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Patterns of Lexis in the Writing of Japanese EFL Students: A Comparative Study

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Introduction

In the teaching of composition to EFL students, the study of vocabulary use generally receives less attention than matters of organization and structure, and related issues of grammar and style. It is, of course, necessary for inexperienced writers to study and attain some mastery in these areas, but the appropriate and effective use of words is also an essential part of good writing. While the role of lexis in writing has not usually been emphasized, neither has it been entirely neglected. In the past few years there have been several insightful studies dealing the various aspects of lexis and its place in the teaching of English as a second or foreign language.

One volume which gives a good overview of past and present trends in vocabulary teaching is Carter and McCarthy (1988), which also suggests some directions for the future. Many of these new directions derive from ongoing research in the area of corpus linguistics (Biber, Conrad and Reppen 1994), and they stress the value of research on collocational patterns in naturally-occurring spoken and written discourse for developing teaching materials and planning syllabi. Farghal and Obiedat (1995) explore the implications of collocations for EFL, and in a similar vein, Nattinger and DeCarrico (1992) point to the

importance for learners of prefabricated “chunks” of language which they term, “lexical phrases”. Basing their work on a broad corpora of spoken and written discourse, they demonstrate the role and functions of the lexical phrase in language and how it can be used as a basis for EFL teaching and learning. Nation (1990) provides a thorough discussion of the issues involved in vocabulary learning and considers the relation between vocabulary study and each of the four skill areas. Similarly, Lewis (1993) presents a lexically-focussed approach as a new direction for English language teaching.

This paper is concerned with describing EFL students’, specifically Japanese EFL students’, use of vocabulary in writing. As a starting point for describing students’ use of vocabulary, I have undertaken a comparative study of lexical use in compositions written by Japanese university EFL students and compositions by American university students. The general purpose has been to identify differences in the frequency or patterns of usage of lexical items. More specifically, I have been concerned with the following questions: (1) One basic assumption is that Japanese EFL intermediate level students use more basic vocabulary than native speaker writers. Is this

really the case, and if so, to what extent? (2) Japanese EFL writers are known to have trouble using articles, prepositions and other function words. In terms of frequency of usage what differences can be found? (3) Some words are commonly used to show the organization of a text. How do the frequency and use of these words compare between the Japanese and American student writers?

Data and Methodology

To investigate these questions, I collected a set of compositions written by Japanese EFL students as assignments in their composition class and another set of compositions written by American students as assignments in their composition class. Originally, it seemed best to compare the Japanese students' writing with American students' writing, rather than with the writing of professional writers, such as journalists, authors or researchers, but I later decided that besides comparing inexperienced writers' writing, it might also be useful to compare the writing of the two groups with published materials that were similar in terms of genre. For this purpose, I used texts from the LOB (Lancaster, Oslo/Bergen) corpus of written British English.

The texts by Japanese writers were written by students in composition classes at two universities. All of the writers were either third or fourth year English major students, and as such they had all studied English for at least 6 years in junior high and high school, and two or three years in college. For these essays students wrote on general topics, usually social issues or problems such as credit card misuse, the homeless, divorce, the spread of vending machines and so on.

The texts by American students were written by students in a freshman composition course at the University of California at Davis. Topics varied. Some essays were about people

whom the writers knew or had interviewed, others dealt with leisure-related topics such as favorite restaurants, water skiing, skateboarding, and so forth. Thus, topic-wise there was not a perfect match between the two sets of texts, but the difference was not as great as one might expect, for in both sets of texts, writers frequently wrote about their own experiences in the course of developing their points.

The third set of texts came from the tagged LOB Corpus, which is available on CD. The LOB Corpus consists of 15 categories of written texts and over one million words, but only texts from the category of *Belles lettres*, biography, and essays were used for this study. This was the category which I judged to be closest to the students' essays in terms of topic and style. These texts consisted of excerpts from novels, essays, biographies and the like.

The set of texts by Japanese EFL students (the "J" texts) consisted of 29 compositions, with an average length of 702 words. Altogether there were 20,362 words in these texts. The set of texts by American students (the "A" texts) consisted of 18 compositions, with an average length of 1,174 words. Altogether there were 21,127 words in these texts. There were 77 text samples in the *Belles lettres*, biography, and essays category of the LOB Corpus (the "E" texts), and each text sample was slightly over 2,000 words in length. These comprised 155,903 words.

The analysis of the texts involved several steps. First, the compositions were collected and stored in machine-readable form. In most cases this involved retyping the texts and saving them on floppy disks, though for some texts a scanner was used which made retyping unnecessary. The retyped or scanned texts were then compared with the originals to ensure that there no typing errors or differences between the original and the copied version. Two concordance programs were used for

processing the texts: Microconcord, a program developed by Mike Scott and Tim Johns that is available through Oxford University Press, and VocabProfile, a concordance program developed by Paul Nation. (Nation makes this program available, free of charge, to researchers who wish to use it for research purposes (see Laufer and Nation 1995).)

Besides providing frequency counts of individual lexical items, the VocabProfile program enables us to compare the use of basic vocabulary in different texts or sets of texts. The VocabProfile program contains three word lists. The first is a list of the 1,000 most frequently occurring words in English, and the second is a list of the next 1,000 most frequently occurring words. The third list includes 1,000 words not included in the first two lists, but that are frequent in upper secondary school and university texts from a wide range of subjects. The source of the first two lists was A General Service List of English Words by Michael West (1953), and the source of the third list was "The University Word List" by Xue and Nation (reproduced in I.S.P. Nation (1990)). Each of the word lists in the VocabProfile program contains word forms grouped into word families under a headword. For example, the headword AID has the following family members: AIDED, AIDING, AIDS and UNAIDED. Thus, the first 1,000 words consists of around 2,800 forms, including the headwords and the derived forms. The VocabProfile program counts the total number of words, i.e. tokens, and the number of different words, i.e. types, that occur in a text or set of texts. The program calculates the frequency of tokens and types from each of the three word lists, and also the frequency of

tokens and types of words that are not on any of the three lists. The results are shown as frequency counts and are converted into percentages to show the relative frequency of tokens and types from each of the three lists and of tokens and types not on the lists.

Computational analysis of the texts using Microconcord and VocabProfile provided basic data on the frequency of occurrence of the lexical items in the texts. From this initial analysis differences in the frequencies for lexical items or classes of related lexical items could be identified, and further, closer analysis could be undertaken.

Results

Comparison of some individual lexical items and groups of functionally similar lexical items in the three sets of texts revealed some large and interesting differences, but it is equally interesting to note the large number of cases in which the frequencies of lexical items in the Japanese and native English writers' texts were very close.

Basic words

Of the tokens in the J texts, 81.3% were tokens of words on the first list, as compared to 76.7% of the tokens in the A texts, and 76.9% of those in the E texts. This indicates that the Japanese students were using forms of basic words about 4.7% more frequently on average than the American student writers, and 4.4% more frequently than the experienced writers. Conversely, the A writers and the E writers made greater use of words that are not on any of the three lists, as the percentages in Table 1 indicate.

Table 1. Percentages of Tokens from Word Lists 1, 2 and 3

	J	A	E
Word List 1	81.3	76.7	76.9
Word List 2	6.7	7.0	5.5
Word List 3	4.4	4.3	4.7
Not in 1,2,3	7.6	11.9	12.9

One kind of “basic words” are the delexical verbs, such as *give* and *make*. Sinclair and Renouf (1988) describe these as common transitive verbs that carry particular nouns or adjectives, and which contribute to familiar

idiomatic phrases. (1988: 153). Comparing the combined occurrence of four of these, *get*, *give*, *make* and *take*, we find that the frequency of occurrence is close between the J and A texts, but that they occur less frequently in the E texts.

Table 2. Four delexical verbs (occurrences per 1,000 words)

	J	A	E
get, give, make, take	9.9	8.3	5.9

Although the difference between the Japanese student and American student writers was not large, there may be differences between the two sets of texts regarding the words or types of words that the four delexical verbs collocate with. For instance, it might be the case that the American student writers use these verbs more frequently in idioms or in two-word verbs than the Japanese students do. This is a point which could be pursued with a larger corpus in which there are more tokens of the delexical verbs.

One category of words which are less “basic” are nominalizations, that is nouns composed of a base and nominal suffix, such as *-tion* or *-ment*. Biber (1988: 227) notes that nominalizations are associated with conceptual abstractness. For this reason, one would predict that they would be less frequent in the J texts, and indeed, this is the case. The figures below indicate the occurrence of words ending in *-tion*, *-ment*, *-ness*, or *-ity* (plus their plural forms.

Table 3. Nominalizations (occurrences per 1,000 words)

	J	A	E
nominalizations	20.7	17.5	26.4

Articles

The most striking frequency difference was in the use of articles. Comparing the frequency of the definite article, *the*, per 1,000 words of text, we find that it occurred 38.2 times in the J texts, 63.7 times in the A texts and

67.1 times in the E texts. Similarly, the indefinite article occurred 17.1 times per 1,000 words in the J texts, compared with frequencies of 32.1 and 26.6 for the A and E texts, respectively. These figures indicate that there is a substantial difference in article usage between

the Japanese EFL writers on the one hand and the American student writers and experienced writers on the other. It is not surprising to find

that there is a difference, but these figures give us a sense of the magnitude of the difference.

Table 4. Articles (occurrences per 1,000 words of text)

	J	A	E
definite article	38.2	63.7	67.1
indefinite article	17.1	32.1	26.6

Modals

Another area in which different frequency patterns were apparent is that of modal use. There was some variation in the

overall frequency of modal use with modals occurring 19.3 times per 1,000 words in the J texts, compared to 15.8 for the A texts and 12.2 for the E texts.

Table 5. Modals (occurrences per 1,000 words)

	J	A	E
combined	19.3	15.8	12.2
necessity	5.0	2.7	2.4
possibility	10.5	6.3	5.6
prediction	3.9	6.7	4.2

The J texts exhibited greater use of modals, and the frequency differences become marked when we compare different types of modals. For example, modals of necessity (i.e. *should*, *must*, *ought* + their negative forms) occurred with an average frequency of 5.0 per 1,000 words in the J texts, 2.7 in the A texts, and 2.4 in the E texts. Thus, the frequency of use was twice as high for the Japanese student writers as it is for the experienced writers. Similarly, for modals of possibility (i.e. *can*, *may*, *could*, *might*, + their negative forms), the frequency figures were 10.5, 6.3 and 5.6 for the J, A, and E writers, respectively. According to these figures, the Japanese students were using modals of possibility more frequently in their writing, compared to writers in the other two groups. Some individual items showed greater variation. For example, *can*, *cannot* and *can't* occurred 8.0 times per 1,000 words in the J

texts, as compared to 3.7 and 1.9 times in the A and E texts. Comparing the Japanese writers with the experienced writers, the Japanese writers used *can*, *cannot* and *can't* four times more frequently. Why should this be the case?

Closer analysis of the Japanese students' use of *can* revealed some cases of misuse.

(1) *(discussing school bullying)*

The discontent that *can* contradict his parents exploded in school.

(2) *(discussing school education)*

I believe that they *can* be able to find by themselves what they want to study by experiencing many things.

(3) *(discussing women's roles)*

Most women *can't* get a high salary. So they *can't* their family.

(4) (*discussing spending habits*)

...my parents says that she has been brought up spoilt, always being given everything she had wanted. Probably she is under the impression that helps (money in this case) *can* gush out like a spring.

These examples represent different kinds of usage errors. Such instances of clear misuse are relatively infrequent, but there are many instances in which a native speaker might have preferred to use another construction or word, as in (5), (6) and (7):

(5) (*discussing Japan's declining birthrate*)

But we must not forget that our society depends on young women. They *can* bear the children on which the nation's future depends.

(6) (*discussing drinking*)

For a member of society, it is useful that they *can* drink, so I think it is a good

thing to accustom to drink alcohol when we are child.

(7) (*on the use of machines*)

After the Second World War, the industry has developed and the machines have worked in place of us. As a result of that, we *can* have a lot of leisure time and enjoy all kinds of pastimes.

A native speaker would be likely to use *will* in place of *can* in (5), and might use a construction with *to be able* to in (6), and would probably omit *can* altogether in (7).

Pronouns

As for the use of personal pronouns, there was more overall pronoun usage by the J writers: 75.1 occurrences per 1,000 words compared to 63.8 for A writers and 52.3 for the E writers.

Table 6. Personal pronouns (occurrences per 1,000 words)

	J	A	E
overall	73.7	63.8	52.3
1st person	35.4	14.2	19.0
2nd person	1.3	26.0	1.1
3rd person	37.0	23.6	32.2

There was a rather large difference in overall pronoun use, particularly between the J writers and the E writers. The difference was much more marked in the case of 1st and 2nd person pronouns. Whereas 1st person pronouns (*I, me, we, us, my, our, myself, ourselves*) occurred at a frequency of 35.4 times per 1,000 words in the J texts, their frequency was only 14.2 in the A texts and 19.0 in the E texts. Conversely, 2nd person pronouns (*you, your, yourself,*

yourselves) occurred only 1.3 times per 1,000 words in the J texts, but 26.0 times per 1,000 words in the A texts! The figure for the E texts, 1.1, was close to that for the J writers. To what can such variation be attributed?

In the case of the second person pronouns, the variation seems attributable in part to the topic differences. Some of the American students' essays contained general descriptions of how to do something, for

example how to spend a pleasurable weekend or how to make a castor oil pad for healing sore muscles. In this type of writing the American students tended to put themselves in the place of the reader, that is trying to view and describe the process from the reader's point of view. The essays of this kind had very high frequencies of 2nd person pronouns. On the other hand, the Japanese students did not tend to take the reader's viewpoint, and the low figure for 2nd person pronouns reflects this. In the Japanese students' texts the writer's voice was much more visible and one reflex of this was the much higher frequency of first person subject singular pronoun form (*I*) in these texts: 16.6 occurrences per 1,000 words in the J texts, as compared to 7.4 and 7.9 in the A and E texts.

Conjuncts

Quirk et.al. (1985) describe conjuncts as adverbials that reflect a speaker (or writer's)

assessment of the connection between two linguistic units, which can be clauses, sentences, paragraphs, or even larger units of a text. (1985: 631-632) They identify seven general types of conjunctive roles: listing (e.g. *first, second, similarly, in addition*), summative (e.g. *therefore, in conclusion*), appositional (e.g. *namely, for example*), resultive (e.g. *consequently, therefore*), inferential (e.g. *otherwise*), contrastive (e.g. *instead, anyhow, besides*) and transitional (e.g. *by the way, meanwhile*). EFL composition textbooks usually stress the importance of using such markers to make explicit the connections between units in a text.

For this study, the frequencies of 79 common conjuncts were counted. This count showed that in terms of frequency per 1,000 words, the J writers were using conjuncts more than either the A writers or the E writers.

Table 7. Conjuncts (occurrences per 1,000 words)

	J	A	E
79 common conjuncts	14.5	11.6	9.7

There is no obvious explanation for why the J writers used more conjuncts, but some cases Japanese students overuse conjuncts in their writing, starting almost every sentence with one. This could be one factor related to this frequency difference.

Negative forms

In the use of negative forms there is a marked contrast between the Japanese student writers and the other two groups as is apparent from the figures in the table below.

Table 8. Negative forms (occurrences per 1,000 words)

	J	A	E
combined	21.3	14.5	15.7
not, n't	15.7	9.5	6.6
no	1.8	1.4	2.6
neg. prefixes	2.9	2.9	4.7
neg. pron. & adv.	0.9	0.9	1.8

The Japanese writers used a higher frequency of negative forms overall: 21.3 negative forms per 1,000 words versus 14.5 and 15.7 for the American students and the experienced writers, respectively. In addition to this higher overall frequency, there was also a difference in the way negation was expressed by the Japanese writers.

Negation can be expressed in various ways in English. The two principal ways are verb negation through the use of *not* or its contracted variant, *n't*, and negation of elements using *no*. Negation may also be expressed through the use of forms with a negative prefix (e.g. *non-*, *un-*, *dis-*), through negative pronouns (e.g. *neither*, *none*, *nothing*) and through adverbs such as *rarely*, *scarcely* and *seldom*, which have a negative sense though they do not have a negative form.

For all three groups of writers the most frequent type of negation was verb negation using *not* or *n't*. But verb negation was used much more frequently by the Japanese writers than by the American student writers as indicated by the figures above. For the Japanese writers, verb negation accounted for 74% of all uses of negative forms, but 64% for American students and 42% for experienced writers. In some sentences there is a difference of meaning if *no* negation is used rather than *not* negation. However, in a study of negation in a large corpus, Tottie (1991: 319) found that the proportion of such sentences was very small.

The prevalence of *not* negation (verb negation) in this study is contrary to Tottie's findings from her study of negation in the entire LOB corpus. She reported 37% of *not* negation and 63% of *no* negation. On the other hand, in the London-Lund Corpus of spoken English the proportion of *not* negation to *no* negation was almost exactly reversed: 66% of *not* negation and 34% of *no* negation. (Tottie 1991: 321) Thus, the variation between *not* negation and *no*

negation is related to the mode: spoken or written. The more frequent use of *not* negation by the J and A writers may reflect a lack of familiarity by inexperienced writers of the different characteristics of written and spoken language. Further analysis is needed to account for this variation.

Other comparisons

In the case of prepositions, the frequency of use was generally similar in the three sets of texts. To determine frequency of preposition use I counted the use of 26 prepositions that do not have major functions as other parts of speech. Overall frequencies per 1,000 words were 119.2 for the J writers, 113.4 for the A writers and 137.5 for the E writers. As for individual prepositions, many did not occur enough in these texts to make a comparison, but among the prepositions with relatively high frequency of occurrence, there did not seem to be any great differences.

This finding was contrary to what I had hypothesized. Since Japanese students often make errors in their use of prepositions, I had expected that there would be differences in the overall frequency of preposition use, and in the frequency of some individual prepositions. Of course, the fact that the Japanese writers are close to the American student writers in terms of frequency of preposition use does not necessarily mean that they were always using prepositions correctly and appropriately.

The frequencies of several other groups of words were compared, including: public verbs, private verbs, suasive verbs, denominal nouns, indefinite pronouns, impersonal *it*, downtoners, amplifiers, emphatics, hedges and items associated with the expressions of cause or effect. Although the overall frequency of items from these groups didn't vary much, there was considerable variation in the occurrence of some individual lexical items. For example, in

the category of public verbs, that is, factual verbs that consist of speech act verbs introducing direct statements, there was much more lexical diversity among the A writers and E writers than among the J writers. The word, say, accounted for 62% (69 of 112) of the occurrences of the public verbs in the J texts, as compared to 40% and 28% of the public verbs in the A and E texts, respectively.

Another such example from the category of emphatics are the items, *a lot* and *just*. *A lot* accounted for 29.5% (39/132) of the usages of emphatics by J writers, but only 0.7% (1/147) of the emphatics used by the A writers. Conversely, *just* accounted for 28.6% (42/147) of the usages of emphatics by A writers, but

only 5.3% (7/132) of the emphatics used by J writers. But in spite of these rather large differences in the use of individual lexical items, there was not much difference in the overall frequency in the use of emphatics between the two groups. In terms of frequency per 1,000 words, the figures were 6.6 for the J writers and 7.1 for the A writers. These figures were somewhat higher than that for the E writers, which was 4.4. From examples like these we can see that there can be differences in the lexical means by which J and A writers express functions, in this case, emphasizing, while the overall frequency of words which fulfill this function is quite similar.

Table 8. Other lexical categories (occurrences per 1,000 words)

	J	A	E
public verbs	5.4	4.1	5.3
private verbs	14.1	12.7	12.4
suasive verbs	1.8	1.4	2.4
denominal nouns	1.4	2.6	2.2
indef. pronouns	2.0	1.5	2.1
impersonal <i>it</i>	14.5	9.6	10.0
downtoners	3.1	2.8	3.1
amplifiers	3.4	1.8	2.3
emphatics	7.0	7.2	4.6
hedges	0.6	0.9	0.8
cause/effect	8.9	5.0	2.4

Conclusion

Returning to the original questions, the first question concerned the relative use of basic vocabulary by Japanese student writers as compared to American student writers and experienced writers. The comparison of frequencies for basic words indicated that the Japanese students made greater use of basic vocabulary than the other two groups of writers. This was shown in the figures for the frequencies of tokens from Word List 1, but

there were also many instances in which the frequencies for a particular category of lexical items were similar for the three groups, while within the category there was variation in the use of individual items. In these cases it often happened that the Japanese writers were using one or two basic terms frequently while the writers from the other groups used several different lexical items to perform the same or similar functions. One important implication from this is that Japanese students need to

develop and learn to use a more diverse lexicon in their writing if they are to attain native-like fluency.

Regarding the differences in the frequency of function words, large differences were found in the use of articles, prepositions and modals. The most striking difference was in the frequency of definite and indefinite articles. They were used much less by the Japanese writers compared to writers from the other two groups. There were also differences in the frequencies of categories of modals and of personal pronouns, and within the categories there was considerable variation in frequency for some individual lexical items.

The third question concerned the use of organizational markers. I looked at three kinds of organizational markers: those used to express chronological ordering, those used to show cause/effect relationships and conjuncts, a more general category that includes some items from the other two categories. The frequency figures for markers of chronological ordering were quite similar for the three kinds of texts, but words expressing cause and effect relationships were used more frequently by the Japanese writers than by the other writers. Conjuncts were also used with somewhat more frequency by the Japanese writers as compared to writers from the other two groups.

Comparing the frequency of classes of lexical items, there were substantial differences between the Japanese writers and the writers of the other two groups in the use of articles, modals and some pronouns. There may be other such differences, but it is difficult to draw any conclusions about items that occur only a few times in the corpora. It would be useful to investigate these items further in a larger corpus

to see if differences in frequency patterns could be observed. In this connection, one limitation of this study should be noted. The corpora of students' texts were each slightly over 20,000 words in length. This is very small compared to recently developed standard corpora--the Bank of English contains more than 300 million words at present. By analyzing 20,000 word corpora one can get a fairly good idea of the use of frequently occurring items, but for infrequent items, often there aren't enough instances of occurrence to be able to determine with certainty whether or not there are differences in the patterns of occurrence.

One question related to this study is how much the lexical patterns described here are similar to or different from those in texts produced by learners from other language backgrounds. Corpora of many non-native varieties of English including corpora of learners' English are currently under development. In particular, Longman publishers are compiling a corpus made up of various varieties of learners' texts. (Crowdy 1992) In the near future it should be possible to compare the texts of Japanese EFL learners with those of other learners to see how much similarity there is in the lexical patterns of learners from different language backgrounds.

This paper has been primarily concerned with identifying patterns of lexical use at a rather general level, but there are no doubt other interesting patterns of lexical variation in the use of individual words which may be illuminated by closer analysis of the collocational patterns in which they occur. The frequency differences reported in this study may point to some starting places for such analyses.

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Appendix

Lexical items used for frequency counts in this study. Where appropriate, all forms of each item were counted (plural forms, contracted forms, negative forms, past forms, progressive forms, participle forms). Occurrences of forms with more than one major function were hand-edited.

1. Delexical verbs

get, give, have, take (+past, progressive & 3rd person forms)

2. Nominalizations

forms ending with *-tion, -ment, -ness, -ity* (+plural forms)

3. Articles

definite: *the*

indefinite: *a, an*

4. Modals

possibility: *can, may* (+past forms & neg. contractions)

prediction: *shall, will* (+past, contracted & neg. contracted forms)

necessity: *must, ought, should* (+neg. contractions)

5. Personal pronouns

1st person: *I, me, my, mine, myself* (+plural, object & contracted forms)

2nd person: *you, your, yourself* (+plural & contracted forms)

6. Conjuncts

first(ly), second(ly), third(ly), for one thing, on (the) one hand, to begin with, to start with, then, to conclude, finally, last(ly), correspondingly, likewise, similarly, in the same way, by the same token, also, furthermore, moreover, in particular, what is more, in addition, above all, altogether, overall, therefore, thus, in all, in conclusion, in sum, to summarize, accordingly, consequently, hence, as a consequence, in consequence, as a result, namely, in other words, for example, e.g.(eg), for instance, that is to say, specifically, otherwise, in that case, more accurately, more precisely, alternatively, on the other hand, conversely, instead, on the contrary, in contrast, by contrast, in comparison, anyhow, anyway, besides, however, nevertheless, nonetheless, notwithstanding, though, in any case, in any event, at all events, in spite of, after all, at the same time, all the same, admittedly, incidentally, by the way, meantime, meanwhile, originally, subsequently, eventually

7. Negative forms

no, not(n't)

negative prefixes: *un-, dis-, non-, in-, im-, a-, an-, il-, ir*

negative pronouns and adverbs: *neither, none, nothing, nobody, nowhere, never, seldom, rarely, scarcely, hardly, barely*

8. Prepositions

against, among, at, besides, between, by, despite, during, for, from, in, into, minus, of, on, onto, plus, through, throughout, to, toward, towards, upon, with, within, without

9. Public verbs (verbs associated with actions that are observable, esp. speech act verbs)

acknowledge, admit, agree, assert, claim, complain, declare, deny, explain, hint, insist, mention, proclaim, promise, protest, remark, reply, report, say, suggest, swear, write

10. Private verbs (verbs associated with unobservable actions, esp. intellectual states)

anticipate, assume, believe, conclude, decide, demonstrate, determine, discover, doubt, estimate, fear, find, forget, guess, hear, hope, imagine, imply, indicate, infer, know, learn, mean, notice, prove, realize, recognize, remember, reveal, see, show, suppose, think, understand

11. Suasive verbs (verbs associated with intentions to change something)

agree, arrange, ask, beg, command, decide, demand, insist, instruct, pronounce, propose, recommend, request, suggest, urge

12. Denominal nouns

nouns ending with *-age, -dom, -hood, -ism, -ocracy, -ship*

13. Indefinite pronouns

anybody, anyone, anything, everybody, everyone, everything, nobody, none, nothing, nowhere, somebody, someone, something

14. Downtoners (modifiers which reduce or soften)

almost, barely, hardly, merely, mildly, nearly, only, partially, partly, practically, scarcely, slightly, somewhat

15. Amplifiers (modifiers which boost the force of the verb)

absolutely, altogether, completely, enormously, entirely, extremely, fully, greatly, highly, intensely, perfectly, strongly, thoroughly, totally, utterly, very

16. Emphatics (modifiers which express certainty)

for sure, a lot, such a(n), just, really, most, more, real

17. Hedges (expressions indicating uncertainty)

at about, something like, more or less, almost, maybe, sort of

18. Expressions associated with causes or effects

accordingly, as a result, because, consequently, due to, for this reason, for these reasons, hence, owing to, since, so, therefore, thus