The intonation contour of non-finality revisited Implications for EFL teaching

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CHAPTER 5

The intonation contour of non-finality revisited: Implications for EFL teaching

Running head:

Teaching non-finality contour to EFL learners

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Abstract

It is well documented that in English falling contours are associated with final statements and rising contours with yes-no questions and continuation. Our analyses of the speech of native speakers show that falls dominate in read speech and are widely used non-finally. This has important pedagogical implications for EFL teaching. To help French learners avoid pronouncing too many rises, a visualisation technique is promoted to show the difference between the French and English intonation systems. We also show how relevant a map task can be for the practising and learning of intonation contours. Hopefully this chapter will provide learners with clues to gain greater competence as listeners and speakers, and teachers with tools useful and adaptable in the language class.

Keywords: British English intonation, non-finality contours, EFL teaching, read speech, L2 prosody learning.

Introduction

In this paper, we adopt the perspective of the teaching of English as a Foreign Language[1] (EFL) and we focus on the teaching of prosody and more particularly of intonation. Here we use the term prosody as referring to the domain which studies intonation, accentuation, rhythm, and the duration of the realisation of phonemes (Martin, 2009, p. 13). Intonation is therefore part of prosody and taken in its narrow sense; that is, restricted to "supra-lexical, post-lexical or simply non lexical characteristics, consisting of such phenomena as the overall form of pitch patterns, declination, boundary phenomena, etc." (Hirst & Di Cristo, 1998, p. 4).

Prosody is probably the most neglected phonological aspect of language teaching in schools and universities, as evidenced by school manuals lacking prosodic considerations or university curricula with very few courses on prosody or intonation. One of the main reasons for that may be that it is also one of the most complex aspects of phonology for non-specialists: teachers themselves are not certain about which tone they should use in a specific context and probably do not know how to explain the rhythmic differences between their native language and English. Previous research also shows that English prosody is difficult for L2 learners to master (e.g., Grosser, 1993; Gut, 2009; Horgues, 2010) and this happens for different reasons. First of all, it is well-known that prosody is acquired *in utero* by the foetus. Studies on new-born children have shown that they recognise the rhythm and melodies of their mother tongue (Brooks & Kempe, 2012). Since L1 prosody is acquired first, it is anchored deep and is all the more difficult to alter when learning and speaking a foreign language acquired much later. Another reason is that it has attitudinal functions which differ among languages and even among varieties of the same language, as is the case in English. Prosody also varies according to the

[1] In this chapter and for our purpose, we refer to EFL contexts, where English is taught at school but has no official internal function. This will not prevent us from using, throughout the chapter, the term L1 for the mother tongue (French here) and L2 for the taught/acquired language (English).

type of discourse (with more rising contours found in conversation, for example), the context (formal or informal), and even the speaker. Finally, the same speaker will also use different melodies for the same purpose, so that there is intra- as well as inter-speaker variation. Hence, prosody is highly variable and a complex domain, making it difficult to acquire and not easy to teach.

In the perspective of teaching EFL, we focus on rising contours because it is quite common to hear incongruous rises in the speech of learners. Many studies report the overuse of rising contours by learners, in particular for questions (e.g., MacDonald, 2011; Pytlyk, 2008; Santiago-Vargas & Delais-Roussarie, 2012), but also at the end of declarative sentences (Contreras Roa, 2019; Horgues, 2010). Some of these rising forms, which appear at early learning stages and then decrease gradually, may express linguistic insecurity (Horgues, 2010), but may also reveal some sort of intonational universals (Gussenhoven, 2004; Gussenhoven & Chen, 2000). Herment et al. (2014a) show that one of the main difficulties for French EFL learners is that they have a tendency to assign a rising pitch movement at the end of prosodic words (accentual groups in French), which leads to a clear difference in rhythm as compared to natives. For example, the following French sentence is divided into four prosodic words: *Est-ce que vous pourriez / me donner la liste / des restaurants / de mon quartier?* A French native speaker will rise at the end of each constituent and will tend to do the same in English when pronouncing an equivalent sentence like *Can you give me a list of the restaurants in the neighbourhood?* The chunking will be the same as in French (*Can you give me / a list / of the restaurants / in the neighbourhood?)*, which does not correspond to what an English native speaker would pronounce (see Table 5.1 in the Pedagogical implications section). This is all the more worthy of attention for learners to correct as it is generally admitted that an incomplete statement will be realised with a rising contour in English. This means that if a sentence is divided in two intonation units, for example, the first one (which is not terminal) is pronounced

with a rising contour. EFL speakers will therefore be encouraged to pronounce rises in the middle of sentences, but French EFL speakers will utter too many of these.

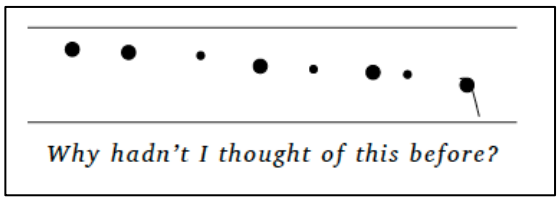
In this chapter, we analyse the speech of native speakers of English with the aim of finding prosodic cues to improve EFL teaching. We used two corpora including both read speech in English by British natives and by French learners, ANGLISH (Tortel, 2008) and AixOx (Herment et al., 2014b). Listening to recordings of British natives, we noticed a high proportion of falling contours in read speech. We decided to investigate further, hypothesising that incomplete statements can be pronounced with a falling tone and frequently are. We first offer an overview of what the literature reports on rising tones and incomplete statements. Then, in our investigation of the native part of the ANGLISH corpus, the intonation of dependent (non-final) and independent (final) units is analysed. The results, which confirm our hypothesis that falling contours are predominant in non-final intonation units, are discussed in the perspective of EFL teaching/learning and of possible pedagogical implications. This is the core of the Pedagogical Implications section, in which we show how visualization techniques can be used to help learners avoid overusing the rising contour. The AixOx corpus proved very helpful for this, because it also includes read speech in French by natives: the sentences to be read are equivalent (free translations) in English and French, which enables cross-language comparisons. Only read speech is analysed in the present chapter, which is why we also propose a pedagogical task that allows work on intonation in a more interactive perspective, the map-task protocol. We show how relevant this task can be for the practising and learning of intonation contours.

Theoretical framework and previous research

Two main systems for the analysis of intonation can be distinguished: the British and the American traditions. The American description system (see Pierrehumbert, 1988) defines tonal targets to describe melodic accents. The transcription of intonation is a broad one (ToBI -Tone and Break Indices, Silverman et al., 1992) based on this compositional system and resulting in a sequence of tones (H for a high tone and L for a low tone) and diacritics (e.g., the star * is associated with a prominent perceived syllable, the symbol % with a terminal boundary tone). Thus H*L corresponds to a fall and L*H to a rise; a fall-rise would be annotated H*L+H%. The British intonation system refers to the form of the global contour. The descriptions are based on a configurational approach, using the intonation unit (IU) as the main constituent and defined as a complete coherent intonation contour. Figure 5.1 gives an example of an interlinear transcription in the British tradition. An intonation unit comprises at least one syllable, necessarily the nuclear syllable (or nucleus), *-fore* in the example in Figure 5.1 below. The melodic movement which characterises the intonation unit starts on the nucleus and spreads on the post-nuclear syllables, if any (in the example sentence in Figure 5.1, there are no post-nuclear syllables). Pre-nuclear syllables (if any) form the head of the tone unit (see Crystal, 1969 or Gussenhoven, 2004 for details). Fall, rise, rise-fall, and fall-rise are the melodic movements commonly used to describe intonation in the British tradition, with a few variants.

Figure 5.1

Interlinear Tonetic Transcription



Our work falls within the framework of the British school of intonation (following amongst others Halliday, 1967 or Cruttenden, 1997, 2014). We follow the idea that a configurational approach is better adapted to teaching (see Herment, 2018; Niebuhr et al., 2017). Indeed, although Toivanen (2005) in his article entitled *ToBI or not ToBI?* shows that the two systems (the American one and the British one) give very similar results among Finnish speakers learning EFL, the fact remains that, for teaching, the British approach is widely favoured. It is easier for a learner to visualise the British interlinear transcription (Figure 5.1) than to read a sequence of tones such as H*L+H%. Moreover, the British approach being holistic, a complete contour is represented, which takes into account the different elements (head, nucleus, and post-nuclear syllables) whereas H*L+H% for example only describes the contour just before the boundary. Although the American approach (also known as the Autosegmental Metrical theory, AM) is much used for research purposes, the British tradition is still favoured for the teaching of English intonation with influential works by Brazil (2007), Cruttenden (1997, 2014), Roach (2009) and Wells (2006).

The functions of intonation contours

Basic functions of intonation contours have largely been described for Standard British English (henceforth SBE) (Cruttenden, 1997, 2014; Hirst, 1998; Roach, 2009; Tench, 1996; Wells, 2006). Falling contours are usually associated with the idea of finality and completeness, while rises are associated with continuity. Hence, neutral complete statements are usually pronounced with a fall (↘), whereas non-final clauses are usually pronounced with a rise (↗). For example, in the sentence *what we will be seeing very ↗<u>shortly</u> / on April 1st to be pre↗<u>cise</u> / is the advent of all sorts of changes within the NH↘<u>S</u>* (taken from Herment & Leonarduzzi, 2012), the first two intonation units are pronounced with a rise and the last one with a fall (the slashes

correspond to intonation unit boundaries and the underlined syllables are the nuclear syllables). For questions, falls are typically found in WH-questions whereas yes-no questions are usually pronounced with a rise (Wells, 2006), even though this has been questioned by Herment et al. (2014a).

As for complex contours, fall-rises (↘↗) can have different functions. They can be associated with continuation (along with simple rises) as in initial adverbial phrases for example. Fall-rises can also be associated with some implication ("implicational fall-rise"): "the speaker implies something without necessarily putting it into words" (Wells 2006, p. 27). Fall-rises can also be used to express a contrast (Cruttenden, 1997; Tench, 1996) or to draw attention to what is being said (Brazil, 1997; Gussenhoven, 2004) as in the following example: *what* ↘↗ *happened is uh / they caught her without a* ↘ *licence* (taken from Herment & Leonarduzzi, 2012). The fall-rise announces that what follows is important. Rise-falls (↗↘) are less common in SBE and they can express surprise or irony (Roach, 2009).

To sum up, according to Wells (2006), non-finality is signalled by a non-fall, i.e., a rise or a fall-rise. Cruttenden (2014) also reports that rises and fall-rises are more frequently used to indicate that a sentence is not finished, especially in reading.

It is worth noting that this is true for SBE, whereas some varieties of English known as Urban Northern British Intonation (UNBI varieties) display a rising contour on declaratives. In these varieties, a rising terminal intonation is the default intonation for complete sentences in Northern urban areas: Belfast (see Jarman & Cruttenden, 1976), Derry (McElholm, 1986), Glasgow (Cruttenden, 2007; Mayo et al., 1997), Newcastle (Pellowe & Jones, 1978), Liverpool (Nance et al., 2015), Manchester (Cruttenden, 2001), Leeds (Wilhelm, 2011) and Birmingham (Cruttenden, 1994). This rising intonation heard at the end of declaratives and also in WH-questions is part of the intonation system of Northern speakers and we will not take it into account here, since the speakers we analyse have a SBE accent. Similarly, the rising contours

known as high rising terminals (HRTs) or uptalk (see Warren, 2016) will not be considered here. They have pragmatic and discourse functions, such as making sure that the interlocutor is following or understands, or expressing linguistic insecurity in the conversation (see Rodrigues Da Mota & Herment, 2016). They are documented mainly in Australia, New Zealand, and North America, and although they are quickly spreading in Great Britain, even in UNBI varieties (Wilhelm, 2015), they are not present in our corpus, probably because it is a corpus of read speech.

Rising contours and speaking styles

Intonation varies according to speaking styles. In their study of cleft sentences on the ICE-GB corpus (Aarts & Nelson, 1999), Herment and Leonarduzzi (2012) note that in Parliament recordings rising contours are much less frequent. Speakers are given a certain amount of time for their speech, so they know they will not be interrupted and do not have to produce rising contours to show that they have not finished. On the contrary, in spontaneous conversations, the speaker will tend to realise rising contours until they have finished speaking and are ready to give up their speech turn. Rising contours with pragmatic functions (HRTs, see above) will also be more frequent in conversation. Hesitations are more common in non-prepared speech and will often trigger a rising contour. In a very peculiar speaking style like sports commentaries (a football game or a horse race for example), the journalist tends to use numerous rising contours because they do not know what is going to happen. These rising contours allow the commentator to increase the suspense (Samlowski et al., 2018). Finally, in reading, a canonical intonation is expected since the speaker does not address someone as in spontaneous speech and will not be interrupted: a rising contour on non-final clauses and a falling contour on final clauses are expected.

Hypothesis and possible pedagogical implications

At this point, a partial conclusion is that non-finality in English is expressed by a rising contour, especially so in read speech. Indeed, the style of speech is very important, but the variety of English is also an important element. However, as mentioned in the introduction, it seems to us that in reading, falling contours are much more frequent on non-final clauses than rising contours, contrary to what is generally admitted. Our hypothesis is therefore that in read SBE speech, falling contours are predominant in non-final intonation units. In order to test our hypothesis, we analysed the speech of the native English speakers in the ANGLISH corpus. If our hypothesis were to be proved right, it would have interesting consequences on the teaching/learning of EFL prosody.

Corpus and method

Corpus

It is worth insisting that we work in the perspective of EFL teaching/learning for this study, even if we are only investigating the speech of native speakers. We analysed the ANGLISH corpus (Tortel, 2008), which is a collection of read speech, repeated sentences, and monologues recorded by 20 native English speakers and 40 French learners of English.[3] We analysed the read part of the natives of ANGLISH, which consists of the recordings of 4 texts of the EUROM1 English corpus (Chan et al., 1995). The EUROM1texts are 5-sentence texts dealing

[3] For details about the speakers' backgrounds, see Tortel (2008).

with everyday life events (see Appendix). We selected the 10 native English female speakers (in order to avoid variation due to gender) reading the 4 texts from ANGLISH. All the speakers have an SBE accent, which is an important variable concerning rises. In total, 40 read short stories representing 200 sentences and 8.52 min of read speech were analysed.

Method

The speech of the readers was divided into intonation units, the two authors performed a perceptual analysis and compared their results. Only three disagreements appeared and were discussed. The total number of analysed intonation units amounts to 365. Final and non-final intonation units were annotated following Gussenhoven's (1983, 1984) tri-tonal approach: fall [↘], rise [↗], and fall-rise [↘↗] are distinguished. Then, the perceptual analysis was compared to the acoustic signal using the PRAAT software (Boersma & Weenink, 2001). In (1) below, an example of an annotated text (speaker F05GB, text T21) is presented. The text is divided into intonation units (the boundaries are represented by the slashes), the nuclear syllables are underlined, and the tone given as read by the speaker (with appropriate tonetic annotation).

(1) ↘↗*Sorry I didn't come to dinner at the weekend. / I was really looking forward to* ↘↗*seeing you again./* ↘*Unfortunately / I had a small* ↘*accident / just as I was getting ready to* ↘*leave./ It was when I went down to fetch a bottle of* ↘*wine / from the* ↘*cellar./ I didn't bother to switch the* ↗*light on, / tripped on a loose step in the* ↘*dark,/ and broke my* ↘*ankle./*

Results and discussion

Tonal distribution in the corpus

The results for the reading task recorded by native English female speakers show that the most common tone for intonation units is the falling tone (71%), followed by the rising tone (15%) and the falling-rising tone (14%), as shown in Figure 5.2. These results apply to all types of intonation units, final and non-final.

Figure 5.2

Tonal Distribution (Fall, Rise, Fall-Rise) of Final (#) and Non-Final (non#) Intonation Units

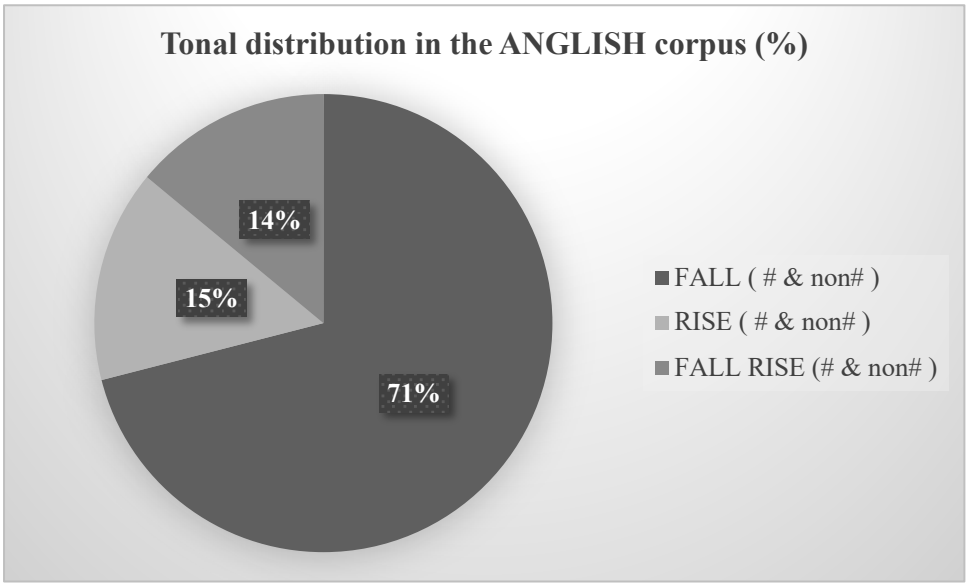
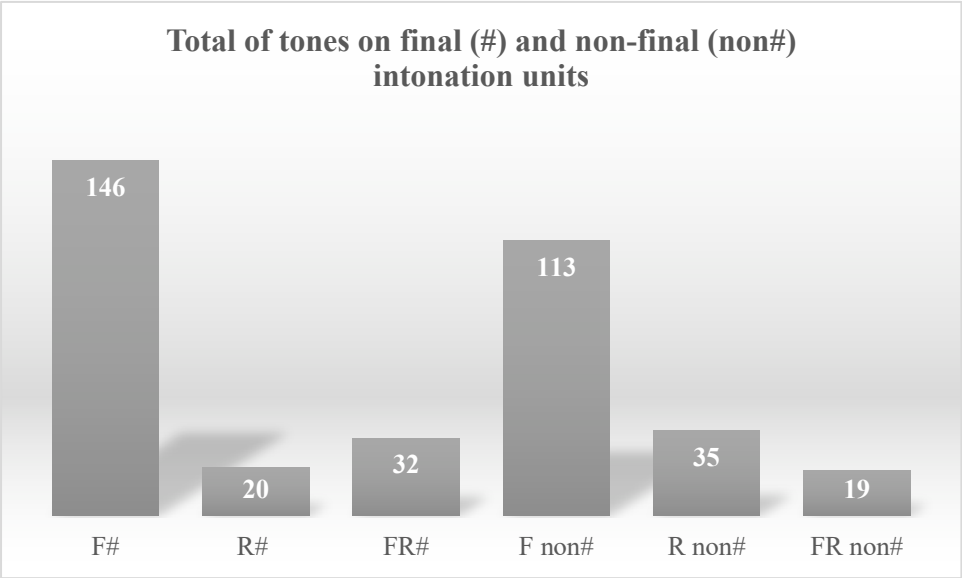


Figure 5.3 below distinguishes between the tones found in the final (#) and non-final (non#) intonation units (IUs). Analysis of tones produced in non-final IUs (n = 167) shows that 68% of occurrences are produced with a fall (*n* = 113). Contrary to what is generally acknowledged,

the rising tone is not the most common contour for non-final IUs, as only 21% were produced with a rise ($n = 35$), and 11% with a fall-rise ($n = 19$). As far as final IUs ($n = 198$) are concerned, the most common tone is the fall, which is found in 74% of the occurrences ($n = 146$), followed by the fall-rise, found in 16% of the occurrences ($n = 32$), and the rise, in 10% of the occurrences ($n = 20$). In contrast, in spontaneous speech, rising tones are held to be much more frequent (Cruttenden, 2007) which confirms that the type of speech is an important variable when dealing with tonal distribution.

Figure 5.3

Number of Occurrences of Tones (F stands for Fall, R for Rise and FR for Fall-Rise) in Final (#) and Non-final (non#) Intonation Units.



Results per speaker

Prosody can vary among speakers, so it is interesting to look at individual results. Figures 5.4 and 5.5 show the tones produced per speaker on respectively final and non-final intonation units. The data refer to the total number of analysed units from the 4 texts from the ANGLISH

corpus. We clearly see that the high number of falling tones is not speaker-dependent. All speakers produce numerous falling tones on both types of intonation units (final and non-final). We notice that two speakers (F09 and F10) pronounce more rising tones on non-final units (and therefore fewer falls) than the other speakers, but they still pronounce more falls than rises. Speaker F01 pronounces very few non-final rises and prefers fall-rises, but the number of non-final falls remains very high.

Figure 5.4

Number of Tones on Final Intonation Units (IUs) per Speaker

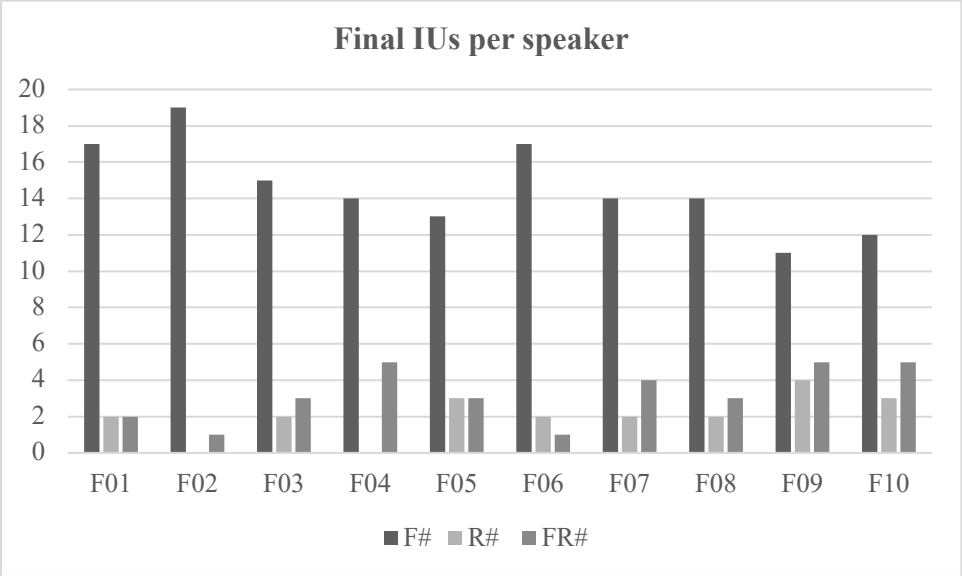
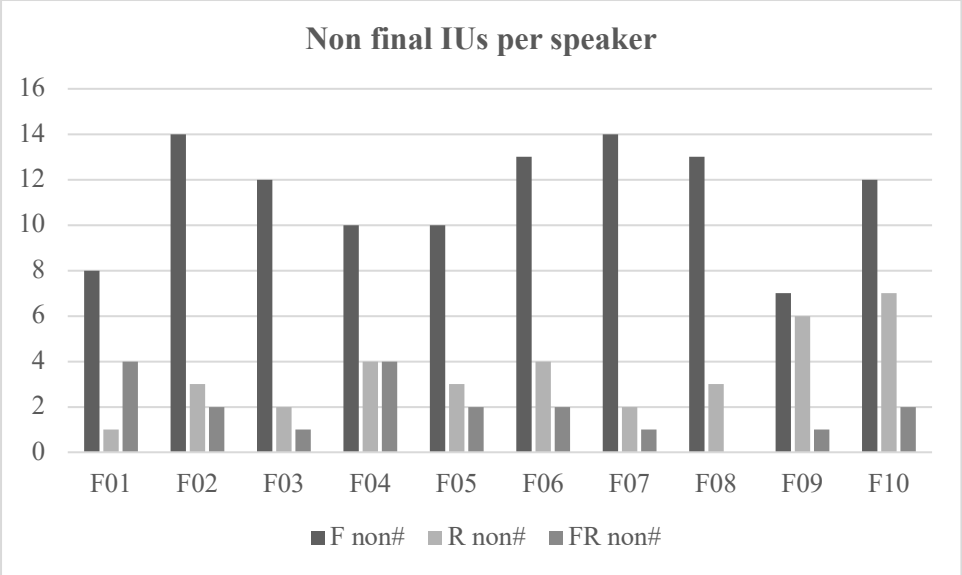


Figure 5.5

Number of Tones on Non-Final Intonation Units (IUs) per Speaker



To conclude, in our data, falls overwhelmingly dominate read speech in final and non-final tone units, which contradicts what is generally claimed. In another study (Herment et al., 2020) using both the ANGLISH corpus and the AixOx corpus, we analysed non-final contours in relation to syntactic structure. We examined the sequences of tones in read speech and found that the sequence fall+fall dominates in those data as well. The results of the two studies converge: the rising contour can be described as exceptional in read speech, even in non-final statements. Regardless of the syntactic structure, the preferred contour is a fall, except in noun phrase enumerations (which are not present in ANGLISH). Initial adverbials show a relatively higher proportion of rises, but the falling contour remains the predominant one. We have found that, contrary to what is stated in the literature, the main function of rising contours in our corpus of read speech is not to indicate non-finality and continuation, but rather to convey the speaker's implication. Wherever a rising tone was pronounced (excluding enumerations and initial adverbials), we found that a particular attitude was conveyed. This is most interesting in respect to the pedagogical implications we aim at developing hereafter.

Pedagogical implications

Our findings on native read speech have important pedagogical implications for EFL learners and for French EFL learners in particular. They allow us to pinpoint which tone is more appropriate according to the context and speaking style, that is to say, in our case, a falling tone in non-final tone units in read speech. The results in this study can inform teaching practices and help learners become aware of the way intonation should be used. The data provide teachers with prosodic information that should be taken into account when creating pronunciation activities for practising intonation in order to help learners produce the appropriate tones. Following this idea, two pedagogical aspects will be presented in this section. First, we propose a technique of visualisation, to show the difference between French and English productions of intonation. The idea is to show learners the numerous falling contours of the English natives and the numerous rising contours of the French natives and help them avoid pronouncing as many rises as in their native language. Second, we discuss the possibility of developing a pedagogical task that allows work on intonation in a more interactive perspective, by adapting the map-task protocol to the English class.

The visualisation of prosody

French learners tend to transfer the French rhythmic division in prosodic words to English. They often divide their speech into smaller units than in English and normally produce a rising contour at the end of these units. Table 5.1 shows an example taken from the AixOx corpus (Herment et al., 2014b). AixOx is a parallel corpus of read speech: it contains similar data in French and English, namely the 40 French and 40 English EUROM1 texts, recorded by French

and English natives, and by French learners of English and English learners of French. As in ANGLISH, the learners are divided into 2 groups: intermediate learners (B) and advanced learners (C). The letters refer to the levels B1/B2 and C1/C2 of the Common European Framework of Reference for Languages - CEFR (Council of Europe, 2001). Since it contains recordings in French and English, the AixOx corpus is very useful to show and study the prosodic differences between the two languages (see Herment et al., 2014a for a study of questions in AixOx).

Table 5.1

Extract from AixOx (Text T10)

English native	*Can you give me a list of the restaurants / in the neighbourhood?/ I live in Clancy Street, /NW1./ I'm interested in something a little more exotic than usual. / Perhaps a Polynesian place, for example./ I'd prefer it not to be vegetarian. /*
French Learner B	*Can you give me / a list / of the restaurants / in the neighbourhood?/ I live in Clancy Street, /NW1./ I'm interested in something / a little more exotic / than usual. / Perhaps a Polynesian place,/ for example./ I'd prefer it / not to be /vegetarian. /*
French native	*Est-ce que vous pourriez / me donner la liste / des restaurants / de mon quartier ? / J'habite à Saint Barnabé, / rue Montaigne. / Je recherche / quelque chose / qui sorte un peu de l'ordinaire, / d'un peu exotique. / Un restaurant japonais / par exemple. / Je préférerais / que ce soit pas / une cuisine végétarienne. /*

As explained above, French and English do not chunk speech in the same way, and it is important to make learners aware of this difference. English offers much longer IUs than French, which is divided into short accentual groups (prosodic words) that then form a larger unit. The top part of Table 5.1 shows how a native English speaker divides the text into intonation units (the boundaries are indicated by slashes). If we compare it with the division operated by a French B-level learner (middle of Table 5.1), we see that the learner divides their speech in more units. The advantage of the AixOx corpus is that the French version read by a French native is available (bottom of Table 5.1). This allows us to make assumptions about L1 prosodic transfer on L2. Even if the text is not the word-for-word translation, some passages are very relevant.

Using the PRAAT software (Boersma & Weenink, 2001), we extracted the melodic contours of the first sentence of the text shown on Table 5.1 for the 3 speakers (Figures 5.6, 5.7 and 5.8). We see that the English contour produced by the French learner of English (Figure 5.7) is very similar to the French contour (Figure 5.8). The speakers produce rising contours at the end of each non-final intonation unit: (a) in Figure 5.7, in the English sentence on *me*, *list* and *restaurants;* and (b) in Figure 5.8, in the French sentence on *pourriez, liste* and *restaurants.* Figure 5.6 shows the English contour by the English native. There are only 2 intonation units (compared to 4 for the French native and the French learner), and the contour on the non-final unit is a falling contour (fall on *list*).

Figure 5.6

First Sentence of the English Text T10 by a Native English Speaker:

Can you give me a list of the restaurants / in the neighbourhood?/

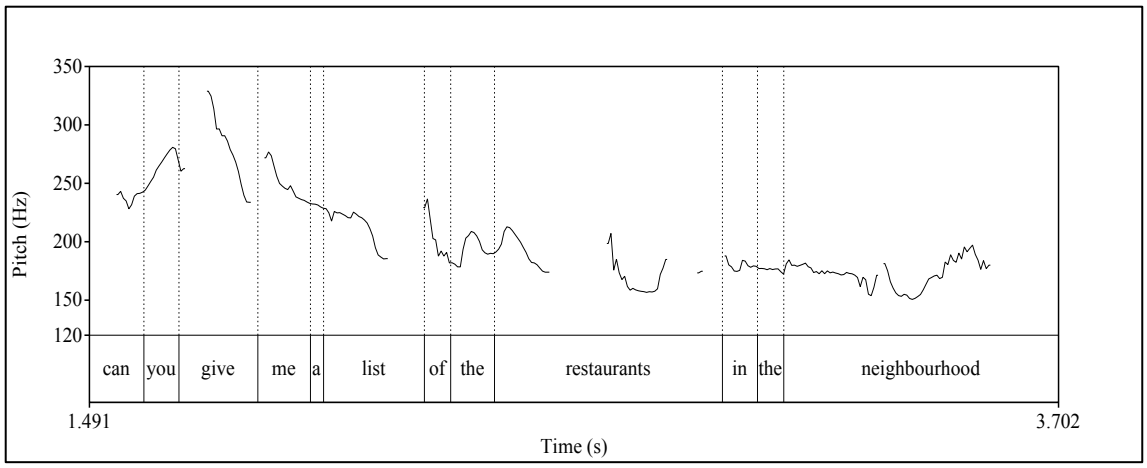


Figure 5.7

First Sentence of the English Text T10 by a French Learner of English (B Level):

Can you give me / a list / of the restaurants / in the neighbourhood?/

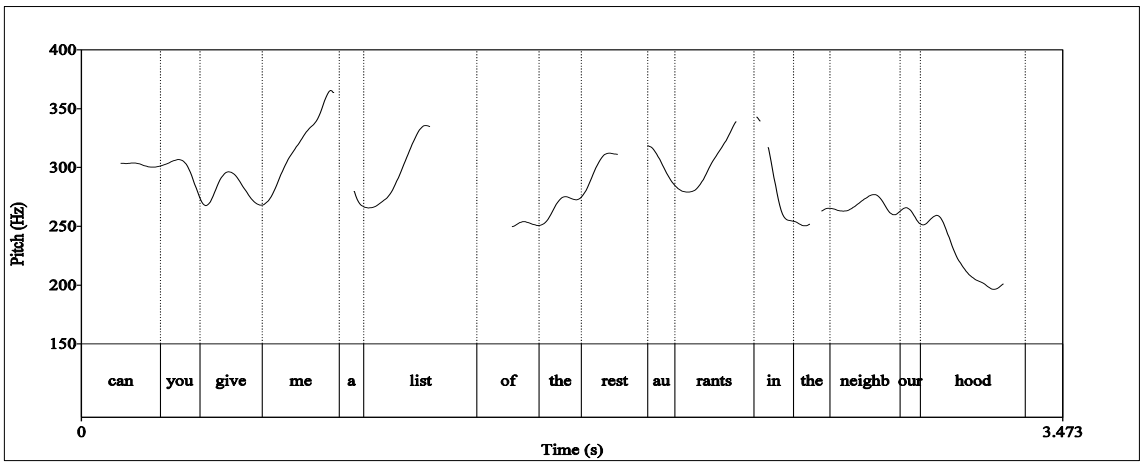
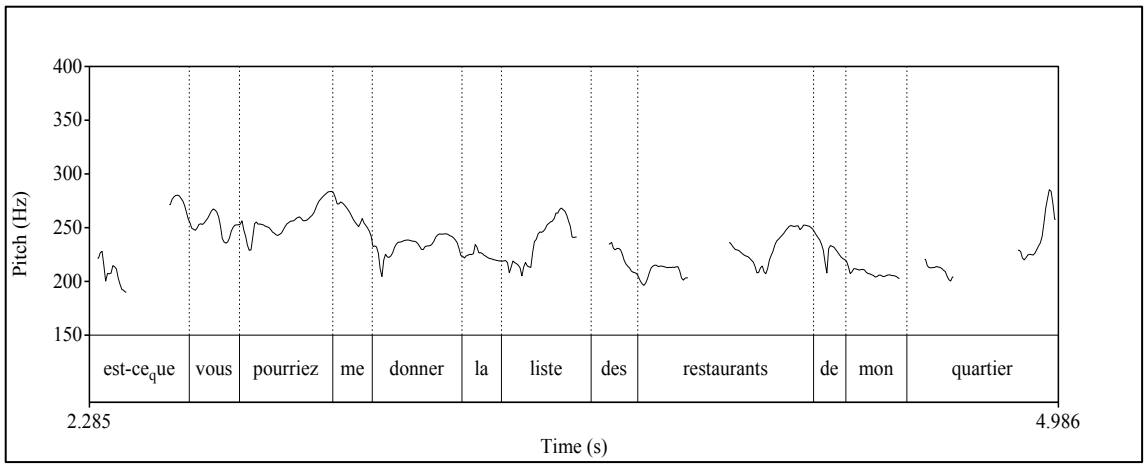


Figure 5.8

First Sentence of the French Text T10 by a Native French Speaker:

Est-ce que vous pourriez / me donner la liste / des restaurants / de mon quartier ?/



The visualisation of the rhythmic groups (Table 5.1) and of the melodic contours (Figures 5.6, 5.7 and 5.8) is a very effective way of making learners aware of the different chunking between French and English and of the rising movements at the end of each rhythmic constituent produced by French learners, which is a typical production for intermediate learners. Experience shows that when learners can see the boundaries, they can perceive the chunks better (see Herment 2018). Anderson-Hsieh (1992) and Martin (2010) also show the usefulness of computer-assisted methods in allowing visualisation for pronunciation training, and particularly of suprasegmentals. This allows the learner to perceive better, and therefore to produce better, since the relationship between perception and production has been proved a mutually beneficial one in terms of acquisition (see Best & Tyler, 2007; Flege, 1995; or Rvachew et al., 2004 for evidence from speech pathology). Hence, better results should be achieved if the teacher insists on the fact that in English there are many more falling contours than in French, demonstrates them to the learners, trains the learners to perceive falling contours, and offers practice opportunities to the learners to produce them.

The map task as a support for authentic oral production

Our study on non-final contours in read speech questions the notion of the types of speech in

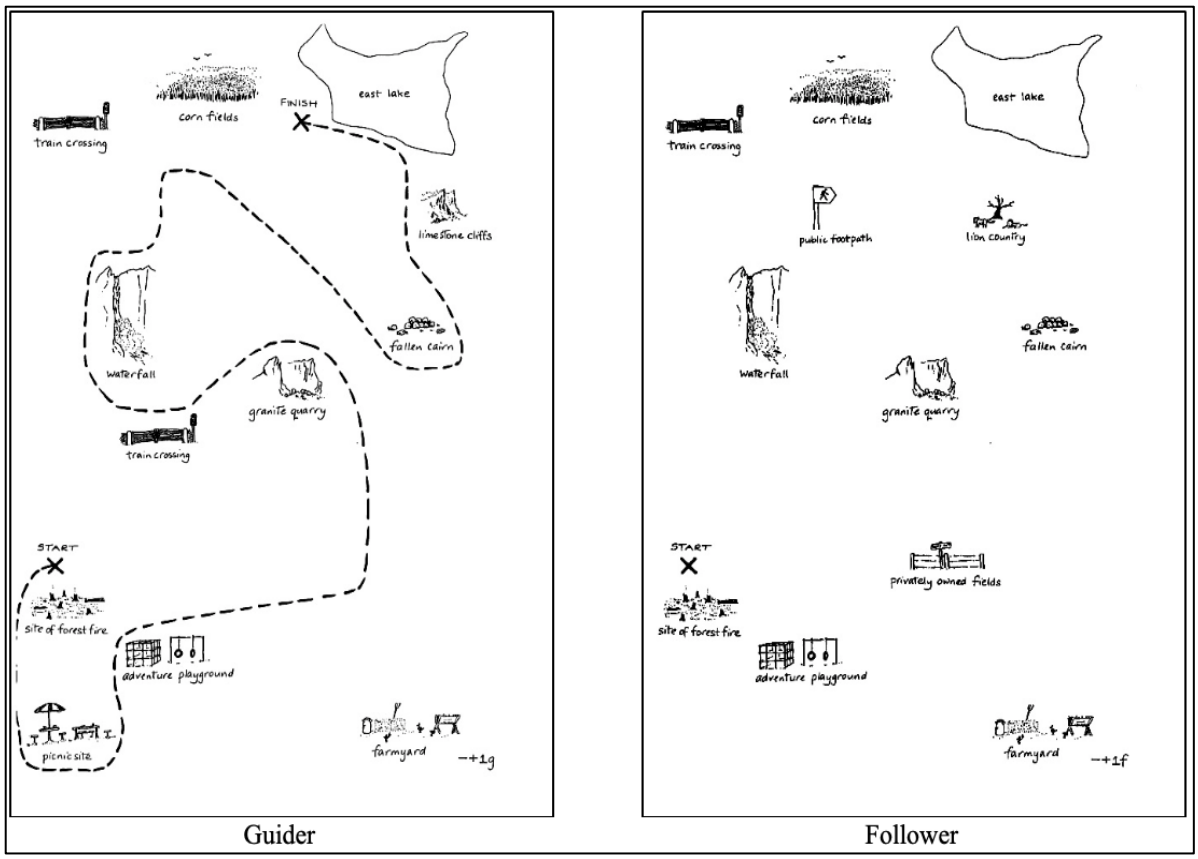
the classroom. We are well aware that read speech is not ideal. Even if the communicative framework for teaching pronunciation outlined by Celce-Murcia et al. (2010) defines a phase for controlled practice, it also defines a phase for guided practice and one for communicative practice. The idea is to gradually move towards interactive tasks. We propose in this section a type of guided practice called a map task. While it is normally used for research purposes, we adapted it in order to work on falling and rising contours.

This is an oral production exercise in pairs. The protocol was created at the HCRC (Human Communication Research Center) of the Universities of Edinburgh and Glasgow. The HCRC is an interdisciplinary research centre that brings together linguists, psychologists, philosophers, and computer scientists, to work on communication skills (Anderson et al., 1991[5]). The protocol provides work in pairs. Each speaker is given a map and has a specific role: one (the guider) must guide the other (the follower) from one point to another on the map. In order to create particular interactions, the two maps are slightly different. The aim is to elicit interesting issues at the syntactic and prosodic levels, such as misunderstandings, questions, surprises, exclamations, and phenomena like pauses, false starts, feedback, etc. Figure 5.9 below shows the HCRC map n°4 (there are 15 of them). We can see how simple the maps and the route given to the guider are. We can also see that the maps differ in some respects: the guider has a *picnic site* (bottom left) that the follower does not have, but the latter has a *public foot* path at the top of the map. The *privately owned fields* of the follower (bottom middle) do not exist on the map of the guider, who has *limestone cliffs* (top right) where the follower has *lion country*. Finally, the guider has two train crossings while the follower has only one.

Figure 5.9

HCRC Map n°4

[5] http://groups.inf.ed.ac.uk/maptask/maptask-description.html



This protocol has several advantages for research that can be transferred to teaching. First, it allows spontaneous speech to be triggered in a semi-controlled manner. Indeed, the main interest of the protocol is that it allows the researcher (and the teacher), through the elements given on the map, to choose certain linguistic phenomena: "elicit unscripted dialogues in such a way as to boost the likelihood of occurrence of certain linguistic phenomena, and to control some of the effects of context".[7] It is therefore a carefully controlled elicitation exercise. One can control the lexicon and therefore some of its phonological difficulties, such as, in the maps shown on Figure 5.9, /t/ elision in *east lake* or *forest fire*, deletion of /d/ in *privately owned fields*, or possible glottalisation in *footpath*.

The map task protocol also allows the manipulation of some other variables. Familiarity between the two people in the pair, for example, can be the subject of a study and an issue in

[7] http://groups.inf.ed.ac.uk/maptask/maptask-description.html

the language class, as speech often turns out to be different in a familiar context. The visual channel can also be controlled to work on comprehension by putting an opaque screen or not between the two speakers so that they can see each other or not.

In the perspective of EFL, the map task is a very adaptable exercise. It allows the teacher to exploit several elements already studied in class, which may be lexical, syntactic and grammatical, phonetic and phonological, but also cultural, so that communication is facilitated. Depending on the level of the learners, the maps can be simplified, with familiar and easy to pronounce elements, or on the contrary the maps can include very complex elements like the ones shown above (the HCRC maps were created for native speakers).

The teacher can also play on the composition of the pairs of learners. One might think that a balanced pairing in terms of the level of the learners is to be favoured, to avoid one dominating the other and making all the conversation. But one can also imagine making an unbalanced pair, where the most advanced learner could be placed in the position of follower. In this way they will be able to ask questions to the one who is guiding them and encourage them to express themselves. One could also put together a pair of learners who know each other well and get along well; they might perform better because the shyness or fear of speaking in front of the other will be reduced. In any case, one should avoid placing an advanced learner as a guider with a less advanced learner as a follower.

One last point is open for discussion: should the learners be told beforehand that the map is different, or should they be left to discover it? One of the interests of the exercise may be lost if they are told, namely the surprise effect that is supposed to provoke interesting oral phenomena. This is indeed the case in the research protocol, when working in the mother tongue. But in the perspective of learning/teaching EFL, the configuration is completely different. With intermediate learners, it is perhaps better to tell the pair that the maps are different. Perhaps it is even better not to make two different maps for beginners. Degrees of

difficulty can then be imagined: for example, the two maps could be similar with beginners (A1), differ slightly for A2-level learners and they would know it, or, differ slightly with B1-level learners without the pair being told.

As far as falling and rising contours are concerned, the map task is interesting because since it is (semi-controlled) spontaneous speech, rising contours are expected to be pronounced in a higher proportion than falling tones and we also expect HRTs to be used since this is an interactional task. We have also explained at the end of section 4 that rising contours seem to be used rather to convey the speaker's implication (at least in read speech). Again, the teacher will need to adapt to the level of the learners. In the case of beginners (A-level), the objective will be for them to pronounce as few rises as possible. The map task will be an excellent exercise to work on falling contours, to help learners to produce falls when they would often use rising contours. Rising contours will only be restricted to yes-no questions. For B-level learners, and particularly for French EFL learners, the teacher will probably allow them to use more rises since the style is more spontaneous. The difficulty will be to use English rises and to avoid a French chunking (with short rhythmic units like the French accentual groups). In the case of advanced learners (C-level), who produce fewer rises than intermediate learners, the objective will be different again. The teacher will insist on the communicative and interactional functions of rises, explaining for example that HRTs can be used by the guider to check if the follower has understood the instructions. The learners' utterances during the task will be recorded, so that the teacher can work on these rising and falling contours. The productions could be subject to visualisation with Praat so that learners can see what they have said and perhaps comment on their own productions.

Conclusion

From a study of rising contours in read speech by native English speakers, we have shown what pedagogical implications our findings can have for the teaching and learning of English as a foreign language. Our study shows that contrary to what is generally acknowledged in the literature, falls overwhelmingly dominate read speech among speakers with a Southern British accent and are used in non-final statements, which implies that the rise is not the preferred contour for non-finality and continuation. This has important pedagogical implications for EFL teaching in general, and in particular for French speakers. Teachers should encourage learners to produce falling patterns in non-final statements, so as to help them avoid realising those typically French rising contours on small units. We encourage the visualisation of prosody for that purpose, emphasising the idea that learners will improve their perception and their production if they can see what this is all about. We also follow the idea, which is widespread in neurosciences and neurodidactics (e.g., Goswani, 2008), that perceptual visualisation might help create mental images which facilitate the visualisation of language concepts.

More generally, we argue that the teaching and learning of prosody should be central in teaching English. Students must be aware of the appropriate English intonation patterns in specific contexts and different speaking styles, as the tone inventory varies with the speaking style. The map-task format we propose will help learners practise intonation in a more interactive and spontaneous style than reading. We adapt this tool used in research, to teaching, and show how relevant it can be for the practising and learning of intonation contours. It could constitute a guideline for teachers to create new exercises to improve the production of prosody in EFL learners.

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Appendix

Four Texts of the EUROM1 Corpus Recorded for the ANGLISH corpus

T20
I've always found it difficult to sleep on long train journeys in Britain. For one thing, I can never make myself comfortable in the seat. Then the other passengers usually talk so loudly, or worse still they snore. In addition, there's the constant clickety-click of the wheels on the track. If I do manage to doze off the ticket inspector comes along and wakes me.

T21
Sorry I didn't come to dinner at the weekend. I was really looking forward to seeing you again. Unfortunately, I had a small accident just as I was getting ready to leave. It was when I went down to fetch a bottle of wine from the cellar. I didn't bother to switch the light on, tripped on a loose step in the dark, and broke my ankle.

T30
My sister is terrified of the dark. She absolutely refuses to go out alone at night. She wants someone to go with her all the time. My father advises her to take the dog with her. At least it would protect her by barking if anything threatened.

T34

It’s my turn to feed the baby again tonight. I hope she’s not off her food. Then there’s the bath and getting her ready for bed. That always gets her excited again. Perhaps she’ll calm down if I sing to her.