

Pronunciation teaching practices in communicative second language classes

Jennifer Ann Foote^{a*}, Pavel Trofimovich^a, Laura Collins^a and Fernanda Soler Urzúa^b

^a*Education, Concordia University, Montreal, Quebec, Canada;* ^b*Department of Integrated Studies in Education, McGill University, Montreal, Quebec, Canada*

The objective of this research was to provide longitudinal, corpus-based evidence of actual teacher behaviour with respect to the teaching of second language (L2) pronunciation in a communicative language learning context. The data involved 40 hours of videotaped lessons from three experienced teachers recorded four times at 100-hour increments during the 400-hour programme for grade six (11- to 12-year-olds) francophone learners in Quebec, Canada. The videotaped lessons were initially transcribed and coded for individual pronunciation teaching episodes, then analysed in terms of their type, linguistic target and impact. Results demonstrated that pronunciation teaching episodes were infrequent (accounting for 10% of all language-related episodes), that pronunciation teaching targeted individual sounds (to the exclusion of other aspects of pronunciation) and that most pronunciation teaching episodes were not incorporated into lesson plans but instead involved various kinds of corrective feedback in response to individual student errors. These findings, which clarify results of previous survey-based studies of teachers' in-class behaviour, provide evidence that might be used to address teachers' concerns regarding the place, scope and role of pronunciation instruction in L2 teaching and teacher training.

Introduction

Over the past two decades, a considerable amount of research attention, both observational and experimental, has been devoted to the learning of 'grammar' (features of morphosyntax) and, more recently, vocabulary, in second language (L2) classes. Pronunciation, however, has been neglected in both theoretical and pedagogical approaches to L2 learning (Derwing and Munro 2005; Gilbert 2010). At least one reason for this is that pronunciation instruction, with its emphasis on individual sounds and/or prosody, does not always make for a comfortable fit with instructors who support communicative language teaching. This caused pronunciation to fall out of favour, both with researchers and practitioners, predominantly because of the belief that an overt focus on pronunciation is ineffective and even extraneous to helping learners achieve communicative competence (e.g. Krashen 1981) and the perception that pronunciation does not combine easily with other language skills, such as reading or writing (MacDonald 2002).

In addition, while learners all have different strengths and weaknesses when it comes to L2 learning, factors such as age of learning, native language (L1) and aptitude are assumed

*Corresponding author. Email: jenn.foote@gmail.com

to play a bigger role with pronunciation than with other skills (Piske, Mackay and Flege 2001). Furthermore, placement tests that are designed to assign students to different levels of instruction typically do not include pronunciation skills. As a result, learners in language classes may be at a similar level in terms of their overall L2 skills, but may vary in their pronunciation. This variability presents a challenge for instructors who often lack training in the teaching of pronunciation (Foote, Holtby and Derwing 2011) and who are frequently faced with textbooks which vary enormously in their treatment of pronunciation (Derwing, Diepenbroek and Foote 2012).

Set against this backdrop, our study attempts to answer a basic question which has not been systematically addressed in previous research: how frequently and how extensively is pronunciation actually treated in a communicatively-based L2 classroom? Understanding current classroom pronunciation teaching practices is important because this information will help guide future research into pronunciation teaching practices. It will also assist language practitioners in their efforts to develop pedagogical materials for practicing instructors and to improve training programmes for pre-service teachers. Our study was carried out in intensive English as a second language (ESL) programmes¹ for grade six (11- to 12-year-olds) francophone learners in Quebec, Canada. Our data featured over 40 hours of videotaped lessons from three experienced teachers, recorded four times at 100-hour increments during the 400-hour programme. The goal was to determine exactly how often and in what way pronunciation is addressed.

Classroom teaching of pronunciation: teacher reports

Thus far, the studies that have investigated how pronunciation instruction is carried out in L2 classrooms have done so through surveying language instructors. The largest and most recent of these is a survey of 159 instructors and/or programme coordinators working in ESL programmes across Canada (Foote et al. 2011). In this study, 86% of teachers reported that they integrated pronunciation into their classes and 73% indicated that they corrected pronunciation errors. Among the most useful activities for improving pronunciation, those focusing on segmentals (i.e. individual sounds, such as /v/ vs. /w/) were mentioned most frequently, though activities targeting suprasegmentals (i.e. aspects of language prosody, such as stress, rhythm, or intonation) were also common. Nearly all respondents indicated that they spend at least some time on suprasegmentals, with 42% devoting over 70% of their time to these aspects of pronunciation. This finding confirms the results from an earlier Canadian study, where Breitkreutz, Derwing and Rossiter (2001) showed that 89% of teachers claimed to focus on both segmentals and suprasegmentals in their classes.

In another context, Murphy (2011) surveyed 36 ESL instructors in or near Dublin, Ireland. She found that 97% of the instructors reported teaching pronunciation at least once per month, while 75% claimed to have targeted it more than once per week. Over 90% of instructors indicated that they most frequently used listen-and-repeat activities or provided corrective feedback while learners read aloud. Working with the government funded Adult Migrant English Program (AMEP) in Australia, Burns (2006) surveyed 143 instructors and found that individual segments were taught most frequently. In another Australian study, MacDonald (2002) interviewed eight instructors from one programme. The instructors, who had all self-identified as either disliking pronunciation teaching or lacking confidence in teaching it, indicated that pronunciation did not have a clear place in the curriculum and was 'easy to overlook' (MacDonald 2002: 6). Finally, Burgess and Spencer (2000) conducted a questionnaire among instructors at colleges and private language schools in the UK. Most respondents appeared to have integrated

pronunciation instruction into their classes, though some would devote class time specifically to pronunciation. When asked which features of pronunciation were covered, the instructors mentioned both segmentals and suprasegmentals. Taken together, the findings of teacher surveys indicate that instructors integrate pronunciation into their classes, targeting both segmentals and suprasegmentals in their teaching.

Classroom teaching of pronunciation: efficacy of instruction

The sentiments expressed by language instructors in surveys to a great extent also reflect some of the ongoing research debates. These concern the effectiveness of classroom-based pronunciation instruction, the choice of teaching targets and the usefulness of particular teaching techniques. With respect to the efficacy of explicit pronunciation instruction,² the results of the few classroom-based studies available in the literature generally show that instruction can lead to improvement in pronunciation. For example, Derwing, Munro and Wiebe (1997: 217) evaluated the effectiveness of a 12-week 'speaking improvement programme' on L2 pronunciation development. Following the instruction, eight of the 13 learners showed improved intelligibility, though statistically significant improvement was detected for only three. In another study, Derwing, Munro and Wiebe (1998) compared segmental instruction with instruction that focused on suprasegmentals and general speaking habits. After a 12-week instructional period, both groups showed some improvement in controlled speech, though only the group receiving suprasegmental instruction showed improvement when speaking extemporaneously. Positive effects of pronunciation instruction were also reported by Couper (2003), who implemented a pronunciation syllabus as part of a general English language class. In this study, learners' pronunciation accuracy (measured as pronunciation errors in reading sentences aloud and giving a self introduction) increased following a 16-week course featuring a total of 18 hours of instruction. In a later study, Couper (2006) showed that learners can improve on a specific pronunciation feature (epenthesis and deletion) after receiving a series of short lessons over a two-week period.

With a few exceptions (e.g. Rajagopalan 2010), researchers also generally agree that intelligibility, which refers to how much of an utterance can be understood by an interlocutor, is a reasonable goal for pronunciation instruction (e.g. Derwing and Munro 2009a; Matsuura 2007; Munro and Derwing 1995). There is less agreement, though, on what the model for intelligible pronunciation should be and which aspects of pronunciation are most important to intelligibility. Proponents of *English as a Lingua Franca* (Jenkins 2000; Walker 2010), for example, favour a teaching model based on communication among non-native speakers and argue for focusing instruction on a lingua franca core that primarily consists of consonants and consonant clusters, with only one suprasegmental element (nuclear stress) included in the core syllabus. However, the available empirical evidence suggests that, in addition to nuclear stress, several other suprasegmental features, including word stress and aspects of fluency, impact intelligibility (Derwing et al. 1998; Derwing and Munro 2009b; Field 2005). Research also suggests that some segments and their clusters are more important for distinguishing meaning (e.g. *bit-beat* in English) than others (e.g. *then-den*) and that these former targets should receive attention in a language classroom (Munro and Derwing 2006).

The question of how pronunciation should be taught in L2 classrooms has received little attention in research. There is some evidence that certain types of perception training can lead to improvements in pronunciation accuracy. For example, studies have found positive results in improving learners' L2 perception and production by using high variability training or the training in which learners are exposed to multiple speakers, on the assumption

that listening to highly variable tokens of target sounds leads to robust perceptual learning (e.g. Iverson, Hazan and Banister 2005; Thomson 2011). It is important to note that this training is conducted in controlled lab settings or delivered through technology rather than embedded in a regular classroom, so it remains an empirical question the degree to which such training may be effective in a classroom setting. Another strand of research shows that repetition may also lead to improved pronunciation accuracy. Trofimovich and Gatbonton (2006), for instance, conducted a study which involved testing learners to see if previous exposure to a target word would increase sensitivity to phonological information. They showed that L2 learners were more sensitive to words that they had recently encountered than words that they had not, suggesting that learners may benefit from repeated exposure to the same pronunciation targets in the classroom.

The one aspect of L2 pronunciation teaching that has received the most research attention in the classroom context is the use of corrective feedback. For example, Lyster (1998) analysed teachers' error correction practices in four French immersion classes in Canada and found that recasts (repetitions of a student's utterance, minus the error) were the most common type of feedback used with pronunciation errors and that learners tended to repair pronunciation errors after receiving a recast. Further evidence for the benefits of recasts for pronunciation was found by Saito and Lyster (2012a, 2012b) in two classroom-based studies of Japanese English as a foreign language (EFL) learners, focused on different segmental L2 targets (the pronunciation of English /ɪ/ and /æ/). Recasting in combination with form-focused tasks had a positive effect on native Japanese learners' subsequent production of these targets. These findings are consistent with the observation that corrective feedback is noticed and used by learners when it targets pronunciation errors (Mackey, Gass and McDonough 2000).

The current study

The preceding brief survey of the literature shows that there is a general agreement between research on teacher beliefs and practices related to the teaching of pronunciation and experimental research on efficacy of classroom-based pronunciation instruction, implying a close match between research and practice. Instructors claim to be including pronunciation as part of their teaching, report a mix of targets covered and acknowledge the use of select activities (e.g. listen and repeat) to tackle learners' pronunciation problems (e.g. Burgess and Spencer 2000; Foote et al. 2011). These same themes recur in the research literature, which has predominantly been concerned with defining the role of pronunciation instruction in L2 teaching (e.g. Derwing and Munro 2009a), focusing on the choice of pronunciation teaching targets (e.g. Field 2005) and identifying most beneficial techniques for teaching L2 pronunciation (e.g. Thomson 2011). However, as surveys have revealed, many instructors either remain unconvinced of the usefulness of pronunciation instruction and unsure of its place within communicative teaching (Burns 2006; MacDonald 2002) or generally report lack of knowledge about or confidence in teaching L2 pronunciation (Derwing 2003). Coupled with existing research evidence showing that teachers' reports of their in-class behaviour are frequently misaligned with their actual classroom practices (Basturkmen, Loewen and Ellis 2004; Sato and Kleinsasser 1999), these concerns bring into question the issue of how instructors actually approach pronunciation in their classrooms. In fact, the basic question of what exactly pronunciation instruction looks like has remained unanswered for the simple reason that, to the best of our knowledge, there are no studies that have documented L2 pronunciation teaching practices through classroom observation.

Therefore, the principal goal of this research was to fill this gap by conducting a longitudinal, corpus-based observational study of actual teacher behaviour in a language classroom. We targeted an intensive language learning context, in which learners receive sustained exposure to the target language, because it ostensibly represents one of the most favourable classroom-based learning environments (see Muñoz 2012), one that might afford teachers ample opportunities to address pronunciation as part of teaching. Our immediate objective was to document actual L2 pronunciation teaching practices. Our long-term aim was to provide research-based evidence that might be used to address teachers' concerns regarding the place, scope and role of pronunciation instruction in L2 teaching, with the hope of bringing together the research and practice on L2 pronunciation. We specifically addressed the following research questions, inspired by the main themes discussed in L2 pronunciation literature:

- (1) How often is pronunciation addressed?
- (2) Which aspects of pronunciation receive attention?
- (3) How is pronunciation treated pedagogically?

Method

Observation data and teaching context

The data used in this study came from a 112,595-word corpus representing over 40 hours of classroom observation carried out longitudinally in three grade six intensive ESL classes in Quebec, Canada. The corpus, collected as part of a larger project (Collins et al. 2009), features instructional input to students recorded at four 100-hour intervals of the 400-hour ESL programme and includes the entire sample of three teachers' speech, both spontaneous and scripted (e.g. in storybook readings), for a total of 12 video recordings, each spanning the entire school day (3–4 hours of ESL instruction at each recording time). The schools participating in this project were located in francophone communities outside Montreal and the 120 students enrolled in the target classes were 11- or 12-year-olds who resided in the same communities and thus had little exposure to English outside of school. The three teachers were experienced ESL instructors. Two of the teachers were L1 speakers of French, but all three were highly proficient speakers of English (with six, 12 and 18 years of teaching experience, respectively). The teachers were not informed of any specific research target and were thus unaware that their pronunciation teaching practices were being examined. However, in a questionnaire administered at the start of the study, they were asked whether they focused on the following areas of language: grammar, vocabulary, pronunciation and spelling/punctuation. All three answered yes to pronunciation.

Quebec is a French-speaking province of Canada with mandated ESL instruction in public schools, beginning in grade one. The typical format is a drip-feed approach of an hour or two a week over the 10-month school year. However, at the end of elementary school, some students participate in a special intensive programme in which the amount of instruction is dramatically increased to 350–400 hours during a single school year. The distribution of the instruction varies across different schools. In our study, students experienced the 400 hours either concentrated into a sustained intensive programme over five months, or concentrated into a series of mini-intensive programmes spread across the 10 months of the school year (see Collins and White 2011, for further information on these two models). The instruction primarily focuses on speaking and listening, with some reading and writing practice as well. This instruction is effective in that students

who typically start as beginners usually attain an intermediate level of spoken English proficiency by the end (Collins and White 2011). The teaching orientation in intensive ESL is communicative and common activities include tongue twisters, role plays and teachers reading aloud. Thus, intensive ESL programmes in Quebec are typical of communicatively oriented EFL instruction elsewhere. In terms of pronunciation, there were no pronunciation specific textbooks used and pronunciation instruction was not given dedicated classroom time as part of the scheduling or curriculum. The pronunciation model being used in this context by the three teachers and as well as speakers outside the classroom is Canadian English, particularly its Quebec variety (Boberg 2008).

Data analysis

The video recordings were first transcribed by research assistants and each transcript was verified by a second transcriber. The transcripts ranged between 27,046 and 48,667 words in length for each teacher (across the four observation times). The transcripts were then thematically coded for type of pedagogical activity by two trained research assistants according to a larger number of categories, then re-coded to eliminate overlapping ones. The following five categories represented the entire content of teacher talk: (a) classroom management and activity setup; (b) language-related episodes; (c) personal anecdotes; (d) text-based input, which included reading aloud; and (e) discussion of text-based input (for more details on the coding, see Trofimovich et al. 2012). Language-related episodes, the category most relevant here, were defined as instances of teacher talk that included a focus on some aspect of language, regardless of its nature (e.g. incidental vs pre-planned, student- vs teacher-initiated), focus (e.g. form, meaning, or use) and length (e.g. brief or extended). The coding of language-related episodes was carried out by using three broad content categories targeting various aspects of L2 vocabulary, grammar, or pronunciation because these categories covered over 99% of all teacher input focused on language. Following initial coding, another trained research assistant verified the coding.

Because the focus of this study was on pronunciation teaching, all identified instances of language-related episodes targeting pronunciation were analysed further. Each pronunciation episode was coded using a four-category scheme, with the initial categories derived from teacher surveys (e.g. Foote et al. 2011), then refined through the coding process. The following categories were used: (a) planning: pre-planned (e.g. carried out as part of a lesson plan or based on teaching materials) versus incidental (e.g. performed in response to a student error or arising from text-based discussion); (b) target: segmental (individual segment or an entire word) versus suprasegmental; and (c) specific form (e.g. /θ/, compared with /t/) and (d) impact: involving an individual student versus the whole class. Based on previous classroom-based research on teachers' error correction practices (Lyster and Ranta 1997) and recent meta-analyses of effectiveness of oral corrective feedback (Lyster and Saito 2010), all instances of corrective feedback involving pronunciation were further coded as recasts (repetition of a student's utterance, minus the error), explicit corrections, or prompts (feedback encouraging students to reformulate the error on their own). The coding of all pronunciation episodes was carried out by one of the authors, then verified by another author.

The following episode illustrates the categories used in the analysis. It was coded as a pronunciation episode which was incidental, targeted a segmental issue (whole word), focused on the specific form *sour* (as different from *sweet*) and involved one student. As the episode involved corrective feedback, it was further coded as being a recast:

Student: Uh ... bitter, sur-
 Teacher: Sour.
 Student: Sour, sweet and salt.

To take another example, the following episode was coded as preplanned, with a segmental target (individual sound). The specific targets were /f/, /w/ and /v/ and the episode involved the entire class.

Teacher: Okay. Three. You have to say five times fine white wine vinegar with a veal because of all the w sounds and the v sounds and the f sounds it makes it hard. Uh, well I can try it five times. Fine white wine vinegar with a veal. [repeated four more times]

Results

Language-related episodes in teacher talk

An analysis of the five categories that represented teacher talk overall revealed that focus on language comprised a relatively small percentage of class time. This accounted for only about 17% of the total teacher input, with all teachers revealing similar behaviour (16%, 19% and 17% in each individual teacher's input). The most common type of activity was classroom management, which also included activity setup, instructions and explanations of classroom procedures, with 75% of all activities belonging to this category. The other three categories (personal anecdotes, text-based input and discussion of text-based input) made up the remaining 8%. When looking more closely at language-related episodes (see Table 1), focus on language was heavily dominated by vocabulary (70% of all episodes), while pronunciation received little attention, accounting for only about 10% of all episodes. At three of the four observation times (100, 200 and 400 hours) pronunciation received the least attention. At time three, pronunciation was slightly more dominant than grammar, but neither received much focus during this observation time. This pattern was nearly identical across the three teachers observed; therefore, the totals shown in Table 1 are pooled.

Frequency of pronunciation episodes

When language-related episodes targeted pronunciation, their overall number in each class varied across the three teachers (henceforth, Teachers A, B and C) and across the observations. Over the four days of recorded instruction, Teacher A had 42 pronunciation episodes overall, Teacher B had 21 and Teacher C had 28 (see Table 2). Teacher A had a relatively large number of pronunciation episodes during the first three observations (10, 18 and 12, respectively) but only two episodes were found during the last one. Teacher B was relatively consistent, with a handful of

Table 1. Number of language-related episodes as a function of linguistic focus across observation times.

Language focus	Observation time				Total
	1	2	3	4	
Pronunciation	15	30	22	19	86 (10%)
Grammar	65	75	15	23	178 (20%)
Vocabulary	178	233	145	59	615 (70%)
Total	258	338	182	101	879 (100%)

Table 2. Number of pronunciation episodes across teachers and observation times.

Instructor	Observation time				Total
	1	2	3	4	
Teacher A	10	18	12	2	42
Teacher B	3	5	6	7	21
Teacher C	21	2	0	5	29
Total	34	25	18	14	92

pronunciation episodes at each time. Teacher C showed a similar pattern, with the exception of a large number of episodes during the first observation. Because the total length of video observation for each teacher amounted to approximately 14 hours of classroom teaching (or 3.5 hours per school day), the overall rate of pronunciation teaching was roughly three pronunciation episodes per hour for Teacher A, 1.5 episodes per hour for Teacher B and two episodes per hour for Teacher C, for a mean of about two-hourly episodes per teacher.

Linguistic focus of pronunciation episodes

In terms of which aspects of pronunciation receive the most attention, 100% of all episodes from all three instructors at all four times (i.e. all episodes listed in Table 2) were based on segmental elements. These included features such as possessive and plural 's', past tense endings, 'th' sounds and phonemes /f/, /v/, /w/, /p/, /b/, /i/ and /t/. Teacher A usually focused on entire words rather than individual sounds, Teacher B slightly favoured individual sounds (52%), while Teacher C focused equally on both. There were no instances of suprasegmentals being addressed in class. A typical example of a pronunciation episode targeting an entire word would be a recast of a mispronounced word (Teacher A, Time 1):

Student: Beside the stop s- the stop sign (pronounced as /sin/).

Teacher: The stop sign, eh?

Student: Stop sign.

Teacher: Yes, beside the stop sign. Can we say something else, C?

In another example, the teacher explains a typical incorrect French pronunciation of the word 'easy' to the students (Teacher B, Time 1):

Student: Easy (pronounced as /ezi/).

Teacher: Easy to be ...

Student: Me.

Teacher: Me, yes. How do we pronounce that word, class? Everybody?

Students: Easy.

Teacher: Easy, good. 'Cause some people say a-azy like in French there, but it's easy... easy. Wish that I could, K?

Finally, in the example below, the teacher focuses on a segment rather than an entire word (Teacher B, Time 2):

Teacher: (talking to a student) Okay, ehm – some places you forget to practice, to pronounce your s, saying practices you said a couple of times just 'he practice'.... Maybe I misunderstood, maybe you were saying something different. I wasn't sure.

Pedagogical treatment of pronunciation

How pronunciation was addressed in the classroom varied from instructor to instructor, but in all cases error correction was the most common type of pronunciation episode. This pattern was stable across the four observation times; therefore, the data below are pooled over the four observation times. Error correction made up 93% (39/42) of all pronunciation episodes for Teacher A, 67% (14/21) of all pronunciation episodes for Teacher B and 89% (25/28) of all pronunciation episodes for Teacher C. Other types of pronunciation episodes consisted largely of repetition, often done as choral repetition of a tongue twister. This was particularly true for teachers A and B whose non-feedback episodes largely involved repetition, often done as choral repetition. There was one instance of Teacher A drawing learners’ attention to the sounds they were practicing in a tongue twister (Teacher A, Time 1):

Teacher: So you’re really practicing – what letter are you practicing in here, O?

Student: S and H.

Teacher: S, eh? There’s a lot of ‘s’ and ‘sh’. And you know third person, we always have to pronounce the s, eh? Every time you see an s, we have to hear it... There’s a lot of s’s.

Teacher C had few non-feedback episodes but in those episodes gave explanations and reminders rather than asking for repetition. In the excerpt below, this instructor reminds the learners of a pronunciation point before they start an activity (Teacher C, Time 1):

Teacher: I will give you 2 minutes to practice with a partner. So, student 1 and 2, 3 and 4, 5 and 6. You separate the 4 lines. Make sure you pronounce your past correctly.

In the next excerpt, Teacher C gives an explanation of the sound–spelling correspondence for the word ‘weigh’ (Teacher C, Time 1):

Teacher: Okay, so the next one ‘I weigh’. If it’s written, this word is difficult, it’s...we pronounce this like this...weigh (/wei/)... Could you write this over this word? So this is the way we pronounce it. Weigh (/wei/) – I weigh (/wei/) ...and then you write and it’s written in kilograms.

When corrective feedback targeted pronunciation errors, Teacher A and Teacher C generally favoured recasts, but Teacher B used a variety of feedback techniques (see Table 3). In some cases, recasts were followed by explicit correction, but this occurred only twice for Teacher A, once for Teacher B and three times for Teacher C.

Table 3. Number of feedback types used by teachers.

Instructor	Feedback type			Total
	Recast	Explicit correction	Prompt	
Teacher A	31 (79%)	3 (8%)	5 (13%)	39 (100%)
Teacher B	4 (29%)	5 (36%)	5 (36%)	14 (100%)
Teacher C	17 (68%)	4 (16%)	4 (16%)	25 (100%)

The following example illustrates a prompt sequence (Teacher A, Time 3):

Teacher: Plant.

Student: */unintelligible speech/* planned to join the

Teacher: The...there's something missing there. How do you pronounce this word?

Student: Plant.

Teacher: Plan...

Student: Planted.

In terms of planning, language-related episodes where pronunciation was the primary focus of instruction as a pre-planned lesson point or activity were far less frequent than episodes in which pronunciation was targeted incidentally. Again, this finding held across the four observation times; hence, the data are pooled across all recording times. Overall, pronunciation episodes were pre-planned 14% of the time for Teacher A, 33% for Teacher B and 7% of the time for Teacher C (see Table 4). For all teachers, nearly all of the pre-planned episodes occurred during one day of recording and were part of a larger activity carried out on that day. For Teacher A (five of the six pre-planned episodes) and Teacher B (all seven pre-planned episodes), these were tongue twister activities that involved the instructor focusing on the pronunciation of specific words in each tongue twister. For Teacher C, all pre-planned episodes involved the instructor taking points away from learners who did not say past tense *-ed* endings correctly. The vast majority of the incidental pronunciation incidents involved some form of corrective feedback.

With respect to the impact of pronunciation episodes, the three teachers differed in the extent to which they involved more than one student in each pronunciation episode. Teacher B had the fewest pronunciation episodes overall. However, she was most likely to involve several students or the entire class rather than a single learner, thus increasing the instructional impact of the episode. In fact, 57% (12/21) of the pronunciation episodes in this teacher's class involved several students, whereas Teachers A and C each involved more than one student only 21% of the time (9/42 and 6/28, respectively). Below is an example of an incidental pronunciation episode involving one student (Teacher C, Time 1). This episode targets the possessive/plural *-s* morpheme in English which can be pronounced as one of three allomorphs (*/s/*, */z/*, */əz/*), a challenging pronunciation issue for L2 speakers of English (Abraham 1984):

Student: horse tail

Teacher: OK I did not hear your 's'

Student: The horse tail

Teacher: The horse's tail.... OK you have the horse. To indicate the possessive – apostrophe s, which is pronounced the horse's tail.

Table 4. Number of pre-planned and incidental pronunciation episodes used by teachers.

Instructor	Planning		Total
	Pre-planned	Incidental	
Teacher A	6 (14%)	36 (86%)	42 (100%)
Teacher B	7 (33%)	14 (67%)	21 (100%)
Teacher C	2 (7%)	26 (93%)	28 (100%)

While other students may have been listening to the exchange, it was directed at the one student making the error. The next example involves the entire class and represents a pre-planned pronunciation episode (Teacher A, Time 3):

Teacher: So you know this word here, bought, is the past tense of what verb? C.

Student: Buy?

Teacher: Of buy. So Berry Botter bought. Can you pronounce it? Bought.

Students: Bought.

Teacher: It's not.... It's not but it's bought.

Students: Bought.

Teacher: Bought. And this one is? How do you pronounce this one?

Students: But.

Teacher: But. See the difference? Bought. But.

Students: Bought. But.

This episode is considered pre-planned because the tongue twister activity of which it is a part clearly focuses on this distinction and it is likely that the instructor planned to draw attention to the contrast.

Discussion

The objective of this research was to provide longitudinal, corpus-based evidence of actual teacher behaviour with respect to the teaching of L2 pronunciation in an intensive, communicative language learning context. We were motivated by the overall goal of clarifying the place, scope and role of pronunciation instruction in a communicative L2 classroom. Our findings overall indicate that, at least in the context targeted here, pronunciation instruction is happening, but not entirely in line with how we would expect it to, based on surveys of pronunciation instructors. The results will now be discussed in relation to our original research questions.

How often is pronunciation addressed?

A focus on pronunciation accounted for a mere 10% of all language-related episodes in the classes, receiving half as many episodes as grammar and representing one seventh of the time spent on vocabulary. This number is particularly low considering that language-related episodes in their totality make up only 17% of all classroom input from teachers. This finding contrasts with the results of published teacher surveys which suggest a considerable emphasis on pronunciation, for example, with 75% of instructors reporting that they teach pronunciation more than once per week (Murphy 2011). The relative lack of emphasis on pronunciation is also striking, given that this finding comes from a highly communicative, intensive teaching context which ostensibly represents one of the most ideal situations for the teaching of pronunciation as part of speaking skills.

These findings suggest that teachers are not focusing on pronunciation as much as they think they are. For example, Basturkmen et al. (2004) found that three teachers' beliefs about language-focused instruction were not always in line with their actual classroom practices. Furthermore, in observational studies examining focus on language, both in terms of pre-emptive, or planned, episodes (Basturkmen et al. 2004) and learner uptake after language episodes (Ellis, Basturkmen and Loewen 2001), pronunciation received less focus than vocabulary or grammar.

Nevertheless, one positive aspect of our findings is that while pronunciation may have not received a lot of attention overall, the instructors featured in this study did in fact address pronunciation in their classes. It is noteworthy, for example, that the instructor with most pronunciation episodes had twice as many as the instructor with the fewest. This suggests that there is a lot of variability in the amount of pronunciation instruction going on in classes that exist within similar programs and that have similar materials, learners and curricula.

As was mentioned earlier, pronunciation teaching surveys have shown that not all language instructors see pronunciation instruction as beneficial (Burns 2006; Foote et al. 2011) and that many otherwise well-trained and experienced language instructors lack training in the teaching of pronunciation (Foote et al. 2011). It is possible that the teachers featured in this study may have differed in their interest in and comfort with teaching pronunciation and some may have lacked the requisite training, particularly with respect to suprasegmental aspects of English. Indeed, when asked which aspects of language they tend to prioritise in teaching, the three teachers in this study identified grammar and/or vocabulary as most crucial. In addition, although all three teachers were exposed to basic information on English phonology and pronunciation teaching as part of one required course in their teacher training, the focus of that course was largely theoretical in nature and prioritised segmental issues. Thus, the three teachers featured in this study were likely typical of the sample of experienced teachers surveyed by Foote et al. (2011), namely, those who are interested in teaching pronunciation but may not feel overly confident to be able to do so.

However, a more likely reason for the observed lack of emphasis on pronunciation is specific to the particular student group featured here (a homogenous group of native French learners with little contact with English outside class). Pronunciation issues may not be as pronounced in this context, compared to classes composed of learners from various L1 backgrounds and exposed to the L2 outside of class, because all learners and teachers alike are highly familiar with mispronunciations typical of French learners of English (e.g. substitution of /t/ and /d/ for 'th' sounds or incorrect word stress). Therefore, teachers may not view pronunciation as an obstacle to communication and may overtly or subtly dismiss a variety of pronunciation issues as unimportant. This influence of context on pronunciation teaching practices and its possible interaction with teacher attitudes towards the teaching of pronunciation, needs to be addressed in future research.

Which aspects of pronunciation are targeted?

Pronunciation teaching surveys have consistently revealed that instructors target different aspects of L2 pronunciation in their teaching. While segmentals are somewhat prevalent, at least some time is spent on suprasegmentals (e.g. Burgess and Spencer 2000; Foote et al. 2011). Further, as mentioned previously, research findings clearly indicate that suprasegmentals are important to intelligibility (e.g. Derwing et al. 1998; Field 2005). This makes it surprising that in a total of 92 pronunciation episodes between three instructors during 12 full days of teaching across 400 hours of instruction, not one episode had a suprasegmental focus. This finding can be explained by teachers' general lack of knowledge about or confidence in teaching suprasegmentals (Burgess and Spencer 2000; Derwing 2003; Foote et al. 2011). This finding may also reflect the fact that suprasegmentals, compared to segmentals, are difficult to describe without reference to specialised terminology. Yet another (related) reason for this may be the large number of pronunciation episodes that involved corrective feedback. Segmental errors are often more salient and easier to correct

than suprasegmental errors, especially because many suprasegmentals span several words, phrases and even clauses and cannot therefore be associated with a single lexical item and referred to easily. It is possible, then, that when correcting errors, instructors are not intentionally omitting suprasegmentals, but are simply less likely to notice or choose them when giving corrective feedback.

How is pronunciation treated pedagogically?

The vast majority of the pronunciation episodes in this study were in the form of corrective feedback. As was mentioned previously, corrective feedback is an important part of pronunciation instruction and the use of recasts is supported by findings in the literature. However, the heavy use of recasts is also possibly a concern. For instance, Saito and Lyster's (2012a) study found that recasts were effective for improving pronunciation, but tested recasts in combination with form-focused instruction, which was largely absent in this study. Without instruction that first guides students to notice a targeted aspect of pronunciation, students are not always going to recognise that they are receiving feedback. For instance, it seems unlikely that recasting an entire sentence to indicate a change in thought groups (in order to illustrate the placement of sentence stress or to target a particular intonation contour) would be easily recognised as corrective feedback unless there had been a recent lesson focusing on this aspect of pronunciation.

Further, the large percentage of corrective feedback episodes indicates that corrective feedback was often used to the exclusion of other types of pronunciation intervention. In addition, corrective feedback typically targets the pronunciation difficulties of a single learner. Individual attention is laudable and timely feedback can be effective. However, with such heavy focus on feedback, learners are not getting sustained, repetitive practice with challenging aspects of pronunciation. Seen this way, our finding that L2 pronunciation is predominantly treated through corrective feedback, namely, through recasting of learners' pronunciation errors, does not seem to be altogether encouraging. What is needed perhaps is a more nuanced approach to pronunciation teaching, one that complements teachers' individual error correction preferences to include explicit treatment of pronunciation difficulties through pronunciation activities embedded in teachers' lesson plans and programme curricula. That is to say, the inclusion of proactive, rather than just reactive, approaches to L2 pronunciation teaching would provide learners with richer opportunities for working on challenging features of L2 pronunciation.

With respect to activity planning, our findings revealed some (albeit few) instances where pronunciation episodes were not incidental but had clearly been planned in advance by the instructors. However, these were mostly limited to tongue twister activities. It is possible that if the recordings had happened on different days, a wider variety of pre-planned pronunciation episodes would have been observed. However, based on our familiarity with the three teachers' pedagogical practices in general and with their teaching captured in over 40 hours of recorded classroom activity, tongue twisters and (to some extent) planned repetition appear to be the only pre-planned pronunciation activities taking place in this context and even those seem to be fairly infrequent. This finding is surprising in that it contradicts the outcomes of teacher surveys reviewed earlier (e.g. Foote et al. 2011; Murphy 2011). It is possible that survey results are highly sensitive to sampling bias, as people who do not teach pronunciation are less likely to complete a pronunciation teaching survey and it may be that the surveys are giving an overly optimistic picture of current pronunciation teaching practices. Finally, it is also possible that the relatively low proficiency level of the learners in this study, especially at the outset of

the course, is one reason that pronunciation is seldom taught in a planned way. When Foote et al. (2011) asked instructors if they agreed with the statement ‘You can’t teach pronunciation to lower levels,’ only 5% agreed. Nonetheless, when working with lower-level learners, building up learners’ vocabulary and basic grammar may be viewed as a necessary first step before teaching pronunciation in a comprehensive or systematic way.

Conclusion

The findings of this study have implications for teacher training programs. Certainly, this was a study of one ESL context and as such, it cannot be concluded that the pronunciation teaching practices found in this context necessarily reflect what is happening in other contexts. However, it is interesting that while surveys of pronunciation teaching practices have yielded seemingly consistent findings, the actual teaching practices in this study did not reflect what one would expect based on those surveys. Given the lack of pre-planned pronunciation episodes and the complete absence of any suprasegmental instruction, there may be need for more pronunciation-specific training for both pre-service and practicing teachers. Instructors should be aware of the importance of suprasegmentals to intelligibility and feel comfortable teaching them in class. The difference between the findings of this study and the surveys of pronunciation instructors also calls for more research investigating how pronunciation is actually being taught. Future studies could look at pronunciation in different types of language classrooms and could combine interview or survey data of teacher beliefs and practices with analyses of teachers’ actual classroom behaviour.

Acknowledgements

We are grateful to the two anonymous reviewers for their helpful comments on earlier versions of this article and to the many research assistants who transcribed and assisted with the coding of the original data (reported by Collins et al. 2009): Kathryn MacFadden-Willard, Cassandre McLean Ikauno, Yvette Relkoff, Fabrizio Stendardo and Derek Theriault. This project was supported by the Social Sciences and Humanities Research Council of Canada and Fonds Quebecois de la Recherche sur la Societe et la Culture grants awarded to the coauthors.

Notes

1. Canada has two official languages, French and English and the convention is to refer to the teaching of these languages to non-native speakers as second language teaching. However, in some parts of the country, such as the regions in this study, learners typically have little exposure to English outside the classroom, resulting in contexts that have more in common with EFL situations elsewhere in the world.
2. Although at least some outcomes of L2 pronunciation development can be attributed to implicit learning through exposure to high-quality input, it remains unclear whether and to what extent adult learners rely on implicit learning and whether pronunciation teaching activities could harness implicit learning strategies (for preliminary evidence, see Trofimovich, McDonough and Neumann 2013). Therefore, we focus here exclusively on explicit teaching of pronunciation in a classroom context.

References

- Abraham, R.G. 1984. Patterns in the use of the present tense third person singular –s by university-level ESL speakers. *TESOL Quarterly* 18, no. 1: 55–69.

- Basturkmen, H., S. Loewen and R. Ellis. 2004. Teachers' stated beliefs about incidental focus on form and their classroom practices. *Applied Linguistics* 25, no. 2: 243–272.
- Boberg, C. 2008. Regional phonetic differentiation in standard Canadian English. *Journal of English Linguistics* 36, no. 2: 129–154.
- Breitkreutz, J., T.M. Derwing and M.J. Rossiter. 2001. Pronunciation teaching practices in Canada. *TESL Canada Journal* 19, no. 1: 51–61.
- Burgess, J. and S. Spencer. 2000. Phonology and pronunciation in integrated language teaching and teacher education. *System* 28, no. 2: 191–215.
- Burns, A. 2006. Integrating research and professional development on pronunciation teaching in a national adult ESL program. *TESL Reporter* 39, no. 2: 34–41.
- Collins, L. and J. White. 2011. An intensive look at intensity and language learning. *TESOL Quarterly* 45, no. 1: 106–133.
- Collins, L., P. Trofimovich, J. White, C. Cardoso and M. Horst. 2009. Some input on the easy/difficult grammar question. *The Modern Language Journal* 93, no. 3: 336–353.
- Couper, G. 2003. The value of an explicit pronunciation syllabus in ESOL teaching. *Prospect* 18, no. 3: 53–70.
- Couper, G. 2006. The short- and long-term effects of pronunciation instruction. *Prospect* 21, no. 1: 46–66.
- Derwing, T.M. 2003. What do ESL students say about their accents? *Canadian Modern Language Review* 59, no. 4: 547–566.
- Derwing, T.M., L.G. Diepenbroek and J.A. Foote. 2012. How well do general skills ESL textbooks address pronunciation? *TESL Canada Journal* 30, no. 1: 22–44.
- Derwing, T.M. and M.J. Munro. 2005. Second language accent and pronunciation teaching: a research based approach. *TESOL Quarterly* 39, no. 3: 379–397.
- Derwing, T.M. and M.J. Munro. 2009a. Comprehensibility as a factor in listener interaction preferences: implications for the workplace. *Canadian Modern Language Review* 66: 181–202.
- Derwing, T.M. and M.J. Munro. 2009b. Putting accent in its place: rethinking obstacles to communication. *Language Teaching* 42: 476–490.
- Derwing, T.M., M.J. Munro and G.E. Wiebe. 1997. Pronunciation instruction for "fossilized" learners: can it help? *Applied Language Learning* 8, no. 2: 217–235.
- Derwing, T.M., M.J. Munro and G.E. Wiebe. 1998. Evidence in favor of a broad framework for pronunciation instruction. *Language Learning* 48, no. 3: 393–410.
- Ellis, R., H. Basturkmen and S. Loewen. 2001. Pre-emptive focus on form in the ESL classroom. *TESOL Quarterly* 35, no. 3: 407–432.
- Field, J. 2005. Intelligibility and the listener: the role of lexical stress. *TESOL Quarterly* 39, no. 3: 399–423.
- Foote, J.A., A. Holtby and T.M. Derwing. 2011. 2010 survey of pronunciation teaching in adult ESL programs in Canada. *TESL Canada Journal* 29, no. 1: 1–22.
- Gilbert, J. 2010. Pronunciation as orphan: what can be done? *SpeakOut: The newsletter of the IATEFL pronunciation special interest group* 43: 3–7.
- Iverson, P., V. Hazan and K. Banister. 2005. Phonetic training with acoustic cue manipulations: a comparison of methods for teaching English /r/-/l/ to Japanese adults. *The Journal of the Acoustical Society of America* 118, no. 5: 3267–3278.
- Jenkins, J. 2000. *The Phonology of English as an International Language*. Oxford: Oxford University Press.
- Krashen, S. ed. 1981. *Second Language Acquisition and Second Language Learning*. Oxford: Pergamon.
- Lyster, R. 1998. Recasts, repetition and ambiguity in L2 classroom discourse. *Studies in Second Language Acquisition* 20, no. 1: 51–81.
- Lyster, R. and K. Saito. 2010. Oral feedback in classroom SLA: a metaanalysis. *Studies in Second Language Acquisition* 32, no. 2: 265–302.
- Lyster, R. and L. Ranta. 1997. Corrective feedback and learner uptake. *Studies in Second Language Acquisition* 19, no. 1: 37–66.
- MacDonald, S. 2002. Pronunciation: views and practices of reluctant teachers. *Prospect* 17, no. 3: 3–18.
- Mackey, A., S. Gass and K. McDonough. 2000. How do learners perceive interactional feedback? *Studies in Second Language Acquisition* 22, no. 4: 471–497.

- Matsuura, H. 2007. Intelligibility and individual learner differences in the EIL context. *System* 35, no. 3: 293–304.
- Muñoz, C. ed. 2012. *Intensive Exposure in Second Language Learning*. Bristol, UK: Multilingual Matters.
- Munro, M.J. and T.M. Derwing. 1995. Foreign accent, comprehensibility and intelligibility in the speech of second language learners. *Language Learning* 45, no. 1: 73–97
- Munro, M.J. and T.M. Derwing. 2006. The functional load principle in ESL pronunciation instruction: an exploratory study. *System* 34, no. 4: 520–531.
- Murphy, D. 2011. An investigation of English pronunciation teaching in Ireland. *English Today* 27, no. 4: 10–18.
- Piske, T., I.R.A. MacKay and J.E. Flege. 2001. Factors affecting degree of foreign accent in an L2: a review. *Journal of Phonetics* 2, no. 2: 191–215.
- Rajagopalan, K. 2010. The soft ideological underbelly of the notion of intelligibility in discussions about ‘World Englishes.’ *Applied Linguistics* 31, no. 3: 465–470.
- Saito, K. and R. Lyster. 2012a. Effects of form-focused instruction on L2 pronunciation development of /ɪ/ by Japanese Learners of English. *Language Learning* 62, no. 2: 595–633.
- Saito, K. and R. Lyster. 2012b. Investigating the pedagogical potential of recasts for L2 vowel acquisition. *TESOL Quarterly* 46, no. 2: 387–398.
- Sato, K. and R.C. Kleinsasser. 1999. Communicative language teaching (CLT): practical understandings. *The Modern Language Journal* 83, no. 4: 494–517.
- Thomson, R.I. 2011. Computer assisted pronunciation training: targeting second language vowel perception improves pronunciation. *CALICO Journal* 28, no. 3: 744–765.
- Trofimovich, P. and E. Gatlinton. 2006. Repetition and focus on form in processing L2 Spanish words: implications for pronunciation instruction. *The Modern Language Journal* 90, no. 4: 411–440.
- Trofimovich, P., L. Collins, W. Cardoso, J. White and M. Horst. 2012. A frequency-based approach to L2 phonological learning: teacher input and student output in an intensive ESL context. *TESOL Quarterly* 46, no. 1: 176–186.
- Trofimovich, P., K. McDonough and H. Neumann. 2013. Using collaborative tasks to elicit auditory and structural priming. *TESOL Quarterly* 47, no. 1: 177–186.
- Walker, R. 2010. *Teaching the Pronunciation of English as a Lingua Franca*. Oxford: Oxford University Press.