

Original Paper

## Discourse Analysis: Differences in Degree of Probability and Certainty among Four Adverbs—*Maybe*, *Probably*, *Perhaps* and *Possibly*

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### Abstract

This paper focuses on the different degrees of probability and certainty among four adverbs—*maybe*, *probably*, *perhaps*, and *possibly*—as a study in the field of discourse analysis. Data for the analysis is based on the results of questionnaires which were obtained by the author at Central Washington University, Washington, USA. The results of this research reveal how these four adverbs are used in real communication among American—native English speakers.

### Introduction

It is difficult to define exactly what discourse analysis is, because various disciplines are interwoven in this study, including linguistics, sociology, psychology, and anthropology. Michael McCarthy (1991) defined discourse analysis as the study concerned with the relationship between language and the contexts in which it is used<sup>1)</sup>. Evelyn Hatch (1992) said that “discourse analysis is the study of the language of communication …spoken or written”<sup>2)</sup>. Considering these definitions and the study of other researchers such as Zellig Harris (1952)<sup>3)</sup>, Dell Hymes (1964)<sup>4)</sup>, Austin (1962)<sup>5)</sup>, Searle (1969)<sup>6)</sup>, Grice (1975)<sup>7)</sup>, Halliday and Hasan (1976)<sup>8)</sup>, and so on, we may say that discourse analysis is the

study of language beyond the sentence(s) used in real communication, not artificially created ones. Owing to the wide-ranging scope of this discipline, there is no agreed-upon set of analytic procedures, system, or method of analysis, and this is the major problem of discourse analysis. The goals of each study define the units and processes.

On the basis of these facts, this paper focuses on the different degrees of probability and certainty among four adverbs—*maybe*, *perhaps*, *probably* and *possibly*—as the first step to understand how they are used in real communication. Traditional reference books tend to be based on scholarly observation which may not reflect real-life use. In a traditional reference book such as an English-Japanese dictionary published by

KENKYUSHA<sup>9)</sup>, one of the leading publishers in Japan, we will find that the word *maybe* is explained as follows: (usually it is used at the beginning of a sentence) *kotoni-yoruto* (syn. perhaps). When we look up the Japanese *kotoni-yoruto* in a Japanese-English dictionary (KENKYUSHA)<sup>10)</sup>, it says that *kotoni-yoruto* means “possibly,” “perhaps,” “probably,” or “maybe.” When we look up *perhaps* in the English-Japanese dictionary (KENKYUSHA), it lists “possibly,” “maybe,” or “probably” and adds the following explanation about *perhaps*: *Perhaps* has probability but does not have any certainty and it does not connote any degree of probability. These explanations in the English-Japanese dictionary (KENKYUSHA) seem to be clear superficially, but they are still ambiguous for non-native English speakers. They do not indicate what connotation will be conveyed to the listener in real communication. They seem to be circulated in the meaning among the four adverbs.

How do dictionaries in the United States explain these words? In the American Heritage Dictionary (3rd Edition)<sup>11)</sup>, the definition of *maybe* is “perhaps” and “possibly,” that of *perhaps* is “maybe” and “possibly,” that of *possibly* is undefined (presumably “perhaps” or “maybe”), and that of *probably* is “most likely and presumably.” That is, in this dictionary, *maybe*, *perhaps* and *possibly* are synonymous. In Merriam Webster’s Collegiate Dictionary (tenth edition)<sup>12)</sup>, *maybe* means “perhaps,” *perhaps* means “possibly” but not “certainly,” *possibly* means “in a possible manner :by any possibility,” and *probably* means “insofar as seems reasonably true, factual, or to be expected:without much doubt.” These explanations are confusing for Japanese. In *The Grammar Book, an ESL/EFL Teacher’s Course*<sup>13)</sup>, *probably* has the highest degree of certainty, followed by *per-*

*haps* and *possibly*. As for the degree of probability, *probably* is rated higher than *possibly*. The degrees of probability of *maybe* and *perhaps* are not mentioned in this book.

Thus, it is extremely difficult to understand how these four adverbs are used in real communication with various connotations including possibility and certainty. Therefore, I obtained and analyzed data about the four adverbs including their different degrees of probability and certainty through questionnaires in which three different situations were assumed and which were given in two different groups and to both sexes.

### Method

Questionnaires were designed to test degrees of certainty and probability, to ascertain differences between men’s and women’s responses, and to ascertain the effects of different settings. The questionnaires consisted of three questions: for men, Question 1 is “You proposed marriage to your girlfriend. What degree of probability would the following answers suggest?” For women, Question 1 is “Your boyfriend has recently proposed marriage to you. You don’t want to reply ‘yes’ or ‘no’ immediately. What degree of probability would the following answers suggest?” We can expect to get information about probability through Question 1. Since this question is concerned with a personal matter, we could predict a diversity of answers based on emotional level.

Question 2 is: “You argue with your friend about something. Finally, he/she responded with the following words to your opinion. What degree of certainty would it suggest?” We can expect to know the different degree of certainty among *maybe*, *probably*, *perhaps*, and *possibly* when a person who has a different point of view or opinion hears these words. Persons who answer this question

must control the usage of these words or be aware of some difference among these adverbs, because they logically and intentionally choose the word to finish the argument. So, we can think this response is on a controlled level.

Question 3 is "You see the cloudy sky. You think it might rain. And you say to your friend, 'It will rain.' What degree of probability would the following answer suggest?" The topic of this question is not a serious one. Therefore, we can predict that the responders do not care much about the usage of these four adverbs. Unconsciously, they use these words effectively in the context. So we can think this response is on the level of unconscious use.

The responders made marks on a line showing the degree of certainty or probability from 100 % to 0 %. For example, if an answerer to Question 1 feels a great deal of probability that he will get married to his girl-friend when he hears *maybe* as her answer to his proposal, he will put a mark on the line near 100 %, depending on his personal sense of the degree of probability. The questionnaires were handed out in two classes at Central Washington University. One was an introductory anthropology class which consisted of 6 men and 16 women, and the other was an introductory linguistics class which consisted of 8 men and 6 women. The total number of respondents was thus 36.

### Results

Fig. 1 shows the results of Question 1 in the anthropology class—for women, "Your boyfriend has recently proposed marriage to you. You don't want to reply 'yes' or 'no' immediately. What degree of probability would the following answers suggest?" and for men, "You proposed marriage to your girlfriend. What degree of probability would the follow-

ing answers suggest?" The results are that *probably* has the greatest probability for both sexes. No order of probability for the other three words could be distinguished in the men's responses, because the differences are so slight. The three adverbs apart from *probably* were almost equivalent in meaning for the men. Among the women the three adverbs showed slight distinctions in degree of probability, especially *maybe* and *possibly*. The women felt an affirmative connotation in the word *maybe* as compared with the words *perhaps* and *possibly*, as we see from the fact that *maybe* received a 54.88 % degree of probability, but *possibly* with only 45.31 % seemed to have a negative connotation.

Fig. 2 shows the results of Question 1 when given to the linguistics class which consisted

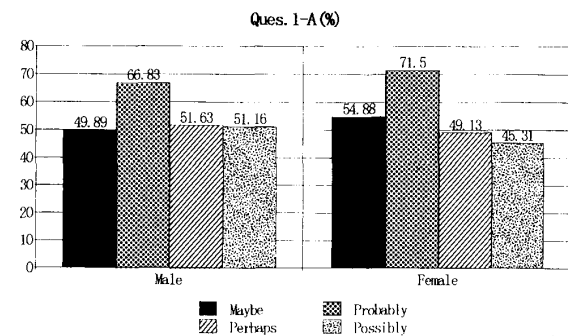


Fig. 1 Question 1-A Marriage. Degree of probability represented as a percentage, men versus women, anthropology class.

of 8 men and 6 women. In this figure, *probably* conveyed a very high degree of probability to both men and women, an even higher degree than in the anthropology class. The word with the lowest degree of probability was *maybe* for men, and *possibly* for women—the same results as in the anthropology class although the percentage is much lower than in the anthropology class. *Perhaps* and *possibly* are almost equivalent among men, while *perhaps* and *maybe* are equivalent among women. Except for *perhaps*, the other three adverbs show 50 % or less. Especially *maybe*

for men and *possibly* for women had a negative connotation on the emotional level in this class, because the figures are considerably lower than those for the other adverbs.

Fig. 3 shows the results of Question 2 in the anthropology class—"You argue with your friend about something. Finally, he/she re-

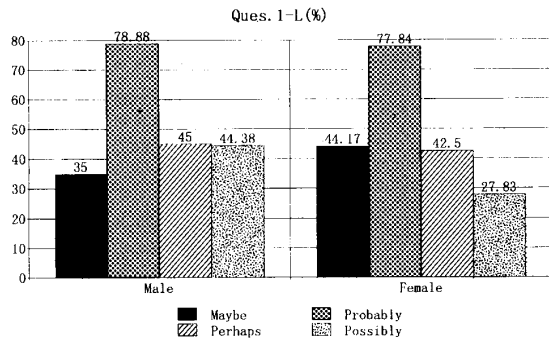


Fig. 2 Question 1-L Marriage. Degree of probability represented as a percentage, men versus women, linguistics class.

sponded with the following words to your opinion. What degree of certainty would it suggest?" The pattern of the figures is very similar to that of Ques.1-A (done in an anthropology class), on the topic of marriage. That is, *probably* has the highest percentage of certainty for both sexes. And *perhaps* has the second highest for men, while *maybe* has so for women. In general, most of the words have an affirmative connotation for both men and women, because all show a percentage of

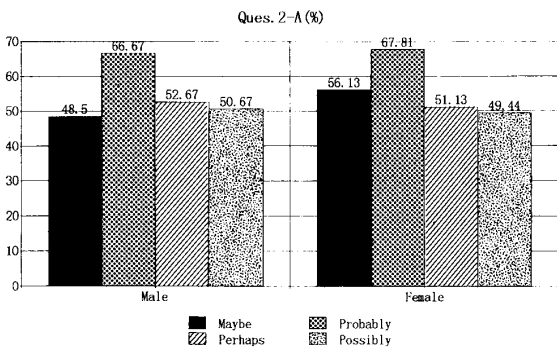


Fig. 3 Question 2-A Argument. Degree of certainty of agreement represented as a percentage, men versus women, anthropology class.

around 50% or more.

Fig. 4 shows the data obtained from the linguistics class for Question 2. *Probably* shows 87.5% for men and 78% for women. These figures are higher than the results of Ques. 2-A as to the degree of certainty of agreement in the anthropology class. However, the order of certainty among the four adverbs for men and women is the same as in the anthropology class. That is, *probably* has the highest percentage of certainty for everyone. While *perhaps* has the second highest for men and *maybe* for women. *Maybe* seems to have a rather negative connotation for men compared with the other three adverbs and *perhaps* and *possibly* for women. We could also say that the students in the linguistics class saw sharper distinctions in the degree of certainty than did the students in anthropology class.

Fig. 5 (Ques.3-A) shows results in the anthropology class. The topic is weather. The probability of *probably* is almost the same for

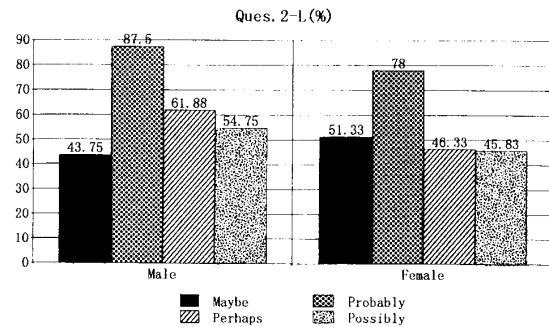


Fig. 4 Question 2-L Argument. Degree of certainty represented as a percentage, men versus women, linguistics class.

both sexes, with 78% and 78.1% respectively and highest degree of probability among the four adverbs. The other three words also show more than 50% probability. They carry affirmative connotations especially for men, because all the figures show over 60% probability. Besides all three words have an almost equivalent degree of probability for the men,

while the women saw a little more distinction among them. For both sexes, *possibly* has the lowest degree. The order of probability is almost the same as that in Ques. 1 and 2. That is, the highest is *probably* for both sexes, the second *maybe*, the third *perhaps* and the lowest *possibly* for women. The three adverbs, apart from *probably*, are practically equivalent for men as mentioned above.

Fig. 6 (Ques.3-L) was obtained in linguistics class and assigns very high possibility to the word *probably* with 90.63% for men and 87.5% for women. These figures are the highest

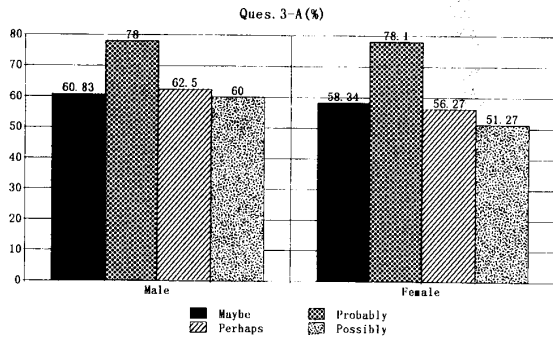


Fig. 5 Question 3-A Weather. Degree of probability represented as a percentage, men versus women, anthropology class.

in the whole questionnaire. The most different feature is that *maybe* has the lowest degree for women, although it is over 50%. *Maybe* almost always maintains the second highest degree of probability for every question among women, but it carries a different connotation on the topic of weather—unconscious use level. *Perhaps* and *possibly* show very similar percentages for both sexes. The percentage order of probability among four adverbs is the same for both sexes. The probability of *maybe* is lower in linguistics class than that in anthropology class. We could say that the students in linguistics class distinguish the usage of *maybe* more sharply than the students in anthropology class.

The next figure (Fig. 7) combines the percentages in anthropology class with those in

linguistics class. By doing this, we can figure out the differences among the four adverbs

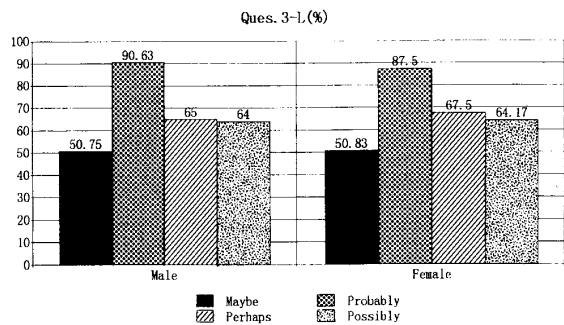


Fig. 6 Question 3-L Weather. Degree of probability represented as a percentage, men versus women, linguistics class.

for men and women in general. Fig. 7 (Ques. 1-C) shows the percentage given by the 14 men and 22 women to Question 1, whose topic is marriage. It proves that *probably* has the highest degree of probability and that the percentages are almost the same for both men and women. For men, *maybe* has the lowest degree of probability and *probably* and *perhaps* are equivalent. But for women, the word *possibly* has the lowest and *maybe* the second highest. The percentage of *perhaps* is almost the same for both sexes with 48.32% for men and 45.82% for women. Except for *probably* for both sexes and *maybe* for women the other three adverbs carry negative connotations for both sexes on an emotional level, because the percentages are below 50%.

Fig. 8 (Ques.2-C) also combines data of

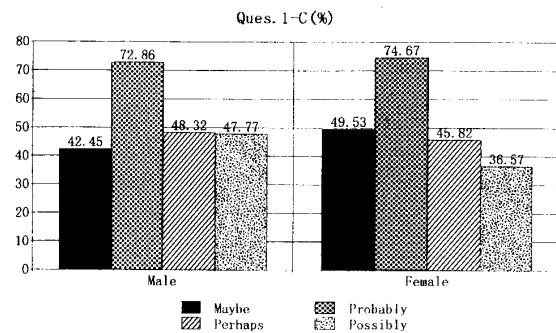


Fig. 7 Question 1-C Marriage. Both classes combined.

both classes concerning the degree of certainty of agreement with a friend's opinion. *Probably* shows the highest degree for both sexes as it did in the other questions. *Maybe* has the lowest degree of agreement for men while *possibly* has the lowest for women. The most different feature in this graph might be the different degree of certainty assigned to *maybe* between the sexes. *Maybe* carries negative connotations for men, while it has the second highest degree of probability for women. *Perhaps* and *possibly* also carry negative connotations for women. The pattern of figures is the same as that in Question 1. That is, the highest is *probably* for both sexes, the second is *perhaps* for men vs. *maybe* for women, the third is *possible* for men vs. *perhaps* for women, and the fourth *maybe* for men vs. *possibly* for women.

Fig. 9 (Ques. 3-C) shows the data for the combined classes on the question about weather. This figure also shows that the word *probably* indicates the highest probability for both sexes. The order of probability is the same for all on the topic of weather (uncon-

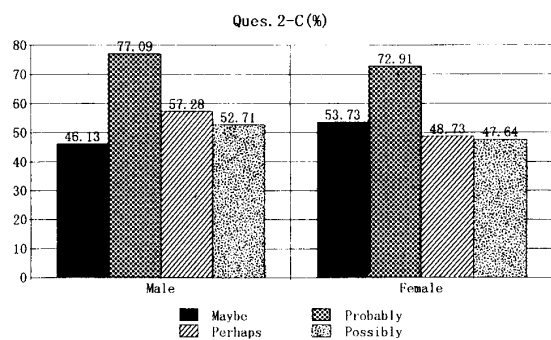


Fig.8 Question 2-C Argument. Both classes combined.

scious use level), which is different from the case of the other two questions—marriage (emotional level) and argument (control level). That is, the highest is *probably*, the second is *perhaps*, the third *possibly* and the lowest is *maybe*. The connotation of *maybe* for women is different from in the other

questions. We can presume from this result that for women the degree of probability of *maybe* changes according to the topic.

Fig. 10 shows the data for both men and women combined so that we can compare them according to the topics. Ques.1-T shows the figures regarding Question 1 about marriage. Ques.2-T refers to Question 2 about argument and Ques.3-T to Question 3 about weather. *Probably* is accorded the highest

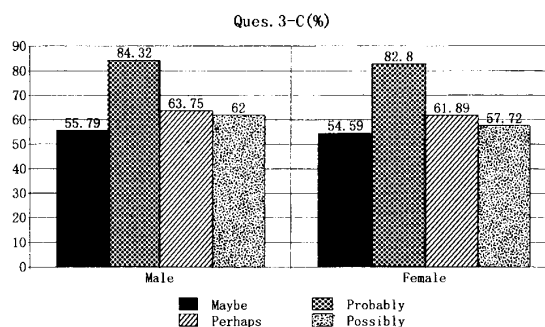


Fig. 9 Question 3-C Weather. Both classes combined.

degree of certainty and probability in all types of questions, but its percentage is especially high in the question about the weather as compared with Questions 1 (marriage) and 2 (argument). The order of the four words in degree of certainty and probability in Questions 2 (control level) and 3 (unconscious use) is the same: the highest is *probably*, the second *perhaps*, the third *possibly*, and the fourth *maybe*. However, in Question 1 (emotional level) the third is *maybe* and the fourth *possibly*. On unconscious use level (Ques.3-T), all adverbs have an affirmative connotation because the percentages are all over 50% and higher than those on emotional (Ques.1-T) and control level (Ques.2-T). On an emotional level, all adverbs except for *probably* carry a negative connotation, because the figures are below 50%. On the control level (Ques.2-T), all the adverbs except for *probably* are around 50%. It could be said that they are changeable according to the circumstances.

Discussion

The results of this research are significant as a stepping stone to know with what degree of probability these adverbs are used by Americans in real life. Honestly, it is difficult to distinguish the degrees of certainty and probability of the adverbs studied through

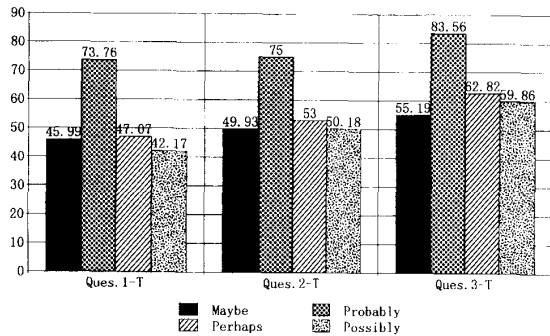


Fig. 10 Sexes and Classes Combined.

this survey, except for *probably*. However, we can find some characteristic features of each adverb through this study.

Looking back at the results from Figure 1 to Figure 6, we see that the students in linguistics class distinguish the degrees of probability of the four adverbs a little more clearly than the students in anthropology class. We can presume that the students in linguistics class were a little more sensitive to words than those in the anthropology class. From these results, we can say that the degree of probability and certainty will differ with a person's sensitivity to words.

When we focus on the differences or similarities between male and female students shown in Figures 7, 8, and 9, we can see a certain pattern of degree of probability and certainty depending on the topics—marriage (emotional level), argument (control level) and weather (unconscious use level). *Probably* always shows the highest probability for both sexes. However, the other three adverbs seem to express different degrees of probability for men and women. For men the second is *per-*

*haps*, the third *possibly*, and the lowest is *maybe*, and this order remains almost the same regardless of the topics. For women the second is *maybe*, the third *perhaps* and the lowest is *possibly*, and this order also remains fixed except for the topic of weather (unconscious level). The connotation of the words *maybe* and *possibly* might differ between the sexes. We could say that women prefer using *maybe* but men do not.

Fig. 10, which analyses the results by topic, shows that there is no big difference between probability and certainty according to the topic. The pattern of the figures are almost the same regardless of the topics. But the degree of probability and certainty does differ slightly depending on the topic. The results indicate that *maybe*, *perhaps*, and *possibly* have a rather negative connotation of probability on emotional level (marriage), because they all fall below 50% of probability on the topic of marriage. On the topic of argument (control level), it is difficult to distinguish differences in degree of certainty except for *probably*. The adverbs *maybe*, *perhaps*, and *possibly* are almost equivalent in meaning on control level. This result might indicate that these three adverbs are changeable according to circumstances on control level. On the topic of weather, all the four adverbs show a rather high percentage of probability and certainty. We could say that all these adverbs are used unconsciously with affirmative connotation.

As a result, *probably* had the highest degree of probability through Figure 1 to Figure 10 according to this survey. *Probably* maintains its priority of over 65% even when the results are broken down by class and sex.

The figures for *maybe* in women's discourse are a little higher than in that of men on emotional and control level. The connotation of *maybe* differs with sex and topic. We

hypothesize that women prefer using the adverb *maybe* with around 50% probability or less as compared with men on emotional and control level. On unconscious use level, *maybe* carries an affirmative connotation, but on emotional level it carries a negative connotation. On the control level, it shows about 50%. This might mean that the connotation of *maybe* changes according to circumstances on control level.

*Perhaps* consistently showed above or around 50% probability for all three questions. We can presume that the connotation of *perhaps* is relatively fixed. The degree of probability and certainty of *perhaps* for men is always higher than that for women. Besides, we can find that the figures for *perhaps* indicate a low probability on emotional level. On unconscious use level, it obtains rather high percentages. So, we might hypothesize that *perhaps* carries an affirmative connotation on unconscious use level and is used more by men than by women.

*Possibly* is also a word in which it is difficult to find differences in degree of certainty and probability between men and women and among the different topics. However, we can find some features from the results of this survey. *Possibly* is almost equivalent to *perhaps* for men in the results of Ques.1-C (marriage), 2-C (argument), and 3-C (weather). Moreover *possibly* always keeps the third highest degree of probability in men's answers to all three questions. It is almost fixed. But it seems that women do not like to use *possibly* on emotional level and control level, because *possibly* almost always has the lowest degree of probability and certainty for women. So, we might hypothesize that *possibly* is a word men are more apt to use than women and carries a negative connotation on emotional level.

## Conclusion

This research has a meaning in a bigger picture. Accordingly, we need to take into account the different possible situations or conditions presumed by the data later on. The connotations of the four words could change depending on intonation, tone of voice, and style. Besides, the results might change according to oral versus written modes. As an example of style and intonation, we can presume that *maybe* is sometimes used as a soft "no," as from a parent to a child. The meaning of *perhaps* might also change by adding some special intonation. It might change the meaning from a near "yes" to a near "no." Furthermore, Americans use these different conditions including intonations and ways of saying a word as strategies to express irony.

In any case, this study clarifies the different connotations of the four adverbs in real communication for the Japanese to some extent. For example, we have seen that *probably* always carries a high probability regardless of the sex, topic, and setting. On the emotional level all three adverbs apart from *probably* carry negative connotations. And on the unconscious use level all the four adverbs carry affirmative connotations regardless of sex. On the control level, the three adverbs apart from *probably* are changeable depending on circumstances. Women prefer using *maybe*, while men prefer *possibly*. These results should be useful for students in ESL/EFL situations, because they are not mentioned in traditional reference books, as I mentioned in the introduction.

As the next step, further research should include the different intonation, tone of voice, and style to make clear the different connotations of these adverbs in addition to the results of this study. I hope this study can serve as a basis for further work to under-



stand the real usage not only of the four adverbs but also of other words of similar meaning in real spoken or written communication.

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