

A Study of Gender Differences in English from the Perspective of Sociolinguistics

Zhang Saiyao and Sun Yu

Abstract—As we all know, there are certain differences between female and male in physiology and psychology, but for a long time, the language characteristics and differences between female and male have been rarely known. Until the rise of the American women's Liberation Movement in the last century, linguists began to pay more attention to the differences in language between different genders. In this paper, the author selects 22 episodes of the first season of the American drama *How I Met Your Mother* and arranges the conversations among them. Then the author studies the language differences of female and male from five aspects: adjectives, hedges, interrogative sentences and exclamatory sentences and topics. The author hopes that this study can provide empirical help for the study of language differences between female and male.

Index Terms—Adjectives, hedges, interrogative, exclamatory.

I. INTRODUCTION

A. Research Background

Language is a tool of communication, and its most obvious characteristics are arbitrariness and conventionality. As the carrier of society and culture, language is not isolated. It is closely linked with social culture and people's ideology. Early linguistics emphasizes the structural and semiotic nature of language. However, with the development of society and the expansion of research fields, sociolinguistics has emerged as a discipline to study the social phenomena of language. Sociolinguistics is an important branch of linguistics that emerged in the 1960s. It takes the linguistic elements into consideration in the social environment. The study of gender differences in English has been carried out since then and has become one of the issues widely concerned in sociolinguistics [1].

Language variation has always been the main content of sociolinguistic research. There are many social factors that cause language change and gender is one of the important factors. This study selects 22 episodes of the first season of the American drama *How I Met Your Mother* and arranges the conversations among them. Then it studies the language differences of different genders from five aspects: adjectives, hedges, interrogative sentences and exclamatory sentences and topics.

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How I Met Your Mother is a comedy about Ted's search for true love. The series tells the story of how he meets his wife in the tone of Ted in 2030. It is not only a humorous sitcom, but also full of many life philosophies and practical factors. The drama contains a lot of cross gender conversations, and the plot tends to daily life. It is a good material to study the language differences between different genders.

B. Research Objective

The purpose of this paper is to explore the language differences between men and women by sorting out and analyzing the conversations between men and women in *How I Met Your Mother*. The paper also briefly analyzes the causes of these differences.

C. Research Significance

This article selects certain corpus and conducts empirical research to expound the differences between female and male in using adjectives, hedges, interrogative sentences, exclamatory sentences and topics in conversation, and explores the causes for the differences. In terms of practical value, this study may provide empirical help for the study of language differences between female and male.

II. LITERATURE REVIEW

A. History of Language and Gender

Studies on language and gender began in the 1960s and 1970s. At that time, the second feminist movement rose in the United States and Canada. In 1975, Lakoff said in *Language and Women's Place* that women's marginalization and powerlessness are reflected in the way men talk to women and the way women are talked about. After the publication of this book, many researchers began to pay attention to this new field: language and gender [2]. Different from previous studies which focused on female language defects, the following studies belong to the observed differences in social status between men and women. These authors evaluate and analyze these differences more objectively and accurately in order to avoid discrimination against women. Of these books and articles, *Man Made Language of Spender* in 1980, *Language and the Sexes of Anshen's* in 1983, *Grammar and Gender of Baron* in 1986 are only a few of the most important [3].

B. Researches on Language and Gender

Linguists in the 1990s explored this subject mainly on the basis of the 1980s. They focused on the language forms of different genders. Linguist M. R. Key and J. Holmes expounded the different forms, meanings, evolution and causes of male and female language in society and culture. M.

R. Key not only examines the characteristics of women's language, but also explores the language phenomenon of discrimination against men in English [4]. It is not easy for American female scholars to provide a relatively fair description without prejudice. In 1995, Janet Holmes published *Women, Men and Politics*. Using the principles and methods of sociolinguistics, psycholinguistics and pragmatics, this book explores the differences between men and women in the use of polite language [5].

In addition, Bai Jiehong discusses the language used by men and women from the perspectives of sociolinguistics, pragmatics and semantics [6]. Zhao Ronghui published the Book *Language and Gender*. Through a comparative study of Chinese and Russian languages, this paper reveals the differences of gender in pronunciation, vocabulary and conversational style [7]. In the past three decades, China's research on gender language has achieved great success, which also prompted more scholars to conduct in-depth research in this field.

Examinations of this issue are a latecomer in Chian. In the early days, scholars mainly focused on the introduction of gender culture in English, or on the basis of foreign private experience to explore this topic. Therefore, these surveys did not form a scientific and theoretical system. In addition, since the 1990s, linguists began to pay attention to the interdisciplinary study of this subject, which enriched the theoretical basis of male and female language. However, compared with the foreign investigation on this issue, China is still in its infancy [8].

III. RESEARCH METHODOLOGY

A. Research Process

The author summarizes the history of language and gender, as well as the existing research at home and abroad through literature searching. In addition, by collecting and analyzing the conversation of the first season of the American drama *How I Met Your Mother*, the author finds out the differences between men and women in the use of adjectives, hedges, interrogative sentences, exclamatory sentences and topics, and analyzes the reasons for the differences. Finally, the paper briefly puts forward some suggestions for improving the conversation between female and male.

B. Data Collection

By watching the play and its scripts, the author manually counted the number of adjectives, hedges, interrogative sentences and exclamatory sentences used by female and male in each episode and conducted correlation analysis and t-test to explore language differences. The author also counted the main topics of female and male as well as cross gender conversations in each episode.

In the selection of corpus, since the play mainly focuses on the dialogues between the protagonists, the author only selects the dialogues between the opposite sex of the protagonists in each episode, and removes the dialogues between the protagonists and supporting actors, so as to increase the objectivity of the research results.

IV. ANALYSIS

A. The Amount of Exclamatory Sentences

The author counted the number of exclamatory sentences used by female and male in the 22 episodes of the first season in *How I Met Your Mother* and used Eviews 9.0 to conduct correlation analysis and t-test.

TABLE I: THE AMOUNT OF EXCLAMATORY SENTENCES

	1	2	3	4	5	6	7	8	9	10	11	12
Female	6	2	3	7	3	1	6	5	4	2	4	5
Male	8	1	2	2	4	1	9	6	4	6	3	5
	13	14	15	16	17	18	19	20	21	22	Total	
Female	2	6	7	2	4	3	1	6	4	3	86	
Male	3	4	4	3	5	2	0	2	3	5	82	

Table I shows the number of exclamatory sentences in cross gender conversations of each episode in *How I Met Your Mother*. The number of exclamatory sentences used by female was 86, while that of men was 82. Female use exclamatory sentences more frequently, but there is little difference between female and male.

TABLE II: RESULTS OF CORRELATION ANALYSIS

	Correlation	P-value
Female	0.460905	0.0309
Male		

TABLE III: RESULTS OF T-TEST

Variable	Count	Mean	Std. Dev.	Std. Err. Of Mean	t-test	P-value
FEMALE	22	3.909091	1.874874	0.399724	0.292770	0.7711
MALE	22	3.727273	2.229282	0.475284		

In Table II, the correlation of amount of male and female was 0.461 with the p-value is 0.031(<0.05). It illustrates that the correlation of this pair is relatively good and that the data credibility of t-test in Table III is relatively high. In table 15, p-value of exclamatory sentences amount is 0.771(>0.05) so we wouldn't reject the null hypothesis that they are the same. It shows that there is not obvious difference between the amount of exclamatory sentences of female and that of male.

B. The Amount of Adjectives

The author counted the number of adjectives used by female and male in the 22 episodes of the first season in *How I Met Your Mother* and conducted correlation analysis and t-test.

TABLE IV: THE AMOUNT OF ADJECTIVES

	1	2	3	4	5	6	7	8	9	10	11	12
Female	21	19	5	13	8	9	10	13	13	8	15	12
Male	9	6	4	15	5	8	11	6	12	5	9	6
	13	14	15	16	17	18	19	20	21	22	Total	
Female	20	7	10	14	12	9	14	12	13	8	265	
Male	13	8	11	12	6	3	10	12	8	4	183	

Table IV shows the number of adjectives in cross gender conversations of each episode in *How I Met Your Mother*. The number of adjectives used by female was 265, while that of men was 183. Female use adjectives more frequently and female and male are quite different in this index.

TABLE V: RESULTS OF CORRELATION ANALYSIS

	Correlation	P-value
Female Male	0.444252	0.0383

TABLE VI: RESULTS OF T-TEST

Variable	Count	Mean	Std. Dev.	Std. Err. Of Mean	t-test	P-value
FEMALE	22	12.04545	4.157349	0.886350	3.276881	0.0021
MALE	22	8.318182	3.343599	0.712858		

In Table V, the correlation of amount of male and female was 0.444 with the p-value is 0.038(<0.05). It illustrates that the correlation of this pair is relatively good and that the data credibility of t-test in Table VI is relatively high. In table 6, p-value of adjectives amount is 0.002(<0.05), so we would reject the null hypothesis that they are the same. It shows that there is obvious difference between the amount of adjectives of female and that of male.

C. The Amount of Hedges

The author counted the number of hedges used by female and male in the 22 episodes of the first season in *How I Met Your Mother* and conducted correlation analysis and t-test.

TABLE VII: THE AMOUNT OF HEDGES

	1	2	3	4	5	6	7	8	9	10	11	12
Female	5	9	2	1	0	4	1	1	0	1	3	6
Male	5	5	0	1	0	2	1	0	0	0	1	4
	13	14	15	16	17	18	19	20	21	22	Total	
Female	2	0	2	5	7	1	3	0	2	4	59	
Male	0	0	1	3	4	0	0	0	1	1	29	

Table VII shows the number of hedges in cross gender conversations of each episode in *How I Met Your Mother*. The number of hedges used by female was 59, while that of men was 29. Female use hedges more frequently and female and male are different in this index.

TABLE VIII: RESULTS OF CORRELATION ANALYSIS

	Correlation	P-value
Female Male	0.892328	0.0000

In Table VIII, the correlation of amount of male and female was 0.892 with the p-value is 0.000(<0.05). It illustrates that the correlation of this pair is relatively good and that the data credibility of t-test in table 9 is relatively high. In Table IX, p-value of hedges amount is 0.040(<0.05), so we would reject the null hypothesis that they are the same. It shows that there is obvious difference between the amount of hedges of female and that of male.

TABLE IX: RESULTS OF T-TEST

Variable	Count	Mean	Std. Dev.	Std. Err. Of Mean	t-test	P-value
FEMALE	22	12.04545	4.157349	0.886350	3.276881	0.0021
MALE	22	8.318182	3.343599	0.712858		

D. The Amount of Interrogative Sentences

The author counted the number of interrogative sentences used by female and male in the 22 episodes of the first season in *How I Met Your Mother* and conducted correlation analysis and t-test.

Table X shows the number of interrogative sentences in cross gender conversations of each episode in *How I Met Your Mother*. The number of hedges used by female was 381, while that of men was 313. Female use interrogative sentences more frequently and female and male are quite different in this index.

TABLE X: THE AMOUNT OF INTERROGATIVE SENTENCES

	1	2	3	4	5	6	7	8	9	10	11	12
Female	17	11	9	32	7	25	25	20	24	18	15	10
Male	13	12	5	17	1	15	23	11	31	17	16	8
	0											
	13	14	15	16	1	18	19	20	21	22	Total	
	7											
Female	21	11	17	24	1	10	22	18	12	19	381	
	4											
Male	22	6	13	20	1	12	17	14	7	8	313	
	6											

TABLE XI: RESULTS OF CORRELATION ANALYSIS

	Correlation	P-value
Female Male	0.673839	0.0006

In Table XI, the correlation of amount of male and female was 0.674 with the p-value is 0.001(<0.05). It illustrates that the correlation of this pair is relatively good and that the data credibility of t-test in table 12 is relatively high. In table 12, p-value of interrogative sentences amount is 0.113(>0.05), so we wouldn't reject the null hypothesis that they are the same. It shows that there isn't obvious difference between the amount of hedges of female and that of male. This may be because the sample size is not large enough.

TABLE XII: RESULTS OF T-TEST

Variable	Count	Mean	Std. Dev.	Std. Err. Of Mean	t-test	P-value
FEMALE	22	17.31818	6.461508	1.377598	1.619619	0.1128
MALE	22	14.22727	6.194712	1.320717		

E. Topics in Cross Gender Conversation

The author counted the topics in cross gender conversation in the 22 episodes of the first season in *How I Met Your Mother*. Male talk more about love, marriage, sex, game, party, bars and club. Female talk more about family, kids, friend, gossip, memory and experience. Most of cross gender conversation topics are about love, marriage, sex, work, study and science.

V. CONCLUSION AND SUGGESTION

A. Conclusion

Through the above statistics and analysis of the first season of *How I Met Your Mother*, we can draw five conclusions.

First, female use adjectives more frequently than male in conversation. Second, female tend to use hedges when they express their opinions. Third, female use interrogative sentences more frequently than male. What's more, there is little difference in the frequency of exclamatory sentences used by male and female in conversation. Finally, most topics of cross gender conversation are about love, marriage, sex, work, study and science. Maybe it's because the theme of the TV series tends to love.

As for the reasons for these results, the author believes that there are external reasons and internal reasons. The internal reasons include physiological and psychological differences and the external reasons include different division of labor and social status. Women's emotion is more delicate, and they are more sensitive to the perception and description of things, so they need more adjectives to express this perception, especially cute, sweet and lovely. Female tend to use hedges when they express their opinions because they think that a tone of consultation and suggestion will show respect, such as "I mean...", "I guess...". Men are more likely to express their views directly in language, while women are more likely to avoid conflicts. What's more, for a long time, the division of labor based on gender determines that men play a strong and dominant role. Therefore, they will be in a strong social position, and women's long-term social division of labor results in their language being considered to be polite, gentle and euphemistic. The different roles and social division of labor between men and women will inevitably lead to the differences in language use between different genders. However, in recent years, women's social status is improving, and women gradually have more discourse power in the family and society. The language differences caused by gender differences between female and male are changing.

B. Suggestions to Cross Gender Communication

In cross gender conversation, male should show their support to female, especially the topic of games and study. Female also should give male more chances to show their views on personal emotion and children issues. When there is a topic, every participant should join in the conversation actively. They should give each speaker the chance to share their idea with others and listen to them attentively. In cross gender conversations, speakers also need to pay attention to the speed of speech, words and expression management.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Zhang Saiyao and Sun Yu conducted the research; Zhang Saiyao analyzed the data and wrote the paper; Sun Yu directed and revised the paper; both authors had approved the final version.

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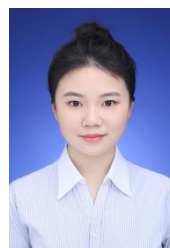
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Prof. Sun has presided over and participated in a number of provincial-level and university-level teaching, scientific research and fund projects. For example, in 2013, as the project host, she presided over a Shaanxi Social Science Fund project "study on the status quo and strategies of the internationalization of graduate education in Shaanxi based on the theory of constructivism."