4 When Comprehensible Input is not Comprehensive Input: A Multi-dimensional Analysis of Instructional Input in Intensive English as a Foreign Language

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A question we are sometimes asked is why so much of the classroom research on second language learning in the French-speaking Canadian province of Quebec has been conducted in intensive classes, given that this form of second language (L2) instruction is currently available to only a very small percentage (10%) of students in French-medium schools. From a language development perspective, the answer is quite simple: there is something to study! That is, in the space of a few months, the progress made is substantial, especially in oral expression and listening skills.

The reason for the impressive amount of learning is directly related to the time on task, including both its distribution and its quality. Unlike the more typical EFL[1] classes in Quebec, where students may receive as little as an hour a week of instruction throughout elementary school (grades 1–6), students in intensive ESL receive approximately 400 hours of instruction in a single school year, usually concentrated into five consecutive months of their final year of elementary school (other distributions of the time also exist, see Collins *et al.*, 1999; Collins & J. White, 2011). Furthermore, the instructional approach used in intensive EFL in Quebec favors the provision of comprehensible input, with emphasis on authentic language experienced through a

range of media, and on meaningful interaction with peers through a variety of pair and small-group activities, such as skits, surveys and theme-based projects. In the intensive classes, minimal attention is given to the formal features of language: the main objectives are to increase exposure to and use of English for communication. Thus the intensive experience provides the French-speaking[2] children with their first 'significant exposure' (Muñoz, 2008: 584) to English. Over several decades, research in these classes has documented the impressive language learning gains that result from this exposure. Students develop from false beginners with very limited English to intermediates with considerable communicative confidence (Collins & J. White, this volume; Lightbown, this volume; see also Collins & J. White, 2011; Lightbown & Spada, 1994, 1997; Spada & Lightbown, 1989).[3]

There are features of the language that remain challenging for these students, however. Examples observed in previous research include inversion in question formation (Ammar *et al.*, 2010; Spada & Lightbown, 1993), the syntax of adverbs of frequency (L. White, 1991; Trahey & L. White, 1993), the use of the *his/her* possessive determiners (J. White, 1998, 2008) and tense-aspect morphology (Collins *et al.*, 1999; Collins & J. White, 2011). This has prompted a number of form-focused instruction studies in which different types of pedagogical approaches have been used to draw learners' attention to some of the features just mentioned. The interventions have varied in their degree of explicitness, but they all resulted in an increase in the target forms in the input to the children during the experimental treatment period. There is some evidence, however, that the success of form-focused instruction in promoting the learning of a target form may not have lasting benefits if the opportunities to experience the form in subsequent classroom exposure are limited. L. White (1991), for example, found that francophone students in intensive programs did not retain the knowledge gained from focused instruction on the syntax of adverbs of frequency (*they quickly changed the subject* rather than **they changed quickly the subject*, an L1-influenced error) when the students were tested a year after the treatment. This is in contrast to the sustained improvement observed following instruction on the syntax of question forms in a companion study (L. White *et al.*, 1991; Spada & Lighbown, 1993). An analysis of classroom speech by the teachers of these students revealed that, once the instruction had ended, students did not have many opportunities to hear the forms, as adverbs of frequency were not a very common feature in the normal instructional talk in the intensive classes. Question forms, on the other hand, were quite frequent (Lightbown & Spada, 2006).[4] As the classroom input was the students' primary source of data for learning – the schools were located in French-speaking areas where students had very few (if any) opportunities to interact with speakers of the target language in the community – it seemed reasonable to conclude that adverbs of frequency were not sufficiently available in the classroom input for students to retain the gains they had made from the focused exposure provided in the experimental treatment.

This raises the interesting questions of how much and what kind of exposure the students normally get to certain grammatical forms in their regular intensive input. These are important questions for several reasons. Knowing more about how forms (of varying degrees of acquisition difficulty) are typically experienced in the input can inform our understanding of the input–acquisition relationship (see Collins *et al.*, 2009, for a summary of different views on the input–acquisition relationship). From a pedagogical perspective, knowing more about the kind of exposure students are typically getting to key language features informs choices regarding which forms merit instructional focus in a given context and, crucially, what the focus of the instruction should be (increasing the *instances* of the forms, the *variety of contexts* in which they occur or their *perceptual salience*). These are the questions we sought to answer in our investigation of the characteristics of intensive EFL input with respect to two of the challenging features of English mentioned above: the possessive determiners *his/her* and the simple past tense. Our main objectives were to determine to what degree the comprehensible input experienced in the intensive EFL context afforded quality exposure to the two features, and to identify whether there were pedagogical activities that resulted in richer exposure to language forms than others.

This chapter is organized as follows. First, we briefly describe the two target features and summarize the acquisition findings to date. Then we explain the four research questions that guided the investigation and provide an overview of the corpus we created of intensive EFL instructional talk. The analyses are sub-divided into four sections, one for each research question. The final section summarizes the findings and suggests directions for future research.

Target Features: Past Tense and Possessive Determiners *His/Her*

There are two ways in which the simple past tense is expressed in English. The vast majority of verbs, including any new verbs that enter the language (e.g. *googled, texted, spammed*), mark past with the bound morpheme *-ed*, which occurs in three allomorphs: /əd/ as in *hesitated*; /t/ as in *knocked*; and /d/ as in *tried*. There are also a comparatively small number of verbs (approximately 180, according to Prasada & Pinker, 1993), that are irregular in their past form, many of which are very common words in English (e.g. *went, took, had, was/were*).

The acquisition of the past tense in English has been the subject of a number of studies. The three main findings to date are that: (i) it can take considerable time to acquire, relative to other tense-aspect forms in the language such as progressive (the morpheme acquisition studies, reviewed in Goldschneider & DeKeyser, 2001); (ii) its early use may be semantically

restricted to the lexical category of verbs known as telics (verbs with an inherent end point, such as *started, broke*) (e.g. Bardovi-Harlig, 2000; Salaberry & Shirai, 2002); and (iii) its commonly used irregular forms become reliably productive earlier than the regular forms (Lee, 2001; Rohde, 1996; see also Dietrich *et al.*, 1995). There is also some evidence that the difficulties learners have producing regular past forms (e.g. Bayley, 1994; Goad *et al.*, 2003; Wolfram, 1985) may be related to the difficulties they have perceiving these forms in aural input (Collins *et al.*, 2011b; Solt *et al.*, 2004).

The acquisition of the possessive determiners (PDs) *his* and *her* has been studied among populations of learners whose L1 marks the distinction differently. These include several Romance languages, French, Spanish and Catalan (Muñoz, 1994, 2005; Serrano, 2011; J. White *et al.*, 2007), as well as Finnish (Poussa, 1985). Because our target EFL population is francophone, we will use the English/French comparison to illustrate the main features of this form.

In English, the pedagogical rule of thumb for third-person singular PDs is straightforward: *his* is used when the possessor is masculine (*He rode his bike*) and *her* when the possessor is feminine (*She rode her bike*). In French, the masculine form is *son* and the feminine form is *sa*. The pedagogical rule is different, but equally straightforward: *son* is used with masculine nouns, sa with feminine: *son vélo*; *sa bicyclette* (both synonyms for bicycle in Quebec French). There is thus a masculine and a feminine PD form in both languages, but this similarity is deceptive, since the equivalent of *his* can be either *son* or *sa*, depending on the gender of the noun, as can the equivalent of *her*.

There may also be an overall difficulty in keeping track of the referent/possessor as a clause or two may separate the possessor from the PD. This is not the case when the gender of the noun determines the PD, as is the case in French. Compare the following examples:

> Charles and his sister Anne got lots of candy for Halloween. *Charles* ate most of it, but he shared some pieces with *his* little brother Paul.
>
> Charles et sa soeur Anne ont reçu beaucoup de bonbons pour l'Halloween. Charles en a mange la plupart, mais il a partagé quelques morceaux avec *son* frère *Paul*.[5]

There is a considerable body of evidence demonstrating that the productive use of *his* and *her* is acquired in a series of stages: pre-emergence, emergence and post-emergence (J. White, 1998, 2008; J. White *et al.*, 2007). In pre-emergence stages, learners avoid using PDs altogether or use one, all-purpose form, typically *your*. As third person emerges, although there may be some target-like uses of *his* and/or *her*, one form is often overgeneralized to all contexts. Finally, learners sort out the *his/her* distinction and become increasingly

accurate in its use, starting in 'kin-same' contexts, where the gender of the PD matches the natural gender of possessed entity (e.g. Bill pushed *his brother* on the swing) and eventually in 'kin-different' contexts (e.g. Bill helped *his sister* build a snowman), where the genders differ. Kin-different contexts present a persistent learning challenge, and we have observed that many learners get 'stuck' at an emergence or post-emergence stage. Indeed, PD errors persist for some highly proficient speakers of English.[6]

From this overview, we see that input profiles of the two forms should document not only frequency factors (i.e. how often the forms occur), but also contextual factors, such as types of verbs (for simple past) and collocated nouns (for PDs). In addition, the relative ease with which the contexts allow for the perception of the forms may also be revealing. These factors were formalized into four research questions. The first three addressed the distribution profiles of the simple past and the *his/her* forms across the corpus (described below) as a whole; the fourth considered the distribution profiles with reference to the type of instructional activity in which the forms occurred. The questions are:

(1) How often would students typically hear the simple past and the possessive determiners *his/her* in the instructional input of the intensive classes?
(2) How rich is the aural exposure with respect to the types of verbs (simple past) and the collocated nouns (*his/her*)?
(3) How rich is the aural exposure with respect to the perceptual salience of the *-ed* and the *his/her* forms?
(4) Are some pedagogical activities better than others in terms of the frequency and richness of the exposure to the two forms?

The investigation focused on aural language to allow us to consider aspects of speech phenomena that may influence perceptual salience.

Corpus

The corpus we developed to examine these features consists of the instructional input portions of video-recordings of whole class interactions that were part of a larger study of different distributions of instructional time in intensive ESL (Collins & J. White, 2011). The three grade 6 classes were in two elementary schools located in areas outside Montreal where students had little or no contact with English outside the classroom. All classes were taught by native or highly proficient speakers of English. Four recordings of three classes were made at intervals of roughly 100 hours, such that each class was recorded at the same point in the 400 hour intensive program. These recordings were transcribed. For this study, we examined all

the aural input to students from the teacher, visitors, videos and audio soundtracks. This yielded a corpus of 110,000 words representing roughly 40 hours of instructional input. Because our focus was on the aural input from proficient speakers, we did not analyze the classroom speech of the students.

Analyses and Findings: Distribution of Past and PDs Across the Corpus

The first step in our analyses was to code all finite verbs in the corpus for tense (present and past), aspect (progressive, perfect, simple) and mood, and all possessive determiners (*my, your, our, his, her, their*) for person, number and gender. Two separate teams of coders (three for verb forms, two for possessive determiners), all graduate students in applied linguistics with strong backgrounds in English grammar, coded an equivalent portion of the transcripts, and then verified the coding of the other member(s) of the coding team. As conjugated verbs and possessive determiners are low-inference categories, the only differences in coding tended to be the occasional missed instance of the target forms, rather than mis-identified forms. This process yielded 15,130 finite verb tokens and 2398 PD tokens.

Frequency of the past and PDs

To answer the first research question, we looked at the distribution of the simple past and the PDs relative to the other forms in their respective paradigms. We initially considered each of the four instructional times separately, but as Figures 4.1 and 4.2 show, the frequency of simple past and *his/her* forms were very similar at each time. Overall, the simple past accounted for less than 10% (1413 tokens) of the finite verb forms in the corpus. *His/her* tokens were similarly infrequent, representing 9% (223) of all PDs.[7]

What is remarkable about the frequency profile of PDs is the predominance of *your*. A closer look at the corpus revealed that *your* is the natural PD for activity and classroom management, as the following excerpt shows (/—/ denotes unintelligible speech):

Teacher: Okay. I will give each team a pack of cards like this. Put *your* pencils down. Close *your* agendas /—/. Close *your* activity books. Put everything on the floor. Antoine, put that /—/. Okay. So, I will give each team a pack of cards. Okay? In each pack, you have the four seasons. Who can tell me what the four seasons are? ... Raise *your* hand.

Similarly, it was also surprising to see so few instances of simple past across 40 hours of instructional talk. However, as the excerpt above demonstrates,

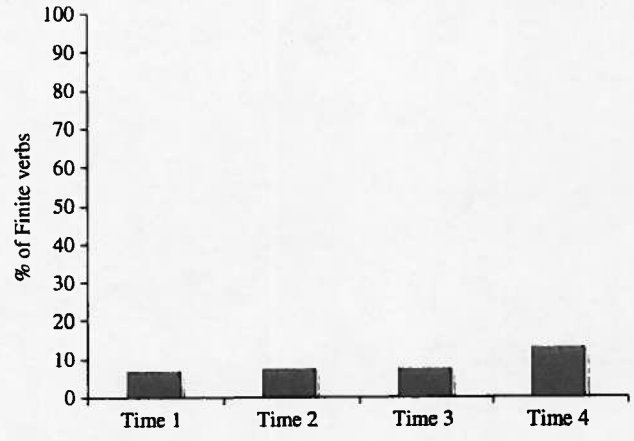

Figure 4.1 Distribution of past tense tokens by time

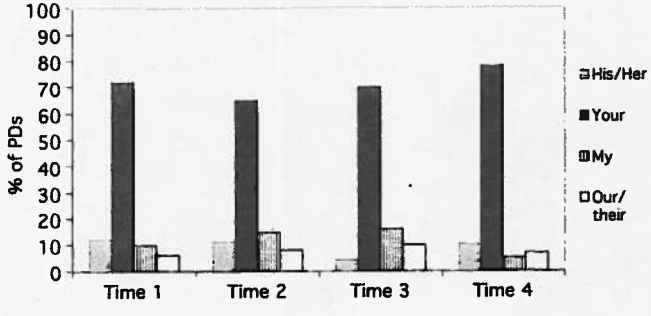

Figure 4.2 Distribution of possessive determiners tokens in instructional talk

a great deal of the talk in the classroom is focused on the here and now, and the immediate future, with limited contexts for reference to prior events. We will return to this point in more detail when we report on the analysis of pedagogical activities below.

Contexts for the past and PDs: Verb types and collocated nouns

To address the second research question, for the simple past tense we looked at the proportion of regulars vs irregulars, and the semantic category of the verbs (statives, activities and telics). For the latter, we developed a three-step operational test synthesized from previous research (Dowty, 1979; Mourelatos, 1981; Robison, 1990, 1995; Shirai & Andersen, 1995). The first step was to determine whether the verb was dynamic (*play hockey*) or stative (*feel nervous*); the second was to determine whether the dynamic verbs were activities (unbounded events with no inherent end point – *skate on the*

Table 4.1 Fifteen most common past tense verbs

was/were (258)	forgot (23)
said (121)	grew (20)
had (86)	made (19)
did (55)	came (17)
wrote (30)	saw (17)
got (29)	told (17)
went (29)	asked (15)
thought (27)	

pond) or telics (*score a goal*). The first author and a graduate student research assistant with a background in lexical semantics initially coded 25% of the verbs. There was 90% agreement on the coding, with differences resolved through discussion. The research assistant then coded the remaining tokens.

Table 4.1 shows the 15 most common past tense verbs in the corpus in order of frequency. Note that the top 14 of these are irregulars with the most frequent regular verb (*asked*) occupying only the 15th place. Indeed, irregular forms accounted for 75% of the past tense tokens in the corpus, almost all of them (98%) drawn from the 1000 most frequent words in the English language (according to lists based on the British National Corpus by Nation, 2006). Clearly, many of these verbs were repeated (in fact, of the 76 verb types that occurred more than twice in the corpus, most were irregulars). These numbers suggest that the input was relatively rich for learning irregulars: they are frequent in the corpus and frequently repeated, and they occur with familiar words. This is in contrast with the regular types, of which only slightly more than half (58%) came from the 1000 words list. Indeed, some of these verbs were quite unusual (*swayed, tangled, thumped*), and many were only encountered once in the 40 hours of recorded instruction.

As for the lexical categories of the verbs, as Figure 4.3 shows, the overwhelming majority of the past types (regular and irregular combined) occurred with telics (72%). The least frequent type was statives. These findings demonstrate that students' exposure to past was skewed towards one semantic category.

To investigate the lexical characteristics of *his* and *her*, we first examined the semantic contexts in which they occurred. That is, we were interested in whether the entity possessed was inanimate (*his* book) or animate (kin-same, as in *her* mother, or kin-different, as in *her* father), and how these contexts were distributed in the corpus. We found that inanimate contexts were the most frequent (119 tokens), followed by animate (62 tokens). Of the animate contexts, 31 were kin-same and 31 were kin-different.

We then took a closer look at the collocations for *his* and *her* in kin-different contexts. The most frequent kin-different pair in our data was *his*

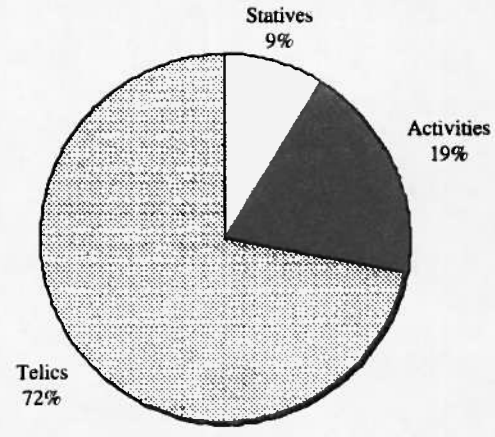

Figure 4.3 Percentage distribution of past tense by semantic category

wife, which occurred 26 times when the teacher read aloud a story. The others were *his sister, his mother, his daughter, her husband, her brother* and *her brother-in-law*. Although kin-different collocates make up a small lexical set of mostly family members, they are arguably the most informative contexts with respect to the difference between the French and English PD rules since the gender of the PD differs from that of the possessed entity. In summary, there were not only limited collocation types for PDs in our corpus, but also limited tokens of these types.

Contexts for the past and PDs: Perceptual salience

To address the third research question, we examined three aspects of the regular past allomorphs: the distribution of /d/, /t/ and /əd/; the degree of saliency (taking into account the phonetic environment following the *-ed*); and the degree of emphasis the pronunciation of the past tense verb was given, according to whether it was followed by a pause, repeated or stressed.

The most salient allomorph /əd/, as in *wanted*, was the least frequent in the data, accounting for just 22% of the regular past. Thus, the least salient allomorphs, /d/ and /t/, accounted for the majority of the regular past tense tokens: 45 and 33% respectively. Table 4.2 summarizes the findings for the immediate phonetic environment of the *-ed* forms. It shows that only 25% of the regular past occurred in the clearest contexts, that is, followed by a vowel. The remaining cases included instances in which the allomorph was followed by a consonant, co-articulated with the following consonant or deleted completely.

The majority of the forms (82%) also received no particular emphasis. They were rarely followed by a pause (12%), which occurs naturally when the verb is in sentence-final position but can also occur mid-sentence; and

Table 4.2 Perceptual saliency of regular past tense verbs

Degree of salience	*Example from corpus*	*Percentage*
clear (+ vowel)	Ah, he never complained again! Yesterday, we talked about uh, flavours, eh?	25%
somewhat clear (+ consonant, but released)	Every day Farmer Joe worked hard in the field. ... you answered well	68%
unclear (co-articulated with consonant)	Nobody noticed my mistake! No, I just wanted to say	2%
absent (deleted)	... that is the reason why I asked you to bring pictures of your family	4%

hardly ever stressed for emphasis (4%) or repeated (2%). Thus, overall, the regular past occurrences in our corpus were not very salient.

The salience of *his* and *her* was examined by means of acoustical analyses in all semantic contexts. Table 4.3 summarizes our findings for the different dimensions of saliency we considered. We considered that the salience of PDs is affected by the fact that they precede nouns and are only stressed in exceptional circumstances. For example, they may be stressed in order to contrast information (*HIS dog*, not *her* dog), or stress may serve as a pedagogical tool to increase the salience of the possessor. We found that *his* and *her* were usually unstressed, and rarely repeated. In addition, the initial sound (h) was frequently deleted (e.g. *turned _is chair*), further compromising salience.

The preceding sound affects the ease with which the /h/ in *his* or *her* is perceived. The ideal environment is a preceding pause (e.g. at the beginning of an utterance: *his dog is black*) or a preceding vowel (*see his dog*). However,

Table 4.3 Perceptual saliency of *his* and *her*

Categories	*Percentage*
Stressed	12%
Unstressed	88%
Repeated	3%
Unrepeated	97%
/h/ present*	16%
/h/ deleted	81%
Preceded by a vowel/pause	20%
Preceded by a consonant	80%

*Three percent of the /h/ contexts were not possible to judge

this was rare. Much more common was for *his* and *her* to be preceded by a consonant (*walked his dog*), an environment that renders the /h/ much more difficult to perceive. Thus, like the regular past, the *his* and *her* PD forms did not occur in perceptually clear contexts.

Contexts for the past and PDs: Pedagogical category

The findings reported above are based on analyses across times and types of pedagogical activity, but of course a teaching day can contain a range of activities with potentially different input profiles. Our fourth research question asked whether there were pedagogical activities that yielded potentially richer sources of aural information about the two target features. The analysis was conducted in three steps. In the first step, a team of three coders each examined a different subset of the instructional input to gain an understanding of the range of purposes it served. This data-driven approach yielded a number of precise functions such as modeling a tongue twister, preparing and monitoring an activity, explaining specific aspects of language (grammar, vocabulary, pronunciation, etc.), reading aloud, and so on. These functions were then grouped into five categories: classroom procedures, language-related episodes, text-based input, text-related discussion and personal anecdotes (defined below). The second step of the analysis, the coding of all the input by pedagogical category, was done in four phases. Two research assistants separately coded half of the instructional input transcripts from the first data collection time (time 1). They then verified each other's coding and met to resolve any differences of interpretation. This process was repeated for each of the remaining three data collection times. In the third and final step, the distribution of the past tense and the PDs within and across pedagogical categories was calculated.

Description of Pedagogical Activities

Classroom procedures, by far the most frequent category, accounted for 75% of the input in our corpus. It captured teacher talk that organized the various activities and routines, and that also managed student behavior (although discipline episodes were not very common). In the following example we see a teacher interrupting an activity in which the students are preparing menus for restaurants to provide some clarification on the procedure.

> Okay guys, can I have your attention a moment? The papers, the scrap paper that you're using is just for you to write some ideas, to invent the name of your restaurant and to write, you know. And then I will correct. You don't start making a clean copy right away with the stencil and everything. This is just after when everything is corrected and done.

Language-related episodes accounted for 17% of the aural input, and described any focus on features of the language such as morphosyntax, pronunciation and vocabulary, with the latter being the most common (see Horst, 2009, for a discussion of the vocabulary episodes and an analysis of the lexical characteristics of the corpus as a whole). This was sometimes isolated practice in which the teacher was briefly focusing on an aspect of grammar, as part of a homework activity, for example. More frequently, it was integrated into the larger lesson, in the form of feedback on error, explanation of a vocabulary item or the pronunciation of a word, provision of a grammar structure useful for completing the task at hand, and so on. In the example below, the teacher makes a comment on a student's error, providing the correction and a brief explanation.

> Okay, so here it's not he needs *a* glue. He needs *some* glue because glue is like liquid and you can't count. You see? That's why you put *some* glue. You understand?

The remaining three categories accounted for less than 10% of the input, but nevertheless represented aural language that differed in important ways from the speech that characterized the management of the class or the explanation of language features. They all focused on content beyond the 'here and now' of the classroom, often involving additional people not present in the classroom.

Text-based input accounted for 4% of the input. It described any speech involving scripted language that was read by the teacher, such as reading aloud from a storybook or the modeling of poems, songs, limericks, dialogues, and so on, as the students were learning to recite them. This was not the teacher's spontaneous speech, but it was delivered to the students by the teacher's voice. It also included audio recordings that students listened to (primarily songs). An illustration of this type of input follows, in which the teacher begins reading a story aloud.

> Once upon a time there was a boy named Bradley Flowers who lived in the Gaspé region. He liked to ski. So one day during the winter he went skiing alone and ...

Discussion of text-based input, at 3% of the data, primarily involved reflection and elaboration of the content of stories read aloud. This included elements such as plot or character and it was observed to occur prior to, during and/or after a reading. Occasionally it also focused on the content of tongue twisters or songs. In the following example, the teacher clarifies a part of the plot for the students.

> So, he quit his job. He told his boss, well I'm not continuing. So he left the ship. Lucky him! It saved his life.

Personal anecdotes were the least frequent, accounting for 1% of the input. They consisted of the teacher recounting personal experiences or elaborating upon students' own experiences during which the teacher would repeat, recast and expand the students' utterances. In the excerpt below the teacher has just explained the meaning of the expression 'break a leg' (a language-related episode) and suddenly remembers an incident that happened to her husband that she shares with her class.

> one day P, my husband, was playing in a tennis tournament and he was known to jump over the net ... instead of going on the other side, around – he would jump over the net, okay? So before the tournament I told him, I said 'break a leg'. ... So, of course, he jumped over the net and what do you think happened?

These latter three categories were sometimes the source of language-related episodes. Any attention to language during the reading/discussion of texts or the recounting of anecdotes was, of course, coded as such, to distinguish it from the language used when a story was read or elaborated upon, or when a personal experience was related. In the next example the teacher is reading aloud (text-based input), stops to explain a word (the language-focused input in italics) and then returns to the reading aloud.

> She sort of swayed ...
> *to sway is to go from side to side*
> ... like she didn't know what she was supposed to do.

Distribution of Past and PDs by Pedagogical Activity

In this section, we report on the frequency distribution of the simple past and the possessive determiners *his/her* across the five pedagogical categories. Table 4.4 shows the findings for the past tense. There are many more instances of simple past in the procedures category (871), but this is not surprising, given that it accounted for 75% of the corpus. There is, however, a substantial number of past forms in the text-based input (356, or 427 if combined with the discussion of the content of the text read aloud). There are also a considerable number of occurrences of past when anecdotes are recounted. In fact, if we tally the total number of past forms in these three categories, we see that they account for 574 instances of the simple past in the corpus, an impressive number for talk that represented less than 10% of the corpus overall. Furthermore, the number of different types of past in these three categories was much more varied than in the classroom procedures talk, as revealed by type token ratio figures in the final column of Table 4.4.

Table 4.4 Distribution of past tense tokens by pedagogical category

Category	*Token*	*Type*	*Ratio*
Classroom procedures	871	115	0.13
Text-based	356	90	0.25
Text-based discussion	71	23	0.32
Anecdotes	146	37	0.25
Language episodes	6	3	N/A

Table 4.5 Distribution of PDs by pedagogical category

Category	*Token*	*Percentage*
Classroom procedures	111	46.64%
Text-based	60	25.21%
Text-based discussion	19	7.98%
Anecdotes	17	7.14%
Language episodes	31	13.03%

The analysis of the PDs yielded a similar result. As Table 4.5 shows, there were again more instances of *his/her* (111) in the most common type of teacher talk, classroom procedures. However, text-based and text-based discussion also yielded a proportionately large number of tokens of *his/her* (79 combined), given the relative infrequence of these two instructional categories in the corpus. In addition, when we examine the distribution of input type by semantic category (see Table 4.6), we see that, within the crucial kin-different category, the text-based and text-based discussion input accounted for 44% of the total tokens. This figure is comparable to the 47% that are found in the classroom procedures component, but the large size of this component –which accounts for three quarters of all of the teacher speech – means that the kin-different PDs are much more concentrated in the text and text discussion categories.

Comparing Reading Aloud with Classroom Procedure Talk

The analysis above suggested that the most common source of input – classroom procedures talk – was not necessarily the richest source of exposure to the simple past and the PDs, but the variation in the proportion of talk represented by the different input categories makes it difficult to make fine-grained comparisons of the target features across the categories. We therefore decided to extract two equal segments of talk from the text-based

Table 4.6 Percentage distribution of semantic categories of *his/her* tokens by pedagogical categories

	Inanimate (*n* = 121)	*Animate** (*n* = 17)	*Kin-same* (*n* = 19)	*Kin-different* (*n* = 34)
Classroom procedures (*n* = 111)	48.76	47.06	78.95	47.06
Text-based (*n* = 60)	32.23	5.88	0.00	38.24
Text-based discussion (*n* = 19)	11.57	11.76	0.00	5.88
Anecdotes (*n* = 17)	2.48	23.53	0.00	8.82
Language episodes (*n* = 31)	4.96	11.76	21.05	0
Totals (*n* = 238**)	100.00	100.00	100.00	100.00

*Animate refers to cases where the gender of the noun is not clear (e.g. student, friend) or refers to a group comprising both males and females (e.g. plural nouns like children, friends). ** This total includes 47 instances of references to body parts

and the classroom procedures categories. They were taken from the same teacher, on the same day, within the same part of the lesson. The read-aloud segment was a short story about a haunted house, and consisted of 874 words. The matched classroom procedures excerpt was a segment of 871 words.[8] We compared the frequency and the salience of the past tense and *his/her* forms in these excerpts.

For the past tense, we examined the types and tokens of both regular and irregular past forms. Table 4.7 shows that, not only were there far more instances of past overall in the story (96 vs 11 in the classroom procedures segment), but there was also a variety of different types, and a substantial number of regular past forms (roughly half of the total past tense types). For the PDs, Table 4.7 shows an even more dramatic finding: there was not a single instance of *his/her* in the classroom procedures talk. There were, however, 30 instances in the story.

As for the perceptual salience of the 34 regular past tense verbs, we found that 35% were followed by either a vowel or a pause (*decided it*), the

Table 4.7 Reading aloud: Frequency of target forms

	Haunted House story read aloud	*Procedures talk*
Total words	874	871
Past tokens	96 (34 regular)	11 (3 regular)
Past types	45 (20 regular)	8 (3 regular)
Possessive determiners	30 (12 his; 18 her)	0

condition that makes the *-ed* marking relatively salient. The remaining 65% contained a released consonant (*Joe worked hard*). There were thus no cases of deletion or of unreleased consonants following the *-ed*, both of which render the form difficult to perceive. In addition, all of the instances of regular past tense in the story were produced at a slower speech rate using more emphatic intonation than the regular past tense verbs in the classroom procedure talk. For *his/her* tokens in the story read aloud, we considered perceptual salience from the perspective of /h/ deletion. The analyses showed that it was deleted 37% of the time only. Recall that the overall deletion rate for the whole corpus was 81%. Thus, the reading aloud speech provided the students with substantially clearer contexts in which to perceive the *his/her* forms.

Summary and discussion of quality input

The analysis of the quantity and the quality of the occurrence of the target features in the different types of pedagogical input the students were exposed to reveals that the exposure was richer when teachers were participating in activities (e.g. commenting on stories, telling or elaborating personal experiences), and not just managing them. That is, when the role of the teacher went beyond facilitating oral interaction among students to include interacting with them herself, her own speech became a richer source of input, at least for the two features we have investigated here.

In addition, there seems to be a special status for reading aloud, both for content and salience. Stories often include events in the past, and are written in the third person; children's stories frequently also include repetition of key events and thus more opportunities for repeated exposure to PDs and the past. Furthermore, there was evidence in our corpus that teachers' speech rate was slower and clearer, potentially making aspects of language more accessible to learners.

To further explore the content point raised above, we created a corpus of 14 storybooks that were appropriate for the age and language level of the students in our study. The books included classic children's fairy tales and fables (e.g. 'Goldilocks and the three bears' and 'The tortoise and the hare'), as well as contemporary children's storybooks by authors such as Robert Munsch and Phoebe Gilman. They comprised of 8000 words. Figure 4.4 compares the PD findings for this corpus with our intensive input corpus. What is striking is the difference in the frequency of *your* vs *his/her* in the two corpora. We found that the relative proportion of instances of *his* and *her* to instances of *your* in the storybook corpus was 57 vs 17%. This is in contrast to the complete instructional talk corpus where the relative proportion of *his* and *her* to your was 9 vs 71%. While the absolute numbers are small – 192 instances of *his/her*, or 2% of the entire storybook corpus, compared with 223 instances of *his/her*, or 0.2% of the entire teacher corpus – it is clear that

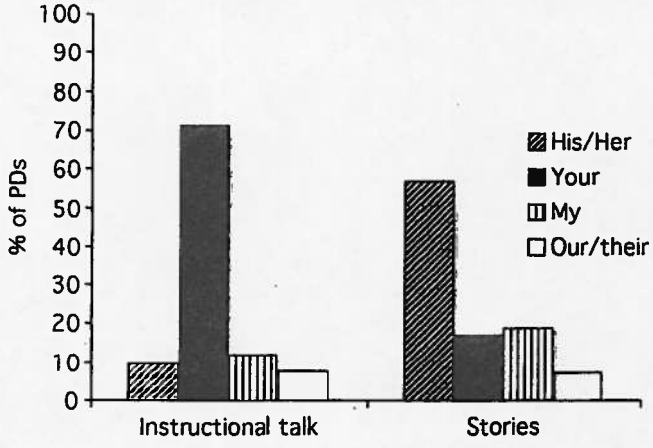

Figure 4.4 Distribution of possessive determiners in instructional talk and story-book corpus

third-person PDs occur more often and are more task-natural in stories and other narratives than in classroom input, overall.

Conclusion

To return to the questions we asked at the outset of this study, students in the intensive EFL classes had very limited aural exposure to the regular past and the possessive determiners *his/her*. The input was also lacking in terms of quality encounters with verb types (few instances of regular past or of semantic types other than telics), and with key nouns collocated with *his* and *her* (few instances of the crucial kin-different combinations). The two features also occurred frequently in contexts that would be hard to perceive.

It is important to note, however, that although the functions of the teacher talk such as 'classroom management' may distinguish it from speech in contexts outside the classroom, it nevertheless shares features observed in other contexts as well. For the simple past, there is increasing evidence that past (or perfective past, in other languages) occurs more frequently with telics than other verb types (Wulff *et al.*, 2009) and irregular past forms are much more frequent than regular past (Prasada & Pinker, 1993). Similarly, the relative frequency of *your* and the limited instances of *his* and *her* are also representative of spoken English outside the classroom. When we compared our corpus with that of the British National Corpus (2007), we found an almost identical order, with the first four the same and only those in fifth and sixth place reversed.

Intensive corpus:	your > my > his > their > our > her
BNC corpus:	your > my > his > their > her > our

In addition, the low perceptual salience of both simple past and PDs in the intensive context is consistent with speech in casual non-classroom contexts. As function words, for example, *his* and *her* are typically not stressed, and the initial /h/ is usually deleted in mid-sentence situations in connected speech, although not in sentence initial position (Mah *et al.*, 2006).

Thus the instructional input students are receiving in the intensive context is similar to 'natural' speech in a variety of ways, which is a desirable situation. However, one of the roles of the classroom is also to facilitate learning, and in our future research we will be using the insights gleaned from these analyses to explore how the comprehensible input provided by intensity may become more 'comprehensive', in terms of providing favorable conditions for acquisition.

Given our findings for the target features in the reading aloud speech – increased frequency, richer semantic contexts and superior perceptual environments – one promising avenue to explore is the design of focused listening tasks in which the targets include not only the *his/her* pronouns and *-ed* past forms, but also the surrounding phonetic environment in which they occur. A recently completed follow-up study showed significant improvement in the perception of the regular past tense among intensive students who experienced the form in different perceptual contexts (which we had manipulated) in stories read aloud (Collins *et al.*, 2011a).

Our study examined the input present in an intensive context involving francophone learners of English. The features we focused on, however, have been observed to present acquisition challenges for other populations of learners (referenced above). It is our hope that insights gained from an input study in the intensive EFL context of Quebec may guide future investigations of these (and other features) in other teaching contexts. Of particular value for understanding the input–acquisition relationship are studies that compare students' production with the input they are receiving (e.g. Rast, 2008, 2010). It will also be important in future research to explore the profiles of features that are learned more easily from the input. A follow-up study using the same corpus used in the current study examined the characteristics of the progressive *-ing*, a form that has been documented to be acquired earlier than other aspects of morphology, such as past tense (see Goldschneider & DeKeyser, 2001). The findings showed that this form was not more frequent than the simple past or PDs. However, it occurred with more varied (yet still common) verbs and was rendered more salient owing to its presence as an intact syllable (*-ing*) (Collins *et al.*, 2009).

In the current study, the attention to aural instructional input was motivated by the desire to consider speech phenomena present in connected discourse. This allowed us to create profiles for the aural exposure to the simple

past and PDs in terms of both sounds and meanings. Clearly exposure to written input also merits attention, as does peer input experienced in whole class and small group situations. This is yet another worthwhile avenue to explore in future investigations of the crucial relationship between input and second language acquisition.

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Notes

(1) As noted in Collins and White (this volume), we have opted to use the term EFL (English as a foreign language) for our contributions to this edited volume, to reflect the absence of English in the majority of French-medium schools and communities in Quebec. This includes the research sites for the study we report on here. However, it is important to note that English L2 instruction in Quebec is normally referred to as English as a second language (ESL).

(2) For ease of reference we will refer to these students as 'francophone' with the understanding that the L1 of a small number of the students may be a language other than French or English. To date, any of these students in our intensive studies have always been highly proficient speakers of French, if not French-dominant.

(3) Recognizing the success of the intensive initiative, the Ministry of Education in Quebec has recently decided to make it available to all grade 6 EFL students (11–12 years of age) by 2015.

(4) The exact numbers are not reported in White, L (1991) or in Lightbown and Spada (2006).

(5) Sometimes an adjective may come between the PD and the noun, as in son petit frère, but even so, the distance between the PD and the noun is close, when compared to some of the contexts that arise in English.

(6) Another difference between English and French that causes problems for some learners, one that is not the focus of the analysis in this study, is use of PDs with body parts. In English, PDs are normally used (e.g. He's washing his hands). In French, it is more common to use a definite article (le, la, or les) when referring to body parts, with possession marked by a reflexive pronoun that agrees with the subject (Il se lave les mains).

(7) We also initially considered each of the three teachers separately, but the distribution patterns did not vary: there were small differences in the overall number of tokens of simple past and his/her, but the proportions relative to the other forms were the same across teacher, and across teaching time.

(8) The classroom procedures segment is 4 words shorter because to have an exact equivalent length we would have had to end the segment in the middle of a teacher's utterance. The segment we analyzed concluded at the end of the teacher's sentence.

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