

Japanese Learners' Oral Narratives: Linguistic Features Affecting Comprehensibility

KONDO Junko*

Key words: **learners' oral narrative, story-telling, comprehensibility, native reaction**

For language learners, the development of productive skills to narrate and describe in connected discourse is critical in order to advance language proficiency.

In Japanese discourse studies, the main focus has been on the cohesion between sentences and the overall structure in written discourse. Some recent studies (e.g., Izuhara and Dake, 1991; Watanabe, 1996) discuss possible causes of low comprehensibility, pointing out various features that appear in Japanese learners' narratives, such as inappropriate viewpoint shift and sentence linkage. However, these studies deal with coherence solely from the point of view of the Japanese language teacher. It is thus imperative that we investigate whether these linguistic features indeed cause problems with native interlocutors' understanding of learners' speech.

The present study shows what kind of factors affect comprehensibility, and offers an analysis of low- and high-comprehensible narratives in order to locate the specific features that learners need to be aware of to make themselves more easily understood.

Seventy-nine judges listened to narratives of four learners (two superior and two advanced speakers, based on ACTFL Oral Proficiency Guidelines) and two native speakers and were then asked to assess the narratives in terms of flow of discourse and comprehensibility. Assessment of the narratives revealed that in addition to insufficient content, problems with pronunciation, sentence connections, and filler use may cause difficulty in understanding learners' narratives. Also, close analysis of high- and low-rated narratives revealed potential problematic factors associated with low comprehensibility in learners' narratives: lack of stress in PPU (Pause-bounded Phrasal Units) boundaries, overuse of language production-based fillers, and ambiguous references to story characters. Though further research is needed to confirm the findings, the present study provides useful pedagogical insights into teaching Japanese language skills, especially story-telling narrative production.

* 近藤純子: Lecturer of Japanese, University of Michigan.

1 Introduction

The present study uses six recorded story-telling narratives to investigate potential problematic features in Japanese learners' oral narratives that affect native speakers' comprehension.

For language learners, the development of productive skills to narrate and describe in connected discourse is critical to advance language proficiency. According to the ACTFL Japanese Proficiency Guidelines, for example, advanced-level learners must be able to narrate and describe in connected, paragraph-length discourse. Superior-level learners must be able to provide lengthy and coherent narrations with ease, fluency, and accuracy (ACTFL, 1988). It is possible that narratives that are difficult to understand share certain characteristics irrespective of the speaker's language proficiency, since even native speakers sometimes experience difficulty in making themselves understood when they attempt to explain in detail. However, it is assumed that some characteristics common in learners' narratives affect native speaker understanding even if the learners have acquired near-native fluency in other areas.

The purpose of the present study is twofold: to determine the factors that pose difficulty to native speakers in understanding learners' narratives and to offer an analysis of low- and high-comprehensible narratives in order to locate the specific features that learners need to correct and/or to employ to make themselves more easily understood. To determine which factors affect native speakers' comprehension most, 79 judges listened to narratives of four learners (two superior and two advanced) and two native speakers and were then asked to assess the narratives in terms of flow of discourse and comprehensibility.

Two key concepts in evaluating narratives are "cohesion" and "coherence." Cohesion refers to the connection that exists between elements in the text, and coherence is the connection that is brought about by something outside the text (Renkema, 1993, 35). Maynard (1999, 428) summarizes coherence as follows:

Interpretation of text requires more than mere surface connection; it depends on the reader's broad-based knowledge of how things work, including presupposition, analogy, and logical relations. This knowledge outside the text itself is "coherence."

Various studies have been conducted on discourse cohesion and coherence primarily in English texts (e.g., Gumperz et al., 1984; Tannen, 1984; Roberts et al., 1994; Thompson, 1994). For instance, Halliday and Hasan (1976) identify five categories of cohesive devices that signal relations between sentences and parts of texts: substitutions, ellipsis, references, conjunctions, and lexical cohesion. Although many researchers support the view that these linguistic devices play an important role in creating coherence (Halliday and Hasan, 1989), it is argued that cohesive texts are not necessarily also coherent texts (e.g., Brown and Yule, 1983; Givón, 1995; Seidlhofer and Widdowson, 1999). Coherent discourse is typically characterized as discourse that "hangs together, is well-formed, unified, or related" (Mann

and Thompson, 1986).

For Japanese discourse studies, the main focus has been on the cohesion between sentences and the overall structure in written discourse. Some recent studies (e.g., Izuhara and Dake, 1991; Watanabe, 1996) discuss possible causes of low comprehension, pointing out various features that appear in Japanese learners' narratives, such as inappropriate viewpoint shift and sentence linkage. However, these studies deal with coherence established solely from the point of view of Japanese language teachers. It is thus imperative that we investigate whether such linguistic features previously identified as possible causes of problems really affect native interlocutors' comprehension.

As a result, native speaker judges consistently mention three specific factors of the narratives as explanations of their low comprehension — problems with pronunciation, sentence connections, and filler use — in addition to insufficient content. Close analysis of high- and low-rated narratives reveals three possible features for low comprehensibility in learners' narratives: lack of stress in PPU (Pause-bounded Phrasal Units) boundaries, overuse of language production-based fillers, and ambiguous references to characters.

The paper first reviews the literature concerning coherence in spoken discourse. Next, the factors that affect native speakers' perceived coherence are presented. Then, potential problematic features in learners' narratives are discussed. Finally, a brief conclusion and implications for teaching narrative production are offered.

In the present study, a coherent narrative is defined as a unified narrative with high comprehensibility.

2 The Nature of Coherence in Spoken Language

An issue central to this study is the role that linguistic features play in the creation of coherent discourse. In spite of the numerous studies conducted on discourse cohesion and coherence already mentioned, the nature of these features is still not fully understood and is controversial. As was noted earlier, there are two views concerning coherence: one that focuses on text itself, and another that emphasizes the interaction between comprehender and text. In recent years, many studies favor the second view that coherence is interactively negotiated rather than text-inherited (Bublitz, 1999).

Coherence is fundamentally subjective. It is described as a scalar notion; that is, coherence of any discourse falls in a continuum that ranges from least coherent to most coherent. Coherence is also medium and genre-specific. The strategies and means used by speakers or writers to achieve coherence can (and often do) vary from spoken to written language, from genre to genre, and from text-type to text-type (Roberts et al., 1994; Bublitz, 1999).

A range of factors influences the perception of coherent discourse. The three most discussed factors include: 1) the syntactic and semantic structure of the discourse (Halliday and Hasan, 1976; Hobbs, 1979; Mann and Thompson, 1986), 2) the world knowledge and assumptions that the comprehender possesses (Steffensen,

1986; Renkema, 1993), and 3) the amount of mental effort one is willing to expend (Vuchinich, 1977; Roberts and Kreuz, 1993). The comprehender depends on prior knowledge as well as on linguistic cues to create coherence. Consequently, the judgments people make regarding the quality of each other's written and spoken performance may be taken as judgments regarding the effect of internal cohesiveness on interpretability. Horowitz and Samuel (1987, 7) describe cohesion in spoken language as being achieved through deixis (in this case referring to items outside of the discourse or text), prosodic cues (the pitch, stress, and pauses expressed by the language), and paralinguistic devices (such as facial expressions, lifts of the eyebrow, smiles or frowns, or body language such as pointing or distancing oneself from a listener). It is argued that oral language need not be as explicit as written language because of these non-verbal cues and tone of voice. Deictic expressions are typically pronouns, demonstratives, certain time and place adverbs, some motion verbs, and even tenses (Hatch, 1992).

Although there are disagreements in defining coherence, these studies on discourse coherence reveal the vital nature of coherence, how it is achieved and created. It is clear that discourse coherence has to be examined from a variety of perspectives because of its multidimensionality. The studies reviewed in this section offer substantial insights and practical implications for interested teachers and researchers.

3 Previous Studies on Coherence in Japanese Spoken Discourse

Studies of oral narratives conducted by Clancy (1982) and Maynard (1989) deal with Japanese native speakers' speech. Clancy contrasted the written and spoken styles of Japanese story-telling narratives by examining clause connections, referential choices in subject position, and other features. In oral narratives, native speakers used zero subject, or ellipsis, most of the time (93.2 percent) when the same subject continued from the preceding main clause. In addition, speakers resorted to ellipsis (32.5 percent) for new subject referents despite the potential ambiguity for the listener. Clancy also found that third person pronouns were never used to refer to story characters.

Maynard (1989) proposes models for the structure of casual narratives in Japanese. According to her model, Prefacing, Setting, Narrative Event, Resolution, and Evaluation constitute a casual narrative, though only Prefacing and Narrative Event are the obligatory elements.

In contrast, studies of Japanese learners' oral narratives have emphasized possible sources of problems in comprehension. Using narrative samples cued by cartoon strips, two studies, Watanabe (1996) and Yanagimachi (2000), compared the organizations of the narrative of intermediate and advanced Japanese learners, and then matched their results against native speaker narratives. Both studies identified shifts in viewpoint in the learners' narratives. While the native speakers told a story consistently from the main character's viewpoint, using subject ellipsis, passives, and verbs of giving and receiving, the learners frequently changed the viewpoint, or

the subject, in successive clauses. In Watanabe's study, native speakers employed subordinate conjunctions or the *te* form of verbs to link clauses, whereas the Japanese learners tended to use zero conjunctions (no use of conjunctions between the successive sentences) or the inappropriate use of the *te* form for clause connections. Watanabe pointed out that although the learners' choices of viewpoint and clause connectives are different from those of natives, the degree of difference varied depending on the learner's native language and concluded that learners whose native language uses a similar viewpoint and connectives to Japanese have fewer problems in developing narratives.

Izuhara and Dake's (1991) examination of intermediate and advanced learners' news story narratives identified a variety of problems, including no openings, a lack of anaphoric terms, inappropriate uses of demonstratives, and excessive uses of hesitation words, fillers, and self-repair, as well as inappropriate use of *kango*. Izuhara and Dake's findings, however, contradict Norrick (2000) and others, who claim that disfluencies, such as false starts and self-correction, enhance coherence. Further investigation is needed to find out more about the relationships between disfluencies and perceived coherence.

Taniguchi (1984) summarized four general sources of listener difficulty in comprehension: 1) problems of prosody, such as low voice, high speed of speech, inappropriate use of pauses and stress, 2) problems in vocabulary, such as inappropriate use of *kango*, loan words, jargon, and homonyms, 3) problems related to sentence constructions, such as long and complex sentences and complex modifiers, and 4) problems in discourse organization, such as illogical and/or unnatural sentence connections.

Although findings from these studies provide valuable information for teaching oral narratives in Japanese, further investigation is necessary for several reasons. First, even though a number of problems have been identified, there is no evidence that these problems actually disturb native speaker comprehension since no research heretofore addresses what is acceptable by the target audience. Teachers' points of view may reveal the level of adequacy but not of acceptability. Second, although prosody, including intonation, stress, pitch, and tones, is an important device for accomplishing cohesion in spoken interaction, little attention has been given to this feature. Taniguchi (1984) includes prosody as one of four general categories that account for difficulty in understanding, but no analysis is provided in her study. Also, most of the previous studies on oral narratives used transcripts, which likely affects the interpretations. Although there may be a strong relation between understanding spoken and written language, the fit is not perfect because listening does not allow personal speed in decoding, understanding, and the integration of knowledge, as is possible for readers. Finally, only a few studies have examined different types of narratives. In order to learn more about the characteristics of oral narratives, more studies need to be conducted on different types of narratives, such as personal narratives, objective reports, and news stories.

Clancy and Downing's study (1987) concerning the use of *wa* as a cohesion marker in Japanese oral narratives presents interesting results. The speakers dem-

onstrated different usage of *wa* between a cartoon strip story and *Sazaesan* (video-tape) and Pear stories (film). The frequency of *wa*-use to mark the characters was doubled in the cartoon strip stories, similar to the frequency in written versions. Clancy and Downing conclude that differences in the type of stories and the process of narration lead to different usage of the cohesive device.

4 Hypotheses

The present study investigates the following hypotheses.

Hypothesis 1: The problematic features judged to be contained in learners' narratives do not necessarily result in listeners' low comprehension. The type, location, and frequency of specific features determine the overall judgment.

The problems with Japanese learners' oral narratives discussed in the previous studies do not deal with acceptability by native speakers. The features that Japanese teachers found to be problematic may not affect native speakers' comprehensibility.

Hypothesis 2: The features that cause difficulty in understanding may vary from speaker to speaker, as well as from listener to listener. However, there are some specific features that are salient to the learners.

Although perceived coherence is relative by its very nature, it is assumed that some features are unique to learners' narratives when compared with those of native speakers. Judgments on learners' narratives made by sufficient numbers of native speakers may lead to a core of factors that are worthy of examination. These potentially problematic features could then be identified by closely analyzing the difference between learners' narratives and those of native speakers.

5 Method

My data consist of six story-telling oral narratives extracted from the Oral Proficiency Interviews (OPI) corpus of two advanced-level speakers, two superior-level speakers, and two native speakers. To assess the levels of acceptance by native speakers, a questionnaire was used, which asked 79 native speakers to judge each narrative on the following points: 1) the flow of discourse, 2) comprehensibility, and 3) the reason for their response to the second question. Roberts et al. (1994, 191) noted that the comprehender can articulate some of the properties that affect judgments of coherence in their study of perceived coherence because, although all raters never agree about the coherence of a story, raters also consistently mention specific properties in making their judgments.

5-1 Participants

The participants consisted of 79 native speakers of Japanese (49 females and 30 males) with no experience in teaching Japanese to non-native speakers. Among them, 68 participants resided in Japan, and 11 in the United States for three to twelve months. The participants' ages ranged from the 20s to the 60s.

5-2 Materials

5-2-1 Data

The present study used six recorded narrative excerpts from OPI. Selected were four narratives by non-native speakers (two advanced- and two superior-level speakers), and two by native speakers, all about a movie or a book that the speaker had seen or read before. Each speaker told the plot of the story to the interviewer with no time limitations. Although the six narratives differed in the degree of comprehensibility, each was a complete story without any type of breakdowns. The pronunciation of the non-native speakers was such that it would not cause any problems in understanding. These portions were extracted adopting the “speech paragraph” or *wadan* (Szatrowski, 1991). *Wadan* is a topic-related structural unit used for conversation analysis. The number of speaking turns between interviewer and speaker in the story-telling excerpts ranged from zero to three. Interviews were recorded by interviewers in the United States between 1988 and 1996 for the non-native speakers' samples and in Japan in 1995 for the native speakers' samples. The six narratives are about different stories.

Although the fact that the narratives are all about different stories may reduce the validity of my findings to a degree, there is merit in using such data: if participants hear narratives about the same story repeatedly, their ratings will likely be affected by what they have heard previously.

5-2-2 Tape

An audio-tape was used with the narratives in the following order: A1-advanced speaker, A2-advanced speaker, N1-native speaker, S1-superior speaker, N2-native speaker, and S2-superior speaker. The sound quality of the first and the fourth narratives was less than ideal due to the condition of the original tapes. Therefore, the participants were asked to listen to these narratives with the volume turned up. Also, the first part of the fourth narrative was re-recorded by a male native speaker imitating the narrator because of the poor sound condition. This was explained to prevent confusion.

Despite the poor sound quality, the two narratives were used for lack of an alternative because not many OPIs contain complete story-telling narratives with adequate length. Also, I was not certified to conduct or rate new OPI at the time. Therefore, the best available narratives already rated were used.

5-2-3 Questionnaire

A four-part questionnaire was used to evaluate each narrative. It asked: 1) whether the narrative flows naturally (on a five-point scale), 2) whether it was easy to understand (on a five-point scale), 3) reasons for the response to the second question (13-item multiple-choice answer), and 4) whether they had seen the movie or read the book discussed in the narrative previously (yes or no). The choices for the third question, which investigates possible sources of difficult comprehension, were selected adopting findings from the studies mentioned in section 3. They concerned

six categories: pronunciation, grammar, vocabulary, sentence connections, content, and hesitation and self-repair. The same questionnaire was used to judge all six narratives.

5-3 Procedure

A copy of the audio-tape and six questionnaires were distributed to each participant and returned in December of 2000. The participants were instructed to listen to one narrative at a time in order, and then to answer, at their own pace, the questions for each narrative based on their first impression.

6 Results and Discussion

6-1 Preliminary Analysis of the Narratives

A preliminary analysis of the six narratives revealed characteristics of each, shown in Table 1. The narratives consisted of the following stories: A1—Coming to America, A2—Schindler's List, S1—The Last Emperor, S2—To Die For, N1—Underground, and N2—Field of Dreams. The narratives ranged from 100 to 153 *bunsetsu*, and consisted of between 21 and 35 clauses. *Bunsetsu* is a unit that typically consists of one content word (verbs, nouns, pronouns, adjectives, and adverbs) or a conjunction plus function words (particles and auxiliary verbs) (Maynard, 1989, 26). The length of each was as follows: A1—106, A2—119, S1—153, S2—100, N1—151, and N2—108 *bunsetsu*. S1 and N1 were a little longer than the rest. One to two word-choice errors were observed in the advanced-speaker's narratives (A1 and A2), a superior-speaker's narrative (S1), and a native-speaker's narrative (N2). Also, one to two verb form errors were observed in a advanced-speaker's narrative (A1) and a native-speaker's narrative (N1). As for the organization structure, A1 and S2 do not contain prefacing remarks, which is regarded as one of the obligatory elements in Japanese casual narrative (Maynard, 1989, 117). Both narratives provide ending remarks, such as comment or evaluation; however, A2 and N1 include ending remarks, in addition to prefacing remarks.

Table 1 Characteristics of Each Narrative

	A1	A2	S1	S2	N1	N2
Speaker's proficiency level	Advanced	Advanced	Superior	Superior	Native	Native
Numbers of <i>bunsetsu</i>	106	119	153	100	151	108
Numbers of clauses	24	21	31	35	24	22
Number of vocabulary errors	2	2	1	0	0	1
Number of grammar errors	1	0	0	0	2	0
Prefacing remarks	No	Yes	Yes	No	Yes	Yes
Ending remarks	Yes	Yes	No	Yes	Yes	No

6-2 Results of the Questionnaires

The results of the ratings for flow of discourse (1–very unnatural, 2–somewhat unnatural, 3–undeterminable, 4–natural, 5–very natural) and comprehensibility (1–very difficult to understand, 2–somewhat difficult to understand, 3–undeterminable, 4–easy to understand, 5–very easy to understand) are shown in Table 2. Data were eliminated in which participants mentioned poor sound quality in their ratings; therefore, the numbers of participants are different. The mean scores indicate that the narratives produced by native speakers N1 and N2 were perceived to flow naturally by most of the participants. However, the degree of comprehensibility of Japanese learner's narratives varied, falling between 2.3 and 3.7 for flow of discourse, and 1.8 and 3.4 for comprehensibility. On average, the native narratives were judged as comprehensible (ratings 4 or 5) by 84.8 percent of the participants.

Table 2 Mean Scores for the Flow of Discourse and Comprehensibility

	A1 (n=51)	A2 (n=74)	S1 (n=70)	S2 (n=76)	N1 (n=79)	N2 (n=79)
Flow of discourse	2.3	3.1	3.0	3.7	4.3	4.1
Comprehensibility	1.8	2.7	2.8	3.4	4.1	4.1

In contrast, the advanced speakers were rated comprehensible by 3.9 percent (A1) and 24.7 percent (A2), and the superior-level speakers by 24.3 percent (S1), and 53.9 percent (S2). Although these results are not conclusive, natives' perceived coherence for the superior and advanced speakers is not clear-cut since the ratings for A2 and S1 are almost the same.

The effect of prior knowledge and familiarity on the comprehensibility rating of non-native speakers' samples is evident. The comprehensibility of the four narratives was rated higher by participants with prior knowledge, i.e., who had seen or read the story before. The mean score difference between the two groups fell between 0 (S1; 43 out of 70 knew the story) and 1.1 (A2; 10 out of 74 knew the story). Participants who had lived in the United States gave slightly higher ratings than those who had not, ranging from 0 (S1) to 0.4 (A1 and S2). Although these figures suggest that prior knowledge and familiarity with English speakers may affect comprehension ratings, the difference varied from story to story and did not show consistent association. I, therefore, do not deal with these factors.

The ratings for natural flow of discourse and comprehensibility are clearly associated. In the six narratives, all but two participants who perceived a narrative as unnatural rated it either as incomprehensible (86.4 percent) or undecided (11.4 percent). Likewise, participants who perceived a narrative as having a natural flow mostly rated it as comprehensible (81.8 percent). The participants who rated a narrative incomprehensible or undecided, despite a natural flow (18.2 percent), cited insufficient content (44.2 percent), problems with pronunciation (23.2 percent), disfluencies (20.9 percent), and problems with sentence connections (18.6 percent)

as the reasons for their comprehension difficulty. This result suggests that natural flow of discourse is necessary for high comprehension. However, it also suggests that even if a narrative flows naturally and contains sufficient information, it may not be perceived as coherent when there are problems with pronunciation, sentence connections, or disfluencies.

The results of the questionnaire section concerning reasons for assessment are summarized in Figure 1. As shown in Figure 1, low-rated narratives (A1, A2, and S1) have problems with fluency, pronunciation, sentence connections, and content. The higher the comprehensibility ratings, the more positive factors regarding pronunciation, sentence connections, grammar use, and the like were noted by participants. Upon closer examination of the Japanese learners' narratives, it emerged that each narrative presented a unique problem. For example, while insufficient content appeared to affect the comprehensibility ratings most for S2 (the highest-rated learner's narrative), ambiguous sentence connections for S1 and disfluencies for A2 appeared to be the most significant negative factors. It is interesting that similar numbers of participants cite pronunciation as both positive and negative factors for comprehensibility for A2 and S1, as well as sentence connections for A2. Such variable perceptions can be interpreted as an indication of the mixed qualities of these speakers. That is, while these speakers demonstrated certain phonological features and/or ways of connecting sentences that enhanced coherence, other features were problematic for some hearers. For instance, several participants mentioned "slow tempo" and "lack of intonation" as negative factors in S1. This may have contributed to a negative perception of the speaker's pronunciation. Also, the

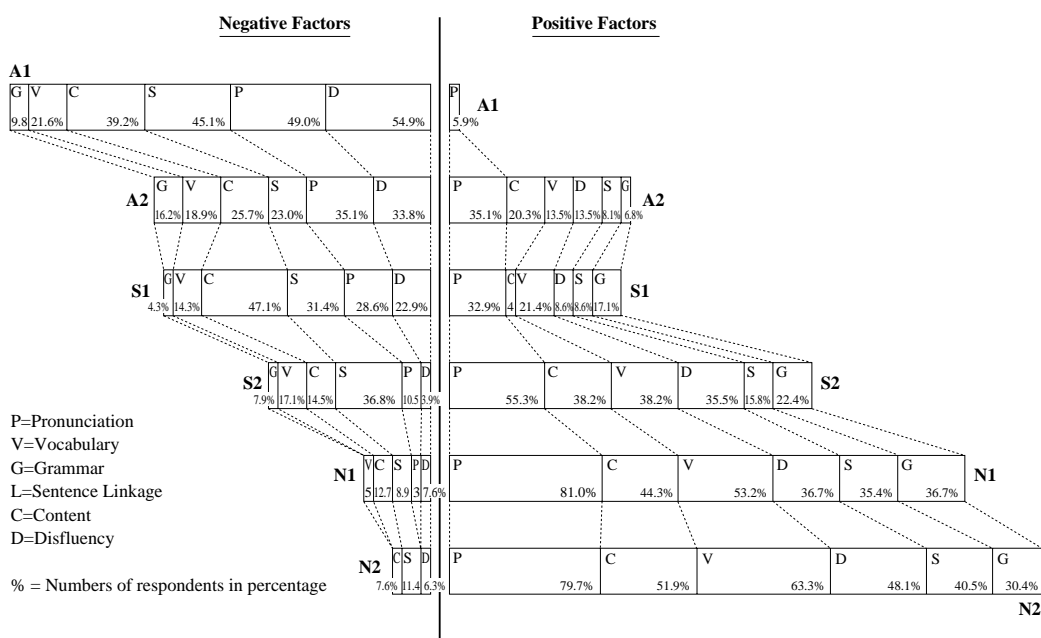


Fig 1 Reasons given for difficulty in comprehension

main differences between S2 (the highest-rated learner's narrative) and native speakers' narratives were pronunciation and vocabulary use. Thus, these two features may remain problematic even after learners acquire near-native proficiency. These results support my second hypothesis that there are common factors that hinder comprehension of the learner narratives, especially advanced-level learners, although individual differences do exist. According to my questionnaire results, these involve problems with pronunciation, disfluency, sentence connections, and content. Table 3 summarizes the sources of low comprehension (rating 1 or 2) across the six narratives. Four factors consistently surface: problems with sentence connections, insufficient content, problems with pronunciation, and overuse of features indicating disfluency, such as fillers and self-repairs.

Table 3 Sources of Incomprehensible Narrative

Sources	Number of times mentioned (%)
Problems with sentence connection	48.6
Insufficient content	46.5
Problems with pronunciation	45.1
Overuse of disfluencies	38.8
Inappropriate use of vocabulary	26.4
Inappropriate use of grammar	16.7

The three sections to follow investigate in detail specific features that negatively impact comprehension. I compare low- and high-rated narratives focusing on pronunciation, disfluency, and sentence connections, three factors most frequently reported by judges as reasons for their low comprehension.

Insufficient content is not analyzed here because the six narratives tell different stories which are difficult to compare in terms of content. As shown in Table 1, a few vocabulary and grammar errors are observed mostly in low-rated narratives (A1 and A2). Although inappropriate use of vocabulary and grammar may have a strong association with comprehension, fewer participants mentioned these factors as hindering their comprehension.

6-3 Problems with Pronunciation

Speakers and listeners use prosody to accomplish or discern cohesion in spoken interaction, for example, intonation, stress, tone of voice, and other paralinguistic signals. As shown in the questionnaire results in Figure 1, there was a clear relationship between pronunciation and overall comprehensibility of the narratives, although perceptions of learners' pronunciation appeared highly subjective, especially in A2 and S1. Because the interpretation of the word *hatsuon*, "pronunciation," used in the questionnaires was left to each participant, "poor pronunciation" could involve not only articulation of each word but also intonation and tone. In fact, some participants commented that the speaker's "tone of voice," "tempo," and

In order to examine each speaker's pattern of speech, the narrative passages were segmented into Pause-bounded Phrasal Units (PPU) (Maynard, 1989, 23–27). A PPU is a stretch of speech bounded by pauses. PPU boundaries are characterized by the presence of a pause or a skipped beat that occasionally accompanies stressed rising intonation. Since listeners are expected to recognize the boundaries as significant divisions in the conversation, I first examined whether the PPU boundaries in the six narratives were marked with stress. Table 4 shows that in the native speakers' narratives, 33.9 percent (N1) and 42.2 percent (N2) of all PPU boundaries were marked with stress, whereas in two of the low-rated narratives, A1 and S1, only 23.3 percent and 9.7 percent of the boundaries were stressed accordingly. This significantly low rate of stress in S1 is a likely reason for some participants' description of the narrative as "monotonous." The rate of another low-rated narrative, A2, was 35.1 percent, a stress pattern similar to that of native speakers. This seems to have had an effect on some judges' positive perception of the speaker's pronunciation. However, problems in other areas, such as word pronunciation and fillers, appear to have had a greater impact on hearers' overall judgment. Although in S2 (the highest-rated learners' narrative), only 10.8 percent of all PPU boundaries are stressed, a closer examination revealed that the speaker frequently stressed the specific PPU boundaries that signal clause relations, as shown in example (1).

- (1) | . . . *aru* *otoko to kekkon shiTE* |
 | . . . *sapōto shite kureru ndesu keDO* |
 | . . . *tochū ni natte kara* |
 | . . . *iya ni natTE* | (Capital letters indicate stressed syllable.)

This tendency was more recognizable in A2, N1, and N2. In the PPU that contain clausal conjunctions, the speakers stressed 76.9 percent, 57.1 percent, and 86.7 percent of such boundaries respectively, as shown in Table 4. Thus, stressed PPU boundaries seem to create rhythmic speech patterns and to help listeners process the information, especially when the boundaries containing clausal conjunction words were stressed.

Table 4 Utterance Pattern of Each Narrative

	A1	A2	S1	S2	N1	N2
Time (sec.)	115	92	168	76	68	116
Numbers of PPU	60	57	72	37	45	62
PPU stressed (%)	23.3	35.1	9.7	10.8	42.2	33.9
PPU stressed in places signaling clause relations (%)	18.2	76.9	15.4	50.0	86.7	57.1
Length / <i>bunsetsu</i> (sec.)	1.1	0.8	1.1	0.8	0.6	0.8

To identify another potential problem concerning pronunciation, I compared the rate of speech in the narratives. The length per *bunsetsu* in each narrative was 0.8 seconds in A2, S2, and N2, 0.6 seconds in N1, and 1.1 seconds in narratives A1 and S1, as shown in Table 4. In other words, the two speakers, A1 and S1, who did not stress PPU boundaries adequately told their story relatively slowly. As some judges cited “slow tempo” as a negative factor for comprehensibility, a slow rate of speech may be considered another factor disturbing hearers' comprehension. However, the frequent pauses in the speech of the A1 narrator probably accounted for by his slow rate of speech. Compared to other speakers' narratives, PPUs in A1 were more fragmented than those of other speakers. Example (2) is taken from A1.

(2) *anoo | kare wa | ano afurika | sono zaminba no hito no | okusan wa | hoshikunai |*
...

Next, I counted the number of words in learners' narratives which I thought would be difficult to understand for natives who are not accustomed to non-native speakers. The results are shown in Table 5. Three types of problems were observed: 1) English-influenced pronunciation, 2) problems of mora (beat), and 3) problems of intonation. In A1, for example, the words *Queens* and *king* were repeatedly used since they are key words for the story. The speaker did not pronounce them exactly as one would in English, rather pronouncing them as [Kwi:ŭ:z] and [Kingŭ] instead of [Kwi:ŭ:zɯ] and [Kin:ɡɯ] influenced by the English pronunciation [Kwi:nz] [Kin], respectively. Also, the speaker of A2 had some problems with long vowels and the moraic nasal /N/. Although the words *mōkete* [mo:kete] and *kanri* [kan:ri] consist of four and three moras respectively, he pronounced them one mora shorter, as [mokete] and [kanri]. In these advanced-speakers' narratives, such problematic pronunciation occurred more than seven times, which may have disturbed the hearers' understanding of the story. Although in the superior-speakers' narratives three words each were produced with unnatural intonation, they were unlikely to lead to confusion.

These results indicate that both word-level and phrase-level pronunciation problems affect comprehensibility. While word-level problems mostly appear in the advanced-speakers' narratives, phrase-level problems could appear in both advanced- and superior-speakers' narratives.

Table 5 Number of Words Difficult to Understand for Natives

	A1	A2	S1	S2
Number of words	16	7	3	3
Examples	Queens King	<i>Mōkete</i> <i>Kanri</i>	<i>Utta</i> <i>KyōSAntō</i>	To Die For <i>Namari</i>

6-4 Problems with Disfluency

Disfluency, such as fillers, false starts, and repairs, are noticeable in spoken dis-

course. These features enhance coherence if they are used properly. In fact, disfluency was regarded as problematic only in low-rated narratives, especially for advanced-speakers' narratives. Table 6 shows the number of occurrences of false starts, repairs, and fillers in each narrative. The most marked difference between low- (A1, A2, and S1) and high-rated (S2, N1, and N2) narratives is the numbers of fillers used. To compare the frequency of fillers in the narratives, the percentage of PPUs containing fillers was obtained. In the low-rated narratives, 33.0 percent to 45.7 percent PPUs were accompanied by some kind of filler, compared to 20.0 percent to 27.0 percent PPUs in the more comprehensible narratives.

Table 6 Types of Disfluencies Appearing in Each Narrative

	A1	A2	S1	S2	N1	N2
Numbers of False Starts	1	2	0	1	4	5
Numbers of Repairs	6	4	3	0	3	5
Numbers of Fillers	20	26	24	10	9	14

Although the use of fillers as frequently as every two or three PPU seems to interfere with hearers' processing information, which types of fillers affect comprehension is not clear. For instance, Maynard (1989, 30) categorizes fillers as either language production-based or socially motivated. Language production-based fillers, such as *uuunto* and *are*, appear when smooth speech is either cognitively or productively hindered, whereas socially motivated fillers, such as *nanka* and *sōdesune*, may be employed to fill a potential silence and to sound less abrupt. Cook (1993) describes the filler *ano* as an affect marker serving to seek the hearer's cooperation in face-to-face interaction. For instance, it often occurs at the beginning of a conversation, before a speaker makes a point, and before introducing a new topic in order to get the hearer's attention. I interpret Maynard's language production-based fillers as speaker-oriented fillers, and the socially motivated fillers as listener-oriented fillers, since the latter type includes such functions as signaling the speaker's attempt to involve the listener, softening the impact of affirmations, and highlighting the information that the speaker wants to emphasize. Based on these distinctions of whether the filler carries any function or not, I compared the types of fillers appearing in the six narratives. However, the distinction between the two types was often not clear. As shown in Table 7, in terms of the frequency with which socially motivated fillers were used, there was not a great difference between the low-rated and the high-rated narratives. The frequency rate of socially motivated fillers in all the narratives fell between 11.7 percent to 21.6 percent of total PPUs. In contrast, language production-based fillers were used much more frequently in the low comprehensibility group.

The frequency rate in the low-rated narratives was 20.8 percent to 26.3 percent of PPUs and 2.2 percent to 8.1 percent of PPUs in the high-rated narratives. The socially motivated fillers included *nanka*, *sōdesune*, *maa*, and *ano(o)* and *sono(o)* at

Table 7 Types of Fillers Appearing in Each Narrative

	A1	A2	S1	S2	N1	N2
Socially motivated (%/PPU)	7 (11.7)	11 (19.3)	9 (12.5)	8 (21.6)	8 (17.8)	9 (14.5)
Language production based (%/PPU)	13 (21.6)	15 (26.3)	15 (20.8)	2 (7.4)	1 (2.2)	5 (8.1)
Total (%/PPU)	20 (33.3)	26 (45.7)	24 (33.2)	10 (27.0)	9 (20.0)	14 (22.6)
Numbers of frequently used fillers	<i>Ano(o)</i> 11 <i>Sono(o)</i> 4 <i>Ee(to)</i> 0 <i>Maa</i> 1	16 2 0 5	8 1 6 2	5 0 3 1	2 1 0 1	2 9 0 1

the beginning as the speakers took their turns in answering questions posed by the interviewers. Frequently used language production-based fillers include *ano(o)*, *sono(o)*, *aa*, and *ee*. It is reasonable to assume that the use of language production-based filler as frequently as every four or five PPUs contributes negatively to comprehension. Also, it is possible that fillers such as *ano(o)* and *sono(o)* are not successfully identified by hearers as serving a function even though they are used to get the hearers' attention if the speaker keeps using such fillers while searching for a word. This seems to be the case for the advanced-speakers' narratives as in (3) and (4). In N1, a native-speaker's narrative, *ano* and *sono* are used to get the listener's attention as in (5).

- (3) *Amerika no | anoo | onnanohito to kekkon shitakatta kara |*
Anoo zaminba | kara | ano nyū yōku made | nyū yōku no Kuinzu | made kimashita.
 (A1)
- (4) *... kare wa sono | anoo | sonoo | sensō ni yotte | anoo kekkō okane o mokete*
mashita | doitsu jin to shite wa | ano kōjō no kari o shite ite desu ne | ano sono ōnā
deshita. (A2)
- (5) *ano | maa daimei wa andāguraundo tte iu n desu keredo |*
sono yūgosurabia ga | tadottekita rekishi de |
sono | gojū nen sensō | ... (N1)

In advanced-speakers' narratives the filler *ano(o)* was used most often, as shown in Table 7. In fact, about 10 percent of the judges observed "too much use of *ano(o)*" regarding A1 and A2. Although *ano(o)* was also the most commonly -used filler in the superior-level speakers' narratives (S1 and S2), it appeared to be less problematic since the superior speakers used other fillers as well, including *ee* and *eeto(ne)*.

In summary, there seems to be a tendency for advanced-level speakers to employ language production-based fillers much more frequently than superior-level speakers. Although both advanced and superior speakers use socially motivated fillers, superior speakers use them more effectively by using a variety of fillers, just as

native speakers do. In contrast, the types of fillers used by the advanced speakers lack variety. These factors may have had a negative impact on the comprehensibility of the advanced-speakers' narratives.

6-5 Problems with Sentence Connections

To be comprehensible, narratives must have their referents specified unambiguously and their sentences interrelated. In the six narratives examined, all speakers told a story focusing on one or two story characters. However, there were major differences between high-rated and low-rated narratives in the way speakers referred to the characters after their introduction in the story. For instance, in S1, which is the most problematic narrative of the six in terms of sentence connection, the speaker used ellipsis for the second appearance of the character *Fugi* (in line 2) and then continued to omit it in successive clauses. Although the speaker switched subject referents in the middle of the sentence (in lines 4–6), the character was reintroduced using *kare* (in line 7) and then elided in the following clause. In contrast with Clancy's (1982) findings that no third person pronoun was used to refer to characters in native speakers' narratives, a third person pronoun was used for a character in S1.

Passage from S1: (Passage divided by clauses.)

- (6) 1 . . . *Fugi tteiu kata desu kedo*.
 2 *φ Nisai gurai de anoo chūgoku no kōtei ni natte*,
 3 *de φ hassai gurai datta to omoimasu kedo*,
 4 *ee teikoku ga tsuburete shimatte*,
 5 *φ kyōwakoku mitaina mononi natta ndesu ga*,
 6 *φ iroiro chūgoku de fuanteina jidai datta kara*,
 7 *kare no seikatsu mo chotto fuantei de*,
 8 *φ anoo kōtei ga sunderu tokoro ni tojikomerarete ita rashii ndesu*.

The person called Fugi

(He) became the Emperor of China at around two years of age and

Then, when (he) was around eight, I think

the Empire had collapsed and

(it) had become a republic-like country but

because (the period) was the time China was unstable in many ways

his life was a little unstable as well and

(he) was confined in the place where the Emperor lives.

By contrast, in a native-speaker's narrative, N1, after a new character was mentioned with a noun phrase (in lines 1 and 4), a reduced form of the noun phrase (in lines 2 and 5) was used for the second mention of a character before switching to ellipsis.

Passage from N1:

- (7) 1 . . . *teikō shite kita hitotachi ga ita ndesu ga* . . .
 2 *Sorede sono hitotachi ga chika ni mogutte*,

- 3 ϕ *buki o tsukuttari shiteita ndesu ga,*
 4 *hitori sono waruihito tte iuka ga imashite,*
 5 *sorega sono hito ga sono nakama o minna chika ni tojikomete oite,*
 7 ϕ *nijūnenkan zutto sensōga tsuzuiteiruto omowaseru ndesu ne.*

... there were people who resisted.

Then, the people went underground and
 made weapons and did other things but
 there is a person, so-called evil person, and
the person keeps his friends underground and
 makes them think that the war is still going on for twenty years.

This tendency supports Clancy's (1982) findings that in Japanese it is common for a reduced noun phrase to be used for the second mention of a character before switching to ellipsis. Although the predominant referential form for given information is ellipsis in Japanese (Clancy, 1980, 1982; Hinds, 1982, 1983, 1984), native speakers in the present study did tend to reintroduce a story character with a noun phrase whenever they started a new sentence or switched subject referents in successive clauses. Although these referential choices may be unique to certain types of narratives, a similar tendency was found in Sakai's (2000) study of written storytelling narratives. She reported that in two successive sentences sharing the same subject, native speakers tended to refer to the subject explicitly in the second sentence if the subject is an actor in the story, and that ellipsis was mainly used for a subject referring to the setting of the story and the story itself.

Table 8 compares the frequency of various forms in the subject position to refer to previously introduced story characters. Since speakers tended to use ellipsis when the same subject appeared in the preceding clause of the same sentence, subject referents were counted only at the beginning of new sentences and when the subject referent was switched in successive clauses (i.e., an immediately preceding clause activated a different referent). As shown in Table 8, the speaker of S1 used ellipsis extensively, relying heavily on the listener's ability to interpret the reference from the context. This may have negatively affected the comprehensibility of the story. The subject was omitted in a native-speaker's narrative, N2, as well. In this case, the elided subject referred to an already introduced story character and created a

Table 8 Referential Choices for the Subject (New and Switched Reference)

	Noun Phrase	Pronoun	ϕ (ellipsis)
A1	2 (50.0%)	1 (25.0%)	1 (25.0%)
A2	1 (25.0%)	3 (75.0%)	–
S1	1 (11.1%)	1 (11.1%)	7 (77.8%)
S2	1 (25.0%)	2 (50.0%)	1 (25.0%)
N1	4 (66.7%)	–	2 (33.3%)
N2	4 (80.0%)	–	1 (20.0%)

potential ambiguity. S1 and N2 differed in the frequency of subject ellipsis. While the speaker of S1 consistently used zero subject throughout the story, the native speaker in N2 used both a zero pronoun and a noun phrase to reintroduce the subject. The ambiguity, therefore, seems to have been quickly resolved when the events were recounted.

Another possible problem was found in overt pronoun use. In the learners' narratives pronouns, such as *kare* and *karera*, were used repeatedly referring to the subject after a character was introduced. For instance, the speaker of A2 used the third person pronoun *kare* (he) for the second mention of a main character, and continued to use it throughout the story. An example is given in (8). In example (9), two pronouns were used in a single clause.

- (8) . . . *doitsujin no hanashi desu keredo,*
maa kare wa sono anoo sonoo sensoo ni yotte . . . (A2)
- (9) *Kare wa karera o sugoku tasuketakute . . .* (A2)

In contrast, third person pronouns were never used in the native speakers' narratives referring to a character. The total numbers of third person pronouns used in the learners' narratives, A1, A2, S1, and S2 were: 2, 7, 3, and 3, respectively. As shown in examples (5) and (6), the speaker of A2 used third person pronouns repeatedly when referring to story characters. Although the repeated use of pronouns was not the most negative factor for A2 based on the questionnaire results, it still creates potential ambiguity. Clancy (1982) reports that in Japanese written narratives pronouns were often used to refer to characters after their introduction into the story. The use of pronouns is generally more acceptable in written discourse, but learners may not know that.

Finally, to signal a cohesive tie between sentences and clauses, all the narratives employed both conjunctions, such as *sore de* and *de*, and various conjunctives such as *kedo*, *kara*, and *ga*. With the exception of A1, the *te* form was mainly used to connect successive clauses. In A1 (rated the lowest), clauses were linked mostly by the conjunctive particles *kara* and *kedo*, while the *te* form was used only once. Also, *n desu* was used in the superior-speakers' narratives, S1 (8 times) and S2 (8 times), as well as in the native-speakers' narratives, N1 (9 times) and N2 (6 times), to relate one sentence to another. In the advanced-speakers' narratives *n desu* appeared three times in A1 and never appeared in A2. From my data alone it is not clear whether the different cohesive marker choices affected perceived coherence, although it is possible.

With regard to related sentences, two types of problems that affect comprehensibility were identified. The first problem was the use of third person pronouns, which was a common characteristic in the learners' narratives. The use of multiple third person pronouns in a single sentence may create ambiguity. Another problem was the frequent use of ellipsis in referring to previously introduced characters. Although ellipsis in the subject position was commonly used by native speakers when providing background information, its use was limited to referring to story characters.

7 Conclusions and Implications

The results of the present study have shown what kinds of features in learners' oral narratives affect native speakers' perceived coherence. a natural flow of discourse is important for high comprehension. However, even a narrative that is given smoothly may sometimes be difficult to comprehend. Although the findings are not conclusive, it can be said in my data at least that while insufficient content may account for the low comprehensibility in native speakers' narratives, problems with pronunciation, sentence linkage, and overuse of fillers seem to be additional factors that cause difficulty in the comprehension of learners' narratives.

A comparison of low- and high-rated narratives reveals three major potential factors for low comprehensibility in learners' narratives: lack of stress in PPU boundaries that contain clausal conjunctions, overuse of language production-based fillers, and ambiguous references to story characters. Although the presence of these features does not automatically result in difficulty in comprehension, they do have a negative impact on overall coherence if one or more of these occur frequently, exceeding the listener's tolerance level. Some of the features, such as overuse of language production-based fillers and incorrect pronunciation, seem to be associated with the speaker's proficiency level. Other features, such as unstressed PPU boundaries and lack of overt subjects, may appear in both advanced- and superior-speakers' narratives.

The factors brought out in this study coincide with those in earlier studies (e.g., Izuhara and Dake, 1991; Watanabe, 1996) of learners' oral narratives: inappropriate use of anaphoric devices, fillers, and prosody affecting comprehensibility. The present study further provides specific types of problems that affect native speaker comprehension. My results also reveal the effect of pronunciation and intonation on native speakers' understanding of a story, especially for natives with little exposure to English speakers of Japanese. This suggests that learners need to be instructed not to overuse language production-based fillers and to pronounce words correctly to the extent possible in order to create a comprehensible narrative. Japanese teachers generally may have a high tolerance of learners' pronunciation problems since they are used to them.

The limitations of the present study include the following. the different sound qualities of the narratives may have affected the comprehension ratings. As noted earlier, the sound qualities of A1 and S1 are especially poor, and whether the judges were able to evaluate the narratives may have depended on what kind of tape recorders they used to listen to the tape. Although problematic data were excluded from the present study, only those clearly recorded should be used in the future. Also, as the data in this study were extracted from interviews (OPIs), the listeners' response during the narratives was postponed. Thus, some problems discussed here may be resolved in natural conversation with the listener asking for clarifications. An investigation of the coherence in narratives occurring during conversation is an interesting topic for future study.

The findings of the present study nevertheless provide useful pedagogical insights

in teaching story-telling narratives in Japanese. For instance, learners need to be instructed as to the appropriate forms to refer to story characters, when and how to use fillers, and the correct pronunciation and intonation in order to narrate a story successfully. As for the anaphoric forms of story characters, learners should be given practice in using reduced noun phrases, such as *sono . . . (no) hito*, instead of using third person pronouns. They also need to learn to use overt subjects instead of omitting them when the subjects are switched in successive clauses or when starting a new sentence with a character as subject even though the subject remains the same from the previous sentence. Learners may also be instructed to avoid using the same fillers repeatedly, especially *anoo*, but to use a variety of fillers when searching for words, such as *nante iu ndesu ka*, *nan to ittara ii deshoo ka*, *sōdesunee*. It is also important for learners to acquire natural intonation, stressing the last syllable of conjunctive particles at the end of PPU boundaries, such as *te*, and *kara*. At the word level, they need to pay special attention to the mora length when pronouncing words with heavy syllables containing the moraic /n/, long vowels, and loan words, as well as to correct pitch accent.

The present study has identified potential problematic features in learners' oral narratives; obviously, further research is needed to confirm the findings. This study may be extended to investigate the effect of intonation on comprehensibility, related to signaling related information and highlighting important information. Also, I did not investigate how different cohesive devices affect perceived coherence, such as connectives used between clauses and sentences. These would be interesting topics for further research, and would undoubtedly yield results useful to the teaching of Japanese to non-native speakers.

ACKNOWLEDGEMENTS

I thank Dr. Mutsuko Endo Hudson, Dr. Yukiko Hatasa, and two anonymous reviewers for their valuable comments.

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