1. Introduction

Intonation has been demonstrated to be one of the linguistic components which set the native speaker of a language like English apart from the non-native speaker or the learner of that language (Jilka, 1999, 2000). This clearly suggests that each non-native variety of English displays its intonation systems which make it somewhat sui generis and different from other varieties of English. A lot of research has been conducted on prosodic or intonational variation in both native varieties of English (e.g. Brend, 1972; Pellowe and Jones, 1978; Fletcher and Harrington, 2001) and non-native English varieties (e.g. Gut, 2003; Udofot, 2000, 2003) and has pictured the extent to which prosodic or intonational features vary with respect to independent social variables like education, age, gender, ethnic origin, social class as well as linguistic variables like speaking style. The present study, like those ones, draws on quantitative sociolinguistics or the Labovian sociolinguistic approach also referred to in the literature as secular linguistics (cf. Trudgill, 2003) to account for intonational variation in Cameroon English (hereinafter CamE).

The purpose of the study is to characterise some features of intonational meaning, namely, tone (Brazil, 1997) and paratone (Crystal, 1969; Brown, 1977; Yule, 1980; Brown and Yule, 1983; Couper-Kuhlen, 1983, 1986; Tench, 1996) as well as the intonational marking of new and given information in CamE and to assess the degree to which they vary in respect of extra-linguistic variables like educational attainment and gender and of the linguistic variable speaking style. Put differently, the study intends to categorise CamE speakers with reference to their use of the two above-mentioned intonational 'morphemes' (Wennerstrom, 1994, 1998), tone and paratone, and of the intonational marking of new and given information in discourse. Just as many sociolinguistic surveys on segmental phonology have examined the interface or interrelatedness between quantifiable linguistic variables like the famous post-vocalic /r/ (e.g. Labov, 1966; Trudgill, 1972, 1974) and independent social variables like social class, age and gender, the present study is quantitative in nature. The two intonational features are considered in this study as quantifiable intonational variables and it will be examined to what extent they, together with the intonational marking of new and given

information, vary with respect to the two social variables mentioned above, educational attainment and gender, and with regard to speaking style. Trudgill (1974:47) argues for example that prosodic features such as intonation or paralinguistic features like voice quality serve to signal telling class differences. This statement may be valid only when applied to Western societies where the phenomenon of discrete social class is strongly marked, a suspicion confirmed in a statement by Jibril (1986:70) who reports that the existence and crystallization of social classes assumed by Labov's sociolinguistic model have not yet developed in African societies.

The fundamental premise underpinning this study is that there exist patterns of co-variation between features of CamE intonation and the two above-mentioned social variables, education and gender and the linguistic variable speaking style. Similar patterns of co-variation have been reported in studies on native English and have led linguists to postulate such linguistic theories as the tendency by female speakers to be more prestige-conscious or to use less stigmatised and non-standard variants than their male counterparts, the tendency by less educated speakers to use linguistic features which carry social stigma in comparison with highly educated speakers who use more formal and less stigmatised linguistic features or again the general inclination by younger speakers in speech communities to use more stigmatised language features (e.g. Labov, 1966; Trudgill, 1972; Yule, 1996; Macaulay, 1997) than adult or older speakers. In short, these studies have arrived at the conclusions that highly educated people speak differently from less educated ones, that females speak differently from males or that younger speakers speak differently from older speakers. Note however that the primary aim of examining the co-variation between the intonational features mentioned above and the social and linguistic variables is not to find out whether one group of CamE speakers subsumed under a given variable is more prestige-conscious than, or outstrips another group. Rather, the purpose is to ascertain whether these groups differ at all in their use of the two intonational features and of the intonational marking of new and given information in discourse. The question of prestige-consciousness lies therefore outside the scope of the present study. One question that emerges from all these theories based on native English is to what extent they apply to non-native varieties of English as well, of which CamE is one. The study also seeks to answer this question and it may not be surprising to observe that some, if not all, of these theories do not apply to CamE or apply differently.

This study, unlike previous ones on CamE intonation, adopts a new methodological approach. The intonational features mentioned earlier and the intonational marking of new and given information are analysed within two descriptive frameworks, viz., the Discourse Intonation (Brazil, 1975, 1978, 1997) and Auto-Segmental Metrical (hereafter AM) (Pierrehumbert, 1980; Ladd, 1996) frameworks. More concretely, these intonational aspects are examined 'within context' and not 'out of context' (Brown, 1977) like in previous studies on CamE (e.g. Bafuh, 1988; Talla Sando Ouafeu, 1999) to find out, first, how CamE speakers use them in real contexts of interaction and, secondly, whether they vary with reference to the two independent social variables, education and gender, and the linguistic variable under study, namely speaking style.

With respect to its significance, the present study, interestingly, offers new insights into the way variationists look at language variation. The study intends to show, with Eckert (1989: 264), that generalisations about linguistic phenomena are "best deferred until more communities have been examined". In other words, variationists could learn from the present study that if for example female speakers in Western societies differ in their speech from male speakers, those in non-native English-speaking communities may not necessarily behave likewise. The study will also be of interest to teachers of English as a Second Language (ESL) as well as teachers of English as a Foreign Language in making them aware of the need to design new pedagogical materials to make it possible for their students to "cross the final hurdle which the vast majority of speakers of ESL never manage to cross" (Jowitt 2000:63, quoting Banjo 1976). Lastly, the study will be a contribution to the evidence that CamE intonation has its specificities that make it different from other native varieties of English and other New Englishes (NEs).

This study resolves into nine chapters. The first is the introduction which states the purpose, the scope and the significance of the study. It also presents the outline of the study. The second chapter discusses intonational models relevant to the present study as well as the theoretical frameworks within which the data for the study are analysed. The concept of paratone as well as the notions of new and given information are equally taken up in this chapter. Besides, studies on the intonation of lists, of compound and complex sentences as well as of non-sentence adverbials are critically reviewed. The third chapter is concerned with the concept of intonational variation and the factors that

influence it. At this level, theoretical considerations and empirical surveys on such patterns of co-variation of intonation and extra-linguistic and linguistic variables as intonational variation and educational attainment, intonational variation and gender and intonational variation and speaking style are critically reviewed. Note that these three patterns of co-variation of intonation and social as well as linguistic variables are those relevant to the present study. The fourth chapter concentrates on CamE and other NEs. The linguistic situation of Cameroon is presented and previous studies on CamE intonation are reviewed to point out their limitations and to highlight the originality of the present study. Studies on the intonation of other NEs are also reviewed to show their similarities with or dissimilarities to those done on CamE intonation. The fifth chapter takes up issues related to the methodology used in gathering the raw data for this study as well as that used in the treatment or analysis of these data. Two main methods of data analysis are described, namely, the auditory and acoustic or instrumental analyses. Chapter Six presents the findings obtained from the auditory and acoustic analyses of the new/given information contrast in CamE and describes the co-variation between these two concepts and the extra-linguistic variables educational attainment and gender as well as the linguistic variable speaking style. The seventh chapter summarises the results of the analyses of the intonational feature tone and discusses the co-variation between this feature and the two social variables under study as well as the variable speaking style. The eighth chapter deals with the findings from the analyses of the feature paratone and also presents the findings from the co-variation between the results and the two social variables under investigation, namely, educational attainment and gender. Chapter Nine is devoted to the discussion of the findings. The results of the analyses are discussed and possible explanations suggested in order to account for some recurrent patterns. Suggestions for further research on the intonation of CamE are also put forward in this last chapter and the implications of the study are highlighted.

2. Intonational Models and Approaches to Intonation

This chapter critically discusses intonational models and theories with special focus on their relevance to the present study and examines two intonational approaches in particular which will serve as analytic frameworks for the study. These two approaches are Discourse Intonation (hereinafter DI) based on Brazil (1975, 1978, 1997) and the AM approach built on influential works in the late 1970s and early 1980s by Liberman (1975), Bruce (1977) and Pierrhumbert (1980). In addition, the concepts of paratone (e.g. Brown, 1977; Yule, 1980; Couper-Kuhlen, 1983, 1986; Wennerstrom, 2001), of new and given information are reviewed. There are ultimately critical statements on previous studies on the intonation of compound and complex sentences, of non-sentence adverbials as well as on listing intonation.

2.1 The British tradition of intonational analysis

The approach which characterises the British tradition of intonational analysis is referred to in the literature as the contour approach in comparison to the phonemic or level approach which typifies the American tradition. This contour approach, which has enjoyed wide currency among British intonationists over the years, is broken down into two sub-groups, namely, the tune analysis or whole tune approach which goes back to Jones (1909, 1918) and Armstrong and Ward (1926) and the tonetic analysis, also termed the nuclear approach, which started with Palmer (1922). The former emphasises the overall shape of the tune while the latter focuses on local changes. Put differently, the tonetic approach differs from the tune approach in that the basic unit in the former, known as the tone group, is further subdivided in two, namely, the head and the nucleus whereas in the tune approach the whole tone group makes up a single tune.

O'Connor and Arnold (1973), whose classic survey of the intonation of colloquial British English somewhat epitomises the account of the intonation of this variety of English, fall within the tonetic approach to intonational analysis. In their characterisation of the intonation patterns of colloquial British English for example, they put forth three major premises as the key underpinnings of their analysis. They argue that intonation is significant, systematic and characteristic. As for the significance of

intonation, they hold that utterances which differ with respect to their intonation also differ in meaning. For example, the same sentence may be spoken with a "downright, or reserved, or a questioning tone of voice" (p. 1). By systematic, they mean that there exists a limited number of pitch patterns in any one language and these pitch patterns are used to produce definite meaningful effects. By "intonation is characteristic", lastly, they imply that the pitch patterns and tune inventory of English are by no means the same as those of other languages. For instance, the pitch patterns and tune inventory of French and German are not at all the same as those of English. A clear failing in this last premise lies in the fact that O'Connor and Arnold (1973) seem to refer exclusively to cross-linguistic differences in tune inventory, thereby ignoring to a large degree that cross-dialectal differences in tune inventory may as well be huge as evidenced by recent numerous cross-dialectal surveys on English intonation (Grabe, 2000; Fletcher et al, 2001). It would not be astonishing for example to find that the tune inventory in CamE, which can be considered a dialect of English spoken in a non-native setting, proves significantly different from that of Standard British English (SBE). Additionally, O'Connor and Arnold state that the pitch patterns of a given language cannot be applied to a different language, otherwise it would sound wrong. Many English speakers can be identified as having a French, an Italian or an Arab background just as many African English speakers can be recognised from their various backgrounds influenced by African indigenous languages. Note however that the question of whether CamE intonation is affected by Cameroonian local languages falls outside the scope of the present study.

With respect to the functions of intonation, O'Connor and Arnold (1973) maintain that one of its main functions is the division of longer utterances into relevant word groups while another is the use of varying tunes and different pitch patterns for grammatical purposes. 'Word group' here refers to a unit which has a nucleus and optional elements like pre-head and tail. The following example adduced by the authors

(1)   You may have beans| or cabbage||

may mean 'there are beans and cabbage and nothing else' or that 'beans' and 'cabbage' are just examples of available items, depending on whether the items are said on a rising-falling or rising-rising tune. One question which arises here is what pitch patterns will CamE speakers use for example to differentiate incomplete information from complete one.

6

Furthermore, O'Connor and Arnold (1973) argue that accent plays a crucial role in the meaning associated with a word group, variously called breath group (Lieberman, 1967), sense group (originally used by Klinghardt, 1920:32 and termed 'intonatorischer Sinntakt'; Armstrong and Ward, 1926; Kingdon, 1958), phonemic group, tone group, tone unit (Halliday, 1967), intonation group or intonation chunk (Halliday, 1967). To O'Connor and Arnold, some words are more important than others in a tone group and this, they explain, is contingent on or determined by the context or situation in which the word group is said. As an illustration, they propose that if an utterance like 'It was an unusually dark night' (p. 6) were uttered as the beginning of a story told on the radio, the last three words would all be particularly important. Conversely, if the same sentence were uttered in response to a question like 'What sort of night was it?', the word 'night' in the reply would eventually lose "some of its force because the questioner is already in possession of the information that it might otherwise have given him". This aspect of their approach is particularly relevant to the present study inasmuch as one of the main purposes of this study is to ascertain to what extent CamE speakers make a distinction between new and given information in the discourse structure. It is questionable whether CamE speakers will make use of acoustic signals to differentiate information that is already present in the discourse from that which is newly introduced in the discourse structure. This idea of deaccenting given information in the discourse structure is also central to the DI and the AM theories and will become clearer subsequently (Brazil, 1975, 1978, 1997; Pierrehumbert, 1980; Pierrehumbert and Hirschberg, 1990).

As for tunes, O'Connor and Arnold list, among others, the Low Fall, the High Fall, the Rise-Fall, the Low Rise, the High Rise, the Fall-Rise and the Mid-Level (pp. 8f) following Kingdon's (1958) distinction between kinetic and static tones. Kingdon (1958) considers the first six of the above-listed tones as being kinetic by virtue of their involving a pitch movement either from low to high or from high to low and the mid-level as a static tone for it does not involve any change in pitch direction. It should be emphasised here again that this tune inventory in British English for example is not necessarily the same obtained in non-native varieties of English which have been impressionistically characterised as having very limited tone inventories (Kouega, 1991 for CamE; Jowitt, 2000 for Nigerian English (NgE) for example). Reviewing previous studies on the tone inventory in the British tradition, Gut (2000:4) notes that there are simple nuclei which include falls, rises and level terminal pitch contour as well as

complex nuclei like fall-rises, rise-falls and rise-fall-rises, the last three having been discussed as scarce or absent in non-native varieties of English (cf. Jowitt, 2000). Basically, O'Connor and Arnold (1973) make a distinction between a phonetic and a phonological level of analysis for intonation. The tunes, characterised according to a phonetic system, are grouped into phonological classes with respect to their functions. These classes are called tone groups which they define as "a grouping of tunes all conveying the same attitude on the part of the speaker" (p. 39). The major drawback to O'Connor and Arnold's (1973) approach to intonation and to the British tradition of intonational analysis in general is the sole reliance on auditory impressions which somewhat call into question the validity of some conclusions arrived at. O'Connor and Arnold's account of the distinction between high rise and low rise, to take an example, cannot be particularly attractive on the sole basis of auditory evidence. One of the merits of their model, however, lies in the fact that they underscore the 'characteristic' nature of intonation as well as the role of the context of interaction in the interpretation of intonational choices made by speakers and it follows from their remark that the tune inventory in British English may not necessarily coincide with that of CamE which is a non-native variety of English. A good approach to intonational analysis is one that can integrate auditory impressions with acoustic evidence.

2.2 The American tradition of intonational analysis

The American tradition of intonational analysis differs from the British approach outlined above. Within the American tradition, two further models can be distinguished, viz., Bolinger's pitch accent theory and the phonemic or levels approach. This further sub-division within the American tradition is based on the fact that Bolinger's approach bears striking similarities to the British approach.

Bolinger (1951) postulates for instance that pitch configurations are more important than pitch-level, thereby departing radically from the phonemic approach. Central to his pitch accent theory is the idea that prominence plays a vital role in the characterisation of intonation contours. He defines prominence as being "a rapid and relatively wide departure from a smooth undulating contour" (Bolinger, 1958). His proposal is that pitch or pitch prominence is the main cue to stress and that when used alone, the term 'stress' should be construed as word stress and not sentence stress. Bolinger (1958:112) makes a distinction between three kinds of pitch accents for