

GENDER DIFFERENCES IN GIVING DIRECTIONS: A CASE STUDY OF ENGLISH LITERATURE STUDENTS AT BINUS UNIVERSITY

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ABSTRACT

Many researchers have said that there are differences in the ways people give direction between males and females, especially in spatial task (cardinal directions, topography, mileage, building, right/left markers) (e.g., Lawton, 2001; Dabbs et al., 1998). Here, the thesis investigates what differences occur between both genders in giving direction. The respondents are 25 females and 25 males of fifth semester Binus University students majoring in English Literature. The respondents answered with a certain route from Binus's Anggrek Campus to Senayan City. The study was conducted by qualitative and quantitative method. From the data analysis, the writer discovered that gender does affect in selecting the key words in explaining direction it is found that there were differences in choosing key words in giving direction between females and males. The difference is women use more than twice spatial references than men do. In terms of verbal abilities, it was confirmed that female use longer explanation. However, in other aspects such as serial orientation and maintenance words, the result is inconclusive.

Keywords: sociolinguistics, gender, cognitive, spatial ability, giving directions

ABSTRAK

Skripsi ini membahas perbedaan cara dalam memberikan arah yang dilakukan oleh mahasiswa laki-laki dan perempuan semester lima Universitas Binus jurusan Sastra Inggris. Responden terdiri dari dua puluh lima perempuan dan dua puluh lima laki-laki. Responden diminta untuk menunjukkan arah menuju ke Senayan City dari Kampus Anggrek. Uraian responden kemudian dicatat sebagai data. Studi ini dilakukan dengan menggunakan metode kuantitatif dan kualitatif. Berdasarkan analisa data, penulis menemukan bahwa jenis kelamin mempengaruhi dalam pemilihan kata kunci dalam menjelaskan arah dengan menggunakan dan ditemukan bahwa terdapat perbedaan dalam pemilihan kata kunci dalam menunjukkan arah antara perempuan dan laki-laki. Perempuan menggunakan kata-kunci spatial dua kali lebih banyak daripada laki-laki. Dalam penggunaan bahasa, ditemukan bahwa perempuan menunjukkan arah dengan lebih banyak kata, tetapi dalam aspek pemberian urutan informasi dan kata-kata yang bersifat "maintenance" tidak ada perbedaan preferensi yang jelas.

Kata kunci: sociolinguistics, jender, kognitif, kemampuan spasial, menunjukkan arah

INTRODUCTION

Some people have observed that men and women explain things differently because men and women are two completely different creatures. The way they speak, the way they express themselves, the way they state opinions, the way they share ideas and the way they talk to each other are totally different (Gray, 1992). However, those differences not only provide positive value but negative as well. Because of the differences men and women share in communication style, a great number of errors may emerge and as the result, those errors may lead men and women into misunderstandings, misperception, and even conflict in their communication activity.

Lawton (2001), who studied the ways in which men and women give directions for spatial tasks, stated, “the pattern of gender differences that has emerged from research on navigation and way finding shows that men excel on some tasks and women on others” (p. 322). Coates (2004 in Napoleon, 2007), explains the “difference approach” to describe how men and women use language. This approach “emphasizes the idea that men and women belong to different subcultures...researchers have been able to show the strengths of linguistic strategies characteristic of women [and men]” (p. 18).

In terms of particular cognitive strengths, however, men generally tend to include a higher frequency of references to cardinal directions, distance information (for example, the estimation of distances to landmarks), serial orientation (using words to describe the steps of the directions as a series: “first,” “second,” etc.) (Boerger & Henley, 1999; Cohen, 1977; Plumert et al., 2001). Men also excel in pointing to out-of-sight markers, locating hidden targets, and creating sketch-map drawings. On the other hand, women have better verbal abilities (Maccoby & Jacklin, 1974). Women are more communicative. They can give longer explanation due to their verbal ability.

Some studies mentioned that females are better than males in remembering landmarks (Dabbs et al., 1998; Denis, 1997; Miller & Santoni, 1986; Schmitz, 1997, cited in Lawton, 2001, p. 323). Also, Lawton (2001) said that females are far more frequent in using left/right markers.

Montello et al. (1999) who conducted a verbal description of route walked on a campus by students confirmed that males exceed females in mentioning metric distance and cardinal direction. However, there were little differences in the number of turns and landmark mentioned by males and females. Also, they discovered that female seemed to be better at non-metric-distance terms and maintenance statements.

METHODS

To confirm the above mentioned studies, we conducted a research to see the difference of language use (i.e. keywords) by female and male students of Binus University in giving directions were examined in the light of what has been written about spatial ability of male and female. In particular, the writers wanted see the use of keywords by these students related to cardinal directions, topographical features, right/left, and buildings as the indicators. Are the spatial reference keywords used by male and females different? What other differences are present in their speech when giving directions?

Our study involved asking 25 male and 25 female students of Binus University to give verbal directions from the campus to Senayan City. Their responses were recorded and analyzed based on the use of spatial reference keywords.

RESULTS AND DISCUSSIONS

Cardinal Directions

Cardinal direction is a way to point at a certain direction. The first four main cardinal directions are North (N), East (E), West (W), and South (S). Sometimes it also can be defined as the position of the sun. It is mostly used for geographic orientation.

From the data we collected, females outperformed males in using cardinal referents. Out of 25 women, 17 women mentioned cardinal directions for 18 times. There are 16 women who mentioned it one time and there is only one woman who mentioned it twice. Meanwhile, out of 25 men only 2 men mentioned cardinal direction. Each of them mentioned it one time. Based on this comparison, there is a big gap between men and women in cardinal direction. In explaining the route direction, the women more often use the indicator of cardinal direction rather than men. The ratio between men and women is 1:9. (see figure 1 below)

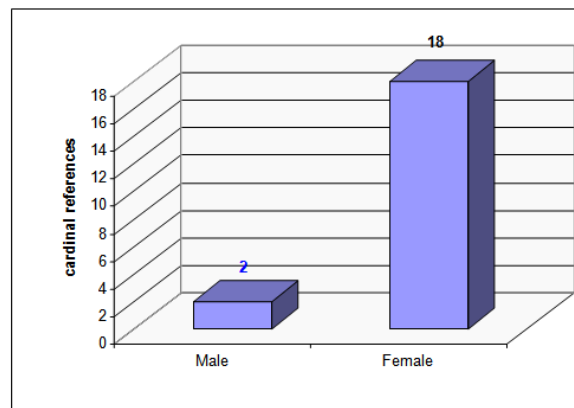


Figure 1 Cardinal references

Topographical Reference

The second reference is topography. Topography is the three-dimensional arrangement of physical attributes (such as shape, height, and depth) of a land surface in a place or region (Kleinedler, 2005, p. 1526). It describes surface shapes and features (especially their depiction in maps). The topography of an area can also be the surface shape and its own features. These features including natural features (mountains, valleys, plains, and bodies of water), human-made (lake, bridge, road curve, and railway) and road structures are considered topographical.

Based on topography which is taken from the respondents answers, there are only 2 words refer to topography which are stated by 2 men. On the contrary, 25 women stated words referring to topography for 57 times. Each of 3 women stated topography reference for 4 times, each of 7 women stated the reference for 3 times, each of 9 women stated the reference for 2 times, and each of 6 women stated the reference only once. From this comparison, we can conclude that women uttered the reference of topography much more than men. Women tend to use the indicator of topography more. The following graph (figure 2) illustrates this. The graph shows that women use almost as 30 times more than men.

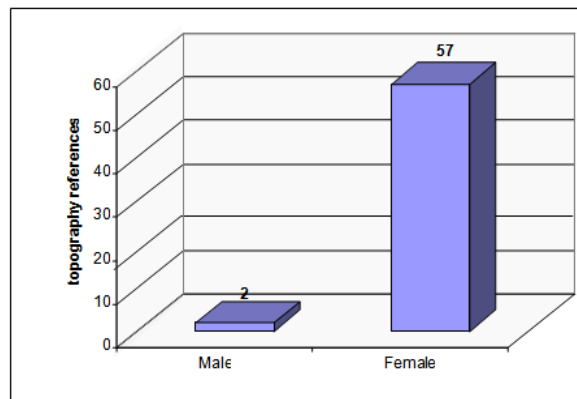


Figure 2 Topography References

Mileage Reference

The third reference is mileage. Mileage is total length, extent, or distance measured or expressed in miles. In this thesis, kilometer or meter will also be used as measurement of distance. Total kilometers are covered or traveled in a given time. Mileage is essential to show a distance that we have passed to reach a certain destination. Sometimes it does not have to be in an explicit number (e.g., 2 kilometer, 400 meter), but mileage can also be represented as “several kilometers” or “few meters”.

This is where the difference between females and males is not that much. There are four out of twenty five male respondents that did not answer using mileage reference while all female respondents answered using the reference of mileage. This is the following graph:

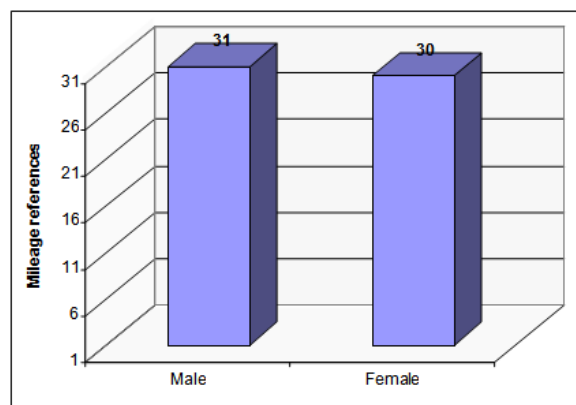


Figure 3 Mileage references

In mileage, 25 females mentioned 30 words of mileage indicator when answering direction question. Each of 20 females uttered the indicator for one time and 5 females mentioned it twice. Males asserted 31 words of mileage indicator. There are 4 males who did not mention the indicator. There is only one male who mentioned it 3 times. Twelve males mentioned the indicator once, and 8 males mentioned it twice. If we look at the total mileage indicators mentioned, the results show that male use them only one time more than female do. However, when it comes to the frequency used by a individuals, 8 males used the indicators twice, and one male used it three times, whereas only 5 females used it more than once. So, overall male used mileage indicators more than female.

Building (Landmark) Reference

The fourth reference is building reference. It is common to refer to landmarks when one gives directions because it is usually easier for people to identify landmarks such as a market or a police station, rather than calculating distances from a certain point. In this research, most of the respondents used Anggrek Campus, Senayan City, and Plaza Senayan as the building references.

The male respondents explained the direction by using building references for 15 times. There are 16 out of 25 males who did not use this parameter. On the other hand, there are nine males who used this parameter. There are 3 out of 9 males who mentioned it once. There are 6 out of 9 males who uttered the parameter twice. The female respondents gave direction by using building reference for 90 times. There are 5 females mentioned it for 5 times, 8 females mentioned it for 4 times, 9 females mentioned it 3 times, and 3 females mentioned it twice. This indicates that men use less in mentioning building parameter than women do. In fact, the female students used it 6 times more than male students.

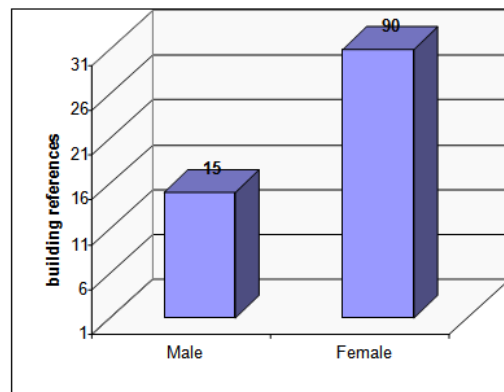


Figure 4 Building References

Right/Left Reference

The final reference is right/left markers. Right/left markers is the reference which is mostly used by both genders. The total is illustrated in the graph below:

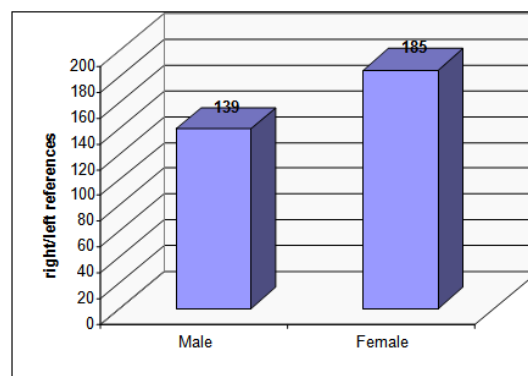


Figure 5 Right/Left References

In the subject of right/left markers, the 25 male respondents articulated right/left markers for 139 times in replying the question of "How to get from Binus Anggrek to Senayan City?" There are 2 males who mentioned it for 3 times. There are 7 males mentioned it for 4 times. There are 4 males mentioned it for 5 times. There are 11 males who mentioned it for 7 times. There is only 1 male who

mentioned it for 8 times. On the other hand, the 25 female respondents articulated right/left markers for 185 times in describing the answer. There is 1 female who mentioned it for 4 times. There are 9 females mentioned it for 6 times. There are 4 females mentioned it for 7 times. There are 11 females who mentioned it for 9 times. The ratio of the use of left/right markers between males and females is 3:4. Females used it 30% more than males do.

Total use of References

The writer counted the total of the five references uttered by female and male respondents. It is presented with the graph below:

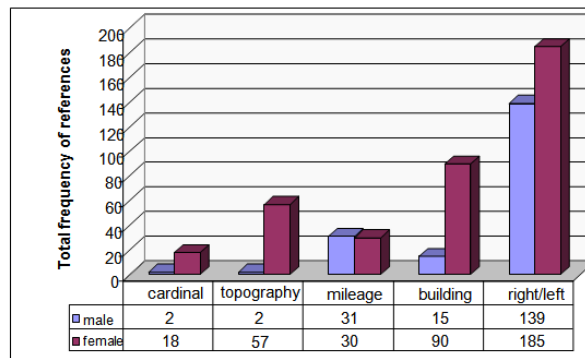


Figure 6 Total Frequency of References

From figure 6, the result of interview shows that the women outperform the males in the cardinal directions, topography, building, right/left markers, whereas men is a little bit better in mileage since the total is not too different between them.

The Length of Explanation and Language Use

Many researchers found that females have better verbal abilities regarding spatial references (Maccoby and Jacklin, 1974, Montello, 1999). To confirm this, 12 respondents consisting 6 males and 6 females were chosen randomly. Their speeches were then analyzed in terms of their length. In the calculation of the number of words, we consider words like *you'll* or *it's* as one word. It turns out that the average length of the explanation of these 6 males is 68 words. On the other hand, from the 6 females chosen, their utterances had more words, with the average of 104.7 words. (See table 1 and 2 in the following pages.) This agrees with what other writers have said that females give longer explanation when giving directions.

This study, however, does not always confirm the fact that males give more serial orientation (using words to describe the steps of the directions as a series: “first,” “second,” etc.) as described by Boerger & Henley (1999), Cohen (1977), Plumert et al. (2005 in Napoleon, 2007). From table 1 and 2 in the previous pages, it can be seen that male C and male G used the word *first*, while none of the women respondents used that word. However, the word *then*, which also indicates sequence, seemed to be used less by male (22 times) than by female (28 times). Also, the phrase *after that* occurred 5 times in male speech, but 6 times in female speech.

Maintenance statements such as *keep going*, *go straight*, *go further*, etc. were reported to be used slightly more by females than males in the study of Montello (1999, p527). In our study this fact seems to be inconclusive. Females said 18 times of *go straight* and once *going straight* while males said 13 times of *go straight* and two times of *going straight* (*keep going straight* and *continue going straight*). However, males said 7 times of *follow the street*, but female said it only 6 times.

Table 1 Verbal Responses From Six Randomly-Chosen Male Students

subject	Response
Male C	Go out first, then turn right. Now you're going to south After you pass a spotlight, just <u>go straight</u> for 4 km. Then, turn left, just <u>keep going straight</u> until you see spotlight turn left. <u>Follow the street</u> then go for around 2 km turn right after you see three junctions, and then turn left, turn right then turn left. (60 words)
Male G	You turn right, and <u>follow the street</u> . After you find redlight, turn left, and around 2 km there's ITC Permata Hijau on your left. After that, turn left, follow the street just <u>go straight</u> and, <u>follow the street</u> after you see three junctions turn right then turn left after that turn right again around 1km. And then you turn left.(60 words)
Male I	First, go out from Anggrek turn right, <u>go straight</u> for a couple of km then turn left. Just <u>go straight</u> don't take any turn after you find the red light then you turn right and you just <u>go straight</u> . After that, you will turn left, go up and then <u>go straight follow the street</u> then turn left. Around 1 km you will see Plaza Senayan just <u>keep going</u> and then you will see it on your right. (77 words)
Male U	You just turn right. After red light turn left, <u>go until</u> you find the red light turn right. <u>Go straight</u> for around 2 km after that you will see the circling bridge on your left side. Take it and <u>follow the street</u> until you find Mulia Hotel turn left. Then you will pass Plaza Senayan just <u>go straight</u> and take U turn on your right side. There you are. (69 words)
Male D	From Campus , you turn right. After red light you turn left, go for several miles until you find the red light turn right. <u>Continue going straight</u> . Go to north for 2 km you will see circling bridge on your left side. <u>Follow the street</u> then turn left and then you will pass Plaza Senayan just <u>go straight</u> then take final U turn on your right side. That's it. (68 words)
Male L	Turn right then turn left after 2km. Then <u>go straight</u> and you will see Kompas Gramedia on your right just <u>go straight</u> after you find red light then turn right then after 2km take U turn on your left after that <u>go straight</u> . You will see Mulia Hotel in front of you then turn left. <u>Go straight</u> for 2km then you will find it on your right and you have to take U turn.(74 words)
Average length of words	$1/6 \times (60+60+77+69+68+74) = 68$ words

Table 2 Verbal Responses from Six Randomly-Chosen Male Students

Subject	Response
Female F	From campus, you turn right. <u>Keep going straight</u> around 1 km and pass the red light. Turn left and turn right just <u>follow the street</u> until you find a red light again. Then you turn left and go to the west, and you will see ITC Permata Hijau on your left then you turn left after a red light. <u>Follow the street</u> and you will pass a railway then you <u>go straight</u> , and on a three junctions you turn right, and turn left after that turn right again and then turn left. (92 words)
Female G	From campus, just turn right. You'll see spotlight after 1 km turn left, then turn right then turn left After you see Palmerah Market on your right turn left. <u>Go straight</u> and you will find another spotlight then you turn right. There is a bridge, go up and then <u>go straight</u> . On your left, you will take another bridge, <u>go straight</u> , and you will find Mulia Hotel in front of you, then turn left. <u>Go straight</u> to the north and you will see Plaza Senayan on your left. After that you will see Senayan City on your right. (98 words)
Female N	Turn right from Anggrek campus and go straight and pass the red light. Turn left then turn right then <u>follow the street</u> , until you find a redlight again. Then you turn left, and you will see ITC Permata Hijau on your left after several hundred meters then you have to turn left after the redlight. <u>Follow the street</u> and <u>go straight</u> , you will pass a railway then <u>keep going</u> . There will be three junctions and you have to turn right, then turn left after that turn right again and then turn left and you will see Senayan City. (98 words)

Table 2 Verbal Responses from Six Randomly-Chosen Male Students
(continued)

Subject	Response
Female A	From Anggrek , you turn right and go to east, and <u>go straight</u> . After you see red light turn left and then turn right. After several hundred meters you see Palmerah Market on your right turn left. And the street is <i>berkelok2</i> , the road is a little bit <i>rusak</i> . <u>Go straight</u> and you will find red light then you turn right. There will be a bridge, go up and then <u>go straight</u> . On your left, you will see a circling bridge, take it, <u>go straight</u> , and you will find Mulia Hotel in front of you, then turn left. Keep going and you will see Plaza Senayan on your left. Not so far, you will see Senayan City on your right and you have to turn right first. (126 words)
Female C	From campus , turn right, after 1 km you will see red light turn left. Turn right after that turn left. you will see a little river and the street is curving on your left Go straight and you will find spotlight then you turn right, go to the east. There will be a bridge, go up and then <u>go straight</u> . you will see a circling bridge on your left, take it, go straight, and you will see Mulia Hotel , then turn left. <u>Go straight</u> and you will see Plaza Senayan on your left. And you will see Senayan City on your left and you have to take U turn on your right.(112 words)
Female H	From Anggrek, you turn right. <u>Go straight</u> and pass the red light. Follow the street, until you find another red light. The street is a little bit curving . Then you turn left go to west, and you will see Belleza on your right then you have to turn left after the redlight. After that turn right and turn left follow the street and <u>go straight</u> , you will pass a railway then you <u>go straight</u> . There is a three junctions after 0,5 km you turn right, then turn left after that turn right again and then turn left and you will see Senayan City. (102 words)
Average no. of words	$1/6 \times (92+98+98+126+112+102) = 104.7$ words

CONCLUSIONS

In this research, the result does not entirely match with the theory. Previous research such as (Dabbs et al., 1998; Denis, 1997; Miller & Santoni, 1986; Schmitz, 1997, cited in Lawton, 2001, p. 323) mentioned that women are good at landmarks (building and topography) and tend to use right/left markers more often than men. These are also proven correctly in this research. On the other hand, it was also stated that men tend to use cardinal directions and use the indicator of mileage in explaining the route direction (Boerger & Henley, 1999; Cohen, 1977; Plumert et al., 2001). In fact, the result shows that women used cardinal direction more often than men.

In terms of verbal ability and the use of language, this study confirms that females give more explanation as the length of their speeches is generally longer. However, the fact that males use much more serial orientation (e.g. *first*, *second*, *then*) is inconclusive. Although the use of the word *first* appeared only in the male respondents, the use of *then* was used more by females. Furthermore, in this study, the frequency of maintenance words such as *go straight* and *follow the street* did not give a definite dichotomy of gender preferences.

The writers assume this happens because the respondents are different from the respondents of previous research. There are some elements that might affect why the results of analysis differ. First, the respondents are not the same in terms of culture background, education level, and childhood, in which will affect their cognitive abilities, because the way someone thinks is shaped by his memories and previous experiences. The respondents mentioned in the literature are from western countries and the respondents in this study are from Indonesia. They might have different ways in giving direction. Where they live might determine the way they give explanation about direction because environment also affects how they give direction.

Since the time was limited, the writer only chose fifty respondents as the subject of research. Further research could be done by having more respondents to get better results. Moreover, the researcher can also categorize the respondents based on age, education, or location. It might affect the analysis in order to have more validity. Also, it can be advisable to have variation in using instruments. While interviewing the respondents, the researcher may use other instruments such as using a map or sketch for the respondents to direct the way.

REFERENCES

- Boerger, M.A., & Henley, T.B. (1999). The usage of analogy in giving instructions. *The Psychological Record*, 49, 193-209. In Napoleon, S. (2007). From here to there: A sociolinguistics study in gender and direction-giving. *Indiana Undergraduate Journal of Cognitive Science*, 2, 18-2
- Cohen, A.A. (1997). The communicative functions of hand illustrators. *Journal of Communication*, 27, 54-63. In Napoleon, S. (2007). From here to there: A sociolinguistics study in gender and direction-giving. *Indiana Undergraduate Journal of Cognitive Science*, 2, 18-2
- Dabbs, J. M., Jr., Chang, E., Strong, R. A., & Milun, R. (1998). Spatial ability, navigation strategy, and geographic knowledge among men and women. *Human Behavior and Evolution*, 19, 89-98. In Lawton, C.A. (2001). Gender and regional differences in spatial referents used in direction giving. *Sex Roles*, 44, 321-337
- Gray, J. (2005). *Men are from mars women from venus*. (T. Hermaya, Trans). Jakarta: P.T Gramedia Pustaka Utama
- Kleinedler, S. et al. (2005). *The American heritage science dictionary*. USA: Houghton Mifflin
- Lawton, C.A. (2001). *Gender and regional differences in spatial referents used in direction giving*. *Sex Roles*, 44, 321-337
- Maccoby, E. E., and Jacklin, C. N. (1974) *The Psychology of Sex Differences* Stanford, CA: Stanford University.
- Montello, D. R., Lovelace, K. L., Golledge R. G., Self, C. M. (1999) Sex-related differences and similarities in geographical and environmental spatial abilities. *Annals of the Association of American Geographers*, 89(3), p.515-534.
- Napoleon, S. (2007). From here to there: A sociolinguistics study in gender and direction-giving. *Indiana Undergraduate Journal of Cognitive Science*, 2, 18-2
- Plumert, T. et al. (2005). Gender differences and cognition among older adults. *Aging, Neuropsychology, and Cognition*, 12, 77-88. In Napoleon, S. (2007). From here to there: A sociolinguistics study in gender and direction-giving. *Indiana Undergraduate Journal of Cognitive Science*, 2, 18-2