non-Tech	Total	%	No.	%	No.	%
I	2,000	2,500	4,500	75.00	1,500	25.00	6,000	81.20
II	269	263	892	83.60	175	16.40	1,067	14.30
III	124	122	246	73.00	90	27.00	336	4.50
	2,393	3,245	5,638		1,765		7,403	100.00

Analysis of the data in the table reveals that of the grand total of 7,403 tense-aspect modifications tabulated from the corpus, 6,000 or 81% were in Group I (Primary Modifications), 1,067 or 14.3% were in Group II (Secondary Modifications), and 336 or 4.5% were in Group III (Special Modifications). Of the 6,000 primary modifications, 4,500 or 75% were from written sources, which included both the technical and non-technical materials, and 1,500 or 25% were from the conversational materials. Of the 1,067 secondary modifications, 892 or 83.6% were from the written sources, and 175 or 16.4% were from the

conversational materials. Of the total of 336 special modifications, 246 or 73% were from the written sources, and 90 or 27% were from the conversational materials.

Further analysis of the data in the table reveals that there seems to be a tendency toward the use of modals in written materials, and that there is a tendency towards the use of more primary and special modifications in the conversational materials. The figures show this observation.

	Written Material	Conversational Material
Group I	80%	85%
Group II	16%	10%
Group III	4%	5%

a. *Primary modifications, Group I.* The findings on the distribution of the different tense-aspect modifications of the Primary Modifications Group are presented in Table IV-B.

Analysis of the data in the table reveals that of the 4,500 primary modifications tabulated from the written materials, 1,962 or 43.3% were *V-s*, and 1,649 or 36.6% were *V-ed*. These two modifications alone account for 80% of the entire number of primary modifications. The *V-ing* modifications account for 3.9% of the entire number of primary modifications, while the *V-en* modifications account for 15.8% of the entire number.

In the conversational material, there is a predominance of the number of *V-s* modifications. Of the 1,500 primary modifications tabulated, 937 or 61.8% were in this tense alone, and 316 or 20.8% were in the past tense. These two tenses together account for 82% of the total number of primary modifications. The *V-ing* modifications account for 6.4% of the total number of primary modifications, which is 2.6% more than the *V-ing* modifications in the written materials. Thus relatively there is a greater tendency towards the use of the *V-ing* modifications in conversation than in writing. The *V-en* modifications account for 9.77% of the total number of primary modifications in the conversational materials, which is 6.0% less

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TABLE IV-B

PRIMARY MODIFICATIONS

Primary Modifications	Written Material			Conversational Material			Total		
	No.	%	Rank	No.	%	Rank	No.	%	Rank
a V-s	1,962	43.36	1	937	61.84	1	2,899	48.41	1
b Ve-d	1,649	36.61	2	316	20.86	2	1,965	32.82	2
c pres-have + V-en	170	3.77	5	85	5.61	3	255	4.26	3
d past-have + V-en	88	1.95	7	8	.53	10	96	1.60	7
e pres-be + V-en	216	4.80	3	27	1.78	5	243	4.06	4
f past-be + V-en	186	4.30	4	18	1.19	6.5	204	3.41	5
g pres-be + V-ing	116	2.58	6	70	4.62	4	186	3.11	6
h past-be + V-ing	45	1.00	8	18	1.19	6.5	63	1.07	8
i pres-have + be-en + V-en	33	.73	9	10	.66	9	43	.72	9
j past-have + be-en + V-en	5	.11	12	0	0.00	12.5	5	.08	12
k pres-have + be-en + V-ing	14	.31	10	11	.73	8	25	.45	10
l past-have + be-en + V-ing	1	.02	14	0	0.00	12.5	1	.02	14
m pres-be + be-ing + V-en	13	.29	11	0	0.00	12.5	13	.22	11
n past-be + be-ing + V-en	2	.04	13	50	0.00	12.5	2	.04	13
Total	4,500	99.90		1.500	99.01		6,000	100.24	

Modifications *o* and *p* did not occur in the entire corpus; not included in the table.

than the *V-en* modifications in the written materials. It means that there is a greater tendency for the *V-en* modifications to be used in writing than in conversation.

   b. *Secondary modifications, Group II.* The findings on the distribution of the different tense-aspect modifications of the Secondary Modifications Group are presented in Table IV-C.

TABLE IV-C

SECONDARY MODIFICATIONS

Modal	Written Material			Conversational Material			T o t a l		
	No.	%	Rank	No.	%	Rank	No.	%	Rank
can	157	17.60	3	44	25.24	2	201	18.83	3
could	77	8.63	5	21	12.00	3	98	9.18	4
may	80	8.97	4	12	6.86	6	92	8.62	5
might	33	3.70	8	5	2.88	8	38	3.56	8
shall	15	1.68	9	0	0.00	9	15	1.41	9
should	57	6.39	6	15	8.59	5	72	6.72	6
will	232	26.00	1	51	29.34	1	283	26.62	1
would	190	21.30	2	17	9.74	4	307	19.40	2
must	51	5.72	7	10	5.72	7	61	5.72	7
Total	892	99.99		175	100.37		1,067	99.89	

Note: In cases of contracted modals, the following were followed:

   (a) What'*ll* I (we) do? = Classified under *shall*
   (b) What'*ll* you (she) do = Classified under *will*

   The above figures include the occurrences of the different complex combinations of the basic forms, like *can + be + V-en, shall + be + V-ing* or *must + have + V-en.* By basic forms are meant *can + V, shall + V,* or *must + V.*

   Analysis of the data in the table reveals that *will* has

the highest functional load, with *would* ranking 2, and *can*, ranking 3. Of the total of 1,067 occurrences of the modals, 283 or 26.4% were *will*. *Shall* is evidently low in functional load, with only 15 or 1.4% of the total occurrences. It is to be noted that it did not occur in the conversational material at all.

  c. *Special modifications, Group III.* The findings on the distribution of the different tense-aspect modifications of the Special Modifications Group are presented in Table IV-D. Analysis of the data in the table reveals that of the 15 different special modifications, (you) + *V, as Drive the car and Have fun* is the most productive. Modifications like *Please come in* and *Let's go* were included in this category. It was encountered in all the sources used, and it ranks 1 in the three different types of sources. Of the total of 336 special modifications, 137 or 40.8% were of this type.

  The second in rank is *pres-be + going to + V,* 'is/are am going to eat'. It was also encountered in all the sources, except in the encylopedia. It appeared 16 times in 500 samples gathered from the textbooks in a second language, and 21 times in the conversational materials.

  Ought to + V, dare to + V, and *need to + V* seem to have low functional load. Twaddell classifies these under a minor class and adds that:

> ...their former semantic functions are increasingly taken over by other modals or catenatives, either wholly or partly via suppletion. (14:10).

This probably explains why their functional load is low.

  Further analysis of the data in the table reveals the following regarding the status of *will +* V (Table IV-C) and *pres-be + going to + V.*

	Written Material	Conversational Material
will + V	26.0%	21.1%
pres-be + going to + V	21.5%	23.3%

Out of a total of 892 occurrences of the modal modifications in the written materials, *will +* V was used 232

TABLE IV-D
SPECIAL MODIFICATIONS

Modification	Written			Conversation			Total		
	No.	%	Rank	No.	%	Rank	No.	%	Rank
pres-be + to + V	15	6.10	4	0	0	12	15	4.46	1
past-be + to + V	5	2.03	8.5	0	0	12	5	1.48	11
pres-have (got) + be + V	30	12.20	3	19	21.11	3	49	14.58	3
past-have + to + V	8	3.25	6.5	4	4.45	4	12	3.57	5
pres-be + going to + V	53	21.55	2	21	23.34	2	74	22.02	2
past-be + going to + V	1	.41	13.5	0	0	12	1	.29	14.5
V-s (Future)	5	2.03	8.5	1	1.11	8	6	1.78	9
pres-dó + V	10	4.07	5	1	1.11	8	11	3.27	6
past-dó + V	8	3.25	6.5	1	1.11	8	9	2.67	7
(You) + V	98	39.66	1	39	43.33	1	137	40.77	1
aux-have + NP + V-en	1	.41	13.5	0	0	12	1	.29	14.5
used to + V	4	1.63	10.5	2	22.2	5.5	6	1.78	9
need to + V	4	1.53	10.5	2	22.2	5.5	6	1.78	9
dare to + V	2	.82	12.5	0	0	22	2	.59	12.5
ought to + V	2	.82	12.5	0	0	12	2	.29	12.5
Total	246	99.86		90	99.81		336	99.92	

times, or approximately 26.0%. Out of a total of 246 occurrences of the special modifications *pres-be* + *going to* + *V* was used 53 times or 21.5%. This yields a difference of 4.5% in favor of *will* + *V*. It might be suspected that in writing *will* + *V* has ascendency over *pres-be* + *going to* + *V*. This is not warranted in these figures because this difference is not statistically significant. If the CR (critical ratio) is used as a test of the significance of two uncorrelated percentage difference, the obtained CR is only .713. To be significant at the 5% level, a CR of 1.96 is necessary.

2. *The most common patterns in which the modifications were found.* In second-language teaching, the basic units of instruction are normally sentence patterns. Substitutions, expansions, conversions, replacement and/or transformations are standard procedures.

Table IV-E shows the most common basic sentence patterns in which the three groups of modifications were found. Analysis of the data in the table reveals that of the 6,000 occurrences of the primary modifications tabulated from both the written and conversational materials, 2,681 or 44.6% were found in sentences or clauses of Pattern IV type (NP + VPt + NPa). Pattern IV also ranks 1 in the secondary modifications as well as in the special modifications group. Pattern I (NP + VPi + Adv) was found to be the next in rank. Further analysis of the data in the table reveals that 25% of the grand total of 7,403 modifications occurred in Pattern VII (NP + *be* + Adv), Pattern VIII (NP + *be* + Adj), and Pattern IX (NP + *be* + NP). This fact is significant because these patterns involve the verb *be*, which is a potential source of error on the part of the Hiligaynon speaker.

3. *The most common two-string transformations where the modifications were found.* Table IV-F presents the findings regarding the most common clauses in which the modifications were found. Analysis of the data in the table reveals that of the total of 1,663 primary modifications which occurred in two-string trans-

TABLE IV-E

DISTRIBUTION OF MODIFICATIONS BY PATTERNS

Pat-tern	Primary Modification		Secondary Modification		Special Modification		Total Grand		R₁	R₂	R₃	R₄
	No.	%	No.	%	No.	%	No.	%	R₁	R₂	R₃	R₄
I	1,144	19.10	205	19.21	129	38.44	1,478	19.95	2	2	2	2
II	63	1.05	11	1.03	1	.30	75	1.01	9	9	8.5	8
III	41	.68	13	1.22	1	.30	75	.74	8	8	8.5	9
IV	2,681	44.65	572	53.60	142	42.31	3,395	45.83	1	1	1	1
V	108	1.79	43	3.93	19	5.66	170	2.30	7	7	3	7
VI	223	3.73	47	4.31	15	4.47	285	3.85	6	5	4	6
VII	397	6.63	44	4.01	8	2.38	449	6.06	5	6	7	5
VIII	592	9.89	77	7.22	10	2.98	679	9.17	4	3	6	4
IX	571	12.54	55	5.16	11	3.28	817	11.03	3	4	5	3
Total	6,000	100.05	1,067	99.69	336	100.42	7,403	99.94				

formations, 533 of 32% were of Type 28, which is tra-ditionally described as the adverbial clause in a complex sentence illustrated in, "*If he goes to New York*, I'll stay in Los Angeles" or in "I stayed *because he left*." Second in rank is Type 15, an example of which is the *who*-clause in adjective position, as in "I know the boy *who borrowed your car*." The clause which occurs in included position as in "I know *that he borrowed your car*" ranks third.

In the case of the secondary modifications, Type 28 also ranks first. Of the total of 302 modal modifications which occurred in the type of clause described, 80 or 26.4% were of Type 28, and 78 or 25.83% were of Type 25. Type 41 ranks last.

Column 3 of the table shows the distribution of the environments of the special modifications group. Type 28 and Type 15 rank 1 and 2 respectively as in the case of the primary and secondary modifications group.

Considering the three groups as a whole, of the grand total of 2,003 modifications which occurred in these six types of clauses, 628 or 31.3% belonged to Type 28, 409

Table IV-F

ENVIRONMENTS OF MODIFICATIONS BY GROUPS

Type	Group I			Group II			Group III			Total		
	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank
23	69	4.15	6	12	39.7	5	2	5.25	5.5	83	4.15	6
25	306	18.39	3	78	25.82	2	10	26.30	2	394	19.67	3
15	359	21.89	2	64	21.19	3	6	15.78	3	409	20.42	2
28	533	32.03	1	80	26.48	1	15	39.45	1	628	31.35	11
30	238	14.31	4	58	19.20	4	3	7.89	4	299	14.93	4
14	158	9.50	5	10	3.31	6	2	5.26	5.5	170	8.49	5
Total	1,663	99.60		302	99.66		38	99.94		2,003	99.01	

23 = *Whoever said that was telling a lie.* (Nominalized VP in subject position)
25 = I know *that he went home.* (Nominalized VP in direct object position)
51 = The boy *who came here is my nephew.* (Adjectivalized VP in adjective position)
28 = *If they stay, I'll go.* (Subordinate clause, traditionally called adverbial clause)
30 = The boy played, *but his sister went to bed.* (Compound sentence, source string)
14 = The boy *sang and danced.* (Compound predicate)

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or 20.4% belonged to Type 15, and 394 or 19.6% belonged to Type 25. Only 83 or 4.1% belonged to Type 23 which is the least common environment in the whole group.

Summary and conclusions. In this paper, the functional load of the different tense-aspect modifications in English was determined by tabulating their frequency of occurrence in written and conversational sources. The most common sentence patterns and the most common environments or types of clauses in which these modifications occurred were also determined. The analysis of the data gathered permit the following conclusions:

(1) *V-s* and *V-ed* are the most highly productive primary modifications.

(2) **W***ill-would* and *can-could* are the most highly productive secondary modifications.

(3) (*You*) + *V* and *aux-be* + *going to* + *V* are the most highly productive special modifications.

(4) There is a greater tendency of the *V-ing* modifications than the *V-en* modifications to be used in conversation, but the reverse is true in the case of the written materials.

(5) Patterns IV and I are the most common patterns in which the modifications occurred, and Patterns II and III are the least common.

(6) Environment Type 28, the adverbial subordinate clause, and Type 15, the *who-clause* used as an adjective, are the most common environments in which the modifications occurred.

Implications for teaching English. The values of the findings in this study for the teaching of English are summarized as follows:

(1) The findings point out to teachers which tense-aspect modifications should be taught early because of their social usefulness.

(2) The findings point out what useful types of sen-

tence patterns and sentence expansions should be taught and mastered because of their social utility.

(3) Textbook writers can make use of the findings for purposes of selecting the most common and most useful tense-aspect modifications, sentence patterns, and sentence expansions.

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