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Contrastive Interlanguage Analysis of Discourse Markers Used by Nonnative and Native English Speakers

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In this study, the use of discourse markers (DMs) in the speech of Japanese learners of English was investigated. To explore the features of their DM use, corpora of non-native and native English speakers’ speech were analysed using the methodology called Contrastive Interlanguage Analysis. A frequency analysis of DMs revealed significant differences between Japanese learners’ and native speakers’ speech, supporting earlier findings. Quantitative and qualitative analyses of the learner corpus data suggest that Japanese learners may use the marker *so* more frequently than other nonnative English learners, while also using certain interpersonal or cognitive function markers such as *you know*, *I mean*, and *just* less frequently. The findings suggest the need for language instructors and materials writers to understand the characteristics of Japanese learners’ interlanguage and to provide them with appropriately designed DM input.

本研究は、日本人英語学習者の話し言葉における談話標識（discourse markers: DMs）の使用を調べたものである。日本人英語学習者のDMs使用の特徴を探るために、対照中間言語分析の手法に基づき、非英語母語話者と英語母語話者の話し言葉コーパスを分析した。まず、日本人英語学習者と英語母語話者の話し言葉におけるDMsの使用頻度を分析したところ、先行研究と同じく、大きな差が見られた。次に、非英語母語話者の話し言葉を量的・質的の両面で分析した結果、日本人英語学習者が、他の非英語母語話者に比べて*so*を多く使用し、*you know*, *I mean*, *just*などの対人関係的、認知的機能をもつDMsをあまり使用しないことが明らかになった。その結果は、教師や教材作成者が日本人英語学習者の中間言語の特徴を理解し、学習者に対して慎重にDMsをインプットしていく必要性があることを示唆している。
Discourse markers (DMs) are lexical items whose pragmatic functions play a crucial role in speech communication: Speakers use them to create textual coherence in interaction, as well as to express their own feelings or stances (Carter & McCarthy, 2006). For example, _OK/okay_, _really_, and _right_ are used to respond to a speaker’s utterance and to suggest agreement, alignment, or active listening. _But, first_, and _then_ serve to organise discourse structure. Words like these are tools that enable speakers to convey their meanings to their listeners. Additionally, even if spoken sentences or phrases are grammatically correct, the lack of DMs may make it difficult to attract listeners’ attention in a polite way (Romero-Trillo, 2002) and may create a negative impression of being uncollaborative or awkward in conversation (Svartvik, 1980). Therefore, DMs are of special importance to nonnative speakers (NNSs), who can use them to compensate for limited English language proficiency and to improve the comprehensibility of their messages (e.g., Tyler, Jefferies, & Davies, 1988; Williams, 1992).

Considerable interest has emerged in the roles and functions of individual DMs such as _because, oh_, and _well_ (e.g., Blakemore, 2002; Fraser, 1999, 2009; Schiffrin, 1987). The development of corpus linguistics has enabled data-driven quantitative and qualitative analyses of the use of DMs by native speakers (NSs) of English (e.g., Lenk, 1998; McCarthy & Handford, 2004). However, a relatively limited amount of research has been conducted concerning DM use in terms of second language acquisition, especially in the Japanese EFL context (see Hays, 1992; Shimada, 2011).

Positioned against this contextual background, the present study was focused on DM use in the speech of Japanese English learners. The methodology followed Granger’s (1996, 2002) Contrastive Interlanguage Analysis (CIA), a corpus-based approach that employs two types of comparisons: “between native language and learner language (L1 vs L2) and between different varieties of interlanguage (L2 vs L2)” (Granger, 2009, p. 18). The CIA approach has been applied in a number of corpus studies (e.g., Ádel, 2006; Granger & Tyson, 1996), and it offers insights into the nature of interlanguage as well as aids in the identification of usage trends (e.g., overuse, underuse, and misuse) in learners’ speech and writing. Thus, the aim of the present study was to investigate differences in the use of DMs (a) between Japanese L2 speakers and NSs of English, and (b) between nonnative English learners with different L1 backgrounds (Japanese, Chinese, Dutch, German, French, and Spanish).
Literature Review and Research Questions

DMs in Spoken English

DMs have been defined by researchers in a number of different ways; however, there is generally a consensus that they mainly serve syntactic and pragmatic functions in discourse. Fraser (1999, 2009) addressed their syntactic functions and considered them to be linguistic items signalling a relationship between two segments of discourse. He argued that a DM must be included as an integral syntactic part of its next discourse segment. The DMs are italicized in the following examples:

1. a. Jones died last night. *But* he had been very ill for a long time.
   b. I went to Boston first *and* later on, went to Cape Cod.
   c. The water wouldn’t boil, *so* we couldn’t make any tea. (Fraser, 2009, p. 294)

In other words, the purpose of each marker in examples 1a, 1b, and 1c is to make coherent links between one discourse segment and another.

In spoken English, DMs often execute pragmatic functions. Schiffrin (1987) stated that they serve as contextual coordinators for establishing or maintaining a relationship between speaker and hearer.

2. Zelda: Are you from Philadelphia?
   Sally: *Well* I grew up uh out in the suburbs. And then I lived for about seven years up in upstate New York. And then I came back here t’go to college. (Schiffrin, 1987, p. 106)

In example 2, Sally uses *well* as a signal that she cannot give a clear answer to Zelda’s yes-no question—in other words, that her pragmatic contribution is at odds with her interlocutor’s expectations. Thus, as Schiffrin pointed out, the marker *well* plays the role of contextual coordinator, marking a juncture between a speaker’s intention and a hearer’s interpretation.

Additionally, Schiffrin examined discourse particles such as *I mean, you know, oh*, and *like*. These items do not serve essential syntactic functions; rather, they are optional devices through which speakers can shape their utterances to affect hearers’ knowledge.
3. a. *I mean* I may be wrong, but I’m—*I mean* that’s what I’m—that’s my opinion.

   b. We have some *y’know*. (Schiffrin, 1987, pp. 34-35)

   Despite the fact that their predominant function is pragmatic instead of syntactic, markers such as those in examples 3a and 3b are ubiquitous in everyday spoken English. The markers in 3a and 3b play a role in indicating the speakers’ intention to keep conversation going, and help the hearers focus on the upcoming words. Schiffrin’s definition of DMs, then, was broader than Fraser’s (1999, 2009), and her model illustrated features of the spoken mode in more detail.

   Fung and Carter (2007) also examined the spoken mode, and they incorporated Schiffrin’s (1987) model while proposing a functional paradigm of DMs drawn from their analysis of spoken English data produced by NSs and

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### Table 1. A Functional Paradigm of DMs in Speech

<table>
<thead>
<tr>
<th>Category</th>
<th>Discourse functions and markers</th>
</tr>
</thead>
</table>
| Interpersonal | Marking shared knowledge, indicating attitudes, or showing responses:  
  *absolutely, actually, basically, exactly, great, I see, I think, just, kind of, like, listen, obviously, oh, oh great, OK/okay, really, right/alright, see, sort of, sure, to be frank, to be honest, well, yeah, yes, you know, you see*  |
| Referential  | Indicating relationship between utterances:  
  *and, anyway, because/‘cause, but, cos, however, likewise, nevertheless, or, similarly, so, yet*  |
| Structural   | Organising or managing the direction of conversations:  
  *and, finally, first, firstly, how about, let me conclude the discussion, let’s discuss, let’s start, next, now, OK/okay, right/alright, second, secondly, so, then, well, what about, yeah*  |
| Cognitive    | Denoting thinking process, or reformulating utterance:  
  *and, I mean, I see, I think, in other words, like, sort of, that is, to put it in another way, well, what I mean is, you know*  |

*Note.* Adapted from “Discourse markers and spoken English: Native and learner use in pedagogic settings,” by L. Fung and R. Carter, 2007, *Applied Linguistics*, 28, p. 418. Some DMs such as *and, I think,* and *well* have multiple functions in discourse.
NNSs. They identified 57 common English DMs and classified them into four categories: interpersonal, referential, structural, and cognitive (see Table 1). This taxonomy is an extensive one, useful for characterising a large number of DMs in spoken English.

**Learner Corpus Analysis of DM Use**

Despite the widely recognised importance of DMs in spoken discourse, there have been only a limited number of studies examining the use of DMs by language learners. Romero-Trillo (2002) and Müller (2004) conducted corpus-driven comparisons of DM use by NSs and NNSs, and their results suggested that the use of certain DMs was influenced by the L1 of NNSs. Romero-Trillo quantitatively analysed spoken English data from Spanish children and adults. He found that Spanish children overused the English word *listen* due to the influence of its high-frequency counterpart in their L1 speech. Similarly, Müller compared the use of *well* and *so* by German speakers of English with their use in the speech of American NSs and found that German speakers used *well* much more frequently, and *so* much less frequently, than American NSs did. Müller pointed out that both DMs were translated as the German adverb *auch*, and that German speakers might have a preference for *well* in order to avoid confusing English *so* and German *also*.

In addition, Aijmer (2004) and Fung and Carter (2007) conducted corpus-based analyses revealing significant differences in the distributions of certain DMs between NS and NNS speech. Aijmer found that Swedish learners of English overused *I don't know* in order to signal uncertainty or hesitation, and Fung and Carter showed that learners in Hong Kong underused many markers, such as *right*, *yeah*, *well*, and *you know*, compared to the frequencies found in British NS data.

Only a few researchers have empirically investigated DM use in the speech of Japanese English learners. Hays (1992) described the acquisition of DMs by Japanese college students of various English proficiency levels. His analysis of the spoken data revealed that although the markers *and*, *but*, and *so* were frequently used, *you know* and *well* were rarely uttered by Japanese students learning English. In other words, his results indicated that the Japanese learners had greater difficulties acquiring pragmatic markers such as *you know* and *well*. Likewise, Miura (2011) compared the frequency of DMs used by Japanese learners of English to those of English NSs and found that certain markers such as *well*, *I mean*, *kind of*, and *like* were underused by novice and lower level learners. Additionally, Shimada (2011) conducted a corpus-based analysis of English DM use by Japanese learners and NS chil-
The results revealed that as speakers’ proficiency improved, they used many items more frequently, regardless of their L1. However, the quantitative analysis confirmed significant differences in the distributions of DMs between Japanese learners and NSs. One of the notable findings was that Japanese learners overused relatively simple types of DMs such as OK/okay, so, and yes.

Most studies on learners’ use of spoken DMs have revealed that learners use certain items much more or less frequently than NSs do. However, the differences in DM frequency between NS and NNS speech are not enough to fully explain the features of DM use in interlanguage—that is, researchers have not yet determined whether the differences are due to the specific influences of individual L1 backgrounds or whether they are common to language learners in general. In order to address the issue, as Granger (2002) argued, it is necessary to construct a comparison of learner languages that incorporate speakers of different L1 backgrounds.

In addition, many comparative studies are based on disparate databases. For example, Shimada (2011) compared three spoken corpora, but there were considerable differences in the ways the data were collected. In that study, the Japanese learner corpus comprised a collection of interviews from a speaking test, but the speech data of NS children and adults were extracted from naturally occurring conversations in daily situations. These different situations may affect how speakers use DMs to facilitate communication, and different types of data collection may generate different results.

**Research Questions**

In the present study, features of DM use in the speech of Japanese learners of English were explored. The following research questions were addressed using the methods of CIA:

- **RQ1:** How do levels of use of spoken English DMs by Japanese learners differ from those of NSs of English?
- **RQ2:** How do levels of use of spoken English DMs by Japanese learners differ from those of other English language learners with different L1 backgrounds?

RQ1 is intended to replicate previous studies but using homogeneous databases. RQ2, on the other hand, is designed to explore the features of Japanese learners’ DM use by comparing interlanguages of different L1 backgrounds.
Method

Databases

In order to make comparisons based on the CIA approach, the present study used two corpus databases. Data for EFL learners were from the Louvain International Database of Spoken English Interlanguage (LINDSEI; Gilquin, De Cock, & Granger, 2010), and data for native English speakers were from the NICT JLE Corpus (Izumi, Uchimoto, & Isahara, 2004).

The former database, LINDSEI, is a spoken corpus consisting of interviews produced by university undergraduates with different L1 backgrounds. All are higher intermediate and advanced learners of English. The spoken corpus consists of 11 subcorpora, classified according to learners’ L1, and the data collection was performed using the same procedure for all subcorpora. Each interview lasts about 15 minutes and contains three tasks: (a) warm-up questions on a set topic (e.g., the most impressive country they have visited, their favourite film or play), (b) free and informal discussion with the interviewer; and (c) a picture description. The present study drew on six of the subcorpora, which are characterised in Table 2 below.

<table>
<thead>
<tr>
<th>L1 subcorpus</th>
<th>Language family</th>
<th>n of interviews</th>
<th>n of words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese (JP)</td>
<td>Asian</td>
<td>51</td>
<td>37,126</td>
</tr>
<tr>
<td>Chinese (CH)</td>
<td>Asian</td>
<td>53</td>
<td>63,542</td>
</tr>
<tr>
<td>Dutch (DU)</td>
<td>Germanic</td>
<td>50</td>
<td>79,652</td>
</tr>
<tr>
<td>German (GE)</td>
<td>Germanic</td>
<td>50</td>
<td>85,950</td>
</tr>
<tr>
<td>French (FR)</td>
<td>Romance</td>
<td>50</td>
<td>91,402</td>
</tr>
<tr>
<td>Spanish (SP)</td>
<td>Romance</td>
<td>50</td>
<td>64,804</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>304</td>
<td>422,476</td>
</tr>
</tbody>
</table>

*Note. Adapted from LINDSEI: Louvain international database of spoken English interlanguage by G. Gilquin, S. De Cock, and S. Granger (Eds.), 2010, p. 25. Louvain-la-Neuve, Belgium: Presses universitaires de Louvain.*

Each subcorpus is made up of about 50 interviews, but the number of words in the Japanese subcorpus is much lower than that in the other subcorpora.  

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3. Each subcorpus is made up of about 50 interviews, but the number of words in the Japanese subcorpus is much lower than that in the other subcorpora.
NS data from the NICT JLE Corpus consisted of 20 interviews (94,845 words) produced by American speakers aged 20-24. Each interview lasts about 15 minutes. The interview tasks are also similar to those of LINDSEI, comprising warm-up questions, a single picture description task, and a role-play with the interviewer. The aim of the present study, therefore, is to address gaps in earlier work, ensuring the homogeneity of databases in order to permit an effective comparison of NS and NNS speech.

Procedure

The present study was focused on the 57 DMs listed in Fung and Carter’s (2007) functional paradigm, which embraces the features of DMs in spoken English. In the first procedure, the corpus analysis software WordSmith Tools 5.0 (Scott, 2008) was used to obtain frequencies for each of the 57 items. Concordance lines were also viewed to differentiate words used as DMs from those playing other grammatical roles. Some examples are as follows:

Words used as DMs:

They are advertising by the week, so I found it. (The NICT JLE Corpus, N_file00006.stt)

...well first of all it’s her expression she’s got this really sour expression. (LINDSEI-GE050)

Words not used as DMs:

...I... wouldn’t be able to come back so early. (LINDSEI-FR006)

...but now I cannot speak English very well. (LINDSEI-JP051)

The categorization was carried out by the author. In order to test the reliability of the coding, a post-hoc intra-coder reliability check was conducted based on Müller (2004) at an interval of about 2 years. Despite the long interval, the simple agreement rate of the coding of like, so, and well was 94%, 99%, and 98%, respectively. Thus, the reliability of the coding process is considered high.

Statistical analyses of the frequencies of DMs were conducted to answer RQ1 and RQ2. The raw frequency of each item was standardized as a frequency per 10,000 words, and then used to calculate the log-likelihood ratio and chi-square value for comparison between corpora of different sizes. In corpus studies, although chi-square tests have often been performed to
Shimada

compare word frequencies across corpora, log-likelihood tests are considered to have higher reliability than other statistical methods when comparing different-sized datasets (Rayson & Garside, 2000). When researchers compare two datasets with a single degree of freedom, significance is statistically tested by the log-likelihood ratios. If the log-likelihood ratio is \( \pm 3.84 \) or more, a significant difference exists between the two datasets at a 5% significance level (Rayson, Berridge, & Francis, 2004). Additionally, Mann-Whitney tests were employed to compare the frequency of DMs by each functional category, following Fung and Carter (2007).

In addition to these quantitative analyses, the study included qualitative observations about the context, situation, and discourse function of spoken DMs. These observations serve to complement the quantitative analyses, providing vital details on the functions of DM use in actual learner speech.

Results and Discussion

Comparisons of DM Use Between Japanese EFL Learners and NSs of English

In order to answer RQ1, a comparative analysis was conducted using the frequency of DMs in two subsets of speech data: the Japanese subcorpus of LINDSEI (i.e., LINDSEI-JP) and the NS subcorpus of the NICT JLE Corpus (i.e., NICT-NS). Table 3 provides the standardized frequency of each marker, the log-likelihood ratios, and chi-squared values. If the occurrence rate of DMs was 0.01% or below in either database, the items were not included in the analysis.

Chi-square tests revealed that significant differences existed between the two databases in the frequencies of 21 out of 27 DMs with an occurrence rate of more than 0.01%. Additionally, log-likelihood ratios were added to the results obtained with the chi-square tests. If the ratio applied to the two databases was +3.84 or more, the item was considered to be used more frequently in LINDSEI-JP than in NICT-NS. On the other hand, when the ratio was -3.84 or less, the item was considered to be used less frequently in the Japanese learner data. The tests revealed that Japanese learners more frequently used relatively simple markers such as yes, so, and I think, while they used some interpersonal or cognitive markers such as like, really, you know, kind of, and I mean less frequently than NSs of English. Moreover, Mann-Whitney tests showed that significant differences existed between the two databases in the frequency of DMs in the interpersonal category \( (U = 110, p = .040) \). Therefore, the results support those of previous studies (e.g., Hays,
1992; Miura, 2011; Shimada, 2011), in finding that there was a significant discrepancy between Japanese learners and NSs of English in the frequency of DMs.

Table 3. Comparisons of DM Use Between Japanese EFL Learners (LINDSEI-JP) and NSs of English (NICT-NS)

<table>
<thead>
<tr>
<th>DM</th>
<th>Category</th>
<th>LINDSEI-JP</th>
<th>NICT-NS</th>
<th>LLR</th>
<th>Chi-square value</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>IP</td>
<td>71.92</td>
<td>14.55</td>
<td>248.791</td>
<td>287.012**</td>
</tr>
<tr>
<td>so</td>
<td>Ref/Str</td>
<td>206.86</td>
<td>133.38</td>
<td>88.213</td>
<td>95.000**</td>
</tr>
<tr>
<td>I think</td>
<td>IP/Cog</td>
<td>88.35</td>
<td>51.66</td>
<td>54.020</td>
<td>58.292**</td>
</tr>
<tr>
<td>but</td>
<td>Ref</td>
<td>145.72</td>
<td>101.22</td>
<td>44.215</td>
<td>46.994**</td>
</tr>
<tr>
<td>now</td>
<td>Str</td>
<td>13.47</td>
<td>3.58</td>
<td>35.907</td>
<td>40.969**</td>
</tr>
<tr>
<td>first</td>
<td>Str</td>
<td>2.96</td>
<td>0.11</td>
<td>21.678</td>
<td>23.961**</td>
</tr>
<tr>
<td>finally</td>
<td>Str</td>
<td>2.96</td>
<td>0.74</td>
<td>8.470</td>
<td>9.684**</td>
</tr>
<tr>
<td>yeah</td>
<td>IP/Str</td>
<td>86.46</td>
<td>72.54</td>
<td>6.599</td>
<td>6.817**</td>
</tr>
<tr>
<td>and</td>
<td>Ref/Str/Cog</td>
<td>420.46</td>
<td>398.02</td>
<td>3.297</td>
<td>3.464</td>
</tr>
<tr>
<td>because/cause</td>
<td>Ref</td>
<td>47.68</td>
<td>46.29</td>
<td>0.109</td>
<td>0.111</td>
</tr>
<tr>
<td>I see</td>
<td>IP/Cog</td>
<td>1.08</td>
<td>1.48</td>
<td>-0.326</td>
<td>0.311</td>
</tr>
<tr>
<td>or</td>
<td>Ref</td>
<td>50.10</td>
<td>54.09</td>
<td>-0.811</td>
<td>0.806</td>
</tr>
<tr>
<td>exactly</td>
<td>IP</td>
<td>2.15</td>
<td>3.48</td>
<td>-1.622</td>
<td>1.507</td>
</tr>
<tr>
<td>anyway</td>
<td>Ref</td>
<td>1.08</td>
<td>2.32</td>
<td>-2.356</td>
<td>2.090</td>
</tr>
<tr>
<td>basically</td>
<td>IP</td>
<td>0.27</td>
<td>4.32</td>
<td>-20.173</td>
<td>13.780**</td>
</tr>
<tr>
<td>oh</td>
<td>IP</td>
<td>7.54</td>
<td>21.30</td>
<td>-34.107</td>
<td>29.021**</td>
</tr>
<tr>
<td>then</td>
<td>Str</td>
<td>15.35</td>
<td>38.91</td>
<td>-53.065</td>
<td>46.000**</td>
</tr>
<tr>
<td>right/alright</td>
<td>IP/Str</td>
<td>0.27</td>
<td>11.07</td>
<td>-60.590</td>
<td>38.787**</td>
</tr>
<tr>
<td>OK/okay</td>
<td>IP/Str</td>
<td>22.90</td>
<td>59.25</td>
<td>-83.548</td>
<td>72.304**</td>
</tr>
<tr>
<td>actually</td>
<td>IP</td>
<td>4.85</td>
<td>27.94</td>
<td>-86.724</td>
<td>66.491**</td>
</tr>
<tr>
<td>I mean</td>
<td>Cog</td>
<td>2.15</td>
<td>25.73</td>
<td>-110.554</td>
<td>77.784**</td>
</tr>
<tr>
<td>well</td>
<td>IP/Str/Cog</td>
<td>5.39</td>
<td>37.32</td>
<td>-128.558</td>
<td>96.303**</td>
</tr>
<tr>
<td>kind of</td>
<td>IP</td>
<td>5.39</td>
<td>41.12</td>
<td>-148.569</td>
<td>110.000**</td>
</tr>
<tr>
<td>just</td>
<td>IP</td>
<td>10.77</td>
<td>77.39</td>
<td>-271.486</td>
<td>203.074**</td>
</tr>
<tr>
<td>you know</td>
<td>IP/Cog</td>
<td>4.31</td>
<td>64.32</td>
<td>-294.673</td>
<td>203.503**</td>
</tr>
<tr>
<td>really</td>
<td>IP</td>
<td>8.62</td>
<td>78.13</td>
<td>-304.263</td>
<td>221.379**</td>
</tr>
<tr>
<td>like</td>
<td>IP/Cog</td>
<td>28.82</td>
<td>140.65</td>
<td>-390.444</td>
<td>308.967**</td>
</tr>
</tbody>
</table>

Note. The occurrence rate of the markers *cos, great, next, obviously, sort of, sure, and what about* was 0% in either corpus. They were excluded from this analysis due to the impossibility of computing the log-likelihood ratio (LLR). Further research should be done to investigate why a certain DM occurs in one dataset but not in the other.

IP = interpersonal; Ref = referential; Str = structural; Cog = cognitive.

**p < .01.
Comparisons of DM Use Between Japanese EFL Learners and Other English Learners

This section addresses RC2, which was about comparing DM frequencies in NNS speech from the Japanese subcorpus with the five other subcorpora of LINDSEI (i.e., LINDSEI-OTHERS). Table 4 shows comparisons of the frequency of DMs. As in the analysis of the previous section, if the occurrence rate of a given DM was 0.01% or below in either database, the item was not included in the analysis.

The results of chi-square tests revealed that although Japanese learners often used some items such as *so* and *but*, they also used 14 out of 27 DMs less frequently than other nonnative English learners did. These findings were supported by tests of log-likelihood ratios. Although Mann-Whitney tests did not show significant differences in the frequencies of DMs according to functional category, interpersonal or cognitive function markers such as *well*, *really*, *you know*, *I mean*, and *just* were used less frequently by Japanese learners than by other English learners. Thus, the significant differences in the frequencies of DMs may represent the features of Japanese learners’ DM use.

On the other hand, the results given in Table 4 reveal no significant differences between the two databases in the frequency of seven items: *exactly*, *kind of*, *or*, *OK/okay*, *anyway*, *cos*, and *basically*. There were only small differences between learners’ respective frequencies of three markers—*and*, *yes*, and *right/alright*—although the differences were significant at a 5% significance level. In short, it was notable that Japanese learners used some items just as frequently as other nonnative English learners. Among these items, the use of *kind of*, *OK/okay*, *basically*, *yes*, and *right/alright* may be regarded as features of DM use in NNSs’ interlanguage because the frequency of the five items differed significantly between Japanese learners and NSs of English (see Table 3).
Table 4. Comparisons of DM Use Between Japanese EFL Learners (LINDSEI-JP) and Other Nonnative English Learners (LINDSEI-OTHERS)

<table>
<thead>
<tr>
<th>DM</th>
<th>Category</th>
<th>LINDSEI-JP</th>
<th>LINDSEI-OTHERS</th>
<th>LLR</th>
<th>Chi-square value</th>
</tr>
</thead>
<tbody>
<tr>
<td>so</td>
<td>Ref/Str</td>
<td>206.86</td>
<td>96.04</td>
<td>315.280</td>
<td>397.358**</td>
</tr>
<tr>
<td>but</td>
<td>Ref</td>
<td>145.72</td>
<td>119.45</td>
<td>18.157</td>
<td>19.430**</td>
</tr>
<tr>
<td>now</td>
<td>Str</td>
<td>13.47</td>
<td>8.15</td>
<td>9.638</td>
<td>11.130**</td>
</tr>
<tr>
<td>finally</td>
<td>Str</td>
<td>2.96</td>
<td>1.09</td>
<td>7.093</td>
<td>9.470**</td>
</tr>
<tr>
<td>first</td>
<td>Str</td>
<td>2.96</td>
<td>1.17</td>
<td>6.292</td>
<td>8.234**</td>
</tr>
<tr>
<td>and</td>
<td>Ref/Str/Cog</td>
<td>420.46</td>
<td>394.14</td>
<td>5.815</td>
<td>6.164*</td>
</tr>
<tr>
<td>OK/okay</td>
<td>IP/Str</td>
<td>22.90</td>
<td>19.05</td>
<td>2.456</td>
<td>2.591</td>
</tr>
<tr>
<td>kind of</td>
<td>IP</td>
<td>5.39</td>
<td>4.88</td>
<td>0.173</td>
<td>0.178</td>
</tr>
<tr>
<td>exactly</td>
<td>IP</td>
<td>2.15</td>
<td>2.13</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>or</td>
<td>Ref</td>
<td>50.10</td>
<td>55.35</td>
<td>-1.749</td>
<td>1.711</td>
</tr>
<tr>
<td>anyway</td>
<td>Ref</td>
<td>1.08</td>
<td>2.36</td>
<td>-3.025</td>
<td>2.484</td>
</tr>
<tr>
<td>cos</td>
<td>Ref</td>
<td>4.31</td>
<td>6.90</td>
<td>-3.859</td>
<td>3.414</td>
</tr>
<tr>
<td>basically</td>
<td>IP</td>
<td>0.27</td>
<td>1.32</td>
<td>-4.363</td>
<td>3.057</td>
</tr>
<tr>
<td>yes</td>
<td>IP</td>
<td>71.92</td>
<td>84.57</td>
<td>-6.790</td>
<td>6.553*</td>
</tr>
<tr>
<td>right/alright</td>
<td>IP/Str</td>
<td>0.27</td>
<td>2.15</td>
<td>-9.283</td>
<td>6.050*</td>
</tr>
<tr>
<td>yeah</td>
<td>IP/Str</td>
<td>86.46</td>
<td>111.48</td>
<td>-20.767</td>
<td>19.613**</td>
</tr>
<tr>
<td>like</td>
<td>IP/Cog</td>
<td>28.82</td>
<td>44.56</td>
<td>-21.778</td>
<td>19.507**</td>
</tr>
<tr>
<td>oh</td>
<td>IP</td>
<td>7.54</td>
<td>18.42</td>
<td>-28.653</td>
<td>23.000**</td>
</tr>
<tr>
<td>because/cause</td>
<td>Ref</td>
<td>47.68</td>
<td>73.26</td>
<td>-34.943</td>
<td>31.434**</td>
</tr>
<tr>
<td>then</td>
<td>Str</td>
<td>15.35</td>
<td>33.61</td>
<td>-42.937</td>
<td>35.367**</td>
</tr>
<tr>
<td>just</td>
<td>IP</td>
<td>10.77</td>
<td>47.72</td>
<td>-145.738</td>
<td>104.410**</td>
</tr>
<tr>
<td>I mean</td>
<td>Cog</td>
<td>2.15</td>
<td>31.30</td>
<td>-164.463</td>
<td>100.366**</td>
</tr>
<tr>
<td>you know</td>
<td>IP/Cog</td>
<td>4.31</td>
<td>39.91</td>
<td>-182.483</td>
<td>117.121**</td>
</tr>
<tr>
<td>really</td>
<td>IP</td>
<td>8.62</td>
<td>57.53</td>
<td>-227.775</td>
<td>153.006**</td>
</tr>
<tr>
<td>well</td>
<td>IP/Str/Cog</td>
<td>5.39</td>
<td>70.01</td>
<td>-357.270</td>
<td>221.268**</td>
</tr>
</tbody>
</table>

Note. The occurrence rate of the markers sort of and that is was 0% in either corpus. They were excluded from this analysis due to the impossibility of computing the log-likelihood ratio (LLR). Further research should be done to investigate why a certain DM occurs in one dataset but not in the other.

IP = interpersonal; Ref = referential; Str = structural; Cog = cognitive.
*p < .05. **p < .01.

However, these data do not address differences in DM use within the category LINDSEI-OTHERS, and distributions within individual subcorpora could boost or lower the overall frequency. To provide a clear picture, the frequencies of 12 DMs mentioned in this section were also compared across the six subcorpora of NNS speech. The further comparison was made to
confirm whether the use of so, but, well, really, you know, I mean, and just exhibited the features of Japanese learners’ speech, and whether the use of yes, kind of, right/alright, basically, and OK/okay reflected the features of DM use in NNSs’ interlanguage.

Figure 1 shows the frequency of so and but in each subcorpus. Although so was used in the Japanese subcorpus substantially more frequently than in any other nonnative subcorpus, only small differences existed among subcorpora in the frequency of but. Thus, the results confirm that the marker so is used more frequently by Japanese learners, and that the lower usage levels of but in the Chinese and German subcorpora lower the overall frequency of LINDSEI-OTHERS.

![Figure 1. Frequency of so and but per 10,000 words in each subcorpus of LINDSEI.](image)

Figure 2 shows a comparison of the frequency of well and really in each subcorpus. The analysis revealed that both Japanese and Chinese learners of English used the two markers notably less frequently than other nonnative English learners. In other words, the results suggest that English learners whose L1 belongs to an East Asian language family may be more likely to use the markers well and really much less frequently.
Figure 2. Frequency of *well* and *really* per 10,000 words in each subcorpus of LINDSEI.

Figure 3 shows the frequency of *you know*, *I mean*, and *just* in each subcorpus. The analysis revealed that Japanese learners used the three markers less frequently than other nonnative English learners. In other words, the results display a marked tendency for Japanese learners to use the interpersonal or cognitive function markers less often. These distinguishing features can be found only among Japanese learners of English; that is, they are not shared by nonnative English learners with different L1 backgrounds.

Figure 3. Frequency of *you know*, *I mean*, and *just* per 10,000 words in each subcorpus of LINDSEI.
Figure 4 shows the frequencies of yes, kind of, right/alright, basically, and OK/okay in each subcorpus. The marker yes generally displays small differences among the subcorpora except for in the French subcorpus, where it was quite frequent indeed. On the other hand, the three markers kind of, right/alright, and basically were infrequently used in all six subcorpora. The general frequent use of yes and the low frequencies of kind of, right/alright, and basically may be common to learners of English. With regard to the frequencies of OK/okay, Figure 4 shows that there is a considerable variability among the subcorpora.

![Figure 4. Frequency of yes, kind of, right/alright, basically, and OK/okay per 10,000 words in each subcorpus of LINDSEI.](image)

In short, although simple items such as yes may be preferred by NNSs, items such as kind of, right/alright, and basically may be more difficult for them to acquire.

**Why Do Japanese EFL Learners Overuse the Marker So?**

Previous studies such as Hays (1992), Miura (2011), and Shimada (2011) have suggested that Japanese learners may infrequently use certain pragmatic markers such as well, I mean, and you know, but they may frequently
use simple types of markers such as *so* and *yes*. The present study yielded similar findings and distinguished features particular to Japanese learners from those seen in the speech of other NNSs. To investigate the acquisition of DMs in Japanese learners’ speech, however, it is important to explore why some items are more or less frequently used. To that end, this section is focused on the marker *so*, which is frequently used by Japanese learners.

According to Fung and Carter’s (2007) framework, the marker *so* has two discourse functions, referential and structural. Although the referential marker *so* serves a syntactic function to signal a relationship between one discourse segment and another, the structural marker *so* has some pragmatic functions, such as a signal of summarising opinions and topic shifts. In the present study, as in my earlier study (Shimada, 2012), tokens of *so* were classified by functional category: referential, structural, or other. The following are illustrative examples of *so* extracted from the speech data of LINDSEI:

4. Referential: I don’t think I pronounce it very well, *so* I am a bit embarrassed . . . (LINDSEI-SP015)
5. Structural: . . . I think that’s Julia Roberts. *So* that’s all. (LINDSEI-CH019)
6. Structural: *So* what do you think of the city Guangzhou? (LINDSEI-CH045)
7. Other: . . . I always use bus *so* unto6 . . . my nearest station is Ujiie Station. (LINDSEI-JP005)

In example 4, the speaker uses the referential marker *so* in order to establish a cause-and-effect link between the first clause and the second one. In example 5, the speaker tries to mark the conclusion of the topic by using the structural marker *so*. The speaker in example 6 changes the topic to the listener’s impression of the city Guangzhou by using the structural marker *so*. In example 7, however, the marker *so* is neither referential nor functional; instead, it seems to be used as a filler, which can provide time for the speaker to think about what to say next.

Figure 5 shows the percentages for the three types of *so* (referential, structural, other) in the randomly sampled speech data, which comprise 10 interviews from each subcorpus. The coding of the functional categories was carried out by the author. As in the categorization of DMs described above, a post-hoc intra-coded check was conducted for the three subcorpora, LINDSEI-JP, -CH, and -DU (i.e., 30 interviews) at an interval of about
2 years. The overall agreement rate was 93%. Thus, the reliability of this analysis is considered high.

![Figure 5. Percentages for the three types of so in randomly sampled speech data (10 interviews from each subcorpus of LINDSEI).](image)

The results given in Figure 5 reveal that the proportion of the structural marker *so* was very low in the Japanese subcorpus. The third class of *so*, which is neither referential nor structural in function (i.e., other) was used more frequently by Japanese English speakers than by any other subcorpus group. The use of *so* as a filler may boost the frequency of the marker in Japanese English learners’ speech.7

**Conclusion**

CIA was employed in this study to investigate the use of DMs in the speech data of Japanese learners of English. The results illuminate some features of these speakers’ DM use.

This study’s first research question was about frequencies of DMs in the speech of Japanese learners in comparison with those of NSs of English. Frequency analysis revealed significant differences between Japanese learners and NSs of English in the frequency of many DMs. Japanese learners frequently used some simple markers such as *yes, so*, and *I think*, yet they infrequently used certain interpersonal or cognitive function markers such as *like, really, you know, kind of*, and *I mean*. These findings corroborate those of previous studies, and they indicate that Japanese learners may have more difficulty acquiring particular pragmatic markers. These findings have important implications for language instructors, who may improve their students’ interactional L2 skills as well as their linguistic ones through instructional focus on DMs.
The second research question was about levels of English DM use by Japanese learners in comparison with those of English learners with different L1 backgrounds. Frequency analyses revealed both similarities and differences between Japanese learners and other nonnative English learners in their use of DMs. Although Japanese learners used so much more frequently than other nonnative learners, they also used certain interpersonal or cognitive function markers such as you know, I mean, and just much less frequently. In other words, certain features of their DM use are distinguishable from those of nonnative English learners generally. This suggests the need for language instructors and materials writers to carefully provide Japanese learners with language input according to the characteristics of their interlanguage. For example, language instructors and materials writers should provide infrequent and difficult items, such as interpersonal or cognitive markers, at an intermediate or advanced proficiency level. Additionally, they should furnish Japanese learners with opportunities to use as many kinds of easy-to-use items as possible at a lower level.

This study has two basic limitations. Qualitative observations indicated that Japanese learners might use so as a filler, but this analysis has been far from exhaustive; more work on qualitative patterning is thus needed. As Romero-Trillo (2002) and Müller (2004) have suggested, Japanese learners’ more or less frequent use of DMs may be a result of the influence of their L1. Second, some tasks to elicit speech may have an effect on learners’ DM use. For example, a picture description task may not lend itself to the use of interpersonal markers such as really and just. Further research is needed to analyse learners’ speech from a qualitative perspective and to investigate why Japanese learners may display different tendencies in English DM use from other nonnative English learners.

Notes
1. An earlier version of this paper was presented at the 127th Kanto Chapter Conference of the Japan Association for Language Education and Technology, Tokyo, Japan, 12 November 2011.
2. According to the online English Vocabulary Profile (http://www.englishprofile.org/), the markers OK/okay, so, and yes are classified into the Common European Framework (CEFR) level A1 or A2. Therefore, these markers can be regarded as easy items for English learners.
3. As Pritchard (1995) points out, Japanese learners of English may prefer slow, careful speech and take a long pause before answering a ques-
tion. If so, the interaction style may have a negative effect on fluency in speech production. However, LINSDEI does not contain audio data and does not provide the information necessary to find out why the Japanese students produced a much smaller number of words than any of the other nonnative English learners.

4. The tests of the log-likelihood ratios are also called G-tests.

5. The author combined the five subcorpora into one group and ran log-likelihood tests to compare the frequency of DMs between LINDSEI-JP and LINDSEI-OTHERS.

6. The Japanese word *unto* is approximately equivalent to the English marker *well*.

7. In the Japanese subcorpus, *so* as a filler was ubiquitous, although the frequency was not fully examined. Shimada (2012) also pointed out that the filler usage may contribute to Japanese learners’ overuse of the marker. The present study confirms those earlier findings.

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