Pronunciation difficulties for Japanese learners of French

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The EFL research community has produced an abundance of literature to help teachers target specific problem areas for their students (Smith & Swan, 1987; Celce-Murcia, Brinton, & Goodwin, 1996; Ohta, 2004). Wanting to provide the same kind of targeted research, the author has collected data from five Japanese learners of French as a foreign language and analyzed their pronunciation difficulties in French. This article identifies the sounds that cause problems for Japanese learners of French, specifically, the minimal pairs /b/ and /v/; and other often problematic sounds such as [ʃ], [R], [y], [œ] and [ø]. Highlighting the difficulties in pronunciation learners face when they produce free speech, this paper will also look at why these sounds are important for French and how they differ from English and/or Japanese sounds. ***Liaisons*** and ***enchaînements*** and the disappearance of neutral e are some other factors that will affect the quality of pronunciation. Lastly, this article will provide teachers with material and suggestions to help their students improve their pronunciation while learning French.

外国語としての英語を研究する 専門家達が、教師を助けて学習者にとって特有の問題を解決するために、多くの著作が産み出されてきた(Smith & Swan, 1987; Celce-Murcia, Brinton, & Goodwin, 1996; Ohta, 2004). 同じ種類の研究を行うために、著者はフランス語を外国語として学ぶ五人の日本人からデータを収集し、彼らのフランス語の発音の誤りを分析した。この論文は日本人のフランス語 学習者にとって問題を引き起こす発音、特に最少対 /b/ と /v/、そして他の問題となる発音[ʃ]、 [R]、 [y]、 [œ] と[ø]などを明示した。学習者が自由発話を行う際に直面する発音の問題にスポットを当てながら、なぜこれらの発音がフランス語にとって重要であるか、そしてどのように英語や日本語の発音と異なるかにも言及してい る。ニュートラルな /e/ の連結、enchainements、 そして脱落は発音の質に影響を及ぼす要因である。最後に、この論文では教師のためにフランス 語を学ぶ学生の発音向上に役立つ教材と提案が示されている。

For the teacher or researcher who has access to materials in the English language, there is an infinite amount of papers and books available on the subject of pronunciation. French researchers have also done well to document the French phonetic system, its particular characteristics, such as prosody, rhythm accents, as well as its common day usage. But to the author's knowledge, there has been very little work done on the pronunciation difficulties faced by Japanese learners of French. Pronunciation manuals describing all the features present in the French language have been made available by a number of Japanese publishing houses, but some of them have the confusing characteristic of using Japanese katakana (syllabic alphabet) to describe French sounds (Kojima, 2002). At the JALT2009 French Forum,

the debate continued among French foreign language teachers about the merits of using the International Phonetic Alphabet (IPA) to teach French sounds. In the meantime, what are the sounds that cause particular problems to Japanese learners of French? Why are these sounds difficult? What strategies can teachers use to help their students acquire these sounds?

To best help instructors of French as a foreign language in Japan, the author has compiled a list of pronunciation difficulties faced by Japanese learners of French. After a brief analysis of these difficulties, instructors will be provided with some ideas and material to help their students improve their French pronunciation.

Literature review

With the rise in popularity of the communicative approach at the end of the last century, phonetics and phonology were briefly discarded in the French language classroom, being viewed as secondary to the process of successful communication. But it was during the 1950s in Europe that phonetics made interesting developments with the audiovisual structuro-global theory (a more global approach to language through pictures, audio, and slides) that encouraged the use of language as a tool for learners to communicate and a focus toward spoken language rather than just literary understanding (Chiss, Filliolet, & Maingueneau, 2001). Slowly, phonetics and phonology are creeping back into French textbooks in the form of small rubrics interspersed in units or chapters.

An abundance of materials has been made available to researchers and teachers in the past century defining common pronunciation problems for learners of English as a foreign language. Books have been published to help learners of different age levels and different language groups master the pronunciation of English (Smith & Swan, 2001; Celce-Murcia, Brinton, & Goodwin, 1996). However, very little has been made available recently in French research literature with regard to the problems that foreign language learners face, in particular Japanese learners. Most books available tend to have a prescriptive approach to phonetics (Leon, 1966; Grammont, 1966) and although that can be useful for the teacher to understand the subject in question, it can be difficult for them to apply in the classroom. For this reason, the author has attempted to make a descriptive compilation of problems that are characteristic to Japanese learners.

Method

Five participants of varying fluency levels volunteered after being asked to participate in this study (see Table 1). One participant was a private student of mine, the other four had been coworkers for a short period of time at the Fukuoka Nichifutsu Gakkan (French Japanese Institute). I selected some documents and pictures from a false-beginner level French textbook that I deemed would be easy enough for all the participants to make comments about or read.

Each participant was met individually and asked to read the documents aloud or discuss the pictures they were shown in French. I recorded them using the GarageBand application on my MacBook Pro computer. The meeting took about 15 minutes for each participant.

Background information on participants (P)

P1 was a high school technology teacher who started studying French on his own five years before this study. Besides his self-study, he also took one hour a week of private lessons over the past two years. He was exposed to about three hours of French a week through his lessons, watching movies and listening to music.

Table 1. Participants in the study: Age, level, and length of study

	P1	P2	P3	P4	P5
Sex	Male	Female	Female	Female	Male
Age	51	20	41	30	30
Level*	A1	B2	C1	C2	C2
Length of study	5 years	2 years	10 years	12 years	12 years

*According to the Common European Framework of Reference for Languages

P2 started studying French two years prior to the study when she began university. She spent a month and a half at a language school in France. On average, she spent about 10 hours a week communicating in French with her teachers, listening to music and watching movies.

P3 studied French at university for four years and went to a language school in France for a year. She has been working at the French Institute in Fukuoka for six years. She spends about 30 hours a week communicating in French and watches at least two movies a week.

P4 also started studying French at university. She spent 11 months in a language school in France and completed the equivalent of a Masters (DEA) in a French university. For the last five years, she has been working at the French Institute in Fukuoka. She spends about 40 hours a week communicating in French with her colleagues and friends and listening to the radio.

P5 started studying French in his last year of high school. He continued studying it in university and spent one year in France attending a language school. He worked at the French Institute for a few months. Now he spends 3 hours a week on average communicating in French with friends or listening to the radio.

P1 was recorded using the GarageBand program on a MacBook Pro computer in a noisy café making the conditions for recording speech less than ideal. However P2, P3, P4 and P5 were all recorded in a quiet media centre using the same software. The participants were asked to read two texts silently then they were recorded reading them aloud (see Appendix 1 and 2). They were also shown three pictures, given a minute to think about them, and asked to describe them or make up a story about them. The first picture was a painting by Degas called "L'absynthe", the second one was a cartoon drawing of a couple in a restaurant where the woman is smiling and the man realizes he has forgotten his wallet as the waiter comes with the check. The third picture was a drawing of a map with various road names and indications on it; the participants were required to provide directions from "home" to the "university".

Analysis: Pronunciation difficulties

After having recorded each of the participants, I transcribed all of our dialogues using the International Phonetic Alphabet (IPA). Any of the sounds that did not correspond to standard French pronunciation were deemed problematic, in particular the sounds that interfered with comprehensibility. For example, if one letter were to be pronounced as another, it would change the meaning of the word. In this case, the sound is a phoneme and will be transcribed using the slanted bars / /. Sounds which did not correspond to the standard French pronunciation, but did not hinder comprehension as much are transcribed as phonetic sounds, using the square brackets [].

There are several sounds the participants in this study had difficulty with which were similar to the sounds Japanese learn-

ers of English face. In particular, the /b/ and /v/ minimal pair and its instances of hypercorrection. Hypercorrection is when the learner produces a sound that is not available in their L1 in place of a sound that is available in the L1, when the sound that is available should be used. . For example, saying "vone" instead of "bone" for a Japanese learner of English. The participants also had some difficulty with the [si] syllable, which does not exist in the Japanese syllabic alphabet (sa, shi, su, se, so). There were cases when the word "cinéma" was pronounced as "shinéma", quite possibly from L1 interference (Text 2, line 4) (See Appendix for references to Text 1 and Text 2).

The French r

The French r is typically pronounced as a (post-)dorso velar [R]. Japanese students usually have problems with this sound because it does not exist in Japanese. However, in this study P2, P3, P4 and P5 were generally successful in producing this sound. P1 had the most trouble, but was successful when [R] was word initial, such as in [Restoʀɑ̃] (restaurant, Text 1, line 4) or [Rɑ̃ntʀe] (rentrés, Text 1, line 5).

Some other productions of the letter r included the rolled Spanish [ɾ], as P1 did with [baɾselon] (Barcelone, Text 1, line 2) or [fɛʀ] (faire, Text 1, line 3) which is the closest pronunciation to the Japanese [l] sound. The Japanese [l] sound is a flap on the palatal ridge, however it is transcribed as both "r" and "l" in romaji (Japanese words transcribed in the latin alphabet), which confuses students when they have to read those two letters in French.

P1 also pronounced the letter r as an English glide in [ʃɛr] (Chère, Text 1, line 1). This pronunciation may have been influenced by the fact that all Japanese have to learn English from elementary school through to university and this is the pronunciation they are taught for this letter. However, in this case, because the next word is "Léa", with an l initial, it is likely that P1 moved the [R] sound towards the back of the throat without completing a flap with the uvula, only a glide, and coming back towards the front of the mouth to produce [l] at the alveolar level.

The letter r was also produced as [l] by P1 in [alive] (arrivés, Text 1, line 2) or [pali] (Paris, Text 2, line 6). In this case, I believe the combination of the [R] sound at the back of the throat and the alveo-palatal [i] sound with the lips pulled out was difficult to produce because of the distance between the production areas of the two sounds. Alveolar [l] is produced physically closer to the [i] sound.

The [y] sound

The [y] sound *(as in the French "lune")* does not exist in Japanese and therefore causes difficulty. P1 and P3 added the glide [j] before they pronounced the vowel [y] as in [jyn ekselɑ̃nt] (une excellente, Text 1, line 5-6) or [jy nami:] (une amie, Text 2, line 3). When P1 produces [y] successfully, the vowel is in a stressed position (we will see how that helps the student later) as in [lu myse] (le musée, Text 1, line 7).

The sounds [œ] and [ø]

The sounds [œ] and [ø] *(as in the French "fleur" and "deux", respectively)* also presented a certain amount of difficulty. Neither of these sounds exist in Japanese. The closest sound in Japanese is [u]. P1 has trouble producing [œ] when it is in an unstressed position such as it is in [døzœʀ] (deux heures, Text 1, line 5). However, when the sound [ø] is in a stressed position, it is more difficult to produce for Japanese speakers.

Reading words until the end

Another difficulty some Japanese learners seem to face is completing words that they are reading. Reading in French differs from reading in Japanese in the sense that Japanese words are read ideographically through characters representing syllabic chunks. Even the smallest word unit can only be boiled down to a syllabic unit (there are no letters like in the French alphabet). When Japanese learners meet a new word, they must process each letter one by one in order to decode it successfully. However, when words resemble other words they know, learners can be tempted to hazard a guess at the word rather than decode it until the end. For example, P2, P3, P4 and P5 pronounced [biz] (bises, Text 1, line 9) as [bizu] (*bisous*) even though they were all familiar with the word [biz]. There needs to be more research done to establish whether the different writing systems influence learners' reading strategies in L2.

The role of neutral e

The neutral e (also known as *e caduc* or *e muet*) is a vowel that manifests itself in different ways depending on its environment. In some cases it is maintained to avoid having three consonants being grouped together or due to regional accent. It can also be dropped in rapid speech sometimes to avoid homophony or more often because it is optional to pronounce this *e*.

Japanese, like French, is an open syllable language meaning the syllabic groups are organized in CV (consonant-vowel) sequences. In Japanese, CVV and CCV sequences (where C is the same) are also quite common. CCV and CCV usually constitute minimal pairs with CV. The only CCV sequence where C differs is /tsu/. The only C that can finish a word is /n/ or /s/ (written /su/ but pronounced [s] in casual conversation). Therefore, most syllabic sequences finish with a vowel (open syllabication), making it difficult for Japanese learners of French to master the elision of the letter e in French. In French, it is possible to have CCCV syllabic groups.

French is also an open syllable language when spoken. The written system can make it difficult for learners to grasp this concept. For example, a sentence would be written:

Il est avec Emma. (*He is with Emma*)

However, it would be pronounced:

i/le/ta/vɛ/kɛ/ma

Whereas the written system shows 3 words ending with a consonant, the spoken system has none. Every syllable ends with a vowel.

While reading aloud, one often produces output more slowly and carefully than when speaking. More attention is given to each word pronounced. A common process, whether reading aloud or speaking, is the disappearance of neutral e in certain words. However, this form of speech is often associated with vernacular speech and considered inappropriate in French reading style.

All participants dropped neutral e in words such as [aktyɛlmɑ] (actuellement, Text 1, line 2) and [samdi] (samedi, Text 1, line 3). But they all maintained neutral e in the word [apaRtəmɑ] (appartement, Text 2, line 4) in order to avoid a 3-consonant group [Rtm] which would be difficult (if not impossible) to pronounce in French.

Enchaînements

Enchaînement is the linking of a pronounced consonant at the end of a word to the initial vowel of the next word, without the consonant's pronunciation being modified. For example, the words "une amie" are individually pronounced [yn] and [ami],

respectively. In spoken output, they would be pronounced [ynami]. Texts 1 and 2 (See Appendix 1 and 2) had a combined total of nine possible *enchaînements*. After having transcribed the participants' oral output in IPA, the total number of *enchaînements* produced was tallied.

Table 2. Number of possible *enchaînements* produced while reading

	P1	P2	P3	P4	P5
Text 1	1/3	3/3	2/3	3/3	3/3
Text 2	3/6	3/6	6/6	4/6	4/6
Total	**4/9**	**6/9**	**8/9**	**7/9**	**7/9**
Total %	**44%**	**67%**	**89%**	**78%**	**78%**

Because the participants are focusing on reading, it is possible that they are not reading fast enough to anticipate all the possible *enchaînement*s. It is also possible that if the reader is focusing on the correct pronunciation of an individual sound, they are not focusing on possible *enchaînement*s in proximity.

Liaisons

Liaison is the linking of the silent consonant at the end of a word to the following word starting with a vowel or silent h. For example, "suis à" are individually pronounced [syi] and [a], respectively. In spoken output, they are pronounced [syiza]. The same thing was done for the *liaisons* produced in the participants' output in texts 1 and 2.

Table 3. Number of possible *liaisons* produced while reading

	P1	P2	P3	P4	P5
Text 1	7/10	6/10	9/10	10/10	10/10
Text 2	3/6	4/6	5/6	5/6	5/6
Total	**10/16**	**10/16**	**14/16**	**15/16**	**15/16**
Total %	**63%**	**63%**	**88%**	**94%**	**94%**

Not only is *liaison* in French considered as a measurement of fluency, it also has sociolinguistic implications. Even for native speakers, it can be a challenge to complete mandatory *liaisons* (e.g. to indicate tense or number) effectively and decide which optional *liaisons* to complete (e.g. to indicate style or social level) (Encrevé, 1983). Completing a *liaison* or not is a face-threatening risk the speaker must assess before speaking. For learners who have not had the opportunity to hear much French, they may be more hesitant to complete these *liaisons*. We can see that the *liaisons* that the learners have heard their teacher complete, such as [lezetydjɑ̃] (les étudiants) or [nuzavɔ̃] (nous avons) were all completed successfully. Others that are less common, such as [tʀɛzɛteresɑ̃] (très intéressant), were not completed by all the participants, namely the most recent learners. As learners are exposed to more *liaisons* after a longer time of study, teir ability to use them should improve.

All in all, the *enchaînement* and *liaison* phenomenons are spoken ones. Asking participants to focus on it while they are reading adds a dimension to the spoken aspect of the text that they may not be ready to deal with. It is possible that the number of *enchaînement*s and *liaisons* produced is higher in a free speech context due to the fact that there is no written text that may influence the speaker's pronunciation.

Activities for teaching pronunciation

In this section we will look at different ways to help learners with these difficulties. These activities were designed for Japanese learners of French, but could also be used with other languages.

The [R] sound

This sound does not exist in Japanese, so instructors have to teach Japanese learners how to produce it. There are numerous books available with explanations in Japanese about how to create that sound physically in the mouth. However, the French [R] produced by foreign language learners is usually vigorously pronounced at the back of the throat regardless of whether or not [R] is in the initial, middle or final position of the word. Native speakers do not pronounce [R] as vigorously as it is instructed in French foreign language textbooks every time. The [R] is pronounced more or less loosely, depending on where it is in the melodic chain. Practicing pronunciation with [R] in different parts of the word is important, for example:

1. *Reviens Réal!* (initial position)
2. *Je me gratte la gorge.* (middle position)
3. *Je vais faire des courses.* (final position)

The [y], [œ], [ø] sounds

Not only do these three sounds not exist in Japanese, but they also constitute minimal pairs, meaning that if the sounds within these pairs are interchanged, they will change meaning, adding to the importance of producing these sounds correctly. [jø pø] (*I can*) does not mean the same thing as [jø py] (*I stink*)! There are five vowels in Japanese, whereas there are 16 in standard French. According to Renard's theory (Renard, 1971), these vowels should be practiced in their ideal position in the melodic chain depending on where the learner is from. If the vowel sound is placed in a stressed or unstressed position, it will be easier to produce for the learner (Renard, 1971). For Japanese learners, the [y] sound should be in a stressed position, such as:

Sais-tu? rather than *Tu sais.*

The [œ] sound should also be in a stressed position, such as:

Cette fleur est à moi.

Whereas the [ø] sound should be in an unstressed position, such as:

Peut-il le dire? rather than *Oui, je peux.*

This method can be useful in helping the learners hear the sounds, but I find they can also feel overwhelmed by the number of sounds they are being asked to pronounce. Also, it is important for them to be able to recognize and produce vowels both in stressed and unstressed positions.

The /b/ and /v/ minimal pair and the sound [si]

The [b] sound exists in Japanese, but it is often poorly distinguished from [v]. Beyond using books to practice the sounds individually, gestures and onomatopoeic associations can help, especially with younger learners. Still, it is also important for learners to hear the sounds. I find the minimal pairs pyramid or word chart (see Appendix 3 and 4) effective for this situation. I start at the top of the pyramid (Appendix 3) and pronounce one of the 2 possible words (in this case *voit* or *boit*). While I pronounce the words aloud, the students point on the paper with their finger, choosing each word they think I am saying. At the end of the exercise, the students should end up at the same number as me if they have heard all the words correctly. Using the word chart (Appendix 4), I

have students build sentences by calling out minimal pairs in bold on the top of the chart and on the left of the chart. For example, if I call out *roi* and *hachis* the students should write down the word *je*. Here is how a sentence might be built:

- roi + hachis = *je*
- vallon + riz = *suis*
- ballon + lit = *dans*
- roi + riz = *la*
- doux + lit = *rue*

So the correct sentence should be: *Je suis dans la rue (I am in the street)*. If the students misunderstand a word, they will not be able to write the intended sentence.

A reversal of roles is also useful as it allows me to ensure that these sounds have been properly understood. This is achieved by having the students read the words to me as I listen and try to follow their directions to the intended number or sentence.

Though this type of activity is contrary to Renard's theory mentioned above, one has to take into consideration the learners' cultural inclination (Arbor, 2003; Thompson, 1987). It is very common for Japanese learners to drill new elements that they have learned with endless repetition in various areas, such as sports, calligraphy, language until they have mastered them.

Reading words until the end

After I introduce new words to students on flash cards, I ask them to read the words upside-down. I find forcing them to look at the word and having to rearrange it makes them think about all the letters that are in the word. This exercise is very helpful and enticing for the learners who are not often asked to do this sort of thing. I also sometimes ask students to read a text from the last word back to the beginning (reading each word from left to right, but the sentence itself from right to left).

Enchaînements and liaisons

Even if learners get explanations about how to use *enchaînements* and *liaisons*, due to the complexity, it can be quite difficult for them to put them into practice. I think learners, just like native speakers, will use the *enchaînements* and *liaisons* they have heard the most with confidence. Mastering this phenomenon also requires familiarity with French spelling so the teacher can help by giving dictations which will help learners with their spelling and allow them to hear more *enchaînements* and *liaisons*.

Prosody

Reading aloud can help learners practice the open syllabication and intonation accent placed at the end of a sequence/syllabic group. Learners can also practice intonation curves by listening to the radio and drawing the curves they hear. The curves will likely differ from the ones in their L1 – and students can be made to draw those to show the differences.

Another way of making learners aware of sound and rhythm in a foreign language is to have them sing karaoke (Mora, 2000). In Japan, karaoke is an extremely popular phenomenon and a real opportunity for learners to improve their pronunciation.

Conclusion

Regardless of the teacher's methodological inclination, one has to consider that students need a minimum of instruction on L2 sounds and their production in order to successfully communicate in their target language. Learners of French will not only have difficulties with the sounds that do not exist in their L1 but also with sounds that cannot be easily distinguished from the ones that they already know (Riney & Takagi, 1999). While open syllabication is a characteristic shared by Japanese and French, which can benefit the learners, the fact that there are three

times as many vowels in French as in Japanese presents a new challenge for students. Moving beyond individual sounds, it is important to keep in mind that prosody, intonation and rhythm can also cause difficulties for learners.

The teacher must also be aware of the learner's L1 and culture to understand why such errors occur and how they can be avoided. Although a linguistic group may have cultural expectations about how learning should take place, it is also important to remember that each learner is an individual and has their own way of processing a new language. With these considerations, the teacher can try to introduce learners to new ways of learning by using diverse phonological activities to stimulate different types of production or processing ranging from oral production to gestures.

Given that English is immensely popular as a foreign language, the research in that field has provided a wealth of materials on how to teach pronunciation and phonetics in the classroom. French teachers and language researchers can try to replicate some of the studies that have been done to measure the efficacy of certain teaching methods in pronunciation practice. How can the open syllable factor common to both Japanese and French best benefit the learners in their pronunciation? Do rhythm strategies and prosody differ from French to Japanese? Does the use of katakana transcription for French pronunciation have an effect on learners' quality of output? Do learners' capacities to produce *enchainements* or *liaisons* vary depending on whether or not they are reading? These are some of the questions that need to be addressed to determine what can best help Japanese learners of French overcome their pronunciation difficulties.

Informed consent

The author hereby declares that the research subjects gave their informed consent.

Bio data

Marie-Emilie Masson completed her Masters in Foreign Language Education at the University of Bourgogne in 2008 and has been working at Kyushu Sangyo University since 2009.

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Appendix 1

Text 1 (Capelle & Menand, 2003)

Chère Léa,

Étienne et moi, nous sommes actuellement à Barcelone, chez Alicia. Nous sommes arrivés vendredi en avion. Samedi, Alicia et moi, nous sommes allées faire des courses. Nous avons marché toute la journée. Le soir, nous sommes allés au restaurant tous les trois et nous sommes rentrés à deux heures du matin. Nous avons passés une excellente soirée!

Ce matin, nous avons visité la le musée Picasso et, cet après-midi, nous sommes allés au parc Güell. C'est magnifique! Nous rest... resterons dans deux jours.

À bientôt. Bisous

Appendix 2

Text 2 (Capelle & Menand, 2003)

Cher Mathieu,

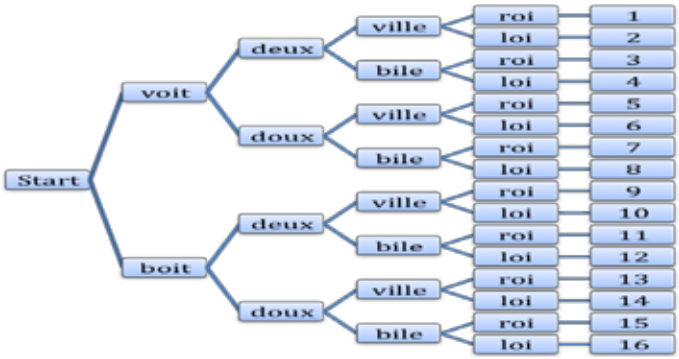
je suis à Strasbourg, dans l'Est de la France. Cette ville est très jolie. J'habite dans le centre avec Élisa, une amie espagnole : elle va aussi à l'Institut avec moi. Nous avons un appartement de 50m2, avec deux chambres : il est très bien. On va au cinéma, dans les bars... On visite aussi des musées : il y a le musée d'Art moderne. C'est très intéressant et c'est gratuit pour les étudiants! Ce week-end, nous allons à Paris en train. Et toi, comment ça va?

À bientôt. Bises

Appendix 3

Minimal pairs pyramid

Created by Marie-Emilie Masson



Appendix 4

Minimal pairs chart

Created by Marie-Emilie Masson

	roi	**loi**	**deux**	**doux**	**vallon**	**ballon**
hachi	je	grand-mere	dix	en	ma	cinq
assis	jardin	boucher	me	alle	vu	un
lit	parapluie	mari	nouvelle	rue	trente	dans
riz	la	jupe	mon	heures	suis	avec
rue	amie	voiture	telephone	a	train	chez
roue	au	achete	le	appele	une	bus