

Difference in comprehensibility of spontaneous and read speech of Japanese

This study compares the difference in comprehensibility of spontaneous and read speech of Japanese by Hong Kong learners. Features of spontaneous speech make the comprehension of it more difficult. However, few studies have examined factors influencing learners' listening performance. This study investigates the specific factors of learners' proficiency levels, speech rate and language exposure with spontaneous/semi-spontaneous speech outside classroom on word recognition differences in listening tasks.

Thirty adult students of three different proficiency levels participated in tasks of listening to two types of audio materials of the same contents (one set of spontaneous speech and another set of read speech). Read speech extracted from educational materials was used for comparison too. Participants recalled the contents following by a post-test survey.

Results indicate that the learners' comprehensions of different aspects (syllable, word, sentence, monologue and dialogue) are notably lower in the case of spontaneous speech, though the performance varies among different aspects and levels. Intelligibility of read style of live native speakers shows a similar accuracy rate and trend with the intelligibility of extracted ready-made materials. Spontaneity emerges as a strong potent factor at all proficiency levels in this study. The difference of accuracy rate shows that there is a statistically significant interaction among different aspects of speech. The performance of comprehension of dialogues is the poorest in both the spontaneous and read types of sound data. The performance of comprehension of words is the best in average and shows the least difference between the spontaneous and read style.

A significant drop in accuracy rate is observed with an increase in speech rate. Proficiency also shows high correlation with the difference. Nonetheless, the difference is only statistically significant between the advanced and intermediate group as well as the advanced and beginner groups. Learners who had more extra exposure and experience have better overall performance. However, as reflected from the correlation coefficient, the effect is not as large as expected before.

The findings suggest that students generally perform poorer in spontaneous speech, which is the natural speech that people come across most commonly in daily life. Learners who are accustomed to classroom language or learning materials generally have difficulty to understand real authentic language uses. Implications on the development of educational materials and corpus of real speech are discussed.

Table 1: Results of t-tests comparing accuracy rates of spontaneous and read speech (significant differences highlighted)

Aspect	Mean (Spontaneous)	Mean (Read)	Mean Difference (Spontaneous-Read)	Standard Deviation	t	p
Syllable	27.9503	29.3583	-1.40800	2.32064	t(29)=-3.323	0.002
Word	47.0070	50.5780	-3.57100	8.01149	t(29)=-2.441	0.021
Sentence	24.3487	32.5540	-8.20533	6.48854	t(29)=-6.926	<0.001
Monologue	27.5533	33.4040	-5.85067	5.86674	t(29)=-5.462	<0.001
Dialogue	17.9657	22.7120	-4.74633	4.63102	t(29)=-5.614	<0.001

Figure 1: Differences of accuracy rates of aspects at different levels

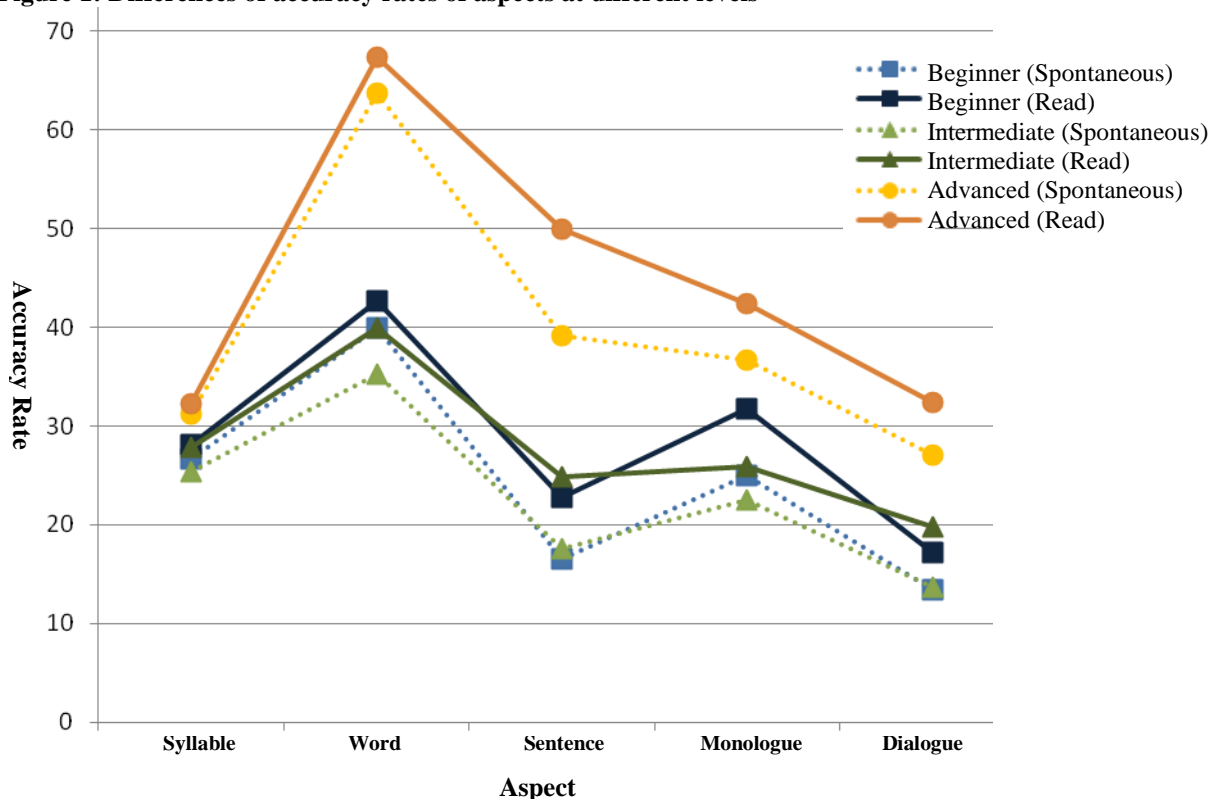


Table 2: Correlations of accuracy rates with proficiency levels, types, aspects, speech rates and exposure (significant differences highlighted)

Correlations		Proficiency Level	Type	Aspect	Speech rate	Exposure
Accuracy rate	Pearson Correlation	0.389**	0.143*	-0.298**	-0.397**	0.056
	Significance (2-tailed)	<0.001	0.013	<0.001	<0.001	0.334
	N	300	300	300	300	300

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

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