Frequency of Vowel Fillers in Japanese Political Settings

AKIKO YOKOYAMA

Ⅰ. Introduction

Japanese language is called a "hyper-phatic language" (Reynolds 2000). One of the linguistic devices for phatic communication is what we call "fillers" or "pause fillers". Reynolds (1984) attempted to show evidence on the discourse function of one type of fillers, namely, "vowel fillers", proposing that "the vowel fillers are a conventionalized strategy of camouflaging hesitation used ... by adult male speakers who have come to occupy positions which require public talking" (p.9). More recently, she discussed fillers including vowel fillers as used by politicians (Reynolds 2000). The present paper investigates the characteristics of vowel fillers uttered by male politicians from both the government and opposition parties, taking into consideration the social contexts of the speech event, especially the social functions of the speakers. The aim of this study is primarily to find more empirical evidence for the preceding studies of the use of vowel fillers and shed new light on the discourse functions of fillers.

Ⅱ. What are the Fillers?

There are many types of fillers in languages. For example, English has fillers such as "*ah*" and "*er*" (Crystal 1997), and Japanese has "*ano*", "*sono*", "*eeto*" (Peng, Hori, Horiguchi, Ide, Takahara, and Tanaka 1981)[1], in addition to vowel fillers[2]. The functions of fillers are mainly as follows: 1) to avoid silence; 2) to draw attention of the listener(s) to facilitate a smooth beginning of a speech; 3) to fill a time gap /make up for the time when the speaker is looking for the next word to say (Peng et al. 1981); and 4) to fill in the time gap caused by the speaker's hesitation (Peng et al. 1981, Reynolds 1984). Fillers are not always verbal. Head movement, or nodding, may also be treated as a filler that functions as something that can fill in

the gap (Maynard 1998).

Ⅲ. Properties of Vowel Fillers

Types of Vowel Fillers

While fillers such as "*ano*", or "*sono*" originally denoted the meaning "that over there" (Peng et al. 1981, Reynolds 1984), vowel fillers do not have any meaning in themselves. They are the lengthening of the preceding vowel in different types of duration[(3)]. However, there are other types of vowel fillers that behave independently of the quality of the preceding vowels. These types of vowel fillers are called "neutral vowel fillers" (Reynolds: personal communication), which are frequently found in the very beginning of the utterance, or in the beginning of a set of phrases. Speakers employ /e/ most frequently, but not necessarily, for such occasions. I will show examples of both types of vowel fillers below.

Sample: (Extracted from the data described below.)

Obuchi: EE[1)] ima iin goshiteki-no-youni I[2)]
Now as the committee member has pointed out,
kinyu-kantokuchou-choukan-ni-tukimashite EE[3)]
as for the director-general of the Financial Supervisory Agency,
souridaijin-to-shite sono-kengen-no ninmu-o-shite EE[4)]
I, as prime minister, with the commission as an authority, am
sagyou-o susumete-itadaite-oru wake-de gozaimasu.
having him work on the matter.

Here, EE[1)] is an example of a neutral vowel filler, while others (I[2)], EE[3)], EE[4)]) are all regular vowel fillers.

Length of Vowel Fillers

The length of vowel fillers (vf hereafter) varies from a very short utterance of a

vowel to a long, or even a super-long utterance of it. In the present study, I categorized the vowel fillers on the *mora* basis since the Japanese language employs mora as a unit of metrical timing[4].

I categorized various lengths of vowel fillers found in the present data into 5 groups. I made a group of vowel fillers that are 5-mora-long as group vf5 (which was the longest among all), vf4 for 4-mora-long vowel fillers, to vf for 1-mora-long vowel fillers. The tokens of actual vowel fillers in each group vary but within certain ranges of duration in milliseconds (ms.). The following chart shows the duration of vowel fillers in each group (with randomly chosen samples from two speakers, *Obuchi* and *Kan*). The duration of vowel fillers shown in **Table 1** was calculated by PITCHWORKS. As the table shows, vowel fillers in vf5 are those ranging around 1100ms. or over, vf4 ranging around 800-950ms., vf3 ranging around 450-700ms., vf2 ranging around 200-300ms., and vf ranging around 80-150ms. There seems to be no difference between the speakers and the vowel qualities (i.e. "regular vowels" or "neutral vowels").

Vowel Filler Lengths (Samples of regular vfs, extracted from *Obuchi*'s)

	vf5	vf4	vf3	vf2	vf
No. of samples	1	5	5	5	3
Duration (ms.)	1157.1	840.2	474.5	206.5	96.4
		854	523.4	220.3	110.1
		860.9	578.6	261.7	151.6
		881.5	619.8	275.5	
		922.8	674.9	275.5	
Range (ms.)	1157	840-922	474-674	206-275	96-151

Vowel Filler Lengths (Samples of neutral vfs, extracted from *Kan*'s)

	neutral vf5	neutral vf4	neutral vf3	neutral vf2	neutral vf
No. of samples	0	3	5	5	3
Duration (ms.)		829.2	444.9	208.3	83.3
		833.4	500	236.1	137.8
		916.6	527.8	253.4	144
			569.4	261.7	
			614.6	263.9	
Range (ms.)		829-916	444-614	208-263	83-144

Table 1

Ⅳ. Data

The data adopted in this paper is a 1-hour-and-47minute-long interpellation session of the 143rd Budget Committee, The National Diet (The House of Representatives) of Japan, held on August 17, 1998. The data was recorded on 120 minute-long videotape. The material was then copied onto an audiocassette tape for computer-based analyses. The session was conducted between an interpellator from the opposition party, and the members of the government party, including a witness, the president of the Bank of Japan, and a bureaucrat.

Speakers: 1) The government party--Keizo Obuchi (Liberal Democratic Party (LDP), the Prime Minister), Kiichi Miyazawa (LDP, the Minister of Finance), Taichi Sakaiya (a Cabinet member, the Director of the Economic Planning Agency), Souhei Miyashita (LDP, the Minister of Welfare); 2) The opposition party--Naoto Kan (Democratic Party, a member of the House of Representatives); 3) Witness--Yu Hayami (the President of the Bank of Japan); and 4) Bureaucrat--Mr. Fushiya.

Properties of Vowel Fillers

The distribution and frequency of the vowel fillers in the data were analyzed based on the following properties.

1. Length: vf5, vf4, vf3, vf2, vf
2. Vowel quality:
   (1) /a, i, u, e, o/ — Vowel fillers having the same phonetic features as the preceding vowel, namely, "regular vowel fillers (VF)". (See Section Ⅲ above.)
   (2) /e/ (sometimes /o/, /a/, or /u/) — Vowel fillers that occur independently, namely, "neutral vowel fillers (nVF)".

Collection Procedure and Analysis

The vowel fillers were collected according to their length and quality. The

videotaped material was copied onto an audiotape for calibration of duration in ms., with the aid of PITCHWORKS. The frequency of the fillers was calculated by the author through listening to the videotape at least three times. The following charts show the frequency and the duration of vowel fillers uttered by the speakers [5].

1. Number of Vowel Fillers uttered by the speakers

Obuchi

	vf5 (3.4%)	vf4 (9.9%)	vf3 (20.1%)	vf2 (48.9%)	vf (20.8%)	Total (100%)*
No. of regular vf	1	25	54	124	56	260
No. of neutral vf	0	4	5	19	5	33
Total No. of all vf	1	29	59	143	61	293

Kan

	vf5 (0%)	vf4 (7.2%)	vf3 (20.4%)	vf2 (52.4%)	vf (20%)	Total (100%)
No. of regular vf	0	13	36	89	37	175
No. of neutral vf	0	5	15	42	13	75
Total No. of all vf	0	18	51	131	50	250

Miyazawa

	vf5 (0%)	vf4 (2.6%)	vf3 (15.8%)	vf2 (68.4%)	vf (13.2%)	Total (100%)
No. of regular vf	0	1	4	20	4	29
No. of neutral vf	0	0	2	6	1	9
Total No. of all vf	0	1	6	26	5	38

Miyashita

	vf5 (0%)	vf4 (6.6%)	vf3 (13.2%)	vf2 (49.5%)	vf (30.8%)	Total (100%)*
No. of regular vf	0	4	10	36	21	71
No. of neutral vf	0	2	2	9	7	20
Total No. of all vf	0	6	12	45	28	91

Hayami

	vf5 (0%)	vf4 (2.9%)	vf3 (5.9%)	vf2 (29.4%)	vf (61.8%)	Total (100%)
No. of regular vf	0	1	2	9	18	30
No. of neutral vf	0	0	0	1	3	4
Total No. of all vf	0	1	2	10	21	34

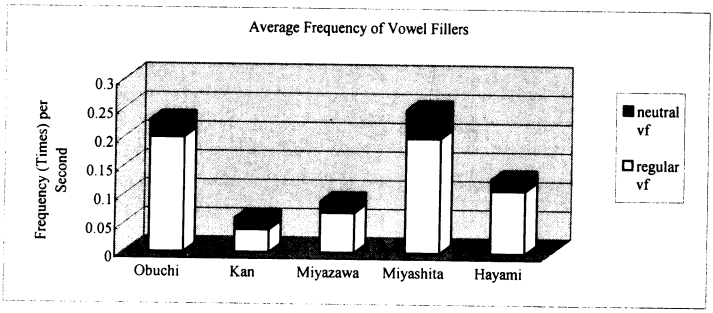
* The calculation does not match the total of 100%, due to the rounded figures (to one decimal) shown in percentages.

2. Length and Frequency of Vowel Fillers uttered by the speakers

	Total length of speech	No. of vowel fillers	Average frequency of vowel fillers per second	Average time for one vowel filler emergence
Obuchi	1285 sec.	293	0.23 times/sec.	1 vowel filler/4.39sec.
Kan	3968 sec.	250	0.06 times/sec.	1 vowel filler/15.88sec.
Miyazawa	407 sec.	38	0.09 times/sec.	1 vowel filler/10.71sec.
Miyashita	360 sec.	91	0.25 times/sec.	1 vowel filler/ 3.96 sec.
Hayami	265 sec.	34	0.13 times/sec.	1 vowel filler/ 7.79 sec.

The charts show that Obuchi uses one vowel filler every 4.39 seconds (i.e. he uses them 0.23 times per sec.), while Kan uses one vf every 15.88 seconds (0.06 times per sec.). Miyashita, the Minister of Welfare, uses one vf every 3.96 seconds (0.25 times per sec.), following Obuchi. Hayami, a witness, uses one vf every 7.79 seconds (0.13 times per sec.). Miyazawa, the Minister of Finance, uses one vf every 10.71 seconds (0.09 times per sec.).

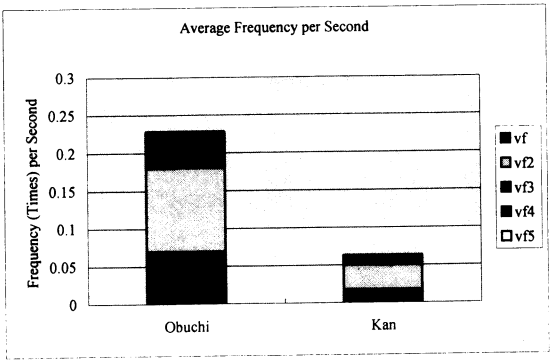
As for the length, vf2 seems to be most frequently used by the speakers (except for Hayami, who used vf most frequently). Obuchi showed a strong tendency to use long vowel fillers. He used vf5, vf4 and vf3 altogether for 33.4% of all his vfs. Kan, on the other hand, used all vf5, vf4, and vf3 for only 27.6%. The results of the speakers in the use of vfs are illustrated in the following graph.



V. Discussion

I would like to discuss the two outstanding findings in the results shown in the graph. One of them is that the frequency of vowel filler use in long duration is extremely

high in Obuchi's utterances. He used vf5 for 3.4%, vf4 for 9.9% and vf3 for 20.1 % of his total vfs. Kan used no vf5, but vf4 and vf3 for 7.2% and 20.4% respectively.



These results can be considered due to the socio-psychological factor that the speakers employ as the "strategy of camouflaging hesitation". As Reynolds (1984) mentions, this strategy is used mostly by adult male speakers who occupy positions in public talking. Obuchi, the prime minister, uses such a strategy, for he is in the situation of defending himself from attacks by opposition parties. He is trying to fill in the time gap caused by hesitation. On the other hand, Kan's speech seems to show the opposite strategy. Kan, who is a member of the opposition party, tries to put pressure on the members of the government party. The number of vowel fillers he used is quite small, while he uses "neutral" vowel fillers quite frequently compared with Obuchi. (Kan used neutral vfs 75 times in his whole speech, while regular vfs 175 times. Obuchi, on the other hand, used neutral vfs only 33 times, while regular vfs 260 times in his whole speech.) As an interpellator, Kan seems to try to get the audience to agree with him, and to keep the floor. Neutral vfs may serve as a strategy to evoke the listener's attention. They behave differently from regular vfs.

VI. Conclusion

Yngve (1970) looks on the back-channel as an activity "consisted of filling in needed personal background so that the person having the floor could continue"

(p.574). The frequent use of vowel fillers by Japanese politicians investigated so far may be considered to function as a tool to show the speaker's intention to hold the floor. This phenomenon comes out obviously and strongly when the speaker is in the defensive position, as we have seen in Obuchi's speech. While speakers in weaker, defensive positions use more vowel fillers in public discourse, speakers in stronger, offensive positions seem to use fewer vowel fillers. Kan, who was an interpellator from the opposition party showed a much smaller number of vowel fillers, compared with people in the government party.

The present research has shown evidence on the use of vowel fillers by speakers from different social positions. However, it is not yet clear whether the frequent use of vowel fillers depends on the situation of the speaker or whether it partly depends on the speaking styles of individual speakers. We have seen very high frequent use of vowel fillers in the speech of the prime minister, who was in the defensive position, but we do not know if he employs this style and shows the same tendency when he is placed in the "offensive" position. For further studies, the research needs to collect more data on various types of speakers and speaking in different situations.

Notes

This paper was written mainly based on the presentation given at the Workshops of Gendai Nihongo Kenkyuukai, on August 3, 2002, at NWEC (National Women's Education Center), Japan.

(1) Peng et al. (1981) employ the term *Kuuhakuhojuugo* (p.127) in Japanese. Crystal (1997) uses "filler pauses". I translated and integrated these term as "fillers" in this paper.

(2) As for the syntactic definition of fillers, Reynolds (1984) defines a filler as follows: (i) A filler occurs at the beginning or within a sentence but not at the end of it; (ii) A filler has no grammatical relationship with any other constituent of the sentence in which it occurs.

(3) Reynolds (1984) attempted to show a phonological illustration of a vowel filler insertion rule.

(4) As for the syllable structure and mora-timing, see McCawley (1978), Vance (1987), and Ladefoged (2001) for reference.

(5) I did not consider the vf utterances by Sakaiya and Fushiya, because the total length of their speech and the number of vowel fillers they used were not considered sufficient for calibration in the present study. (The total length was 34 sec., and 31 sec. and the numbers were 2 and 6, respectively.)

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（よこやま　あきこ）