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Variability in linguistic judgment: An analysis of questionnaire survey data from Istanbul and Berlin on the usage of Turkish demonstratives

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Speakers' judgment about well-formedness is susceptible to variation in certain domains of a language system. The usage of Turkish demonstratives *bu*, *şu* and *o* is one such domain. In this paper the variability of speakers' judgment will be used as a linguistic index characterizing a group of speakers. Turkish monolingual high school students in Istanbul, and Turkish-German bilingual peers in Berlin, participated in questionnaire surveys in which their judgments about which demonstrative was appropriate for given contexts were asked for. University students learning Turkish as a foreign language in Tokyo also participated in the survey as a control group. The results show a complete parallelism between the Istanbul and Berlin students' answers, while a considerable difference is found between the Tokyo students' answers and those of the Istanbul and Berlin students.

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1. Introduction

Although demonstratives seem to be found in every language, as speculated in Dixon 2003, it is sometimes hard to know precisely how a speaker chooses the right one among the two, three, or more available demonstratives. The reason is that they are not distinguished simply by the distance between the speaker and the referent (the object referred to), but other properties may also be encoded in demonstratives, such as visibility, specificity, distinction of new/old information, etc.¹

1 This paper is a revised version of my oral presentation at *15th International Conference on Turkish Linguistics*, August 20–22, 2010, Szeged. Parts of the results have also been presented in Hayasi, Pfaff and Dolnick (2012). I am indebted to Donna Erickson and Everett Thiele for their highly relevant comments and advice, which have improved the paper very much. I am also grateful to Tomokazu Haebara for his clear guidance on statistical analysis.

Turkish has morphologically simplex demonstratives with a three-way distinction, *bu*, *şu* and *o*,² together with their derivatives, such as local demonstratives, *bura*, *şura* and *ora*, and manner demonstratives, *böyle*, *şöyle* and *öyle*. It is traditional in Turkish reference grammars and textbooks to characterize *bu*, *şu* and *o* as referring to proximal, medial and distal referents respectively, according to the distance from the speaker. It is true that there are circumstances in which *şu* seems to be interchangeable with either *bu* or *o*, and which may invite us to locate it between the proximal *bu* and the distal *o*. Recent studies of Turkish demonstratives, however, have revealed that in those circumstances, what motivates the use of *şu* is not the medial distance between the speaker and the referent, but the hearer's unawareness of the referent; i.e. the referent of *şu* is outside the hearer's attention up until the utterance moment, while the referents of *bu* and *o* are already identified by the hearer before the utterance is spoken (Hayasi 1988, 2004, 2014; Özyürek 1998; Küntay & Özyürek 2006), as in (1):

- (1) *Şuna bak. Hasan geliyor.*
'Look at *this*. Hasan is coming.'

The speaker's choice of *şuna*, the dative form of *şu*, in (1) reminds the hearer that the referent is among the objects that she has not recognized yet, for example, someone approaching the hearer from behind. Experimental results (Hayasi & Özsoy 2015) show that the occurrence of *şu* is not related to any distance between the speaker and the referent.

The new characterization of Turkish demonstratives, especially of *şu*, seems to be successful in many cases, but it is not free from counter-examples. The most serious of these may be the case mentioned by Balpınar (2006: 39), in which the speaker can refer exclusively with *şu* to the referents, *şu Meksika'da çölde bulunan iki iskelet* 'those two skeletons found in the desert in Mexico', in her memory that she expects to be shared by the hearer, as in (2):

- (2) *Mr. Redbridge size söz etmiş miydi?*
'Has Mr. Redbridge told you?'
*{*Bu / Şu / *O} Meksika'da çölde bulunan iki iskelet...*
'Those two skeletons found in the desert in Mexico...'
Ne yazık ki gerçekten Richard ve Linda'ya aitmiş.
'It is a great pity that they really belong to Richard and Linda.'
(Glosses and morpheme boundaries in the original example are omitted by the author.)

2 Turkish simplex demonstratives function as pronouns and determiners, like *this* and *that* do in English, e.g. *Bu kitap* 'This is a book', *bu kitap* 'this book'.

One source of difficulty in searching for relevant factors in the choice of demonstratives is the variability of speakers' judgment. There are cases where two different demonstratives are reported to fit the same context equally well, as well as cases where the same demonstrative is reported to be completely appropriate for considerably different contexts. Indeterminacy thus seems inevitable if we look for the definition of the usage of demonstratives through speakers' intuitive judgments.

In this paper, the factors controlling the choice of Turkish demonstratives will not be explored; instead, I will try to propose a way to use such indeterminacy, i.e. the variability of speakers' judgments as an index characterizing a linguistic variety spoken by a group of people. The examples to be treated here are judgments made by Turkish monolingual and Turkish-German bilingual groups. It is often argued that the Turkish variety of the latter group has undergone such strong and enduring influence from German that it differs from the variety of the former. We will examine how distant or close these two groups are to each other linguistically. A group of Japanese students studying Turkish as a foreign language will also serve as a control group for making comparisons.

2. About surveys

2.1. Three surveys carried out in Istanbul, Berlin, and Tokyo

I carried out questionnaire surveys in Istanbul and Berlin in 2008, and in Tokyo in 2010, as follows:³

Table 1: Three questionnaire surveys

Place	Time	Participant
Istanbul	September 2008	59 ninth and tenth grade students
Berlin	June 2008	32 ninth and tenth grade students
Tokyo	July 2010	31 university students studying Turkish as a foreign language for more than one year

The same questionnaire was used in the three surveys. The participants took part in the surveys completely voluntarily outside school hours. They were told to report their judgment anonymously. They were also told that they could leave any question unanswered if they preferred not to answer.

3 I am deeply grateful to Kemal Cengiz, Muhsin Korkmaz, Musa Duman, and Kayoko Hayashi, who kindly distributed the questionnaire to students.

2.2. Questionnaire

The data in this paper comprise the replies to a questionnaire asking participants to choose the most appropriate demonstrative(s) according to the situation given in each question.

The questionnaire contains fifty questions. Ten ask about the background of each participant, while the forty main questions are related to the usage of Turkish words and expressions, the majority of which (36) are concerned with demonstratives.

In the questionnaire, questions about usage are arranged to form a kind of scenario of a short nonsense play. There are three characters in the play: the participant her- or himself, the father of the participant, and the father's Japanese friend whose name is *Hayasi*. The story goes roughly as follows:

(3) Story according to which questions are arranged

"One day your home telephone (i.e., the participant's telephone) rings and a Japanese friend of your father asks you to call your father to the telephone. You tell him that your father is not at home but will be back soon, since he just went out for a walk to one of the nearby parks. The Japanese man tells you that he needs to meet your father and will come to your house in thirty minutes. When the Japanese man arrives at your house, your father is not back home yet. After waiting thirty minutes, the impatient Japanese friend of your father goes out to look for your father at the park you show him from the window. Before five minutes pass, your father comes back from the park. He begins waiting for his Japanese friend, but also gets impatient, and goes out to look for his friend. Then before five minutes pass, the Japanese comes back and begins waiting for your father. Again he gets impatient and goes out, and the same situation continues. It is thus unclear if they manage to see each other."

Participants were requested to choose the most appropriate expressions according to the situation or context, which changes as the story develops. The instructions for answering questions are shown in (4), and in (5), the first three questions about usage are given.

(4) Instructions

Şimdi asıl sorulara geçiyoruz. Aşağıda bir hikaye görürsünüz. Tabii gerçek değil. Bu hikayede siz, babanız ve bir Japon yer alacak. Bu üç kişi, (a), (b), (c) ... ile gösterilen cümlelerden hangisini söylese sizce uygun olur? Uygun olan cümlelerin başına bir çarpı işareti koyar mısınız? Eğer birden fazla uygun cümle varsa tek tek işaret koyabilirsiniz. Şimdi başlıyoruz.

[Now we are moving on to the main questions. You will see a story below. It is, of course, not a real one. In this story you, your father, and a friend of your father will play a part. Which of the alternatives (a), (b), (c) , etc. would be

the most appropriate sentence for you, your father, or your father's friend to say? Please check the most appropriate sentence. You may check more than one sentence if they are all equally appropriate. Now here we go.]

(5) First three questions of the questionnaire

Güzel bir yaz günü. Evinizin telefonu çaldı. Telefona siz çıktınız. Telefondaki adam babanızla görüşmek istiyor. Acaba ne söyler? (Babanızın adı "Ahmet" olsun.) [On a beautiful summer day your home telephone rings. You pick up the telephone. A man on the other end of the line wants to talk with your father. What should he say? (Let's suppose that your father's name is "Ahmet.")]

- (a) *Ahmet Bey burada⁴ mı?* 'Is Mr. Ahmet here₁?'
- (b) *Ahmet Bey şurada mı?* 'Is Mr. Ahmet here₂?'
- (c) *Ahmet Bey orada mı?* 'Is Mr. Ahmet there?'

Babanız biraz önce çevredeki bir parka yürüyüşe çıkmıştı. [Your father has gone for a walk in one of the near-by parks. You say...]

- (a) *Bu an burada değil.* 'At this₁ moment he is not here₁.'
- (b) *Şu an burada değil.* 'At this₂ moment he is not here₁.'
- (c) *O an burada değil.* 'At that moment he is not here₁.'

... diyerek devam ediyorsunuz. [...and you continue...]

- (a) *Ama hemen buradaki parka gittiği için birazdan döner.* 'But he'll be back soon, since he's gone to a park just over here₁.'
- (b) *Ama hemen şuradaki parka gittiği için birazdan döner.* 'But he'll be back soon, since he's gone to a park just over here₂.'
- (c) *Ama hemen oradaki parka gittiği için birazdan döner.* 'But he'll be back soon, since he's gone to a park just over there.'

Three versions of the questionnaire, in Turkish, German and Japanese, were prepared in which the instructions, the background questions and the story are presented in each of the three languages. In Istanbul, the Turkish version was used, and in Tokyo, the Japanese version. In Berlin, however, both Turkish and German versions were available to be chosen according to the student's preference.

4 In translation *bu* and *şu* are rendered into *this₁* and *this₂*, respectively. This does not mean that we categorize both *bu* and *şu* as proximal; they are just practical labels.

2.3. Participants

In Istanbul, 59 students in the 9th and 10th grade at a *lise* ‘senior high school’ in the city quarter of Fatih kindly accepted my request to answer the questionnaire. In Berlin, participants were 32 high school students, also in the 9th and 10th grade, at a Gymnasium in Kreuzberg.

For comparison with the results from Istanbul and Berlin, the questionnaire was also answered in Tokyo by 31 students of Tokyo University of Foreign Studies who had studied Turkish as a foreign language for more than one year. Their major was Turkish studies and they therefore attended Turkish language classes more than fourteen hours per week. One third of the lessons are taught by a Turkish native speaker. Thus, the students are immersed in fairly good conditions for learning Turkish as a foreign language outside of Turkey. In addition, morphosyntactic similarities between the Turkish and Japanese demonstrative systems may also have helped them respond to the questionnaire. Both languages have a three-way distinction: *bu*, *şu* and *o* in Turkish, and, *ko-*, *so-* and *a-* in Japanese, and also resemble each other in other morphosyntactic respects.⁵ Tables 2, 3, and 4 show the age and gender distribution of each group of participants.

Table 2: Participants from Istanbul

Age	Female	Male	Total
14	12	5	17
15	14	12	26
16	5	10	15
17	0	1	1
Total	31	28	59

Table 3: Participants from Berlin

Age	Female	Male	Total
14	4	8	12
15	3	6	9
16	3	6	9
17	1	1	2
Total	11	21	32

Table 4: Participants from Tokyo

Age	Female	Male	Total
19	7	1	8
20	11	1	12
21	4	1	5
22	1	1	2
23	1	0	1
24	1	0	1
25	1	0	1
29	0	1	1
Total	26	5	31

⁵ There are, however, significant differences in usage between Turkish and Japanese demonstratives. See Hayasi (2004).

3. Results

The participants' answers were analyzed in a rather simple way. For each question, the numbers of participants who regarded either *bu*, *şu* or *o* as the most appropriate demonstrative were counted. Yet, counting becomes a little complicated if students check more than one demonstrative, thinking that they are equally appropriate. Let me explain how the number of participants was counted, using questions 30 and 31 as examples.

(6) Question 30

- (a) *Bu Japon arkadaşım hangi parka gitti?*
'Which park has this₁ Japanese friend of mine gone to?'
(b) *Şu Japon arkadaşım hangi parka gitti?*
'Which park has this₂ Japanese friend of mine gone to?'
(c) *O Japon arkadaşım hangi parka gitti?*
'Which park has that Japanese friend of mine gone to?'

(7) Question 31

- (a) *Bu parka.* 'To this₁ park.'
(b) *Şu parka.* 'To this₂ park.'
(c) *O parka.* 'To that park.'

As to question 30, among Istanbul students, 23 chose *bu*, 6 chose *şu*, and 28 chose *o*. One student checked both *bu* and *o*, and another checked all three demonstratives. The former student's responses are thus divided between *bu* and *o*; i.e. 0.5 is added to the totals of both *bu* and *o*. Following the same method, the latter's responses are divided among *bu*, *şu* and *o*; i.e. 0.3333, is added to each of the totals of *bu*, *şu* and *o*. As a result, among the Istanbul participants the totals for *bu*, *şu* and *o* in question 30 are 23.8, 6.3, and 28.8 respectively. The totals for the Berlin and Tokyo participants were counted similarly. Table 5 shows the result of question 30.

Table 5: The result of question 30

	Istanbul			Berlin			Tokyo		
Demonstrative	<i>bu</i>	<i>şu</i>	<i>o</i>	<i>bu</i>	<i>şu</i>	<i>o</i>	<i>bu</i>	<i>şu</i>	<i>o</i>
Number of participants choosing each demonstrative	23.8	6.3	28.8	14.0	2.5	15.5	0.0	10.0	21.0
Percentage of participants	40.4%	10.7%	48.9%	43.8%	7.8%	48.4%	0.0%	32.3%	67.7%

As to question 31, among Istanbul students, 15 chose *bu*, 25 chose *şu*, and 18 chose *o*. There was also one student who reported that all three demonstratives were equal-

ly appropriate in the context where question 31 was placed. This student's responses are divided equally among the three demonstratives, as in the case of question 30. Table 6 shows the result of question 31.

Table 6: The result of question 31

	Istanbul			Berlin			Tokyo		
Demonstrative	<i>bu</i>	<i>şu</i>	<i>o</i>	<i>bu</i>	<i>şu</i>	<i>o</i>	<i>bu</i>	<i>şu</i>	<i>o</i>
Number of participants choosing each demonstrative	15.3	25.3	18.3	11.5	15.0	5.5	1.0	8.5	21.5
Percentage of participants	26.0%	42.9%	31.1%	35.9%	46.9%	17.2%	3.2%	27.4%	69.4%

Tables 5 and 6 show that in no city do students' answers converge upon one demonstrative. Rather, they seem to be scattered over the three demonstratives, especially in Istanbul and Berlin. In Tokyo, however, concentration occurs for the demonstrative *o*. Assuming that variability of speakers' replies may reflect part of their linguistic competence or the common linguistic knowledge of a speech community, then variability may be regarded as information rather than noise. Along this line of thinking, Table 7 shows the numbers of participants choosing each of the demonstratives.

Gray cells on each line show the demonstratives chosen by the majority of participants, i.e. the most frequent responses. Comparison of the most frequent responses of the Istanbul and Berlin students shows an easily recognizable parallelism, as the same demonstrative was chosen as the most frequent response in all 38 questions about choices of demonstratives.

Can such congruence result from mere coincidence? The probability of two groups agreeing completely in 38 independent choices is quite low, occurring by chance in about one in 1.35 quintillion trials. Thus, the congruence between the Istanbul and Berlin students' responses is considered to be significant.

Were the questions too easy? For some of the questions, judgments of participants were scattered over two or three demonstratives, thus showing no congruence, as is seen in the results for question 30 (Table 5) and question 31 (Table 6). This means that participants felt some hesitation in answering at least some of the questions, indicating that the questions were not too easy.

Table 7: Choice of demonstratives by Istanbul, Berlin and Tokyo participants⁶

Question ID	Istanbul				Berlin				Tokyo			
	<i>bu</i>	<i>şu</i>	<i>o</i>	other	<i>bu</i>	<i>şu</i>	<i>o</i>	other	<i>bu</i>	<i>şu</i>	<i>o</i>	other
1	0.0	0.0	59.0	0.0	2.5	0.5	29.0	0.0	3.0	5.5	22.5	0.0
2	0.0	59.0	0.0	0.0	2.0	30.0	0.0	0.0	15.0	10.0	6.0	0.0
3	37.0	20.0	0.0	2.0	23.0	8.0	0.0	1.0	16.0	8.5	6.5	1.0
4	5.5	52.5		1.0	9.5	22.5		0.0	19.0	12.0		0.0
6	0.0	0.0	49.5	9.5	0.0	0.0	20.5	11.5	3.0	4.0	12.5	11.5
7	0.5	0.0	58.5	0.0	4.0	0.0	28.0	0.0	14.0	2.0	15.0	0.0
10	11.0	1.0	47.0	0.0	11.5	2.5	18.0	0.0	4.5	5.5	21.0	0.0
11	49.5	1.0	8.5	0.0	23.5	0.0	8.5	0.0	27.0	1.0	3.0	0.0
12	50.5	8.5	0.0	0.0	20.5	7.5	4.0	0.0	23.5	5.0	2.5	0.0
13	0.0	0.0	4.5	54.5	0.0	0.0	9.0	23.0	0.0	0.0	13.0	18.0
14	59.0	0.0		0.0	29.5	1.5		1.0	23.0	8.0		0.0
15	55.5	2.5		1.0	25.5	6.5		0.0	27.5	3.5		0.0
16	56.5	1.0	1.5	0.0	28.8	1.3	1.8	0.0	31.0	0.0	0.0	0.0
17	57.0	0.0	2.0	0.0	29.0	0.5	2.5	0.0	25.0	2.0	4.0	0.0
18	7.0	22.5	28.5	1.0	7.5	7.5	17.0	0.0	10.0	8.0	13.0	0.0
19	1.0	0.0	58.0	0.0	1.0	1.0	30.0	0.0	22.5	0.0	8.5	0.0
21	1.0	3.0	55.0	0.0	0.0	4.0	28.0	0.0	0.0	11.5	19.5	0.0
22	18.0	32.0	9.0	0.0	5.8	15.3	10.8	0.0	2.3	9.8	18.8	0.0
23 former	12.8	2.8	43.3	0.0	6.8	4.3	20.8	0.0	2.5	6.0	22.5	0.0
23 latter		52.5	6.5	0.0		25.5	6.5	0.0		22.0	9.0	0.0
24	22.0	25.0	12.0	0.0	12.0	12.0	8.0	0.0	3.0	13.5	14.5	0.0
25	4.5	4.0	50.5	0.0	4.0	4.5	23.5	0.0	2.0	8.5	20.5	0.0
26	0.0	3.0	56.0	0.0	1.0	1.5	29.5	0.0	1.0	4.5	25.5	0.0
27	37.0	5.0	16.0	1.0	21.5	5.0	5.5	0.0	20.0	4.0	7.0	0.0
28	9.0	0.0	50.0	0.0	7.5	0.0	24.5	0.0	5.0	9.5	16.5	0.0
29	3.3	10.8	10.3	34.8	2.5	5.0	7.0	17.5	0.0	3.0	10.0	18.0
30	23.8	6.3	28.8	0.0	14.0	2.5	15.5	0.0	0.0	10.0	21.0	0.0
31	15.3	25.3	18.3	0.0	11.5	15.0	5.5	0.0	1.0	8.5	21.5	0.0
32	27.5	20.5	11.0	0.0	18.0	11.0	3.0	0.0	4.0	9.5	17.5	0.0
33	16.5	28.0	14.5	0.0	7.2	20.2	4.7	0.0	3.0	10.5	17.5	0.0
34	2.0	1.0	56.0	0.0	0.3	6.3	25.3	0.0	0.0	3.5	27.5	0.0
35	0.0	1.0	58.0	0.0	4.3	3.8	23.8	0.0	8.0	4.0	19.0	0.0
36	59.0	0.0	0.0	0.0	29.0	0.0	3.0	0.0	31.0	0.0	0.0	0.0
37	3.0	13.0	43.0	0.0	6.5	11.0	14.5	0.0	1.0	5.0	25.0	0.0
38 former	22.8	14.3	21.8	0.0	11.7	11.7	8.7	0.0	8.0	15.5	7.5	0.0
38 latter	22.8	14.3	21.8	0.0	11.7	11.7	8.7	0.0	2.0	12.0	17.0	0.0
39	19.3	30.3	9.3	0.0	14.3	14.8	2.8	0.0	1.0	8.5	21.5	0.0
40	5.0	7.0	47.0	0.0	3.8	6.3	21.8	0.0	1.0	5.0	25.0	0.0

[Note: Demonstratives chosen by the majority of participants are in gray cells.]

As for Tokyo students, in 71% of the questions (i.e. 27 out of 38 questions), the demonstratives chosen by the majority are the same as those chosen by the majority of the Istanbul and Berlin students. I think this is rather a good result for students learn-

⁶ Results of questions 5, 8, 9 and 20 are excluded from Table 7, because they do not concern the demonstratives. Questions 23 and 38, on the other hand, actually each contain two questions, which are shown as the former and the latter, respectively.

ing Turkish as a foreign language, though the ratio of congruence is clearly much lower than that between the Istanbul and Berlin students (71% vs. 100%). The difference is mainly a result of the Tokyo students choosing *o* more frequently than the Istanbul and Berlin students; the majority from Tokyo chose *o* in 22 questions, whereas those from Istanbul and Berlin chose *o* in just 16 questions.

Up to this point, we have focused on which demonstrative is chosen by the majority of each group. However, the distribution of answers to the specific questions may differ considerably, even though the same demonstrative might be chosen by the majority. For example, in question 30, *o* was chosen by the majority of students both in Istanbul and in Tokyo. Yet, as shown in Table 5, in Istanbul, many students also chose *bu* and the difference between *o* and *bu* is small, while in Tokyo more concentration is found on the demonstrative *o*, and no student chose *bu*.

An effective approach for showing differences in distribution of answers may be to calculate the *Entropy* of the answer distribution, since *Entropy* (H^*)⁷ can show the degree of scatteredness of categorical variables. When the number of alternatives is three, as is the case in most of our questions, *Entropy* is defined, as follows:

$$(8) \quad \text{Entropy: } H^* = -\sum_{i=1}^3 \frac{P(x_i) \log P(x_i)}{\log 3}$$

For example, if all the participants chose one and the same demonstrative, then the *Entropy* would be 0. On the other hand, if the same number of participants chose each of the three demonstratives, then, the *Entropy* would be 1. According to how concentrated the answers are, the value of *Entropy* varies between 0 and 1, with 0 showing maximal concentration and 1 maximal scatteredness. Using this formula, the *Entropy* of the answers to questions 30 and 31 from Istanbul can be calculated, as shown in (9) and (10). The results are 0.87 and 0.98, respectively; hence the degree of scatteredness is considerable in both cases.

$$(9) \quad \begin{aligned} H^* &= -\sum P(x_i) \log P(x_i) / \log 3 \\ &= -1 * \{ 23.8/59 * \log (23.8/59) + 6.3/59 * \log (6.3/59) \\ &\quad + 28.8/59 * \log (28.8/59) \} / \log 3 \\ &\approx 0.87 \end{aligned}$$

$$(10) \quad \begin{aligned} H^* &= -\sum P(x_i) \log P(x_i) / \log 3 \\ &= -1 * \{ 15.3/59 * \log (15.3/59) + 25.3/59 * \log (25.3/59) \\ &\quad + 18.3/59 * \log (18.3/59) \} / \log 3 \\ &\approx 0.98 \end{aligned}$$

In the same way, the *Entropies* of all the answers of Istanbul, Berlin and Tokyo students were calculated to compare the values for each group. Figure 1 is the scatter diagram of the *Entropy* values of Istanbul and Berlin students' answers.

7 More precisely, what we call *Entropy* here should be termed 'normalized' *Entropy*.

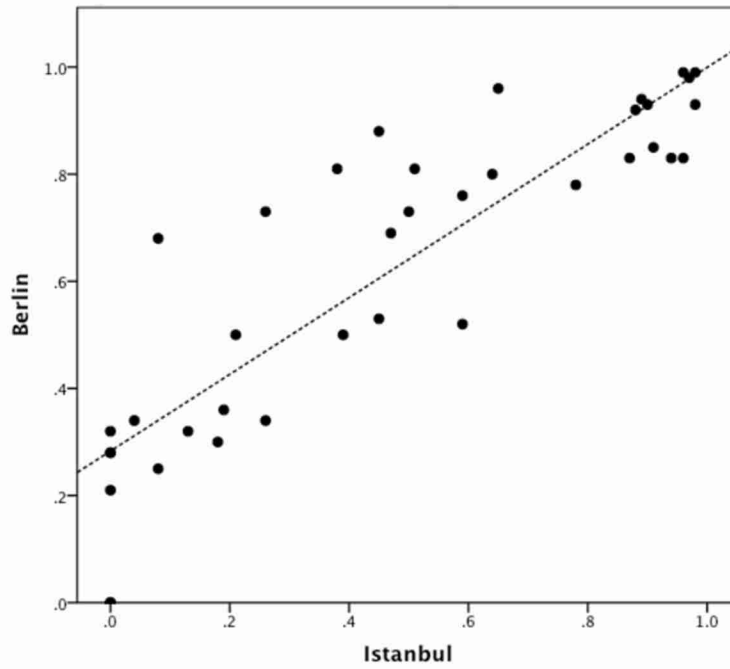


Figure 1: Correlation in variability between Istanbul and Berlin

Each dot in Figure 1 stands for one of the questions in the questionnaire. The x -axis shows the *Entropy* values of the Istanbul students' answers to the questions, while the y -axis shows the *Entropy* values of the Berlin students' answers to the same questions.

Figure 1 indicates a strong positive correlation for students from Istanbul and Berlin; Figure 2, on the other hand, shows a scattered distribution with no correlation for students from Istanbul and Tokyo.

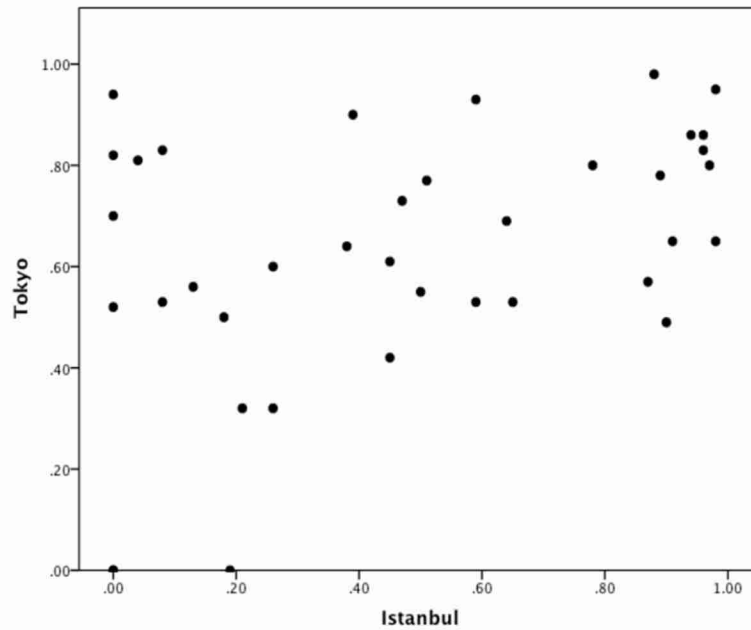


Figure 2: Correlation in variability between Istanbul and Tokyo

Thus, when considering not only which demonstrative is chosen by the majority, but also the distribution patterns of answers, we see that the answers from students in Istanbul and Berlin show almost perfect congruence.

4. Conclusion

The purpose of this research was to examine variability in demonstrative usage among Turkish speakers. The method involved looking at speakers in three distinct locales: Istanbul, Turkey; Berlin, Germany; and Tokyo, Japan. The first two groups consisted of first-language or bilingual speakers. The third group consisted of second-language learners of Turkish and acted as a control group.

The answers from the Tokyo students showed congruence internally, but not with the answers of the first-language or bilingual Turkish speakers. Our results suggest that mono/bilingual speakers share an understanding of the meaning of the demonstratives which the second-language learners do not. It may be the case that they chose *o* as the default demonstrative when they were hesitant about the choice. Actually, the distal demonstrative *o* is also most frequently chosen by the Istanbul and Berlin students; *o* was chosen in 16 questions, *bu* in 12, and *şu* in 8 questions.

The comparison of the answers given by the Istanbul and Berlin students reveals an almost complete parallelism between the two groups. In every question, the same demonstrative is chosen by the majority of students in both cities. The same pattern

of variability is also found in their answers. The parallelism between Istanbul and Berlin speakers becomes more salient when compared with the pattern of the Tokyo students' answers.

The close similarity between the Berlin and Istanbul students in the judgment of demonstratives is particularly amazing considering that 30 of 32 participants in Berlin were born in Germany, that 8 students reported speaking German better than Turkish (15 reported speaking both well), and that the German and Turkish demonstrative systems are different (with a two-way distinction in the German demonstrative system vs. a three-way distinction in Turkish).

The Turkish varieties spoken in Germany usually contain many loans from German and some of their grammatical idiosyncrasies are not found in varieties spoken in Turkey. This gives us the impression that Turkish varieties spoken in Germany have undergone much change induced by the language contact with German. However, we should not draw hasty conclusions. Formal components such as lexical items and grammatical rules are usually explicit, and accordingly are more influential than implicit components, such as patterns and frequencies of their occurrence, in forming the holistic impression of a linguistic variety, although the latter also are important. The results of this paper should thus be taken as another example of the multifacetedness of language.

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