

報告

日本人学生のためのリンガフランカとしての英語の発音の調査

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要約：グローバル言語としての英語の使用の増加は、発音教育の伝統的な方法が時代遅れになってきていることを意味している。本報告では、リンガフランカとして英語を使用する二人の日本人学生のための発音カリキュラムの作成過程を詳細に説明する。これには、音韻明瞭度を妨げる可能性がある学習者の言語の要素の音声記述が含まれている。これは、すべての発音の要素が国際的な環境で同様に必要であるとは限らないことを示すものである。最後に、英語を学習する日本人学生のために修正された発音のカリキュラムを提案する。

(キーワード：発音, 韻律, リンガフランカ, 音韻明瞭度)

An investigation into the pronunciation of English as a lingua franca for Japanese students of English.

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Abstract

The increasing use of English as an International Language (EIL) means that traditional models of pronunciation teaching are becoming outdated. This case study details the steps undertaken to create a pronunciation curriculum for two Japanese students of English who will be using English as a Lingua Franca. It includes a detailed phonetic description of elements of the learner's language that are likely to hinder intelligibility. This is followed by a discussion of how these elements should be ranked into a curriculum in view of the context in which the language will be used. It finds that not all pronunciation elements are equally necessary in an international environment. Furthermore, it asserts that the influence of L1 may not only be hinder intelligibility but may also provide a potential context to help rectify issues. Finally, a modified pronunciation curriculum is suggested for Japanese students of English

1. Introduction

English continues to become increasingly important as a means of international communication. These days, with non-native speakers far outweighing native speakers, communication in English is more likely to take place with other non-native English speakers (Crystal, 2003). This use of English as a Lingua Franca means that language models are changing. One critical area that is being effected is the teaching of pronunciation. It has been suggested by Jenkins (2002) that, given the new role of English as a global language, traditional pronunciation models are no longer relevant.

This case study details the practical steps taken to create a pronunciation curriculum for two Japanese students of English as an International Language (EIL). The case study was driven by the following questions:

- 1) What aspects of the student's pronunciation are likely to hinder intelligibility?
- 2) Taking into account the use of English as an international language how should these elements be prioritized into a curriculum?

This case study details a contrastive analysis of the learner's language. This is followed by a detailed discussion as to what counts as intelligibility, taking into account new models for the teaching of

pronunciation as a Lingua Franca. Finally, a potential curriculum for these two English learners is outlined.

2. Description of the problem

This case study looks at the language of two Japanese students of English in Japan, Mikiko and Asami. (Their names have been changed). Mikiko is a 21 year old university student. She lives in a small city in Shikoku, west Japan. She studies English at university because she wants to be a cabin attendant. She has a fairly advanced level of English with a TOEIC score of 650. However, other than a summer trip to Australia she has limited experience of using English outside of Japan. Asami on the other hand has extensive experience of using English, both with native speakers and as a lingua franca. She is a housewife in her mid-forties and comes from a small rural village in Shikoku western Japan. She is a keen learner of English at a local 'eikaiwa' conversation school and has a TOEIC score of a little over 700. For part of the year she works as a sports official on an international circuit. This position has taken her all over the world including Europe, Australia, America and the UK.

Both of these students had complained about miscommunication due to their pronunciation. Mikiko had recently returned from a trip to Australia and related a story about how upset and frustrated she had been over her inability to buy a train ticket to Perth. It appears that her pronunciation of Perth as /pa:s/ led the staff to believe she was looking for her 'purse' which resulted in a breakdown of communication. She will shortly have an interview with an international Japanese airline and has requested help with her pronunciation. Despite her competence and experience in English Asami also often related stories of how her pronunciation let her down. In one case at a tournament in the UK her pronunciation of 'Thursday' as /sɑ:zdaɪ/ was recognized by her colleagues as 'Saturday'. Unfortunately this seemingly minor miscommunication had some serious consequences. This has led her to request some specific help with her pronunciation.

These stories reflect the point made by Jenkins, that pronunciation has 'a greater potential to compromise mutual international intelligibility than do the other linguistic levels' (Jenkins, 2002, p10). The notion of international intelligibility and English as an

International Language (EIL) are very relevant to this investigation. The context where these two students will be using their language is both a professional and social context, is more likely to be one where they are speaking to other non-native speakers (NNS). For example it is now China rather than America that is both Japan's number one trading partner and tourist destination (Callick, 2015. JTM 2015). The purpose of this report then is to investigate the language characteristics of these two students to determine what factors 'threaten' their 'EIL phonological intelligibility' (Jenkins, 2002, p106)

3. Problem Investigation: Methods

Pronunciation remains a significant barrier to communication. On a global level Jenkins states that non-native speaker English's 'are thought to diverge more from each other in terms of pronunciation than of the other linguistic levels' (Jenkins, 2002, p105). She describes how accents are linked with both identity and motor skills making pronunciation a very difficult subject to teach effectively in fact that 'traditional English pronunciation teaching is destined to fail for all but a small minority of L2 learners' (P105). This case study, which is concerned with second language acquisition (SLA) takes the view of language as 'communicative competence' in the manner proposed by Hymes (1974)

Relevant to the issue of intelligibility are Hymes' notions of possibility, appropriateness and feasibility as described by Cook (2003). In particular the notion of appropriateness for example the transfer of certain Japanese sounds as an approximate substitute for the English phonemes may not be appropriate. Students may be able to get away with this within the confines of a monolingual Japanese classroom but in an authentic situation it is likely to lead to miscommunication. Therefore context is an important consideration for investigating this problem. Hymes states:

'One cannot take linguistic form, a given code, or even speech itself, as a limiting frame of reference. One must take as context a community, or network of persons, investigating its communicative activities as a whole, so that any use of channel and code takes its

place as part of the resources upon which the members draw.’ (Hymes, 1974, p4)

Context then is very important when investigating a real world problem but the definition is very broad. As Blommaert states ‘Context comes in various shapes and sizes and operates at various levels, from the infinitely small to the infinitely big’ (Blommaert, 2005, p184). In fact it can be considered ‘potentially everything’ (p183). What is important firstly then is to define what counts as relevant contextually for this problem.

Blommaert states that the act of contextualization draws on sociocultural knowledge (p183). For the purpose of this case study, sociocultural knowledge will be considered as the linguistic background of the students. For example, the students understanding and production of English phonemes is directly shaped by their sociolinguistic history - their first language. This is relevant to the main issue because it leads to intelligibility problems. Jenkins finds that intelligibility issues caused by pronunciation ‘were caused by the transfer of L1 sounds’ (Jenkins, 2000, quoted in Walker 2010, p27).

This is will the primary contextual consideration but there are also other relevant contextual issues to take into account. For example; the context of intended use. As Blommaert states ‘context and contextualization are dialogical phenomena’ (Blommaert, 2005, p184). That is ‘what counts as most consequential is the contextualization of the one who receives and decodes the message’ (P185). This is relevant to this study as both students will be using their language in an international environment where listeners are equally unlikely to be non-native speakers.

Furthermore there is the context of the monolingual classroom. What makes sense in the classroom context doesn’t in the ‘real world’. In the context of the monolingual classroom the students don’t have to adjust their pronunciation to understand each other (Walker, 2010), therefore they fail to develop accommodation strategies (Jenkins, 2003, p111). This will be relevant when considering ameliorating the problem.

The emphasis on context is indicative of an ethnographic approach. This report reflects some aspects of this perspective, such as the importance of

these contextualizing elements. It also shares other similarities such as the documenting of both etic and emic perspectives. The etic perspective will be the observation, recording and transcription of the data; this will be provide the basis for the text and text analysis. However, there will also be discussion and analysis from an emic perspective. I have lived in Japan for 18 years and worked with Japanese learners for this period of time. I am also a Japanese speaker and student of the language. I believe this combined experience gives me an ‘insider’s’ perspective on some of the pronunciation issues unique to Japanese speakers of English.

The data was collected by recording naturally occurring speech in the classroom. This was supplemented with students reading of a short text. This helped to reveal pronunciation characteristics common to both students, which could help illuminate the impact of the L1. The text chosen is passages taken from the children’s book ‘Little Miss Chatterbox’ by Roger Hargreaves (2003). It was chosen because it contained a broad range of vowel and consonant sounds. The idea of using a Roger Hargreaves’ book was inspired by the British Library’s ‘Evolving English’ project (British Library, 2010) that used a book from this series to document accents of English.

Introducing this experimental aspect detracts from an ethnographic orientation by taking away the spontaneity of the language. In fact Walker criticized Cole’s (2002) use of question prompts in data collection for this very reason (Walker, 2010, p44). The reason for using a text was the lack of usable data the students produced in practice recordings; the text provided access to a wider selection of sounds. The impact of using a text reading will need to be taken into account because people obviously read differently than they speak. But other than perhaps an effect on intonation the overall influence on the segmental level should be minimal.

Section 4 details a contrastive analysis against accepted models. Here phonetic details are described and analyzed at both segmental and supra-segmental level, with phonetic transcription being used to help represent and describe certain characteristics of the student’s speech that may be hindering intelligibility. As a guide to standard RP pronunciation the

Cambridge Advanced Learner's Dictionary (online) was used which gives the IPA for both standard UK and US pronunciation. This was supported by guidance on transcription and articulation taken from the International Phonetic Association homepage.

The relationship between context and intelligibility is reflected upon in section 5. Here, findings from the contrastive analysis are considered, along with discussions on the contextualizing nature of the student's first language and the context of use. These descriptions are analyzed using the notion of international phonetic intelligibility to prioritize issues

This report was typed using Microsoft Word. The Unicode font 'Times New Roman' was found to be the most compatible for the phonetic alphabet. An online IPA typewriter (<http://ipa.typeit.org/full/>) was used to type the transcription which was then copied and pasted to the main document. Descriptions of the pronunciation characteristics of Japanese language speakers were made by drawing on Robin Walker's book 'Teaching the pronunciation of English as a lingua franca' (Walker, 2010) and Saito's descriptions of the pronunciation of Japanese learners of English (Saito, 2007). Discussions on intelligibility in section 4 were made by drawing on Jenkins 'pronunciation syllabus for English as an international language' (Jenkins, 2002) and her notion of a 'Lingua Franca Core' which is also covered in Walkers' book.

4. Linguistic description

What follows is a description of the non-target pronunciation patterns of the two learners that pose a potential threat to intelligibility.

4.1 Consonants

/ð/ and /θ/

The voiced dental fricative /ð/ is substituted by both students. It is produced by Mikiko consistently as a laminal alveolar /z/. Examples are /zä / (the), /zeɪ/ (they), /zät/ (that), /zän/ (than). Asami is less consistent. In 'they' (/zeɪ/) and 'the' (/zä /), it is similarly produced as /z/. However, in 'then' (/den /) it is produced as a voiced alveolar plosive /d/ and in 'Thursday' /tʰzdaɪ/ it is a laminal dental plosive /t/. The voiceless fricative θ/ is substituted with the voiceless alveo-palatal fricative /ç/ in /çɪŋ/ (Mikiko, thing and

anything), and Asami (thing). There are many examples of substitution for these voiced and voiceless fricatives which are likely to be contributing to interference.

/v/

The voiced labio-dental fricative /v/ was substituted with the voiced bilabial plosive /b/ by both students. With Asami it is apparent in words such as 'native' pronounced /neiteib/, 'have' pronounced /häb/ and 'very' pronounced /beɪ/. These all have the potential to be unintelligible or like /beɪ/ misunderstood as 'berry'. Interestingly the /v/ sound produced in 'ever' is clearly pronounced by Asami as /evär/ which even with the irregular vowel sound is reasonably intelligible. It is not clear why the /v/ sound is fine here. It maybe the shape of the mouth from the preceding /e/ sound. The word 'never' is similar although not as pronounced; the sound is somewhere between a /v/ and semi-fricative /b/ sound. This may a potential avenue for correction that should be explored later. With Mikiko /v/ in the word initial position in 'very' is clear yet in the medial position for example 'everyday' it is pronounced /b/ (/ebɪdaɪ/) this is the same in 'over' (/əvə/). Mikiko shares the same characteristic as Asami in that the /v/ in 'ever' is pronounced fairly clearly).

/r/ and /l/

Among Japanese students a common substitution for these phonemes is the alveolar approximant /ɹ/ (Walker, 2010, p31). Both Mikiko and Asami demonstrate difficulty with this sound. Mikiko for example says /ɹkspeɪn/ for 'explained' where the /l/ in the medial position is pronounced /ɹ/. Asami substitutes /ɹ/ for /r/ in 'red' (/ɹed/). There are many examples of this substitution for both /r/ and /l/ and some are more likely to cause unintelligibility than others for example /ɹed/ is fairly easy to recognize but /ɹɪtəʊ/ ('little' - Mikiko) is not easily understandable. This also reveals a problem with the 'dark /l/' in the final position. It is articulated as /aʊ/ in 'little' and /əʊ/ in 'cycle' (/saikəʊ/ Mikiko) which sounds like 'psycho'. At one stage Asami completely omits the /r/ sound in 'delicious' which sounds like /de'eəs/ and is likely to cause misunderstanding. Interestingly there is

an inconsistency with Mikiko who pronounces a clear /r/ in ‘grown’. This may be due to the /g/ sound at the beginning and offers potential possibilities for rectification.

/f/

There are many instances where the students use a substitute for this sound. The closest approximation is a ‘fricative sound made with the airflow escaping from between closely rounded lips’ (Walker, 2010, p116). This voiceless bilabial fricative is represented here by the IPA symbol /ɸ/. It appears in Asami’s pronunciation of ‘friend’ (/ɸuɪɛN/) as well as ‘wonderful’ (/wʌndäɸəl/) and ‘beautiful’ (/bjʊ:teɪɸəl/). It too appears in Mikiko’s pronunciation of ‘wonderful’ (/wʌndäɸɔ/) and beautiful (/bjʊ:teɪɸɔ/) as well as in ‘four’ and ‘before’ (/bɪɸɔr/). It also appears in the final position of ‘half’ (/hāɸ/). The fact that it is voiceless and made between rounded lips makes it difficult to be heard or recognized. This is most apparent in the word initial position, for example ‘full’ (/ɸɔl/ Mikiko,) and word final positions where it is likely to lead to intelligibility.

/ʃ/ and /s/

As well as a substitution for /θ/, the phoneme /ɛ/ is also used for /ʃ/. For example ‘she’ (Asami,) sounds like /ɛi:/. Mikiko also uses it as a substitutes it for /s/ in word initial position in ‘stealing’ (/ɛtɛɪɪŋ/) and Asami substitutes it for /s/ in ‘pronunciation’ (/prənʌnɛɪɛɪɛN/). This substitution is likely to cause intelligibility in minimal pairs where the speaker needs to differentiate between the two sounds such as ‘see’ and ‘she’.

/w/

This sound was unclear before /e/ in ‘went’ (/u:ent/ Mikiko) where it is pronounced similar to /ɔ/. However, where it appears before /a/ such as ‘was’ (Mikiko) and ‘wonderful’ (Asami) it is pronounced with more lip rounding making it clearer.

/n/

This consonant is difficult to hear when produced in the word final position by Asami. For example ‘then’ sounds like /den/. This uvular nasal

sound /N/ is made deep in the throat and ends with the lips placed together similar to /m/. In the final position it makes it difficult to hear and so could be unintelligible, particularly as in this case where it is combined with the irregular θ/ sound. Another occurrence can be seen in Asami’s tendency to not fully aspirate the final /d/ in ‘understand’ making it sound like /ändästän/.

/t/

This consonant was pronounce before /i/ as /tɛ/ by both students. For example ‘native’ (/neɪtɛɪb/ Asami) and ‘beautiful’ (/bjʊ:teɪɸɔ/, Mikiko). It is similar to the English affricate /tʃ/ but sounds brighter and sharper, with the back of the tongue higher in the mouth. This substitution makes the word ‘stealing’ (/ɛtɛɪɪŋ/, Asami and Mikiko) hard to recognize. However, as a substitute for /tʃ/, for example ‘China’ (/tɛamä/, Mikiko) /tɛ/ is unlikely to cause problems. Before /u/. The alveolar plosive /t/ is realized as a voiceless alveolar affricate /ts/ by Mikiko. For example ‘two’ (/tsu:/). This appears to be a direct substitution of the Japanese ‘tsu’ sound and may contribute to unintelligibility. Otherwise the dental plosive /t/ sound in words like ‘true’ (/tʃu:/ Mikiko) and ‘tried’ (/tʃɪəd/ Asami) although not as fully aspirated as an English /t/ is fairly easily recognizable.

4.2 Vowels

The quality and length of the vowels was poor for both these students. Japanese itself has only 5 vowel sounds and the students often produced the Japanese low central unrounded vowel sound /a/. The sound as described by Saito (2007) falls somewhere between the ‘a’ in cat /kæt/ and the ‘a’ in car /kɑ:r/. According to the IPA homepage this can be represented using diacritics as /ä/ to show the centralized position. This is used in this report to differentiate it from the other low position vowels; although in practice the actual sound produced by the students is difficult to pinpoint accurately.

/ə/ and /ɒ/

/ä/ was used as a substitute for many sounds by both students. For example /ə/ in ‘American’ is pronounced by Asami as /ämɛɪcän/ and Mikiko

produces ‘China’ as /tʃaɪnə/. These words are recognizable and the vowel sounds here do not contribute to unintelligibly. ‘Was’ (Asami) pronounced /wəz/ is also reasonably intelligible since the Japanese /ä/ sound is close to /ɒ/ on the phonetic chart; they are both low position, open, unrounded vowels. However, in words like ‘ever’ (Asami) and ‘over’ (Mikiko) the /ə/ is followed by /r/ but neither student voices this sound. Therefore /əv.vər/ for example is produced as /əvbä/ by Mikiko where the combination of errors makes it difficult to recognize. An interesting example of another combination of errors is the word ‘understand’ pronounced by Asami as /ändästän/. Here all three different short vowel sounds are replaced by /ä/. This is compounded by the non-aspiration of the /d/ in the word final position, the nasal /N/ and the equal value given to all syllables which accumulate to jeopardize intelligibility.

/ɜ:/

A noticeable issue with both students is vowel length. Most of the syllables, particularly with Asami, are given equal length. A good example is ‘Thursday’ pronounced /täzdaɪ/. Here the replacement of /ɜ:/ with /ä/ greatly impacts its intelligibility. With the word ‘thirty’ (Mikiko) she has replaced the /ɜ:/ with a lengthened /ä/ (/sä:tei/) which, along with the other substitutions, greatly hinders intelligibility.

/i/

Vowel length is also a problem with /i/. The pronunciation of ‘stealing’ by both students is difficult to understand partly because the longer /i/ has been replaced with a shorter /i/ sound. This is also the case in ‘even’ pronounced as /iben/ by Asami. Other differences in vowel quality are in the word final position in Saturday (/säädai/, (Asami) where it sounds like an Australian pronunciation of the word ‘day’. Also noticeable is Asami’s replacement of /ɔ:/ with the diphthong /aʊ/ in ‘taught’.

4.3 Intonation and stress

There is very little intonation or stress at either word or sentence level. For example the word ‘pronunciation’ (/prənənsiɛɪɪən/ Asami) is spoken with equal syllable length and no pitch changes. This

makes the word sound monotone and difficult to recognize immediately. In fact many of Asami’s utterances are spoken with equal syllable lengths and no pitch or intensity changes to indicate stress, which contributing to its unintelligibility.

At the supra-segmental level utterances are usually broken into tone groups. These tone groups are indicated by the placement of a tonic syllable and help to convey the message as clearly as possible to the listener. However, with these students the use is inconsistent. There are long stretches of language from both students without any tone groups. Where the students do place stresses, they are often different to where a native speaker might place them in a similar context. For example, both students stress the following utterance as follows:

‘They are the **most** red strawberries, the **most** beautiful strawberries, the **most** strawberry-smelling strawberries I have ever grown’.

The stress is placed in an unnatural position. In this case a native speaker would most likely put the stress in the marked position; on the adjectives. This helps to signal contrast with information retrievable from elsewhere in the text. The adjective is where the ‘information focus’ of that particular group is. Also the pitch change itself is irregular. Rather than for example a ‘pitch fall’, where the stress is indicated by a pitch movement starting on the stressed word and then dropping down again over a series of syllables. Here the word is indicated only by one pitch change up, the following word has returned immediately to the pitch same level as the rest of the sentence.

5. Problem understanding

The most immediately noticeable speech characteristic for both students, is the lack of word and sentence stress. According to Jenkins (2002) these aspects of speech are not all equally critical in an international environment. As mentioned in the introduction, the context of use for these students will be one where they are equally likely to be communicating with other non-native speakers of English. The needs of English as an International Language are, according to Jenkins, different; accent is

less of a concern providing it does not ‘jeopardize international intelligibility’ (Jenkins, 2002, p105)

Jenkins includes tone groups and tonic stress in the Lingua Franca Core because of the important role it plays in ‘signaling meaning’ (2003, p113). These also have the effect of introducing short pauses into utterances that, in the words of Walker, ‘allow the listener time to process what he or she has heard’ (2010, p36). However, Japanese learners are producing English through the filter of their Japanese language background, which does not have this system of nuclear stress placement. This means Japanese students ‘will often have difficulty deciding where to place nuclear stress’ (Walker, 2010, p118). Both students commonly miss or miss place the tonic stress, which contributes to a lack of clarity, so should be treated as a priority in a pronunciation curriculum. The other intonation features such as stress timing, pitch and word stress, are not considered as critical in EIL because of their acceptable variations across English. As Jenkins states these elements are ‘not sufficiently generalizable’...’or too complex’ (2003, p113) to be taught effectively.

5.1 Vowels

Jenkins, drawing on her example of language produced by Japanese students, states that the several pronunciation errors ‘all involve vowel length and consonant substitution’ and that ‘these error types are frequent causes of unintelligible pronunciation in my empirical data’ (Jenkins, 2002, p108). Vowel length is an issue with both these students for example of the shortening of /tʃi:p/ to /teɪp/ (Mikiko). However, intervention should be less of a problem because Japanese also differentiates between short and long vowel sounds (Walker, 2010). Therefore, Japanese shouldn’t have difficulty learning to use different vowel lengths within words.

While Jenkins finds vowel length an issue, she states that differences in vowel quality are acceptable ‘providing they are consistent’ (p113). However, there may be cases where vowel quality is enough to jeopardize intelligibility. An example is the differentiation between minimal pairs such as ‘cap’ and ‘cup’ where the difference in vowel quality changes the word. There are no examples of these minimal pairs in

the data but we can see other issues. For example looking at Asami’s /ändästän/ the Japanese /ä/ replaces three different vowel sounds resulting in no differentiation which makes the word unclear. So for these students vowel quality also needs to be considered one of the priorities.

Interestingly, this highlights the importance of context. What this reveals is phonetic problems do not occur in isolation, the surrounding sounds and stress patterns combine to contextualize the word. Therefore, it is difficult to prioritize certain sounds over others because, in many cases, non-core items are equally critical in the contextualization process. For example; Mikiko’s pronunciation of ‘public’ as /püblik/ with no word stress, the two non-core items combine to make the word unintelligible. However, interestingly she produces a clear /l/ sound here.

5.2 Consonants

Consonants were another area Jenkins found critical to intelligibility. In this data the students substitute target consonants with the Japanese equivalent plosives, which are generally not as clearly aspirated as the English phonemes (Walker, 2010). However, they don’t appear to present a major problem in this data. One issue is that both students drop the /d/ at the end of words ending in /nd/. This is a problem when combined with the uvular nasal /N/ as it makes the end of the word disappear. This will be an issue in the potentially noisy environments where these students will be working.

As described the plosive /t/ does present some problems. What is interesting is how the context of the following sound impacts the phoneme; before /u/ it’s /ts/, before /i/ it’s tɕ/. This is a result of the direct substitution of Japanese phonemes and it is important information for remedying the problem, since these individual sounds will need to be practiced in context. Another example of the contextualizing nature of phoneme position is the substitution of /w/ with /u/ by Mikiko. Here this ‘semi-vowel’ only exists before /a/ in Japanese therefore Japanese students are likely to have problems with /w/ in the context of other vowels. (Walker, 2010). Additionally the substitution of /n/ for /N/ in the word final position by both students makes the end of the word difficult to recognize.

Jenkins states that ‘allophonic variation within phonemes permissible as long as the pronunciation does not overlap onto another phoneme’ (2002, p112). /tɛ/ is similar enough to /tʃ/ to be a problem, however /tʃ/ does not overlap with an English phoneme. Nevertheless, it may sound different enough to present a problem and again in the context of this sentence where other irregularities combine to make comprehension difficult, it needs attention.

Other phonemes that overlap are the replacement of the labio-dental fricative /v/ with the bilabial plosive /b/. This again is a substitute of consonants from the students L1 where /b/ is the closest approximation. Also the replacement of /r/ with the Japanese flapped /ɾ/ is not really an overlap since the sound falls somewhere between the English /l/ and /r/ sounds. It is similar to an /r/ but with ‘the tongue coming into contact with the alveolar ridge’ (Walker, 2010, p117). This adds to unintelligibility in this data. Similarly, the substitution of /f/ with the Japanese voiceless bilabial fricative /ɸ/ which although it does not replicate an English phoneme does hinder recognition.

A further substitution of Japanese phonemes is that of the voiced and unvoiced dental fricatives /ð/ and /θ/. Walker describes how these phonemes are notoriously difficult to teach and that many learners, including native speakers, ‘consistently substitute these two sounds with similar sounds that they find easier’ (Walker, 2010, p30). Jenkins has excluded /ð/ and /θ/ from her *Lingua Franca Core* saying that, based on her empirical data, ‘they are intelligible in EIL’ (2002, p112). However, the one example that Asami gives of a communication breakdown is her pronunciation of ‘Thursday’ which was interpreted as ‘Saturday’ because, she says, of the replacement of /θ/ with /s/. Additionally, although not part of the recorded data, Mikiko had also earlier described difficulty with ‘Perth’ which was understood as ‘purse’ by the listener. In both examples the speakers pointed to the substitution of /θ/ being the issue.

Jenkins and Walker both suggest that substitutions are acceptable. However, the students regularly substitute /θ/ with the Japanese voiceless alveo-palatal fricative /ç/ for example in /ɕiŋ/ (thing, Mikiko). This Japanese sound, which has both palatal

and alveolar characteristics, sounds somewhere between an English /ʃ/ and /s/. In fact these students use it as a substitute for both these sounds. Therefore it’s possible to some ears that /ɕiŋ/ could be interpreted as either ‘sing’, ‘shin’ or ‘sin’. So with these students it needs to be considered a priority.

As can be seen from the data description Mikiko consistently substitutes /ð/ with /z/. Asami, however, is less consistent and it varies between /z/. /d/ and /t/ depending on the context of the word. Mikiko’s substitution may be less likely to jeopardize intelligibility because of its consistency. However, Asami’s inconsistency is more likely to be detrimental to understanding and should be given attention. There are also further non-core items that need to be given attention. The ‘dark’ /l/ is considered ‘not necessary for intelligibility in ELF communication’ (Walker, 2010, p31). Yet, particularly with Mikiko, substitutions in /ɪtɒʊ/, /saikɒʊ/ and /wʌndəʃə/ play a key role in hindering comprehension and need to be given attention.

6. Problem addressing

The notions of context and contextualization helped to understand the problem. As Blommaert states, context can viewed down to the level where even one single sound becomes ‘a very meaningful thing’ (2005, p182). This report has shown how even small differences in individual phonemes or stress patterns can contribute to making the utterances unintelligible. In this section the notion of context will again be drawn upon; this time to help offer avenues where the students sociolinguistic background, their L1, may actually be able to act, in the words of Walker, as a ‘powerful teaching resource’ (2010, p100). Not only that, but Walker also describes how linking pronunciation teaching with the students first language is a great way to increase motivation.

The following shows how the phonological characteristics that both students needed help with were prioritized. It can be seen that some non-core EIL items such as vowel quality and word stress were included because they were considered necessary for clear contextualization. However, non-core items such as stress-timed rhythm and ‘pitch movement to signal

attitude or grammatical meaning' (Jenkins, 2002, p114) were not included because of their irregularity and the difficulty involved in teaching them.

6.1 Priorities

- Vowel length, particularly /ɜ:/ and /i/
- Vowel quality particularly /ʌ/, /ə/ and /æ/
- Differentiation between /l/ and /r/
- Differentiation between /b/ and /v/
- Differentiation between /s/ and /ʃ/ and /θ/
- Pronunciation of /f/,
- Pronunciation of /t/ before /u/ and /i/
- Pronunciation of /w/ before /e/
- Pronunciation of /l/ in the word final position.
- Consistent aspiration of /d/ in the word final position.
- Tonic stress
- Word stress

The students also needed the following individual attention. Mikiko will be working in an environment such as an airport or aircraft cabin where there is likely to be a lot of background noise. An issue for her will be volume. Mikiko lacks confidence and speaks very quietly. So volume was a priority. Pronunciation of /dʒ/ in word final position also needed to be looked at. Asami works in a sports environment where again there is a considerable level of background noise. Unlike Mikiko, she has worked in this environment for a number of years and speaks loudly and confidently. One of her major issues is that she speaks too quickly. One priority with her was to slow down her speech a little and work on syllable length. Some consideration was also given to the inconsistency of the voiced dental fricative /ð/.

6.2 The teaching framework

A communicative framework for the teaching of pronunciation was adapted from Celce-Murcia et al. (1996). The teaching was broken into 4 stages: Description and instruction, listening discrimination, controlled practice and feedback; and practice in context.

i) Description and instruction

In the initial stage of description and instruction, a sagittal section diagram was used to illustrate how to articulate particular phonemes. This diagram, which consists of a cross-section of the human head, was particularly useful for showing correct tongue positions. Without a model, tongue position can be something that is difficult to demonstrate. This is particularly true when demonstrating the open or closed nature of particular vowel sounds.

ii) Listening discrimination

The second stage, listening discrimination, used minimal pairs to practice discriminating between sounds that students were having difficulty with. For example /l/ and /r/. This provided listening practice for the students and also helped to pinpoint which sounds students were having difficulty discerning aurally. The minimal pairs consisted of words that only differed by one consonant. For example 'lot' / 'rot', 'vote' / 'boat' and 'cap' / 'cup'. Where possible target phonemes were practiced in word initial position, medial and word final position.

Also at this stage awareness building activities were incorporated to help build recognition of differing vowel lengths in differing contexts. For example, the difference in vowel length before voiced and unvoiced consonants, such as 'back' / 'bag' and 'flat' / 'flag' were covered. Additionally comparisons of vowels before sonorants and non-sonorants were compared, such as, 'loss' / 'law'. This awareness building alone helped significantly towards remedying issues with vowel length.

iii) Controlled practice and feedback

The controlled practice and feedback stage also used minimal pairs. Here the students practiced articulating the target phonemes both in the context of individual words and also in sentences. However, even in a controlled situation with coaching some sounds proved to be difficult to produce. This was particularly the case with the discrimination between /r/ and /l/. To help an idea was adapted from Bowen (2016) where /r/ is often easier to produce at first in clusters. In the case of these students both were able to pronounce the /r/

sound in 'grown'. Therefore, this was used as a remedial context. Words containing the 'gr' cluster were used to practice finding the target sound. Once the target was located the preceding 'g' was dropped.

So for example:

Grow -> row

Great -> rate

Grip -> rip

Gripe -> ripe

This worked to isolate the /r/ sound. Similar remedial contexts were found with other phonemes. For example /v/ was on target in 'ever'. This was used to isolate the target sound and then build up into different words. For example:

Ever -> never

Ever -> clever

Ever -> sever

Kinesthetic reinforcement was used extensively throughout the controlled practice stages; specifically for practicing vowel lengths and intonation groups. Kinesthetic reinforcement is where actions and movement are used in conjunction with teaching (Celce-Murcia et al 1996). For differentiating vowel lengths a rubber band was used. While listening to the differing vowel lengths in context the learner was asked to stretch the band a corresponding amount; i.e. a little for a short vowel length and longer for a long vowel. The student was then asked to repeat these words back, all the while stretching the band a corresponding amount. This proved an effective way to teach differing vowel lengths. A similar activity involved throwing a ball into the air and catching it; making the time the ball is in the air correspond to the vowel length. Kinesthetic reinforcement methods were also used with tone groups. Bands were used to reinforce intonation patterns, again with the bands being stretched to reflect the changes in pitch.

iv) Practice in context

The final stage involved practicing the sounds in an authentic context. Students were given a series of keywords that contained the phonemes that were hindering intelligibility. They were then asked to include them in a short conversation or story. For example, in one case, the student was given a series of

words that contained some of her target sounds: 'blue', 'train', 'cancel', 'Thursday', 'drink', 'village', 'travel'. She was then given a moment to prepare a short story in which she was asked to include these keywords. After she told her story, her partner would then ask follow up questions to help create a more authentic situation.

7. Student progress

The learners made progress with vowel lengths and were able to differentiate between long and short vowels. However, English has more variation in vowel lengths depending on the context. For example; (shorter) loss -> laud -> law (longer). These subtle variations still remain problematic for the students and need more reinforcement. With vowel quality, progress was made differentiating between /ʌ/, /ə/ and /æ/. However, /ɜ:/ continued to be problematic for both students

Consonants proved to be the very stubborn to change. Even after much coaching most consonants remained problematic; particularly the differentiation between /s/ before 'i' and /ʃ/; the differentiation between /r/ and /l/; differentiation between /b/ and /v/; the aspiration of /f/ before 'o'; and the aspiration of /w/ before 'e'. While it was possible to target these sounds during coaching, both students soon reverted back to substitutions in subsequent sessions. However, it was noticed that the university student, Mikiko, displayed more lasting progress here. This may be an age issue and needs further investigation. However, both speakers needed more training with consonant production

Tone groups and intonation patterns responded well to coaching this made a noticeable difference to perceived intelligibility. Kinesthetic activities worked well to reinforce these pattern. Interestingly it was the older student, Asami, who made better progress here. This may be due to her extensive experience of using English in an international environment.

8. Recommendations

The quality of the target sounds varied according to their context. In some cases the learners were able to produce problematic phonemes accurately depending on their position in a word and the

surrounding phonemes. This is a useful observation that offers a potential avenue for students to locate the target sound. In some cases the students had difficulty aspirating the target phoneme as they were not able to recognize them aurally. Therefore, when analyzing a student's pronunciation it is recommended to listen to the sounds in different word contexts. In this case the students had better control over the target sounds in the following settings:

/w/ in 'wallet' (Mikiko)
 /v/ in 'ever' (Mikiko and Asami)
 /r/ in 'grown' (Mikiko and Asami)
 /l/ in 'delicious' (Mikiko)
 /d/ in 'round' (Mikiko) and understand (Asami)
 /dz/ in 'just' (Mikiko)

When teaching consonants it is recommended to teach in clusters first. Some phonemes, such as /r/, are easier to produce alongside another consonant, such as in 'gr'. Work with clusters first and then move onto individual sounds using chaining. Furthermore, it was observed that kinesthetic reinforcement was an effective tool when coaching vowel lengths, word stress, sentence level stress and intonation patterns. Therefore, it is recommended that kinesthetic activities be considered for when teaching these items.

Throughout the coaching sessions it was noticeable that Consonants and vowel quality required a far greater investment of time and energy than elements of prosody. If time is a consideration the pronunciation curriculum needs careful prioritization. For quick improvements in intelligibility it is recommended to focus on vowel lengths and tone groups since these respond well to teaching, and progress can be seen reasonably quickly. In terms of prioritization it should be noted that the Lingua Franca Core (Jenkins, 2002) does not include vowel quality. Therefore, for students working in an environment where English will be used as a Lingua Franca, vowel quality might not be a necessary consideration.

The final step would be the development of accommodation skills. It was noticeable that Asami, with her international experience, had better developed accommodation skills, which gave her the ability to work around her intelligibility issues. One of the

drawbacks of the monolingual classroom is that at worst it 'encourages fossilization and the use of deviant L2 forms' (Bygate 1988 quoted in Jenkins 2002, p114). Students fail to 'develop their accommodation skills in relation to a wide range of different interlocutor groups' (Jenkins p114). Exposure to NNS from other sociolinguistic backgrounds would be advantageous.

9. Conclusion

This case study found a number of potential threats to phonetic intelligibility among two Japanese students of English. The non-target sounds and intonation patterns in their utterances appear to be a result of interference from their Japanese first language. However, not all pronunciation issues were considered equally important in a Lingua Franca environment; nor were they considered equally teachable. In view of this a modified pronunciation curriculum was recommended. In the case of non-target sounds, interference was not equal across the board. In certain contexts phonemes were more accurate and this provided a useful tool to begin remedial work. This is an area that would make an interesting area for continued research.

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