

# Chapter 5

## Intonation in Cameroon English

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**Abstract** The focal point of this contribution is to review, elaborate on, and characterise some aspects of intonation in Cameroon English. In other words, it aims to provide, though not exhaustively, a somewhat panoramic account or overview of the intonation patterns of this variety of English. It will, first of all, revisit the intonational highlighting or marking of information in Cameroon English discussed in Ouafeu (2006): *Intonational Meaning in Cameroon English Discourse: A Sociolinguistic Perspective*; and Ouafeu (2007) in *English World-Wide* 28(2): 187-199 before, secondly, delving into some intonational phenomena in Cameroon English. Also investigated here is the use of tones at intermediate phrase boundaries as well as at intonation phrase boundaries. Examining tones at intermediate and intonation phrase boundaries is intended to help arrive at a preliminary establishment of the frequency of tone distribution in Cameroon English.

**Keywords** Intonation · New information · Given information · Phrase boundary · Pitch · Intensity · Duration

### 5.1 Introduction

Intonation in New Englishes still remains an area of linguistic research more or less uncharted. Unlike fields of linguistic research like lexis, syntax, morphology, and especially sociolinguistics, which have received intense scholarly attention over the years, studies on intonation have been very few, especially on African varieties of English. As regards African English accents, a close look at most published materials reveals that intonation has not until very recently really featured on African linguists' priority lists (cf. Adejuwon 2003). The fact is that the first few attempts at describing the intonation of some African varieties of English were made by

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<sup>†</sup>This chapter is published posthumously in profound memory of my friend, colleague, and long time school mate, Yves, who passed away suddenly on 3 January 2011 after a heart failure. He had submitted the paper a few months before. He was a young and dedicated scholar. We will always miss him. RIP! (Eric A. Anchimbe).

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non-African linguists, *inter alia*, Singler (1981) with his description of tone and intonation in Liberian English negation, Jowitt (2000) and Gut (2005) with their recent accounts of the patterns of Nigerian English intonation.

The relatively low interest in intonation research in New Englishes, generally, could be attributed to the lack of an agreed universal theoretical framework—on the same lines as the generative phonology framework for segmental phonology and stress—within which the intonation systems of each variety of New Englishes could be delineated. Note, notwithstanding, that such theoretical frameworks as the Auto-Segmental Metrical framework (cf. Liberman 1975; Bruce 1977; Pierrehumbert 1980; Pierrehumbert and Hirschberg 1990) and the discourse intonation framework (cf. Brazil 1975, 1978, 1984, 1997; Brazil et al. 1980) exist and were designed primarily for the description of specific varieties of English, namely American English or General American English (GenAm) and British English or Standard British English (SBE) respectively. The auto-segmental metrical approach has achieved a lot of success over the last three decades since its first application in the description of American English by Pierrehumbert (1980).

On the strength of this approach to intonation analysis, an annotation system, namely the Tone and Break Indices (ToBI) notation was developed for the transcription of the intonation of American English. Scholars working on other varieties of English and other languages have adapted ToBI to suit their own descriptions and transcriptions. Therefore, labelling conventions based on ToBI like the following have been conceived to characterise other varieties of English and languages: K-ToBI (Korean ToBI) designed by Beckman and Jun (1996) for Standard Seoul Korean, J-ToBI (Japanese ToBI) by Venditti (1995) and Campbell and Venditti (1995) for Japanese, GlToBI by Mayo, Aylett and Ladd (1997) for the transcription of Western Scottish (Glasgow) English, and GToBI (German ToBI), shaped and reshaped by Baumann, Grice and Benz Müller (2001), Grice and Baumann (2002), Grice, Baumann and Benz Müller (2005) for the transcription of the intonation of German.

As mentioned earlier, all these transcription conventions are based on the original ToBI conceived initially for American English. This diversity in the annotation systems of intonation in other varieties of English and in other languages provides substantial evidence that intonation description must take into account cross-dialectal as well as cross-linguistic differences. It should be noted that no attempt seems to have been made so far at designing a framework or a transcription system for intonation in African varieties of English in general and Cameroon English (CamE) in particular. Despite the huge differences between New Englishes and the so-called native Englishes, the few studies on intonation in the New Englishes have generally been anchored in the existing theoretical frameworks referred to above, i.e. the discourse intonation framework and the auto-segmental metrical framework (cf. Jowitt 2000; Gut 2003, 2004, 2005; Adejuwon 2003; Ouafeu 1999, 2006a, b, 2007).

Cameroon English intonation has, therefore, not received extensive attention. Apart from Masanga's (1983) brief statement on the intonation of Moghamo speakers of English in Cameroon and a few passing references to intonation in CamE in studies dedicated to other language components (e.g. Atechi 1996), the

first comprehensive study on the prosodic system of Cameroon English is Bafuh's (1988) unpublished MA Thesis which, unlike the others, makes direct reference to CamE intonation. Apart from Bafuh's groundbreaking survey, other more recent studies on intonation in CamE have appeared, among them, Ouafeu (1999, 2001, 2006a, b, 2007).

The purpose of this study, therefore, is to review and elaborate on a few aspects of intonation in CamE. It is based on published and unpublished works on CamE intonation as well as data of spoken CamE collected between March and September 2003 and between April and May 2006. Attention is paid in Sect. 5.3 and 5.4 to the use of tones at intermediate phrase boundaries and intonation phrase boundaries, the intonation highlighting or marking of information, and the use of tones in some sentence types.

## 5.2 Some Previous Statements on Cameroon English Intonation

Most previous studies on CamE were essentially concerned with language components like lexicology (cf. Simo Bobda 1983; Kouega 2006), error analysis, interlanguage issues, segmental phonology and stress (cf. Simo Bobda 1986, 1994, 2002, 2004b; Simo Bobda and Mbangwana 1993). Intonation was mentioned only occasionally in some of these studies (cf. Masanga 1983). Bafuh's (1988) study on paralinguistic and prosodic features of CamE was actually the first attempt at describing the prosody of this variety of English. It is important to note that Bafuh's (1988) survey did not focus exclusively on intonation but also on rhythm and stress. Ouafeu's (2006a, b, 2007) recent publications have thrown much light on CamE intonation.

Masanga (1983) has often been quoted as the first real attempt at exploring who counts as accepted speakers of CamE. Placing the acceptability bar on those who at least completed secondary education, Masanga confirms one of the major characteristics of New Englishes, viz, that they are education-based varieties. In his description of the speech of, or pronunciation of certain English words by, Moghamo speakers of English, Masanga (1983) actually made some of the first major references to CamE intonation. According to him, Moghamo people, because of the tonal patterns of their local Moghamo language, "tend to transfer the patterns of their tone language onto English" (Masanga 1983, p. 29). Although Masanga does not use a substantial corpus to prove this, it is understandable that such intonation variations were or are inescapable in World Englishes.

Atechi (1996, 2006) consistently adopts an error analysis focus in his approach to CamE intonation. Although his research is not directly on intonation but rather on phonology and intelligibility, he however argues that CamE speakers generally have the tendency to wrongly identify the nucleus in a tone unit. Furthermore, these speakers, he maintains, incorrectly segment utterances into tone units, which perhaps is a potential cause of unintelligibility with other varieties of English. While it

is true that intonation variation could result in unintelligibility, it is important to say here—apparently overlooked by Atechi—that the segmentation or breaking down of utterances into tone units is largely dependent upon the context of interaction. An utterance out of context could be divided into as many tone units as possible subject to what meaning is associated with each tone unit and with the whole intonation unit. The same applies to an utterance within a specific context of interaction. So, unintelligibility could only be situational and not general.

From a similar perspective as Atechi (1996, 2006), illustrates that CamE speakers deviate from Standard British English (SBE) in their choice of nuclei in tone units and in their segmentation of utterances into tone units. Kouega, however, does not provide cases in which speakers of the two varieties are compared in similar contexts or data samples or examples. Nevertheless, he relies on his CamE data and makes assumptions of SBE speaker productions based on existing research on the subject. Since his work is not dedicated to intonation, not much is said about the role of the context of interaction and other non-linguistic elements, e.g. mood, which are important to the analysis of intonation.

In perhaps the first extensive work on CamE prosody, Bafuh (1988) investigates the rhythmic patterns and several other aspects of intonation in CamE. Using English-speaking journalists of the national radio and television network as case studies, she identifies features such as wrong allocation of tones to given speech functions, deviant grouping of words, ambiguous statements, and inappropriate words within certain utterances. Although these journalists belong to the group of most heard speakers of CamE, they cannot be said to be accurately representative of the rhythm and intonation of CamE. This is simply because these journalists, in the contexts in which they were recorded, read scripted news out of real speech contexts, i.e. in front of a camera (on television) or a microphone (on radio). There are, therefore, bound to be several idiosyncrasies due to the speaking style.

In a number of studies on CamE intonation, Ouafeu has consistently illustrated, first, the specific features of CamE intonation (1999), its deviation from SBE (1999, 2001), and its realisation in real life contexts of interaction (2006a, b, 2007). Like all of the others, he concludes that both CamE speakers and SBE speakers are dissimilar in three major intonation parameters: tonality, tonicity, and tone. Arguing from the same prescriptive and error analysis perspectives like the others, Ouafeu (1999) observes that CamE speakers generally wrongly divide their utterances into more tone units than SBE would in the same contexts. He advances that CamE speakers ‘favour’ the last lexical item in the utterance as the nucleus—a phenomenon pointed out a year later by Jowitt (2000) with respect to Nigerian English intonation. Further, in CamE, as opposed to SBE, speakers often select unpredictable tone or pitch movement. In other words, when a rising pitch movement is expected, speakers use a falling pitch movement and vice-versa. Like all of the other studies, Ouafeu’s (1999) study is based on utterances out of context. Although he makes references to SBE, there is no SBE data in similar contexts as the CamE data he analyses.

There have, however, been significant advances in both the methodological approach to data collection and the analytical framework. While more natural data in real life contexts have been collected, these data have been analysed as belonging to a *normal* variety of the language and so MUST not be judged in terms of

correctness, deviation or inappropriate learning. Ouafeu (2006a, b, 2007) makes a clear effort in these two directions. His findings, some of which are expanded upon in this chapter, are based on naturally occurring data, which represent the natural speech of CamE speakers in their ecology (Anchimbe 2006a). The data for these studies were collected through interactions between the author and the informants or interviewees, who were all speakers of CamE.

The tradition of treating New Englishes as clines of errors, incorrectness, and wrongness practised between the 1960s and 1990s influenced most of the studies reviewed above. However, today, as Bamgbose (1998, p. 1) declares:

few serious scholars of the English language will insist that a non-native English is used only in a narrow range of domains, that it is a transitional and unstable code striving for perfection, that its continued encouragement and use will lead to linguistic fragmentation and/or deterioration of the language, or that only native English is a suitable model for all English language users.

So, any idea of the wrongness or the incorrectness of the intonation in one variety of English vis-à-vis another no longer holds sway, due to several factors: these varieties have been succinctly entrenched in their local ecologies, they have acquired native speakers of their own, have educational norms since they emerged principally through education, and have substantial literature including dictionaries written in or for them. Variation in intonation, therefore, should not be a sign of incorrectness because a huge body of evidence exists that shows how American English intonation differs, for example, from British English; or how Australian English or New Zealand English display intonation patterns that are not necessarily found in SBE or American English (cf. Guy et al. 1986; Horvath 1985; Pauwels 1991; Benton 1966; Alan 1990; Britain 1992; Ainsworth 1994; Warren and Britain 2000). Yet, these varieties of English exhibit a high degree of mutual intelligibility. In the case of New Englishes and of African Englishes in particular, the notion of the wrongness of a given intonation pattern has often been equated with unintelligibility. Rather, the intonation patterns of these Englishes should be described as original and typical of the English-speaking communities in which they are spoken. While unintelligibility may occur, it should be a normal outcome of first-time contacts susceptible to happen between speakers of the so-called native varieties as well.

### **5.3 Intonational Highlighting of Information in Cameroon English**

This section focuses on the issue of intonational marking of new and given information in CamE, referred to here and elsewhere as, the intonational highlighting of information. Succinctly, the intonational highlighting or marking of information refers to the process whereby a specific word in a sentence or phrase is spoken with a higher prominence than another with which it stands in contrast. In the analysis, I have used concrete data, statistical tables, and graphs or figures to illustrate the different intonational marking phenomena in CamE (for more see also Ouafeu 2006a,

2007). From the data of spoken and read CamE speech, the patterns of tone distribution and their frequencies are investigated and accounted for. Furthermore, the distribution of tones at intermediate phrase boundaries and at intonational phrase boundaries has been discussed in the light of lists, compound and complex sentences or utterances.

### 5.3.1 *Data*

The data presented and analysed in this chapter were collected in Cameroon between 2003 and 2006. The respondents come from a wide range of linguistic backgrounds; the only uniting factor among them being that they were all speakers of CamE. For the purpose of this study, a total of 100 respondents are used for the two styles: conversational style and the passage reading style (50 respondents each). There was no equitable distribution as to anglophones and francophones or males or females. For instance, for the conversational style, the 50 respondents (28 female and 22 male) were randomly selected from a pool of over 169 respondents recorded between 2003 and 2006. Of these 50 speakers, 15 were francophones, i.e., they spoke English but had French as second language—of course, on top of their first language, which was a Cameroonian indigenous language. The rest ( $n=35$ ) were anglophones, with an indigenous Cameroonian language as first language and English as second language. In both cases, the majority were secondary and high school students but there were also university graduates. These speakers interacted with me and were interviewed in formal contexts and asked clear questions aimed at eliciting specific intonational features. A sample conversation or interview is provided in Appendix 1. The reason why I refer to these conversations as interviews is that they were organised in a way that many questions were asked to elicit the targeted intonational features. In addition to the conversations or interviews, some of the respondents were given a text (Appendix 2) to read aloud. Only 50 of them selected randomly are used in this paper (see 4.1). The text contains clear and identifiable items which were targeted for given and new information. The data in both situations were collected with the help of a voice-activated tape-recorder. Table 5.1 shows some of the phrases which were targeted in the conversations for new and given information.

In Table 5.1, the items in bold are the new information items by virtue of their non-recoverability or non-traceability (cf. Chafe 1976; Lambrecht 1994) from the previous context while the items in capital letters are the given or old information items, given that they are recoverable from the previous context. In other words, the new information item in each of the phrases is the item which does not appear anywhere in the previous discourse or which is not implicitly or tacitly traceable from the previous context. On the other hand, given or old information represents information mentioned explicitly or implied in the previous discourse. For instance, in a phrase like “**ten** TEACHERS” in response to question 1: “how many teachers have you got?”, the word ‘ten’ is new information because it does not appear in the question or it is the information the interviewer more or less expects from

**Table 5.1** Questions and sample replies for new and given information. (Adapted from Ouafeu 2006a)

Questions	Sample replies
How many teachers have you got?	I have got <b>ten</b> TEACHERS.
How old are you?	I AM <b>fourteen</b> (years old).
Who is/was your best teacher?	My best teacher is/was my <b>Math</b> TEACHER.
How many seasons are there in Cameroon?	There are <b>two</b> SEASONS in Cameroon.

**Table 5.2** New/given information items in the passage reading style. (Adapted from Ouafeu 2007)

New information	Given information
<b>Rainy</b>	SEASON
<b>Dry</b>	SEASON
<b>Four</b>	SEASONS
<b>Drop</b>	RAIN
<b>Fairest</b>	GIRL
<b>Driving</b>	RAIN
<b>Wonderful</b>	GIFT
<b>Heavy</b>	CLOTHES
<b>Lighter</b>	GARMENTS

the interlocutor while the word *teachers* is given or old information because it is traceable to the interviewer's question (cf. Halliday 1967; Grosz and Sidner 1986 for more on recoverability and non-recoverability of information from previous discourse).

Note again that Table 5.1 displays the new and given information contrast only in the conversational style (CS). Another style in which this information contrast was investigated is the passage reading style (PRS). As pointed out earlier on, a text was shown to 50 speakers to read aloud. This text contained target items embedded in carrier phrases. Table 5.2 displays the new and given information contrast in the PRS.

As can be seen in Table 5.2, new information is written in bold (left column) whereas given information is printed in capitals (right column). Again, a piece of information like 'rainy' is new in comparison with given information like 'season' because at this level in the text, it is not traceable or recoverable from the previous context (see Appendix 2). The analyses in the next sections for features typical of intonation in CamE are based on data collected from these two sources.

### 5.3.2 Analyses

The data were processed both auditorily and acoustically. The acoustic analyses, preceded by the digitisation of the data and their transfer onto one of the workstations of the phonetic laboratory of the University of Freiburg in Breisgau in Germany, were carried out with the help of a computer software called



**Table 5.3** Sample auditory analysis

Questions	Sample replies
How many teachers have you got?	I have got <b>ten</b> (P) TEACHERS (NP).
How old are you?	I AM (NP) <b>fourteen</b> (P) (years old).
Who is/was your best teacher?	My best teacher is/was my <b>Math</b> (NP) TEACHER (P).
How many seasons are there in Cameroon?	There are <b>two</b> (P) SEASONS (NP) in Cameroon.

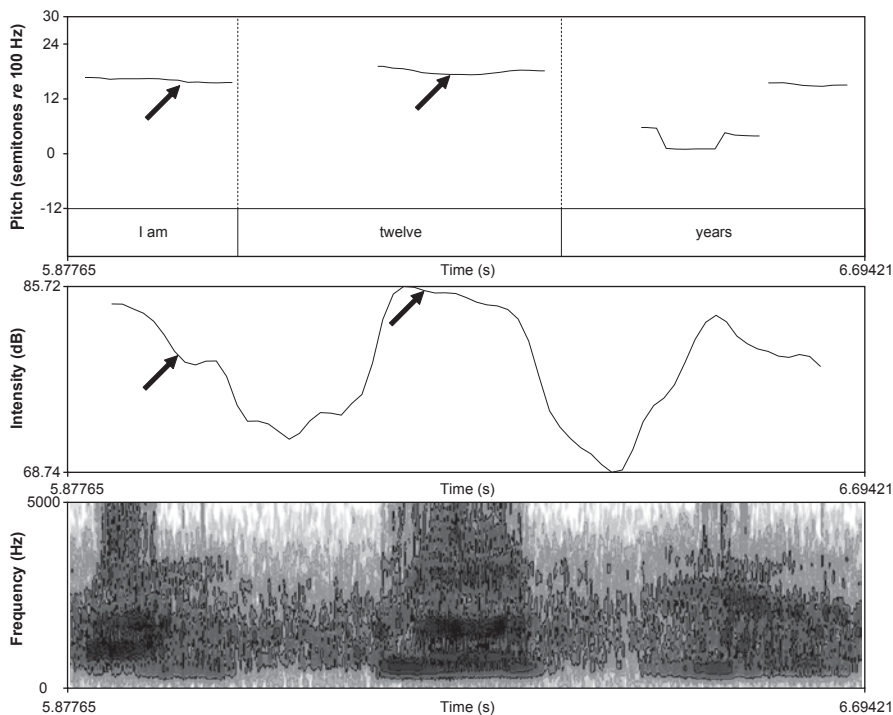
PRAAT [www.praat.org](http://www.praat.org) designed and continuously developed by Paul Boersma and David Weenink of the University of Amsterdam in the Netherlands. This computer software displays fundamental frequency traces, intensity traces as well as the waveforms of the speech recordings. The fundamental frequency traces (Fo) appear in Hertz and the intensity traces are displayed in Decibels (dB). The auditory analyses consisted in listening to the tape-recorded speech and marking new and given information as deaccented (D) or accented (A). For the sake of convenience, I will exceptionally refer to the accented and deaccented nature of new and given information as prominent (P) and non-prominent (NP) respectively. The concept of prominence subsumes acoustic properties such as intensity, length, and pitch movement. Table 5.3 shows sample auditory analyses with the letters in parentheses standing for the status of given or new information.

As can be noticed in Table 5.3, the new information item written in bold was marked (P) when it was heard as being prominent and (NP) when it was heard as being non-prominent. The same applies to the given or old information item written in capitals. The reliability and validity of the auditory analysis was tested through a listening session with three native speakers of British English and some German English speakers. Far from checking for correctness in the intonation patterns, these speakers were brought in to corroborate the initial analysis I had arrived at. More on the prominence or non-prominence of new and given information will be discussed in Sect. 5.3.3.

As for the acoustic analyses, the phrases containing targeted new and given information items were processed with the PRAAT software as illustrated in Fig. 5.1. As noted above, the data, originally recorded on mini-cassettes, were digitised and transferred onto the computer for phonetic analyses.

Figure 5.1 is an exemplification of the acoustic analysis of the utterance “I am twelve years ...” in response to the question “How old are you?” put to one of the speakers. The top of the graph displays the Fo trace of the utterance, the middle half shows the intensity trace of the same utterance while the bottom part exhibits the spectrogram. From Fig. 5.1, the intensity trace of the word—‘*am*’,—which is given information by virtue of its traceability or inference from the question, is lower than that of the word—‘*twelve*,’—which represents new information. This is enough evidence that the speaker utters the new information item more loudly than the given information item. Correspondingly, the mean Fo of the word—‘*am*’—is lower than that of the new information item—‘*twelve*’. The speaker, therefore, utters new information on a higher mean pitch than given information, which proves that





**Fig. 5.1** Exemplification of acoustic analysis:  $F_0$ , intensity traces and waveform of the utterance. “I am twelve years” in response to the question “How old are you?”

new information is highlighted intonationally or is given more prominence than old or given information, which is weakened as a result of its predictability from the previous context. It is important to note that measurements were taken at the centre of the stressed vowels of each targeted item as the arrows on Fig. 5.1 clearly indicate. Sect. 5.3.3 presents some major findings.

### 5.3.3 *Auditory and Acoustic Analyses of Intonational Highlighting of New and Given Information*

Results of both auditory and acoustic analyses show that CamE speakers, unlike speakers of some other New Englishes (cf. Gut 2003, 2005 for Nigerian English; Gumperz 1982 for Indian English), generally make new information more prominent than given information in the discourse structure. In other words, CamE speakers intonationally highlight new information in the discourse structure in comparison with given or old information, which is generally weakened or given less prominence. Table 5.4 displays the results of the auditory analysis for the 50 speakers (picked among the 169) involved in the conversational style (CS). It also

**Table 5.4** Results of the auditory analysis of new/given information

Items	Passage Reading Style		Conversational Style	
	New	Given	New	Given
Prominent	50	0	50	15
Non-prominent	0	50	0	35
Total	50	50	50	50

shows the results of the auditory analysis for 50 speakers (chosen among the 83) who took part in the passage reading exercise, i.e. for the PRS.

Table 5.4 shows that as regards the conversational style, all new information items were heard to be prominent. On the other hand, there were 15 cases where given information items were heard to be prominent. On the whole, results of the analysis indicate, firstly, that the difference between the accenting of new information and deaccenting of given information in the conversational style is statistically significant ( $\chi^2=50.81$ ,  $p<0.0001$ ). Secondly, in the case of the PRS, all new information items were heard to be accented or prominent in comparison with the given information items, which were heard to be non- or less prominent. This represents again a highly statistically significant difference ( $\chi^2=36.1$ ,  $p<0.0001$ ).

As for the acoustic analysis, the results, summarised in Table 5.5, show the average pitch height difference, average intensity difference and average duration difference between new and given information in both the conversational style and the passage reading style.

Note that the average pitch heights on both new and given information items in the CS were 0.78 and 0.44 ST respectively; with the average pitch height difference between both types of information being 0.34 ST. This average pitch height difference was found not to be statistically significant ( $t=1.41$ ,  $df=98$ ,  $p=0.16$ ). In the PRS, the average pitch heights on new and given information are 0.76 and 0.50 ST respectively, which gives an average pitch height difference of 0.26 ST. This average pitch height difference was also found not to be statistically significant ( $t=0.11$ ,  $df=98$ ,  $p=0.90$ ). Furthermore, the average intensities on new and given information in the CS are 76.15 and 64.32 dB, the difference being 11.83 dB. The average intensity difference between both types of information was found to be highly statistically significant ( $t=16.15$ ,  $df=98$ ,  $p<0.0001$ ). In the PRS, the average intensities recorded on both types of information were 64.11 and 56.29 dB. The average intensity difference in this case is 7.82 dB, a difference which reached statistical significance ( $t=8.51$ ,  $df=98$ ,  $p<0.0001$ ). The average durations on new and given information in the CS are 0.15 and 0.08s respectively. In the PRS, the average durations on both types of information were 0.12s and 0.07s. The average duration differences between new and given information in both speaking styles are 0.07s for the CS and 0.05s for the PRS. The average duration differences were found to be statistically significant for both the CS ( $t=7.83$ ,  $df=98$ ,  $p<0.0001$ ) and the PRS ( $t=6.35$ ,  $df=98$ ,  $p<0.0001$ ).

**Table 5.5** Average pitch height, average intensity and average duration differences between new/given information

Items	Conversational Style			Passage Reading Style		
	New	Difference	Given	New	Difference	Given
Pitch height	0.78 ST		0.44 ST	0.76 ST		0.50 ST
Intensity	76.15 dB		64.32 dB	64.11 dB		56.29 dB
Duration	0.15s		0.08s	0.12s		0.07s
Average pitch height difference		0.34 ST			0.26 ST	
Average intensity difference		11.83 dB			7.82 dB	
Average duration difference		0.07s			0.05s	

#### 5.4 Tones at Intermediate and Intonational Phrase Boundaries

This section deals with the frequency distribution of tones or tone types at intermediate and intonational phrase boundaries in CamE. The intonational phrase was initially postulated by Pierrehumbert (1980) as the only constituent in American English intonation, but later work by Pierrehumbert and Beckman (1988) suggests a second level of intonationally-defined constituent, namely the intermediate intonation phrase. The intermediate intonation phrase has been defined as an intonation domain which consists of one or more pitch accents or phrase accents, but no final boundary tone. The key difference between an intermediate intonation phrase and a full intonation phrase lies, therefore, in the fact that the full intonation phrase has a final boundary tone and can be made up of one or more intermediate phrases. In other words, the intermediate intonation phrase is included in the full intonation phrase. In this section, focus will be, on the one hand, on the tone types at the end of intermediate phrases, i.e., phrases which according to the discourse intonation framework (cf. Brazil 1978, 1997) are incomplete phrases and, on the other hand, on the tones at the boundaries of full intonation phrases, which from the discourse intonation viewpoint, are the tone units.

There is, however, a problem with the delimitation between both types of intonation phrases in the sense that an intermediate intonation phrase which is made up of only one pitch accent could at the same time be an intonation phrase. In other words, there are cases where a constituent will consist of only one pitch accent and one boundary tone. In this case, such a constituent will qualify for both an intermediate intonation phrase and a full intonation phrase. In this section, emphasis will be laid on sentence constructions from the data where there is a clear expectation that a pitch movement occurs at the end of the first intermediate phrase and another pitch movement takes place at the end of the construction as a whole. Typical examples

include compound utterances, complex utterances as well as lists. Naturally, compound sentences are those which are linked by coordinating conjunctions like in the sentence “I went to the cinema yesterday AND met a lovely person” while complex sentences are those connected via subordinating conjunctions like the following: “He is very intelligent WHEREAS his sister is harebrained.” As for lists, pitch movements will be examined at the end of each item preceding the last in the list.

### ***5.4.1 Data Elicitation and Analysis***

The three levels of analysis, i.e. compound utterances, complex utterances, and lists were elicited through the styles mentioned above: conversational style and passage reading style. 50 speakers were pooled out of the 169 who participated in the (original) research in the CS. For the PRS, 50 speakers were pooled out of 83 speakers who partook in the passage reading task. This leaves us with a total of 100 speakers pooled randomly from the original research population. However, the two levels CS and PRS are quantified separately here. To elicit compound sentences in the CS, an open question like “Which two things do you do after school?” was posed. An expected answer was “After school, I do my homework and watch TV.” To elicit complex sentences in the CS, questions like “Why did you like your geography teacher most?” and “How many subjects do you study at school and what are they?” were put to the respondents. Anticipated complex sentences included: “I liked my geography teachers most because s/he explained topics well.” For lists, a question like “Which subjects do you study?” was often posed. Expected responses included things like: “I study six subjects, namely geography, French, English, history, mathematics and biology.” Table 5.6 displays sample intonational phrases elicited for the purpose of examining tones at intermediate and intonation phrase boundaries in the three levels: compound, complex sentences, and lists.

The letters in parentheses in Table 5.6 stand for the tones heard during the auditory analysis. F stands for a falling tone, L for a level tone, and R for a rising tone or pitch movement. As mentioned above, the acoustic analysis was carried out with the help of the PRAAT software. Technically, the purpose of the acoustic analysis was to validate the auditory analysis by coming up with more visual evidence. The double vertical bar || represents the boundary of a tone unit (cf. discourse intonation) or an intonation phrase boundary (cf. auto-segmental metrical framework).

### ***5.4.2 Results: Tones at Intermediate and Intonation Phrase Boundaries***

Results of the analyses show that speakers used a wide range of tone types at intermediate phrase boundaries in the construction types outlined in Sect. 5.4.1. These tones include the falling, the level, the rising and the falling-rising tones. This notwithstanding, at full intonation phrase boundaries, only the falling tone

**Table 5.6** Sample intonation phrases for tones at intermediate and intonation phrase boundaries

Compound sentences	Complex sentences	Lists
<i>Conversational style</i>		
I am going to go straight to my parents (F) and show them (F).	When their mother called for them, (F) they would not come back (F).	They are my Biology teacher (L), my Chemistry teacher (L), my Math teacher (R), my English teacher (R), my Civics teacher (R), my Physics teacher (L), my Geography teacher (F).
He congratulates me (R) and tells me to work hard (F).	When they used to go out (F), the mother always advised them not to go far (F).	I have those compulsory subjects like Math (R), English (F) and French (R), then we had Biology (R), Geography (R), History (F), then we had, mm, Physics (F), Chemistry (F).
She teaches well (F) and I understand better than other teachers (F).	If I am promoted to Form Two (L), I will do, I will work more [sic] harder to be promoted to the next class (F).	
<i>Passage reading style</i>		
The rainy season usually starts from MARCH (F)   and ends in OCTOBER (R)   and witnesses the planting of CROPS (F)	The oracle told the people in the village that if no sacrifice was MADE (R), famine would wipe out the whole population because the God of their ancestors was angry with them.	In the temperate, there are four seasons, namely WINTER (L), SUMMER (L), SPRING (L) and AUTUMN (F).
Winter is the coldest SEASON (R)   and people wear thick and heavy CLOTHES (F)		

was recorded in all the cases, especially as the boundaries of the intonation phrases coincided with the end of the sentences. Yes/no questions or *wh*-questions are discarded from the analysis. The bottom line about these tone types at intermediate phrase boundaries is that they occurred with varied frequencies, thereby giving a clear picture of the most used tone types in these sentences. Table 5.7 summarises the frequency of tone distribution at intermediate phrase boundaries in declarative sentences as mentioned above.

In the conversational style, a count of tones at intermediate phrase boundaries in compound sentences shows five tone types occurring in the following descending order of frequency: falling tone (52 occurrences), rising tone (47 occurrences), level tone (22 occurrences), mixed tones (18 occurrences) and falling-rising tone (11 occurrences). By mixed tones, I refer to cases where an intonation phrase combines several tone types occurring at various intermediate phrase boundaries within the same intonation phrase. In the same list, some items were said with the rising or level tone while others were said with the falling or falling-rising tone. As the

**Table 5.7** Frequency of tone distribution at intermediate phrase boundaries

Tone types	Compound sentences	Complex sentences	Lists
<i>Conversational style</i>			
rising	47	38	78
falling	52	41	59
level	22	45	63
falling-rising	11	17	2
mixed tones	18	9	86
Total	150	150	288
<i>Passage reading style</i>			
rising	53	19	39
falling	46	22	34
level	30	9	66
falling-rising	0	0	1
mixed tones	21	0	10
Total	150	50	150

numbers show, it is obvious that the falling tone at intermediate phrase boundaries in compound sentences in the CS outnumbers the other tone types. The rising tone follows, but it should be noted that the Grubb's test (Grubbs 1969) or the ESD (Extreme Studentised Deviate) method (Rosner 1983) shows the Z value for the falling tone (1.20) to be furthest from the rest, but not to be a significant outlier ( $p > 0.01$ ).

As for complex sentences in the CS, the tones at intermediate phrase boundaries are, from the most recurrent to the least recurrent, as follows: level tone (45 occurrences), falling tone (41 occurrences), rising tone (38 occurrences), falling-rising tone (17 occurrences) and mixed tones (9 occurrences). Here, evidence shows that the level tone is numerically greater than the other tone types. It is followed by the falling tone which, in turn, is followed by the falling-rising tone. Although, the level tone outnumbers the other tone types, the Grubb's test shows that there is no significant outlier ( $p > 0.01$ ). Lastly, as regards lists in the CS, statistics indicate that tones at intermediate phrase boundaries occur with the following descending order of frequency: mixed tones (86 occurrences), the rising tone (78 occurrences), the level tone (63 occurrences), the falling tone (59 occurrences) and the falling-rising tone (2 occurrences). The Grubb's test again shows no significant outlier ( $p > 0.01$ ).

From Table 5.7, there is a general trend whereby the falling, the level, and the rising tones occur at intermediate phrase boundaries in compound sentences, complex sentences and lists in the CS with roughly the same frequency. Sometimes, the falling tone outnumbers the other tones and occasionally the rising tone is greater in number than the other tone types. But the general tendency is that in situations or contexts where the rising tone is expected at intermediate phrase boundaries to show incompleteness of information, the falling tone is heard as if to signal the end of the intonation phrase. This trend has also been observed in Nigerian English (cf. Jowitt 2000) and may lead us to postulate, pending of course further investigation, that it is an intonational phenomenon or feature which typifies CamE and other New Englishes.

A look at the PRS also shows that the tone types at intermediate phrase boundaries are distributed more or less evenly. With regard to compound sentences, the count shows that the tone types occur with the following descending order of frequency: rising tone (53 occurrences), falling tone (46 occurrences), level tone (30 occurrences), and mixed tones (21 occurrences). Although apparently certain tones (cf. rising and falling) occur with higher frequencies than others, the Grubb's test indicates that there is no significant outlier ( $p > 0.01$ ). As regards complex sentences, the tone types at intermediate phrase boundaries occur as follows: falling tone (22 occurrences), rising tone (19 occurrences) and level tone (9 occurrences). There are no traces of either the falling-rising tone or the mixed tones type. The Grubb's test shows the falling tone to be furthest from the rest but not a significant outlier ( $p > 0.01$ ). Still in the PRS, evidence indicates that the level tone occurs with a higher frequency (66 occurrences) than the other tone types. The rising tone comes next (39 occurrences) followed closely by the falling tone (34 occurrences). The falling-rising tone occurs once and the mixed tones type occurs ten times. According to the Grubb's test, however, there is no significant outlier ( $p > 0.01$ ) although the falling tone type (66 occurrences) is furthest from the rest ( $Z = 1.40$ ).

In both the CS and the PSR, the falling tone types at intermediate phrase boundaries total 254 occurrences against 227 for the rising tone, which again confirms Ouafeu's (2006a, p. 169) statement that "the falling tone does a lot of work in Cameroon English intonation."

## 5.5 Conclusion and Discussion

The purpose of this contribution has been to review, elaborate on, and characterise some patterns of intonation in CamE. Relying mostly on data collected in previous research, this contribution has established the patterns of tone marking in CamE at intermediate and intonation phrase boundaries. Firstly, prominent among the findings from the auditory and acoustic analyses is the fact that, unlike other New Englishes, CamE speakers make new information more prominent than given information in the discourse structure. Verifiable as it is from the statistical evidence, CamE speakers generally accent new information but deaccent or de-emphasise given or old information in the discourse structure. Secondly, from an acoustic point of view, CamE speakers, unlike native British English speakers (Wennerstrom 1994), use a number of parameters to highlight new information, two of which are very recurrent, namely intensity and duration. Pitch accent is also used, but statistically, it generally does not prove to be a significant acoustic parameter.

One indisputable conclusion of course is that, on the strength of accumulated auditory and acoustic evidence, CamE speakers produce new information louder than given information. This evidence confirms Kochanski et al.'s (2005) recent conclusion, following a survey on seven dialects of British and Irish English, that loudness, in contrast to fundamental frequency, is the better cue to prominence. This means that CamE speakers use intensity more often to emphasise new information



in comparison with given information. Also, the vowel of the stressed syllable of the new information item has a longer duration than that of given information. This lengthening of the vowel of the stressed syllable of the new information item is a phonetic strategy used by speakers to emphasise the item which they would like to see stand out among the others in their speech.

One possible reason why CamE speakers generally make new information more prominent than given information in the discourse structure may be that, as they are being more and more exposed to native English varieties like British English or American English through the media (television, internet, etc.), their speech is also gradually changing towards these varieties. It should be noted that due to the economic and social supremacy of the United States of America in the world today, there is a general tendency in Cameroon, especially by young people through admiration, to copy the values of this superpower especially from a linguistic standpoint (see Anchimbe 2006b). This hypothesis could be confirmed or disconfirmed through a diachronic study of the intonational marking of new and given information in CamE. Besides, most of the participants in the various data collection tasks came from diverse linguistic backgrounds, among them 15 from French-speaking homes. This means that the majority of these French-speaking participants attending English-medium schools, who admitted not to be able to speak their indigenous languages well, somehow belong to the “in” generation that lay greater emphasis on values copied from economically powerful countries like the USA or the UK. Again, this is purely hypothetical or conjectural and can only be confirmed through extensive diachronic studies of this intonational phenomenon in CamE.

Auditory and acoustic analyses of tones at intermediate and intonation phrase boundaries also point to the fact that CamE speakers use a variety of tone types at these boundaries. Sentence types like compound sentences, complex sentences, and lists were analysed and evidence accumulates that CamE speakers basically use four tone types, namely the falling tone, the rising tone, the level tone, and the falling-rising tone. In some situations, there were cases of what I have termed “mixed tone types.” In these situations, speakers use two or more tone types in the same construction. This was noticeable mostly in the case of lists where speakers used both the level tone and the falling tone in the same list. The bottom line is the frequency with which these tone types occur. A statistical analysis indicates that the falling tone generally outnumbers the other tone types, which led Ouafeu (2006a) to conclude that the falling tone is more prevalent than any other tone type in CamE speech. It should also be mentioned that in lists in the PRS, the level tone was the most common, but no definitive statement can be made at this level as to whether the list was a ‘routine list’ or not. It is true that participants were shown a text containing the four seasons in the temperate zone and some may be tempted to say that listing these seasons was a routine activity. Note that in the CS, the rising tone in lists outnumbers the other tone types. Participants in the task, mostly students, were asked to name the subjects they studied at school. The expectation here would have been for students to name their subjects using the level tone in the sense that these school subjects are somewhat a matter of routine for them.

The conclusion that can be drawn at this level, pending future investigations, is that CamE speakers more often use two major tone types on items in lists, namely

the rising tone and the level tone. They also use other tone types like the falling or falling-rising tones on items in lists, but their frequency distribution shows that they are used less often than the level or rising tones. A task for future researchers would be, for instance, to determine what constitutes a routine list in comparison with a regular or normal list in CamE. Then, further analyses could determine whether the level tone is used on routine lists, as has been claimed in some varieties of English like British English (Tench 2003, p. 229; Watt 1994).

### **Appendix 1: Sample Conversation. (Conversation No. 155 with Female Speaker)**

- Interviewer: Good morning, my dear.  
Informant: Good morning.  
Interviewer: How are you?  
Informant: Fine, thanks.  
Interviewer: So what about your age? [...]?  
Informant: I am called [...] and I am twenty years old.  
Interviewer: Now tell me something about your level of education.  
Informant: I am in the University of Yaounde I, second year, bilingual studies.  
Interviewer: Ok. You said you were born and bred in Bamenda.  
Informant: Yes.  
Interviewer: What [...] brought about that situation?  
Informant: ... my father was transferred there, [...].  
Interviewer: I see. [...]. Throughout was in Bamenda, am I right?  
Informant: Yes.  
Interviewer: Which school did you go to?  
Informant: GBHS, Bamenda.  
Interviewer: Bamenda?  
Informant: Yes.  
Interviewer: I see. [...], could you remember a number of things?  
Informant: Actually.  
Interviewer: All right. Now, tell me: could you remember the number of teachers you had when you were there?  
Informant: Mm, approximately seven. I had seven teachers.  
Interviewer: Yeah, in terms of the subjects they taught you...  
Informant: Yes, you wish to know...  
Interviewer: The subjects, not...  
Informant: Ok, we had Mr [...].  
Interviewer: Their names are not important.[...].  
Informant: We had a Geography class, History class, Chemistry, Math, Biology, French and English.  
Interviewer: Right. And, er, [...]. Who was your favourite teacher then and why did you like him best?

- Informant: I think my favourite teacher was Mr [...].
- Interviewer: Who was that?
- Informant: The French teacher. He was somebody very calm and also very welcoming.
- Interviewer: So is that the reason why you decided to [...].?
- Informant: Not really. [...].
- Interviewer: All right. And you are doing really well. Fine. What about a book you read [...].?
- Informant: [...] a tragedy. Yes. It was, er, er,
- Interviewer: What is that?
- Informant: La Croix du Sud.
- Interviewer: La Croix du Sud, Ngoue.
- Informant: Ngoue.
- Interviewer: So what is it about, *La Croix du Sud*? [...].
- Informant: Yes, it's a type of a representation of those dramas from 18th century and it is talking about [...] racism in that time, the main subject was, er, [...].
- Interviewer: All right. [...]. So what is the moral lesson that you can draw from *La Croix du Sud*?
- Informant: Actually (fall), something very sticking that I remember, that I still have in my head till today is that one has not to reject his origin. [...].
- Interviewer: All right. [...]. So what are the main seasons in Bamenda and what characterises each of those seasons?
- Informant: I think there are just two main seasons: what actually characterises them is that namely the rainy season is that there is too much rain. There are days when one cannot even step outside [...].
- Interviewer: Ok. [...]. ... yellow shoes... which one will you choose?
- Informant: I prefer dark colours.
- Interviewer: Dark.
- Informant: Yes.
- Interviewer: It means that you [...] choose black...
- Informant: Black shoes, [...].
- Interviewer: So why don't you like those colours? People like flashy things, you know.
- Informant: I know but [...]. I think I prefer the dark colour (fall) because it brings out the colour of my skin.
- Interviewer: Right, when do you intend to go to your village and pay a visit to your family members?
- Informant: [...] in my plans, but I would think of it.
- Interviewer: All right. Ok, thank you very much indeed.
- Informant: Yes.

## Appendix 2: Text

In tropical Africa, there are two main seasons: these two seasons vary in terms of the proximity or nearness of the region to or its distance away from the Equator. The rainy season<sup>1</sup> usually starts from March and ends in October and witnesses the planting of crops. The dry season<sup>2</sup> starts from October and ends in early March. A farmer relates the plight of the villagers in his area in 1993: “In 1993, there was a terrible dearth of food supply in the village due to drought. All farmers were expecting rain to begin in March as usual. In May, there was still no drop of rain<sup>3</sup> in the village. The farmers decided to consult the oracle to find out what was wrong. The oracle told the people in the village that if no sacrifice was made, famine would wipe out the whole population because the God of their ancestors was angry with them. Then the villagers asked the oracle: ‘What type of sacrifice should we make to appease the God?’ The oracle told them: ‘There are many girls in this village. You should look for the fairest girl<sup>4</sup> and give her to the village chief as the 15th wife’. The sacrifice was performed and within a few days a driving rain<sup>5</sup> pelted down in the village. After the rain, the villagers thought about the gift to offer the oracle. They decided to sacrifice a goat for him. The oracle told the villagers: “This is a wonderful gift<sup>6</sup> indeed. I thank you very much for your gratitude.”

In the temperate, there are four seasons<sup>7</sup>, namely winter, summer, spring and autumn. The types of clothes or garments people wear vary from one season to another. Winter is the coldest season and people wear thick and heavy clothes<sup>8</sup>. In summer, people wear lighter garments<sup>9</sup> because the temperature is usually hot.

*NB: The superscript in the above text represents the carrier phrases embedding the new/given information contrast.*

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