

**A STUDY OF THE ENGLISH POSTPOSITION  
AGO IN THE SPEECH OF ADULT NATIVE  
SPEAKERS IN ADVANCED EFL RECORDINGS**

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## Abstract

Of the three aspects of intonation normally taught at EFL teacher/translator training colleges, namely the ‘chunking’ of speech into *tone groups*, the location of a main prominence or *nucleus*, and the behaviour of the pitch of the voice, or *tone*, it is the area of *nucleus placement* which has suffered from considerable neglect and insufficient training. The right contextual *placement of the nucleus* in English has proven to be quite a challenge for EFL teacher/translator trainees, a generally much more daunting task than when faced, for example, with having to make an appropriate *tone* choice. Consequently, when having to assign prominence to phrases containing elements such as *ago*, whose classification into *lexical* and *non-lexical* varies greatly in the literature, learners generally end up producing faulty accentual patterns which tend to deviate from native speaker norm. In the case of the elusive postposition *ago*, students almost invariably make it prominent in speech and in transcription, contrary to what is felt to be the case in native speaker English. This may be largely due to the misleading ‘adverbial’ nature assigned to it by most grammar books. The present research endeavours to shed light onto the prosodic behaviour of *ago* in a corpus of recordings from advanced EFL textbooks. The findings show a high percentage of occurrence of the intonational nucleus in the complement of the postposition *ago*, which seems to support the researcher’s view that phrases containing *ago*, if nuclear, will *by default* bear the intonational nucleus on the complement of the postposition rather than on the postposition itself –unless stronger psycholinguistic principles such as rhythmic alternation and rhythmic optimisation come into play, which may cause *ago* to become prominent. This prosodic behaviour also would support treatment of *ago* as a non-lexical item in the grammar of English. Further research with a larger and more varied corpus might provide a clearer picture of the prosodic behaviour of *ago*, a neglected deictic item which has long straddled between its adverbial and prepositional personalities in grammars and intonation manuals.

*To my sister*

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# Table of contents

<b>ABSTRACT</b>	2
<b>ACKNOWLEDGMENTS</b>	4
<b>TABLE OF CONTENTS</b>	5
<b>LIST OF FIGURES</b>	8
<b>LIST OF TABLES</b>	9
<b>1. INTRODUCTION</b>	10
<b>1.1 Background of the study</b>	10
<b>1.2 Issue under study</b>	11
<b>1.3 Objectives</b>	12
1.3.1 General objectives	12
1.3.2 Specific objectives	12
<b>1.4 Research questions</b>	12
<b>1.5 Contributions of this study</b>	13
<b>1.6 Structure of the present work</b>	13
<b>2. THEORETICAL CONSIDERATIONS AND STATE OF THE ART</b>	15
<b>2.1 The prosodic framework</b>	15
2.1.1 Prosody vs. Suprasegmentals	16
2.1.2 Prosody vs. Paralanguage	16
2.1.3 Rhythm	19
2.1.4 Intonation	25
2.1.4.1 Allocation of prominence	29
2.1.4.2 Nucleus placement	31
<b>2.2 Nucleus placement and <i>ago</i> in English intonation manuals</b>	32
2.2.1 Palmer's 1922 <i>English Intonation with Systematic Exercises and Everyday Sentences in Spoken English</i>	32
2.2.2 Armstrong & Ward's 1931 <i>Handbook of English Intonation</i>	33
2.2.3 Allen's 1954 <i>Living English Speech</i>	35
2.2.4 Kingdon's 1958 <i>The Groundwork of English Intonation and English Intonation Practice</i>	36
2.2.5 Schubiger's 1958 <i>English Intonation: Its Form and Function</i>	38
2.2.6 O'Connor & Arnold's 1973 <i>Intonation of Colloquial English</i>	39
2.2.7 O'Connor's 1970 <i>Better English Pronunciation</i>	39
2.2.8 M. A. K. Halliday's 1970 <i>A Course in Spoken English: Intonation</i>	40
2.2.9 Wells' 2006 <i>English Intonation: An introduction</i>	41
2.2.10 Cruttenden's 2014 <i>Gimson's Pronunciation of English</i> (8th ed.)	42

<b>2.3 <i>Ago</i> in the English language</b>	42
2.3.1 <i>Ago</i> in the grammar of present-day English	44
2.3.2 <i>Ago</i> as an ‘adverb’ in traditional accounts	45
2.3.3 <i>Ago</i> as an ‘intransitive preposition’	48
2.3.4 <i>Ago</i> as a ‘postposition’	48
<b>3. METHODOLOGY</b>	51
<b>3.1 The corpus</b>	51
<b>3.2 The annotation of the corpus</b>	52
<b>3.3 Auditory transcription of the corpus, reliability of prominence judgments and transcriber differences</b>	54
<b>3.4 Transcription data analysis</b>	55
<b>3.5 Diagnostic test</b>	57
<b>4. RESULTS AND DISCUSSION</b>	59
<b>4.1 <i>Ago</i> in the spoken corpus</b>	59
4.1.1 Results	59
4.1.2 Discussion	62
4.1.2.1 Postpositional complement nuclear <i>by default</i>	62
4.1.2.2 Nucleus on the final element of the complement <i>by default</i>	63
4.1.2.3 Intonationally and rhythmically prominent <i>ago</i>	64
<b>4.2 Advanced students’ prosodic treatment of <i>ago</i> in transcription</b>	66
4.2.1 Results	66
4.2.2 Discussion	69
<b>4.3 Prosodic behaviour of <i>ago</i>: NS spoken corpus versus student transcriptions</b>	70
<b>4.4 <i>Ago</i>: A non-prominent postposition by default?</b>	70
<b>5. CONCLUSION</b>	72
<b>5.1 The research questions revisited</b>	73
<b>5.2 Nuclear and non-nuclear prominence in phrases with <i>ago</i></b>	73
<b>5.3 A reappraisal of <i>ago</i> in the grammar of English</b>	76
<b>5.4 Intonational treatment of <i>ago</i> in non-native speaker transcriptions</b>	77
<b>5.5 Limitations of the present study and suggestions for future work in the area</b>	78
<b>6. REFERENCES</b>	80
<b>APPENDIX A</b>	83
<b>APPENDIX B1</b>	85

**APPENDIX B2**

86

**APPENDIX C**

87

## List of figures

Figure 1: Vocal and non-vocal systems in communication.	17
Figure 2: Relative duration and pitch movement of all the syllables in the sentence 'I've never actually seen Edward playing golf'.	27
Figure 3: Percentages for each of the prominences categories found in the spoken corpus.	62
Figure 4: Distribution of prominences in phrases with ago.	69



## List of tables

Table 1. Kingdon's (1958) categorisation of stressable and non-stressable word classes.	30
Table 2: English postpositions.	49
Table 3: Prominence allocation by transcribers.	56
Table 4: Distribution of prominences in phrases with ago in the corpus.	61
Table 5. Number of occurrences of different nuclei in phrases with ago in the test.	68

# 1. Introduction

## 1.1 Background of the study

In Argentina, English intonation is regularly taught at every teacher training college offering a programme to train teachers of English as a Foreign Language (EFL), in phonetics courses in the second and third years of instruction, with gradually increasing levels of complexity and delicacy in the description. Three aspects of the intonation of English tackled everywhere, though with varying emphasis, are: (1) the ‘chunking’ of speech into melodic units or *tone groups*, (2) the distribution of prominences within each melodic unit, with particular concern for the location of a main prominence or *nucleus*, and (3) the behaviour of the pitch of the voice, or *tone*, during the uttering of this main prominence, which consists on most occasions of either a *falling* pitch, or a *rising* pitch, or combinations of the two into either *falling-rising* or *rising-falling* patterns, though cancellation of pitch movement is also possible in English through the use of a *level tone*.

Though most of the emphasis during instruction is placed –often mistakenly– on the teaching of the third aspect –*tone*–, varying degrees of emphasis have historically been placed on the second area, that of *nucleus placement*. Neglect of this area –or even insufficient training – may not be the best treatment of intonation for pedagogical purposes in our EFL context, since *nucleus placement* has been claimed to take a greater communicative toll in most contexts than pitch movement ever has (Jenkins, 2000). Still, much more time has been –and is– devoted to the acquisition of a range of English *tones*, both receptively and productively, than to the appropriate allocation of prominences in utterances.

This unbalanced emphasis has also been mirrored in intonation manuals, though in the past decade the imbalance seems to have been addressed –albeit partially redressed– by a few researchers and materials writers both locally and abroad, thus slowly showing recognition of the great communicative power *nucleus placement* carries. Three recent manuals (Ortiz Lira, 1998; Wells, 2006; Hewings, 2007) devote

large sections to the treatment of this area of English intonation, including a copious amount of rules and examples, together with several exercise sections, and even the occasional reference to past work in the area.

The right contextual placement of the *nucleus* in English has proven to be quite a challenge for the EFL teacher/translator trainee, a generally much more daunting task than when faced, for example, with having to make an appropriate *tone* choice. Even when learners follow prescribed rules such as the *Last Lexical Item* rule (Halliday, 1970) –i.e. the nucleus normally found on the last content word of an intonation chunk–, they are not usually provided with further insight into this approach or with a more solid classification of items into *lexical* and *non-lexical*. Therefore, instructors have generally scratched the surface each time they have merely borrowed this concept by failing to introduce the full range of implications behind it.

Consequently, when faced with the task of having to accent phrases containing certain elements whose classification into *lexical* and *non-lexical* in the literature varies, learners with insufficient knowledge of how English speakers treat these elements generally end up producing faulty accentual patterns which deviate from native speaker norms to varying degrees. Invariably, most of the students fail to see the deictic or referential character of many allegedly *lexical* items such as *tomorrow*, *now*, *there*, and *ago*, for example. As it will be proposed below, many of these items defy the category of *content words* in which they are so frequently placed.

## 1.2 Issue under study

EFL teacher/translator trainees are very often fraught with uncertainty when selecting the location of the main prominence in an intonation chunk. It is thus hypothesised that learners will uncritically treat *ago* as a *lexical* item, following its traditional grammatical and lexicographical classification as an *adverb*. This seems to contradict the behaviour of the postposition whenever it has appeared in most native speaker recordings used during coursework in the intonation courses taught by the researcher.

## 1.3 Objectives

### 1.3.1 General objectives

The study aims to investigate...

a) The intonational behaviour of the English postposition *ago* in the speech of native speakers of English as heard in a corpus of recordings from advanced English language textbooks used in Argentina.

b) The intonational treatment of *ago* by Advanced EFL students at Teacher Training College.

### 1.3.2 Specific objectives

1. The study seeks to ascertain whether –and under which conditions– the English postposition *ago* receives nuclear intonational prominence in present-day English;
2. The present research also aims to contribute to the classification of *lexical* vs. *non-lexical items* proposed in the literature by focusing on the behaviour of the English postposition *ago*;
3. To establish the degree to which the rhythmical structure of phrases with *ago* might determine its prosodic behaviour.

## 1.4 Research questions

1. Does the English postposition *ago* receive nuclear prominence in present-day English, or does it shy away from prosodic highlighting?
2. Does the rhythmical structure of the phrase containing *ago* influence the prosodic behaviour of the postposition?
3. Why does *ago* behave the way it does?
4. How do advanced students of English treat *ago* in their phonetic transcriptions?

## 1.5 Contributions of this study

In seeking to describe the prosodic behaviour of the English postposition *ago*, this study aims to help English intonation learners to better assign prominence in phrases containing this element. It is hoped that prospective teachers/translators will increase their awareness of this area of English intonation as a way into fostering more accurate speech production. Heightened sensitivity towards the accentual behaviour(s) of this postposition may offer EFL/Phonetics teachers insights into the way other similar elements are treated by native speakers of English and thus increase awareness of English accentuation in general.

## 1.6 Structure of the present work

Previous to the analysis of the collection of recordings which constitute the corpus for this study, the prosodic framework is presented, and a historical outline is provided where the treatment of *ago* is traced along two perspectives: First, a summary is provided of the treatment of *ago* in the major pedagogically-oriented works on English intonation used in the field of ELT since the early 1920s<sup>1</sup>; secondly, an overview is given of its treatment in the main reference grammars used by ELT practitioners over the last 30 years, such as Quirk et al. (1985), Biber et al. (1999), and Huddleston & Pullum (2002), for example, as well as in more Hallidayan, Functional-oriented work such as Morley (2000).

Chapter 3 can be said to consist of two important sections: First, it presents a detailed account of the methodology adopted for the collection and transcription of the corpus used in this study, as well as the decisions made regarding the annotation of the transcribed data; second, it describes the implementation of a diagnostic test designed to study the random, impromptu allocation of prominences in utterances with *ago* by a group of advanced EFL teacher trainees.

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<sup>1</sup>The overview is here limited to works within the so-called *British School of Intonation*, spearheaded by Palmer (1922), with major contributions by Armstrong & Ward (1931), Allen (1954), Kingdon (1958), Schubiger (1958), O'Connor & Arnold (1973), Halliday (1967, 1970), and Wells (2006).

The corpus gathered for the present study consists of all the instances of *ago* found in over 12 hours of recordings which accompany major advanced<sup>2</sup> EFL textbooks commercialised in Argentina. The digital recordings were analysed as follows: All the clauses containing *ago* were identified and transcribed orthographically; next, each circumstantial group with *ago* was classified according to its internal syntactic structure; the clause containing the phrase with *ago* was later transcribed prosodically in terms of the location of *tone group boundaries* and *nucleus*, following the notation system proposed by Wells (2006).

Chapter 4 presents a detailed analysis of the transcribed data from the corpus of recordings as well as from the diagnostic test involving advanced EFL teacher trainees. Results are presented graphically, in a rather simple and visually clear way, interspersed with examples from the corpus and interpretation and comments by the researcher. Also, a comparison is made between native speaker and non-native speaker treatment of *ago* and possible explanations are advanced in relation to the theoretical framework adopted.

Finally, conclusions are drawn on the basis of the observed prosodic behaviour of *ago* in the constructed corpus and its preferred grammatical treatment in the major reference grammars cited, and some didactic guidelines are put forward which might render the teaching of *nucleus placement* in this area more accurate than is currently the case.

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<sup>2</sup>Levels C1 and C2 of the Common European Framework of References for Languages CEFR ([http://www.coe.int/t/dg4/linguistic/dnr\\_EN.asp](http://www.coe.int/t/dg4/linguistic/dnr_EN.asp))

## 2. Theoretical Considerations and State of the Art

### 2.1 The prosodic framework

The study of prosody has long been fraught with a proliferation of terms which either (a) refer to –slightly– similar phenomena but display divided loyalties –e.g. *prosody* vs. *suprasegmental*, or *boundary tone* vs. *nuclear tone*–, (b) are used interchangeably in the literature with the consequent erosion of essential conceptual differences –e.g. *stress* vs. *accent*–, or (c) identify phenomena analysed and described by one school of thought but not another –e.g. *compound tone groups*. This is readily acknowledged by Couper-Kuhlen (1986), who opens up her widely acclaimed textbook-length treatment of English prosody by remarking that ‘terminological confusion is rampant in many fields of scientific inquiry but it is perhaps unmatched in the field of prosody’ (p.1). Similarly, Fox (2002:1) regrets that “there is no universal consensus among phonologists about either the nature of prosodic features themselves or the general framework for their description, and it is difficult to obtain a clear picture of the field as a whole.”

This study draws heavily on British accounts of English intonation<sup>3</sup> as represented in the writings of Palmer (1922), Armstrong & Ward (1926), Allen, (1954), Kingdon (1958), Schubiger (1958), O’Connor & Arnold (1973), Halliday (1967a, 1970), Crystal (1969, 1975), Tench (1990, 1996), Cruttenden (1997, 2014), Ortiz Lira (1998), and Wells (2006). Schubiger’s work, though produced in Switzerland and intended for German EFL students, is included here on accounts that she wrote very much within the British tradition of intonational analysis. So has Halliday, who shares basic notions such as those of intonational phrasing –his *tonality*–, nucleus placement –his *tonicity*–, and tonal contours –his *tone* system–, though, unlike the rest of British intonologists, his is a view of intonational meaning-making which is integrated within a much wider description of language as a semiotic system.

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<sup>3</sup>Occasional reference will be made, nevertheless, to authors working outside this tradition.

This approach implies the adoption of a number of terms which will be progressively defined in the sections which follow. Later mentions in this thesis will assume familiarity with the terms as introduced in this section. It seems convenient to begin by defining the prosodic framework adopted and, within it, the intonational one. Such a prosodic framework is the one proposed in Crystal & Quirk (1964) and, with minor alterations, in Crystal (1969), both of which can be considered, according to Tench (1990) “the most thorough descriptions of prosodic and paralinguistic features in English” (p.479). The intonational framework, however, will be relatively wider in scope.

### **2.1.1 Prosody vs. Suprasegmentals**

In much of the literature on intonation, the terms *prosody* and *suprasegmentals* have –and continue to be– used interchangeably, with the latter probably predominating even in writings originating in Britain. In this study, the word *prosody* is preferred over *suprasegmentals* on the basis that each of these terms pledges allegiance to different schools of thought on non-segmental phonetics and phonology. Within the American structuralist tradition, connected speech processes such as vowel harmony, sound reduction, elision, assimilation and coarticulation, for example, are considered *suprasegmental* phenomena, since they involve segments in sequence and usually apply to more than one segment in the speech stream. These would not be thought of as *prosodic*, however, by British phonologists, even when many of them may be the result of the particular prosodic structure of a language as shaped up by such features as *loudness, length, pitch* and *pause*.

### **2.1.2 Prosody vs. Paralanguage**

Whenever humans communicate through speech, they do so in some unfolding context. Speech thus becomes one of a wide number of behavioural events all constituting a single act of communication. Crystal (1969:97) defines an act of communication as “a ‘bundle’ of interacting behavioural events or non-events from different communicational subsystems (or ‘modalities’) simultaneously transmitted and received as a single (usually auditory-visual) impression.” This ‘bundle’ of factors



includes the speaker's *personal physical setting* (his italics) –the speaker's overall *voice quality*– which permeates the whole of the communication act, in addition to a series of speaker choices from two types of systems: *Vocal/auditory* systems and *Non-vocal* systems. Choices within vocal/auditory systems are made from the *segmental*, *vocalisations*, and *prosodic and paralinguistic* subsystems, whereas choices within the non-vocal systems include *visual*, *tactile*, *olfactory and gustatory*. Following Crystal's diagram, the resources can be sketched out as follows:

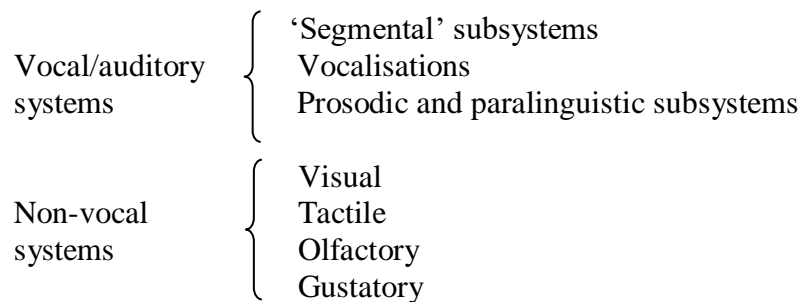


Figure 1: *Vocal and non-vocal systems in communication*<sup>4</sup>

Within the vocal/auditory systems, *segmental* subsystems cover what is traditionally subsumed under *segmental phonetics and phonology*; *vocalisations* are features like 'shhh', 'mhm', or even hesitation phenomena like 'er'; *prosodic and paralinguistic*, –our main concern here– are those aspects of speech which have “an essentially variable relationship to the words selected, as opposed to the segmental features above, which have a direct and identifying relationship” (Crystal, 1969:98). In other words, whereas segments are essential for the identification –i.e. denotative meaning– of words in English, prosodic and paralinguistic features are not.

Now that prosody and paralanguage have been contextualised within a more widely encompassing communicative context, it is time to focus on defining what is meant by both these terms within this framework and on the proposed distinction between the two. As can be derived from Figure 1 above, then, both prosody and paralanguage refer to non-segmental aspects of speech. A stretch of speech may contain non-segmental vocal features, however, which must be set aside from a definition of either prosodic or paralinguistic features. One such feature is the speaker's overall voice

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<sup>4</sup>Adapted from Crystal (1969:98)

quality, considered as “a permanent, idiosyncratic feature which is physiologically determined” (Couper-Kuhlen, 1986:3); a speaker’s occasional sneezes or coughs –when mainly involuntary reflexes– must also be left out. Both these types of behaviour can be said to play a *non-linguistic* role.

However, if a speaker temporarily modifies his/her voice so that a stretch of speech is delivered in the form of a whisper, a creak, or a falsetto (all defined below), or if the speaker suddenly giggles, laughs, or sobs, we are in the presence of auditory effects largely considered *paralinguistic* in nature. The former have been termed *voice qualifiers*<sup>5</sup> and depend on different muscular settings for the vocal folds inside the larynx –phonetically, they are also known as *phonation modes* (Clark & Yallop, 1995). Crystal refers to the latter as *voice qualifications* and usually involve “breath out of phase with the syllable” (1969:133).

Once the non-linguistic and paralinguistic auditory effects have been identified and set aside, what remains are features which enter into systems of linguistic contrasts and which can rightly be called *prosody*. Crystal approaches prosody from a ‘feature’ perspective, and defines it as “sets of mutually defining phonological features which have an essentially variable relationship to the words selected (1969:5). He continues, “the primary prosodic parameters, along which systems of linguistically contrastive features can be plotted, are the psychological attributes of sound described below as *pitch, loudness and duration*” (1969:5, researcher’s emphasis).

According to Crystal (1969) prosodic features can be distinguished from paralinguistic features on various grounds. Phonetically, they are vocal effects which result from variations of pitch, loudness, duration, and pause and which depend primarily on vocal fold activity. Paralinguistic features, however, seem to be the result of the workings of mechanisms other than the vocal folds. This would seem somewhat contrary to fact –see Roach, 2009:151-2, for a similar argument– since the so-called voice qualifiers mentioned above are each a different mode of phonation, and phonation “concerns the generation of acoustic energy (including zero energy) at the larynx, by the

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<sup>5</sup>The term ‘voice qualities’, used in Crystal and Quirk (1964), is dropped in Crystal (1969) in favour of ‘voice qualifiers’ to avoid confusion with the now more general use of ‘voice quality’ as the “permanent ‘background’ speaking characteristic of the voice” (Crystal, 1969:104).

action of the vocal folds” (Laver, 1994:132). Paralinguistic features are “also *phonetically discontinuous* in connected speech” (Crystal, 1969:128), whereas prosodic features are always present. In Couper-Kuhlen’s own words, “we always use stress, rhythm, and intonation when we speak, although we may not always whisper, giggle or sob” (1986:3).

Phonologically, prosodic features can be said to be more amenable to a description in terms of systems of contrasts and as a part of the total description of the language system. Halliday (1967a) is perhaps the most outstanding example of the integration of systems of prosodic contrasts into a more elaborate linguistic framework for the description of all the contrasts found in the grammar of English. Paralinguistic features, on the contrary, seem to lack this potential for entering into contrastive relationships, since they have

...little integrability with other aspects of language structure, are very infrequent in connected speech, and are much less obviously shared, conventional features of articulation, being more frequently confusable with voice-quality or physiological vocal reflexes than any other non-segmental feature.(Crystal, 1969:129-30).

### 2.1.3 Rhythm

Most published grammars to date map the grammatical terrain in terms of structures, with a sporadic reference to prosody or suprasegmental features here and there, only when a certain structure is typically accompanied by a characteristic intonation pattern, as is the case with *question tags*. Rhythm is never brought along as a factor worthy of mention, since no interaction is generally thought to take place between this prosodic aspect and the grammatical structures described in these grammars.

Rhythm as such ‘in speech as in other human activities, arises out of the periodic recurrence of some sort of movement, producing an expectation that the regularity of succession will continue’ (Abercrombie 1967:96). In language, the sort of movement we invoke is determined by the interplay of prominent and non-prominent syllables, in which “the sequential production of stressed syllables is organised in such a way as to produce rhythmic patterns” (Couper-Kuhlen 1986:33). Two competing though not

entirely incompatible views of rhythm have coexisted for quite some time now: there are those who view rhythm as a temporal phenomenon defined by the recurrence of an event at regular intervals of time, and there are those who view it as a pattern created by salient versus non-salient events and the relation to each other regardless of the regularity of their occurrence.

Central to the *temporal* view are the concepts of *periodicity* and *isochrony*; the former makes reference to the regular intervals at which certain events occur, whereas the latter describes these intervals as having equal duration in time. In languages like English, which have been described as *stressed-timed* (Pike, 1945), it is stressed syllables that are claimed to occur at roughly equally spaced intervals of time. A *non-temporal* view of rhythmic phenomena downplays the importance of the timing of events or even their repetition in time; rather, the focus is on the occurrence of salient events and on the listener's perception of these saliences as an overall impression created in their mind –i.e. “the sensory impressions must be related to one another in terms of salience: some must be more prominent than others (and) must be spaced close enough so as to be perceived as a group” (Couper-Kuhlen 1986:52).

The latter approach clearly seems to view rhythm as a perceptual phenomenon, though Couper-Kuhlen claims that psychological studies have shown humans to have a tendency to perceive a succession of unequal intervals of time as more equal than they really are, overestimating the length of shorter intervals and underestimating that of longer ones, thus lending more support to the so-called *temporal* view described above. There appears to be a psychological tendency to perceive more isochrony in the real world than there really is.

“Whether (...) physiologically or psychologically conditioned, there is reason to believe that rhythmic alternation is a universal principle governing the rhythms of natural language” (Selkirk 1984, in Couper-Kuhlen 1986:60). Pike (1945) argues that the rhythm the world's languages can be either *stress-timed* or *syllable-timed*, a categorical division which has created much controversy and counterevidence. Stressed-timed languages are those whose rhythm is based on the (roughly) isochronous occurrence of stressed syllables, whereas syllable-timed languages exhibit a regularity based on the (again, roughly) isochronous occurrence of syllables in general, whether

stressed or unstressed. As a consequence, the degree of vowel reduction of unstressed syllables seems to be much greater in the former type of languages than in the latter, whose syllables –unstressed as well as stressed– contain mostly clear, non-reduced vowels.

In view of the foregoing, it is safe then to say that “it is a basic principle of English speech rhythm that stressed and unstressed syllables alternate rather regularly” (Couper-Kuhlen 1986:37). This principle has come to be known as the *Principle of Rhythmic Alternation* (henceforth PRA) and it is a powerful force explaining the distribution of stresses in English utterances. However, this principle describes at best an idealised state of affairs, since speakers more often than not do produce sequences of stresses that clearly deviate from a physical regular patterning. When this is the case, it is argued that speakers naturally resort to what is called *optimisation strategies*, which differ in accordance to the degree of deviation present in any utterance. In order to clarify the concept, a graphic representation of stress constellations in the way of *metrical grids* can be used (Selkirk 1984, in Couper-Kuhlen 1986) to represent rhythmic structure in any utterance:

a)

				x	level 4	
			x	x	level 3	
	x	x	x	x	level 2	
X	x	X	x	X	x	level 1

*Twenty people went to China*

(Schlüter 2005:19)

The bottom line represents the number of syllables in the utterance with an equivalent number of Xs; on a second level, each stressed syllable receives an x mark, equivalent here to what we may call *lexical* stress; on a third level, the x mark signals the location of *phrasal* stress; finally, the fourth –and last– level shows what will be referred to below as *nucleus placement* in the utterance. In the present work, only the first two levels will be used, since they offer enough detail as to the distribution of stressed and unstressed syllables in any utterance. This graphic representation will be borrowed

whenever it is judged necessary to show stress patterns in English phrases containing the postposition *ago*.

The second level of the grid more than any other shows the PRA at work: “two adjacent stress marks are regularly spaced out by one intervening stress mark on the next lower level (Schlüter *ibid*). Selkirk (1984, in Schlüter *ibid*.) goes as far as to claim not only physical but also psychological reality for the metrical grid shown above. One question springs to mind, though: Do speakers choose their words to fit pre-established mental stress patterns or does ultimate word choice determine, by means of a set of phonological rules, the actual prosodic realisation of the lexeme? If a structure is rhythmically well-formed in terms of the regular alternation of prominent elements purported by the PRA, then no adjustment is required by the rules of rhythm. If, however, a structure is ‘ill-formed’ in terms of the PRA, a number of rhythm rules is applied so that it conforms more closely to the ideal, regular (isochronous) pattern. These rules operate to add/delete/move prominences around to ensure periodicity and isochrony.

One deviation from the idealised sequence of stressed-unstressed-stressed syllables is the absence of an intervening unstressed syllable in a sequence of two stressed syllables, or what is more commonly known as *stress clash*:

b)

x    x  
x    x  
three men

The second major infraction to the PRA is referred to as *stress lapse*, “defined more strictly as containing a sequence of two (or three intervening) unstressed syllables in a sequence” (Schlüter 2005:20).

c)

x				x
X	x	x		X
twenty			machines	

d)

x				x
X	x	x	x	X
seven	ty			machines

However, stress clashes are far more objectionable than stress lapses and compensatory strategies are imminently called for. Sequences of unstressed syllables are (psychologically) more frequently tolerated than sequences of stressed syllables producing a clash of prominences.

One important set of strategies to compensate for stress clashes and lapses is the manipulation of the placement of stresses in an utterance, probably the most important of which has come to be called the *Stress Shift Rule (SSR)*, also popularly known among phoneticians and teachers as the *Thirteen-Men Rule*. This shift in prominences “is made possible by the fact that in words with final stress and a preceding stressable syllable, the stress can be shifted leftwards if the word is followed by another stressed syllable” (ibid:23):

e)

x				
X	◀x	X		=stress shifted leftwards
	x	x		=lexical stress
x	x	x		
fif	teen	men		

The PRA, an important law of grid well-formedness in English, and the rules that conspire to even out the location of stresses in utterances, have long been considered to be part of a set of linguistic universals. Because of its stress-timing character, the

rhythm of English is the stage for innumerable cases of stress clashes and draws heavily on all possible compensatory measures to avoid them<sup>6</sup>. Speech production tends towards minimisation of speakers' articulatory effort and speech perception tends towards minimisation of perceptual confusion. The PRA may well be aimed at enhancing both ease of articulation and ease of perception of the incoming signal. A larger distance between prominent elements may well serve to highlight prominence contrasts and, as a result, semantic and pragmatic ones, thus assigning a crucial role to rhythmic alternation in the articulatory and auditory processing of language.

So pervasive is this tendency to rhythmic regularity that Schlüter (2005) takes it to another level and appeals to the PRA to explain how *phonological* phenomena have dictated the evolutionary path of many morpho-syntactic phenomena. On the basis of corpus analyses, Schlüter sets out to “arrive at accounts that can fill out the blanks left open by current standard grammars of English” (p.10) in the treatment of why certain rhythm-friendlier sequences or constellations of syntactic elements may be favoured over other, less rhythmical ones.

The author presents an apparently simple idea, that English language has historically favoured an alternating pattern of stressed versus unstressed syllables in certain grammatical sequences, The PRA can be traced as far back as in texts dating from the 16th century, and has, according to Schlüter, influenced the development of the language in subtle ways. She illustrates this point by opening her analysis with the distribution of two competing forms, ‘worse’ and ‘worser’. Although ‘worse’ has always been the comparative form of ‘bad’, most other comparatives have an –er ending (e.g. ‘richer’), so there has been, she argues, considerable pressure in usage to stick to the ‘regular’ paradigm. These two forms have competed with each other from as late as medieval times, but ‘worser’ persisted longer than it should have in ‘prenominal’ position. The reason seems to be that ‘worser’ contains an extra (weak) syllable, which accords more with the alternating rhythm favoured by The English language, this weak syllable acting as a buffer between the stressed syllable of the adjective itself and the typically stressed first syllable of the noun it modifies:

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<sup>6</sup>One strong suspicion permeating this thesis is that the behaviour of *ago* may ultimately depend on the rhythmical structure of the phrase containing it and speakers' application of compensatory measures if need be.



f)

x	x
x	x
worse fate	

g)

x		x
X	x	X
wors	er	fate

‘Wors(er)’ seems to have persisted due to its conformity to an alternating rhythm. However, this form seems to have given way to ‘worse’ much sooner in other syntactic environments where the potential for stress clash did not exist. In other words, the preference for rhythmic alternation tipped the scales in favour of one syntactic variant over another.

### 2.1.4 Intonation

Invoking the centrality of pitch contrasts, Cruttenden (1997) defines intonation as the “occurrence of recurrent pitch patterns, each of which is used with a set of relatively consistent meanings, either on single words or on groups of words of varying length” (p.7). Pitch, which is clearly the feature most centrally involved in this respect, depends on the rate of vibrations of the vocal cords. Within the British School of prosody, the word *tone* as applied to *intonation languages* –such as English– is used to refer to “the direction of the pitch movement within the most prominent syllable in a tone unit” (Crystal, 1969:142). Each tone unit must contain a *tone*, which generally manifests itself in terms of falling, or rising, or combinations thereof, and in terms of the width of each glide. Alternatively, a tone unit may contain what Cruttenden (1997) describes as a *level nucleus*, which manifests itself as a mere step up or down in pitch. The pitch movement of an utterance is thus amenable to a description in terms of *direction of pitch*–which gives us categories such as *fall*, *rise* and *fall-rise*, for example– and *range of pitch* –which provides the basis for finer distinctions such as *high fall* vs. *mid fall* vs. *low fall*, for example.

The terms *tone unit* (Crystal, 1969), *tone group* (Halliday, 1967a; Tench, 1996), *intonation-group* (Cruttenden, 1997) and *intonation phrase* (Wells, 2006) will be used interchangeably here to refer to a stretch of speech uttered with one of the widely recognised pitch patterns that Cruttenden (ibid.) outlines. Occasionally, the informal term *intonation chunk* may be used, due to its wide adoption in later intonation manuals. These are preferred over *breath group* (Sweet, 1906, in Couper-Kuhlen, 1986), on the grounds that often more than one tone group can be uttered in just one breath, and over *intonation unit*, due to the lack of specificity and ambiguity of the latter, in the sense that any of the units of intonation identified by British scholars –tone group, tonic syllable, tone, tail, etc. – is in itself an intonation *unit* in the literal sense, with its own structure and function in the overall descriptive framework. Similarly, the term *sense group* is avoided on accounts of its reference to a semantic rather than phonological criterion, analogous to *information unit*, which, in any case, is preferred.

Among the first linguists to establish a close connection between an intonation phrase and information was Halliday, for whom speech was but a sequence of information units realised phonologically in terms of a sequence of tone groups:

Any text in spoken English is organized into what may be called "information units". The distribution of the discourse into information units is obligatory in the sense that the text must consist of a sequence of such units. But it is optional in the sense that the speaker is free to decide where each information unit begins and ends, and how it is organized internally (...) Information structure is realized phonologically by *tonality*, the distribution of the text into tone groups: one information unit is realized as one tone group (...) The distribution into information units represents the speaker's blocking out of the message into quanta of information, or message blocks (1967b:57-58).

But the number of tone groups is also tied to another choice, namely that of the selection of points of information focus in the discourse:

At the same time the information unit is the point of origin of further options regarding the status of its components: for the selection of points of information focus which indicate what new information is being contributed. The distribution into information units thus determines how many points of information focus are to be accommodated, and specifies the possible limits within the

information unit (...) The system of information focus is thus dependent on the information structure; it involves the selection, within each information unit, of a certain element or elements as points of prominence within the message. Each information unit has either one primary point of information focus or one primary followed by one secondary (ibid:59-60).

Thus, each tone group can be recognised as such because it contains at least one peak of prominence on the stressed syllable of the contextually most informative word. This prominence peak is associated with *pitch obtrusion* more often than with any other phonetic phenomenon, though *loudness* and *length* may participate singly or jointly. *Pitch obtrusion*, a term proposed by Bolinger as early as 1958 (in Couper-Kuhlen, 1986), refers to a jump in pitch, either upwards or downwards, which causes it to depart from the baseline, and which is believed to be the feature most heavily relied on in the identification of prominent syllables in discourse, since “when conditions are arranged artificially to pit one cue against another, pitch usually carries the day against length and loudness” (Bolinger, 1986:22). It has been customary to accept the fact that each tone group contains one such pitch peak, which has been accorded the widely accepted term *nucleus* in British analyses of intonation. Fudge (1984:2) provides an example which illustrates the prevalence of pitch over length and loudness in signalling the nucleus:

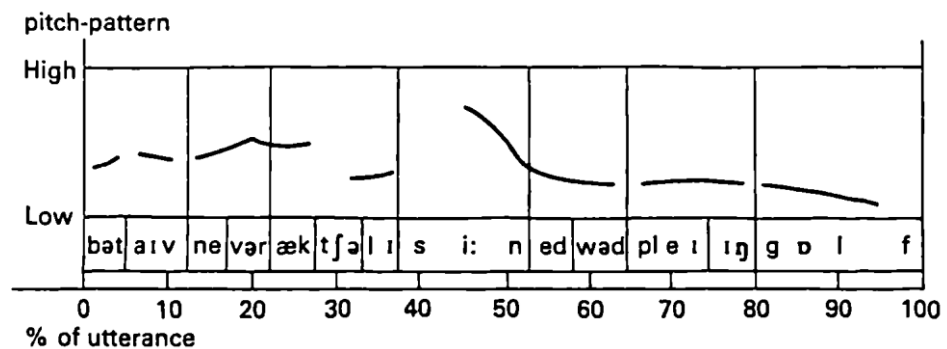


Figure 2: Relative duration and pitch movement of all the syllables in the sentence 'I've never actually seen Edward playing golf'.

There is widespread consensus in Britain as to the phonetic nature of the *nuclear syllable* –also called the *tonic syllable* in some approaches– and its perceptual status as

the most prominent or *salient*<sup>7</sup> syllable in the tone group. There has been much discussion and disagreement, however, on its phonological distribution, an issue discussed in detail below in 2.2. This phenomenon has usually been treated under names such as *nucleus placement* (Cruttenden, 1997), *tonicity* (Halliday, 1967a, 1970; Halliday & Greaves, 2008; Tench, 1996), and *sentence accent* (Ortiz Lira, 1998). Only the first term will be retained here due to its greater popularity and use in the literature. The other two terms, *tonicity* and *sentence accent* will only be used in sections where the relevant authors are mentioned, but will otherwise be avoided due to the theoretical specificity of the former, and the perceived inaccuracy of the latter, which makes overt reference to an orthographic unit belonging to the written language rather than a unit in the phonology.

In longer tone groups, i.e. tone groups consisting of more than one word, we may find additional prominent syllables accompanying the most prominent, nuclear one. Crystal (1969) argues for the presence of more than one degree of prominence in a tone group, thus referring to *primary accent* and *secondary accent*<sup>8</sup>, both identified on the basis of pitch obtrusion, but while the former incorporates “a glide or similar nuclear pitch movement” (p.158), the latter consists only of “steps up or down from a slowly descending reference line” (p.158). In this study, which does not seek to delve deeply into ‘degrees’ of prominence found in the tone groups containing the postposition *ago*, it will suffice to recognise prominence from non-prominence, and when the occasion arises prominences accompanying the nucleus will simply be referred to as *non-nuclear*.

Thus, a tone group can be said to minimally consist of a nucleus, where pitch obtrusion takes place. But more often, tone groups are longer than this, consisting of several words, and consequently carrying additional prominences as well as the obligatory nuclear prominence. If other syllables follow the nucleus, then we are in the presence of a *tail* –i.e. non-prominent syllables following the nucleus–, as the following example illustrates:

// But we've 'already \seen that //

---

<sup>7</sup>Following Abercrombie, Halliday (1967, 1970) prefers this term over others such as *stressed* due to the inconsistencies in the use of the latter.

<sup>8</sup>Halliday refers to these as *salient tonic* and *salient non-tonic* respectively (1967).

The double slant lines // indicate tone group division, while the nuclear prominence mark \ signals a nucleus with falling pitch. Here we take *seen* as the bearer of the *nuclear prominence*, while *that* merely continues, as a *tail*, the downward pitch movement initiated at the nucleus. *Already* carries non-nuclear prominence –marked as /'– ‘shifted’ to an earlier syllable for rhythmical purposes, as explained below. Two other pitch movements that could occur at the nucleus can be marked as / and \/, indicating a rising pitch and a falling-rising pitch respectively.

Pitch prominence does play a major role in nuclear and non-nuclear prominences in the tone group, but prominences in the tail, if there be any, may just as well be marked exclusively by loudness, or just as well by length. Crystal (1969) calls these *stressed syllables*, on the basis that pitch obtrusion has no participation. The present work will also consider Crystal’s *tertiary stresses* as non-nuclear prominences –marked as (,) or (!) here, depending on the direction of the pitch as dictated by the nucleus–, on accounts that they may initiate the second movement of one of Halliday’s two *compound tones*, tone 13 (one-three) and tone 54 (five-four) –*fall plus level rising* and *rise-fall plus level rising* respectively– (1967a, 1970), thus having the potential for pitch obtrusion:

// I \like the way you ɔdrive // or // I \like the way you /drive //

Since the present work focuses on the location of nuclear prominence within the intonation phrase, no treatment will be done here of the tone system of English intonation. The reader is referred to the works mentioned above under 2.1 for extensive discussions on the topic. The phonology of nucleus placement will be further developed below.

#### **2.1.4.1 Allocation of prominence**

In order to account for the distribution of prominences in English utterances, generally understood as *rhythmic beats* in speech, it has long been customary to draw on the traditional distinction based on the semantic load of the different *parts of speech*, thus creating a sharp divide between *content words* –which Crystal defines as ‘words which have storable LEXICAL meaning’ (2008:134, his highlighting)– and *function*

*words* –whose role is primarily to express GRAMMATICAL relationships’ (ibid)–, the former typically receiving prominence, the latter being generally unaccented. Jones (1918, in Couper-Kuhlen 1986) already remarked on the fact that ‘the relative stress of the words in a sequence depends on their relative importance’ (p.35), an importance that later on Kenneth Pike would associate with grammatical category:

The semantically-important words (i.e. CONTENT words) in exposition tend to receive a stress and to constitute the beginning of a primary intonation curve. Words which indicate some grammatical relationship, (i.e. FUNCTION words), but which themselves have little specific semantic content, are usually unstressed, and are submerged into a larger intonation or rhythm unit.

Specifically, then, nouns, main verbs (i.e. not in auxiliary position before other verbs), adjectives, demonstrative and interrogative pronouns, interjections, indefinite pronouns, adverbs of time, place, and manner, are usually stressed, whereas auxiliary verbs, prepositions, reflexive and personal pronouns, adverbs of degree, and connectives are usually unstressed, in non-emphatic exposition. (1945:118)

In Britain, however, it was Kingdon (1958) who produced a detailed account, thus adding complexity to a misleadingly clear divide between content and function words.

Typically stressed	Typically unstressed
Nouns (except generic)	Prepositions (esp. monosyllabic)
Adjectives	Conjunctions
Lexical verbs	Primary & modal verbs: positive
Cardinals, ordinals	Adverbs: degree, relative
Interjections	Pronouns:
Primary & modal verbs: negative	Personal
Adverbs (except degree, relative)	Compound (as object)
Pronouns:	Reciprocal
Demonstrative	Relative
Compound (as subject)	Reflexive (non-emphatic)
Interrogative	Quantifying: <i>some, any</i>
Possessive	Determiners:
Reflexive (emphatic)	Possessive
Quantifying	Quantifying: <i>some, any</i>
Determiners:	Relative
Demonstrative	Articles
Quantifying (not <i>some, any</i> )	
Interrogative	

Table 1. Kingdon’s (1958) categorisation of stressable and non-stressable word classes

In a study on the correlation between prosodic features and different word classes, Altenberg (1987) found that “the potential for prosodic prominence is likely to be greater among lexical words, which generally have greater information value than grammatical ones” (p.129). The so called discourse markers (well, now, you know) and some pre-determiners (all, such) seemed to also show a strong tendency to attract prominence, despite their being classed among the closed classes, which are generally non-prominent. Among the different prominences potentially found in a tone group, though, the one corresponding to the nucleus is “almost exclusively restricted to the open classes (...) with the nouns very much in the majority” (ibid.)

#### 2.1.4.2 Nucleus placement

With the nucleus systematically being associated almost exclusively with the open class items –*nouns* being the class favourites–, the next question now is the placement of the nuclear tone in the tone group, or Halliday’s *tonicity*. Crystal, on the basis of corpus analysis, specifies its location by stating that “normally, the nucleus falls on the last lexical item in the tone-unit. This is in agreement with Halliday’s *Neutral Tonicity*, which also specifies “the (accented syllable of the) last content word in the tone group” (1970:41) as the “neutral” place for the tonic syllable:

A tone group is neutral in tonicity if the tonic falls on the last element of grammatical structure that contains a lexical item (...) the tonic, in neutral tonicity, falls on the last lexical item in the tone group. (p.22)

When more than one item in a tone group is new, “the nucleus in *Neutral Tonicity* then always begin on the last new item” (ibid., his emphasis). There are certain elements, however, which although treated as open class items in most reference works on grammar, do behave as items of situational reference, and are thus left out of consideration for neutral tonicity. Halliday (1967a) further specifies:

Anaphoric items are inherently *given* in the sense that their interpretation depends on identification within the preceding text (...) thus an item like *yesterday*, interpretable only by reference to ‘today’, is contrastive if it carries information focus: compare // John saw the play in June // with // John saw the play yesterday // –where // John saw the play yesterday // would imply something like ‘not the day

before' (...) Similarly (...) // three months earlier // but // three months ago // (...)  
 Thus reference and other closed system items will not carry information focus even  
 when final in the information unit unless they carry contrastive information (p.64-  
 65).

## 2.2 Nucleus placement and *ago* in English intonation manuals

The English postposition *ago* has generally been neglected in intonation manuals, featuring –if ever– through the odd example, and when it has, it has usually been an example concocted by the book writer with no available recording of a naturally-occurring instance. What follows is a brief review of its treatment –or rather, its neglect– in the most widely used manuals written for EFL learners of English from the 1920s to the present.

### 2.2.1 Palmer's 1922 *English Intonation with Systematic Exercises and Everyday Sentences in Spoken English*

Palmer's 1922 *English Intonation* not only spearheaded the British tradition of intonation studies, but proposed categories that were later on taken up by practically every manual published in the UK and elsewhere in Europe. Among his contributions is the word *nucleus*, which he defined as “the stressed syllable of the most prominent word in the Tone-Group” (p.7) and which has become a “concept accepted by nearly all writers on intonation today” (Cruttenden, 1990:7) However, nothing is explicitly said about the regular location of the nucleus in English utterances beyond the examples provided throughout the book. Palmer only hints in the introduction at there being a problem with ‘wrong’ or ‘faulty’ accentuation as a result of transfer from other languages:

The effect of the French sentence, “Je ne l'ai pas vu *hier*,” intoned as the English “I did not see him *yesterday*,” is as remarkable (not to say laughable) as the converse effect.” (p.vi)

In addition, SECTION VIII of the book, a promising section in the TABLE OF CONTENTS entitled “FIVE-SYLLABLE EXERCISES ON THE TONE-GROUPS,



with the Nuclei in Varying Positions”, merely provides sets of repeated exercise sentences with the various tones he proposes located on different words in each sentence, but no explanation is given for the communicative effect achieved through the changing nucleus placement, or about the regular way of going about accenting the sentences in neutral contexts –i.e. where no contrast or emphasis is laid on any of the words. So, as far as nucleus placement is concerned, the learner is left to figure out accentual tendencies through the hundreds of examples given. Furthermore, there is not a single example sentence to be found containing the English postposition *ago*.

We do find just one example in his *Everyday Sentences in Spoken English*, however. The nucleus is, as expected, placed on the temporal phrase preceding *ago* (p.15):

1. ju· ə:t tu əv bi·n in bed ən \auər əgou

though again, the learner is left to infer –if they can ever do such a thing– that the right nucleus placement for utterances with *ago* is the one provided.

### **2.2.2 Armstrong & Ward’s 1931 *Handbook of English Intonation***

This manual seems to provide, at times, clearer hints as to where the nucleus is to be found in English utterances. Concerning the utterance given as an example in *Section A Unemphatic Sentences* on page 4, Armstrong & Ward state:

The stressed syllables form a descending scale. Within the last stressed syllable, the pitch of the voice falls to a low level.

In addition, they also briefly discuss what they term *sentence stress*, or the location of accents in utterances –as opposed to *word stress*, or the location of the main stress within a lexical unit. Here, they enhance the description by making reference to the kind of lexical units that have a potential for accent; they state that “all the grammatically important words in a sentence” may receive prominence, and by this they mean words such as “nouns, adjectives, principal verbs and adverbs” (p.7).

Armstrong & Ward also acknowledge the fact that other than the last accentable word may become the nucleus, as suggested in *Section B Emphatic Sentences*, where *emphasis* is defined as

- ‘an all-round special increase of effort on the part of the speaker to express
1. Some added meaning or intensity.
  2. Some extra prominence which he attaches to particular words or sentences.’ (p.43)

What interests us here is the second kind of emphasis, that caused by making any word more prominent than the rest, irrespective of its position in the utterance. This emphasis, used to bring one or more words into focus, generally for contrast, they call *Special Prominence* (p.44):

2. ðə wəz ən i' nɔ:məs kju: weɪtɪŋ ət ðə θɪətə

This intonation seems to contradict some previous assertion about there being only a small queue, or merely a big one. “Other words in the sentence are neglected so that the contrast-word may be specially prominent” (ibid.). Optionally, a slight secondary stress in the form of a rising movement may follow and early falling movement on a word given special prominence:

3. aɪ 'nevər ɑ:sk kwesʃnz əbaʊt juə 'praɪvət əfɛəz

However, that leaves the learner without an explanation for those cases where other than the last accentable word is normally made prominent and for no special emphasis at all. These do not feature in the manual. Learners may still be at a disadvantage here, since *ago* is likely to be treated as an ‘adverb’ and consequently given full prominence. Nevertheless, the authors do provide a few examples –three in all, in fact– with the postposition which, in my view, may help the sharp-eyed reader notice how phrases with *ago* are frequently accented:

4. 'Not very 'long ago | during a holiday in ... (p.101)
5. A 'few 'evenings ago | I was helping a friend ... (p.117)

6. ...and I had some visitors here | a 'fortnight ago ... (p.119)

The researcher's teaching experience would seem to suggest otherwise, though. Students rarely notice regularities in intonation patterns across the pages of a book unless most of them are *made to* notice them.

### 2.2.3 Allen's 1954 *Living English Speech*

Allen's manual, published more than two decades after Armstrong & Ward's, was designed "to present the basic principles of stress and intonation and to provide copious practical exercises" (1954:vii). As promised by the author, extensive practice is offered in the rhythm and tone patterns of English, but no explicit information is given as to the location of the nucleus in English utterances, though the exercises are clearly built around the idea that it is the last lexical item –the last of the "significant words" (p.2)– which carries the major pitch movement –or the "last significant (meaningful) stress" (p.39, his highlighting and brackets).

The significant stress is, in the author's view

the one that takes the beginning of the final fall or rise that marks it as Type I or Type II. The choice of this syllable depends on the speaker's thoughts, for by 'significant' we are to understand the last syllable (or word) that is of importance for the speaker's meaning (p.57)

Thus, depending on their communicative needs, speakers may opt for one of the following:

7. 'Do you 'know the 'shortest /way?

'Do you 'know the /shortest way?

'Do/you know the shortest way? (p.58, his emphasis)

In exercise 67 the author begins to offer practice focused on locating the most significant stress in various places in an utterance, to give special emphasis:

*Note.* Apart from the obvious habit of exaggerating the movement of the voice when emotionally excited, there is the very important English speech habit of emphasizing one or two words in a sentence to give special point to the speaker's ideas. When this is done in simple objective statements, the word (or syllable) to be made prominent is spoken with a falling intonation, starting higher than the previous stress (p.65).

Thus, in this and other exercises for cases of 'special stress', the learner is offered contrasting examples such as:

8. He wants \ME to stay (I'm the one who has been asked) (p.69)
9. \HE wants me to stay (He's the one who has asked me) (ibid.)
10. Which is the platform for the \NINE o'clock train? (p.73)
11. Where are\YOU going on Sunday? (p.74)

As regards *ago*, we are offered only two examples, and, quite surprisingly and unlike any example encountered so far, with the nucleus located on the postposition:

12. / long ago / (p.9, following the suggested □□□ rhythmical pattern of the exercise)
13. 'That 'tap 'dripped ↑ 'twice as 'fast 'two days^ a\go (p.23)

No explanation given yet telling enough, these exercises reveal either where the author stands in regards to the prosodic behaviour of the postposition, or his current usage, or both.

#### **2.2.4 Kingdon's 1958 *The Groundwork of English Intonation and English Intonation Practice***

Kingdon's manual, published in 1958 in combination with the author's other book *The Groundwork of English Stress*, set out to "make a full analysis of the significant factors of intonation" (p.xvi) and to provide "copious examples of the

working system of tonetic stress marks, which seem to be the most efficient and practical means of indicating intonation” (p.xvii). Sections A through H deal with the tones and tunes of English in terms of a taxonomy offered by the author of *static* and *kinetic*, as well as *simple*, *compound* and *complex* tones. Section J, the final section in the book, tackles the meanings expressed by the tunes when combined with different utterance types, such as questions, statements, and salutations.

Little is said throughout the book on nucleus placement, except for some vague references in section I. The most relevant comment seems to be the following:

While the incidence of stress in any given sentence will not remain constant under all conditions, but will vary according to the context of the sentence, the situation in which it is used, and the idiosyncrasy of the individual speaker, it is nevertheless possible to postulate for most sentences a basic or normal stressing which, in the absence of any disturbing factors, may be regarded as the “correct” stressing. (p.170)

However, Kingdon never gets to grips with sentences which have an early nucleus, for example, or ever mentions anything about sentences containing the postposition *ago*, even though he does deal with the accentuation of adverbs and prepositions. A few examples, though, with adapted transcription, are enough to confuse the alert reader:

14. I ˈwrote to you ˈtwo days a/go (p.59)

15. ˈYears a/go I ˈused to \know /that (p.60)

16. We ˈasked them to \mend it – ,two days a/go (p.80)

But...

17. It was ˆhours a,go. (p.137)

Either with nuclear or non-nuclear prominences, the examples with accented *ago* greatly outnumber those where the postposition is left unaccented.

### 2.2.5 Schubiger's 1958 *English Intonation: Its Form and Function*

The selection of one tone pattern for another as presented in this work is said to be of no consequence to the substance of the utterances but to produce a difference in the “attitude (...) to my interlocutor” (p.77). But if instead of *Are you /happy?* the speaker said *Are /you happy?*, he/she would want to focus on ‘who’ is happy. Variations of this kind, Schubiger argues, “are primarily a matter of stress” (ibid.). She further states that pronouncing

a sentence with the correct intonation, we will be understood even if we neglect the stress, while a wrongly placed nuclear glide, to a lesser extent a wrongly placed head, will change the meaning of our utterance even if the stress-pattern is correct. A foreigner who chooses an inappropriate tone-pattern, who says e.g. *'Sit \down*, instead of *'Sit /down*, risks being taken for more discourteous than he really is, but he will be understood. If he places the nucleus wrongly, saying e.g. *'Henry 'sat 'down \first* instead of *'Henry 'sat \down ,first*, he will be misunderstood. (ibid)

Schubiger divides the second part of her book, *Intonation Conditioned by Sentence Stress*, into three sections, A B & C. Section A deals with variations in the placement of the nucleus engendered by different contextual situations, such as cases where contrast arises, as in *\You've nothing to complain of*, or where an early fall generates a fall plus rise pattern, which the author calls *unity stress*, as in *\Father's /coming*; section B tackles variations conditioned by sentence structure of the sort *He 'speaks 'English \naturally* vs *He 'speaks \English /naturally*. Both sections A & B also deal with variations in tone, as well as nucleus placement. Finally, section C deals with variations from ‘normal’ patterns conditioned by the speaker’s deployment of strong emotion.

‘Unity stress’ seems to account for cases of nucleus placement which are typically English and which Spanish speakers usually find problematic. In *The \water was running* and *My\boots need mending*, the author explains that the subject and the predicate forms “a unity of communication with only one peak of prominence” (p.84), and the nucleus occurs on “the most important word of this announcement” (ibid).

As for *ago*, only one example was found in the book:

18. They 'only \got here a ,few minutes a/go

And it shows the pattern dominant in previous publications, as expected.

### 2.2.6 O'Connor & Arnold's 1973 *Intonation of Colloquial English*

O'Connor & Arnold seem to have had little to say about nucleus placement other than the fact that it is to be found on “the stressed syllable of the last accented word in a word group” (p.286). Their sample sentences, however, go a long way to represent a different reality from the one presented in previous publications, and there seems to be none of the previous ambiguity when it comes to *ago*:

19. A 'couple of \months a,go / 'Nearly a \week ago | /now (p.137)<sup>9</sup>

20. A /week a'go / A /fortnight a'go / About a /month a'go (p.149)

21. I 'saw him a 'few \moments a,go (p.161)

22. He 'went to Bar'bados 'ten \years a,go (p.162)

23. /Tea was 'cleared away an \hour a,go (p.194)

24. Well he 'left a \week a,go (p.196)

25. But a few \moments a,go | his 'secretary rang 'up to \cancel it (line from a conversation on p.281)

The examples by O'Connor & Arnold more than amply demonstrate the accentual approach of the authors towards utterances containing the postposition. The skilful instructor may point out to the students the regular prosodic behaviour of the postposition in the corpus of examples throughout the book.

### 2.2.7 O'Connor's 1970 *Better English Pronunciation*

O'Connor's *important words* –the words that “carry most of the meaning in the word group” (p.138)– determine the shape of a tune, since they are all pitch prominent by definition, and ultimately “*any* word may be important if the situation makes it

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<sup>9</sup> Page numbers refer to the 2nd edition, published in 1973.

important” (p.140, his emphasis). Nothing else is said, though, in the way of specifying English nucleus placement. In addition, only three occurrences of *ago* can be found at the end of the section on intonation, and embedded in a couple of conversational passages meant to practice the tunes presented in earlier sections:

26. I 'only \got it a,bout ,four ,days a/go (p. 128)

27. The 'same 'place as I 'got my \last one | 'nineteen \years a ,go (p.128)

28. I 'bought it \here | 'six \months a ,go (p. 130)

Not much can be inferred from these two examples about the prosodic behaviour of the postposition, except that either option is equally valid and therefore valid for teaching purposes.

### **2.2.8 M. A. K. Halliday’s 1970 *A Course in Spoken English: Intonation***

Nucleus placement in the work of the linguist M. A. K. Halliday has come to be known as *tonicity*, or “the assignment of tonic prominence to a particular place in the tone group” (p.40). This place is usually occupied by the last content word in the tone group, that is “on the last word in the tone group other than structural words, like *of*, and *anaphoric* words” (p.41). Thus Halliday shows concern not only for the items that are regularly accented in the tone group, but also for items that regularly shy away from tonic prominence when final in the tone group. Such ‘anaphoric words’ are words such as “pronouns that get their meaning from referring back to something mentioned earlier; they are (...) items like yesterday, next year, which can be interpreted only by reference to the present (..) they do not carry the tonic except for contrast (p.41, his underlining, and 2.2.2 above).

As far as the postposition *ago* is concerned, no instances could be found in this manual; Halliday does however mention in his *Notes on Transitivity and Theme in English* that information which is recoverable from the context or the previous discourse “tends to be represented anaphorically” (1967b:64), and anaphoric items are inherently *given*. Certain anaphoric items can, though, be structurally new, and are thus typically contrastive. More often than not, however, they are non-prominent due to their



reluctance to carry information focus, and, as introduced above, the example // three months ago // is offered on the same page to illustrate extralinguistic reference embodied in the postposition.

### 2.2.9 Wells' 2006 *English Intonation: An introduction*

Wells' manual offers by far the most extensive treatment of nucleus placement in English; however, not a single example can be found in the 93-page section on *Tonicity*, and a quick look at the other sections of the book only renders 3 examples, of which none shows *ago* to receive nuclear prominence:

29. \Ages ago. (p.67)

30. 'Two \years ago | I 'visited Bot\swana. (p.79)

31. A 'few /days ago. (p.227)

Examples 29 & 30 appear in the section devoted to *Tone*, so the focus is on the pitch direction (falling on interjections and falling-rising on leading adverbials respectively), and example 31 shows up in a section that deals with pre-nuclear patterns (low-pitched heads, in this case).

As we can see, the student is again left to infer any connection there might be between *ago* and its accentual behaviour, doubtlessly a daunting task for most –if not all– students who, by the time they reach those examples, will be focusing their complete attention on pronouncing the differences in pitch height and pitch direction. The teacher holds a key role here in leading students a bit further ahead and have them notice aspects of the intonation of the examples provided other than merely the *Tone* used. Perhaps while working on the *Tonicity* chapter of the book and, more specifically, on sections 3.23/24 dealing with the tonicity of adverbials, the teacher should point out that many grammars do treat *ago* as a time adverbial, albeit of a rather deictic nature, and draw the students attention to the three examples mentioned above.

### 2.2.10 Cruttenden's 2014 *Gimson's Pronunciation of English* (8th ed.)

This long-awaited update of a classic which covers all areas of the pronunciation of English has regrettably nothing to offer us in the way of elucidating the prosodic behaviour of *ago*. Its clear, student-friendly treatment of intonation, albeit (too) concise, does not go beyond the mere generalities concerning nucleus placement in English.

## 2.3 *Ago* in the English language

The word *ago* has an attested history of nearly 700 years as part of the English lexicon. According to Kurzon, as early as 1314 we begin to see traces of *ago* in what seems to be a prepositional phrase:

32. For it was ago fifyer That he was last ther

(2008:4)

as this example taken from the Oxford English Dictionary illustrates. The unstable status of *ago*, however, is evident if one looks at two other instances of the word, one in Chaucer's *Wife of Bath's Tale* (1386, also in Kurzon 2008):

33. I speke of mony a hundred zere a-go

which Kurzon hypothesizes 'could be an adverb, replaceable by *previously*' (p.5), and a later one, in Shakespeare's *Twelfth Night* (1601):

34. O, he's drunke, Sir Toby, an houreagone (5.1.204)

which clearly shows the participial nature of the postposition. John Ayto has recently offered further support for this view in the corresponding entry in his etymological dictionary:

**ago** [14] Historically, *ago* is the past participle of a verb. Its earlier, Middle English, form – *agone* – reveals its origins more clearly. It comes from the Old English verb *āgān* ‘pass away’, which was formed from *gān* ‘go’ and the prefix *ā-* ‘away, out’. At first it was used *before* expressions of time (‘For it was ago five year that he was last there’, *Guy of Warwick* 1314), but this was soon superseded by the now current postnominal use.

(2005:13)

This only goes to show that the origin of the word *ago* does not help at all when one needs to clarify its present status. According to Bourdin (2008), the phrase *ten years ago* was initially an elliptical version of *It is ten years agone* and traces a parallel origin for the expression *ten years since*. It was not until the 14<sup>th</sup> century that reference to an event in the past began to be encoded by a participial “clause containing *agone*, the past participle of *āgān*, itself an Old English verb derived by prefixation from *gān*, ‘go’, and which meant ‘depart, go away’ (Bourdin 2011:46). *Ago* is mostly postposed at the time (see examples 32-33 above) and it equally combines with the adverb *long* and with a NP denoting a quantity of time.

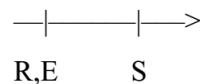
Bourdin (ibid: 48) further documents the structure he hypothesises is at the very origin of *NP+ago*:

35. Thenne came a preest to Galahad and said syr hit is past a seuen yere agone that these seuen bretheren cam in to this Castel...

By 1500 *ago* was already invariably postposed, and by 1800 it was by far the most frequent marker of past deixis (see below) by comparison with *since*, becoming by 1900 the ‘default’ marker. Bourdin confidently argues that the firm establishment and pre-eminence of *ago* between 1700 and 1900 also coincides with the decline of *since* in similar contexts of use. *Ago* has historically acquired a more or less uncertain status in the grammar of English, albeit presenting the syntactic peculiarity of being postposed to its complementation in a language in which the reverse order is the norm.

### 2.3.1 *Ago* in the grammar of present-day English

Because of the way we humans experience time, we conceptualise it as a linear entity, and all languages are thus expected to possess the means to refer deictically to states or events separated by a gap of time from the actual moment of speaking or writing. In terms of Reichenbach's scheme (1947, in Kurzón 2008), the time frame for a sentence such as *She went to the cinema yesterday* can be expressed linearly as follows:



where the arrow indicating time flow from past to future is intersected by two vertical lines, one indicating the moment of speaking or ‘Speech Time’ (S), and another showing a preceding ‘Event Time’ (E), which happens to coincide in this case with the past ‘Reference Time’ (R). This is generally interpreted as there being an event (*going to the cinema*) which precedes (*yesterday*) the time of speaking (*now*), with the time of the event and the point in time taken as reference coinciding. But they need not do so, as evident in the use of the past perfect tense in English. In *When they arrived I had already done the cleaning*, E (*doing the cleaning*) precedes R (*their arrival*) which in turn precedes S (*now*).

English encodes such time shifts mainly through the use of Adverbials, which can have a variety of syntactic realisations –though it is mostly NPs and PPs that adopt this temporal semantic role. Among the range of phrases which can act as temporal signals in discourse are those containing the postposition *ago*, as in *I met her over 20 years ago*. *Ago*, then, as a present-day marker of *Scalar Deictic Localisation in the Past* or SDLP (Bourdin 2011) serves to locate in time a specific past event, and it does so by specifying through a Noun Phrase complement the duration of the interval existing between the time of speaking and the time of the event.

The concept of *deixis* makes reference to the fact that the interpretation of certain elements in an utterance can only be possible by recourse to “features of the

utterance-act: the time, the place, and the participants; i.e. those with the role of speaker and addressee” (Huddleston & Pullum, 2002:1451). Words like *yesterday* or *ago* are made sense of in relation to the time of the utterance, so they are a matter of *temporal deixis*. Consider, for example:

36. The boat left two hours ago.

*Two hours ago* measures the temporal distance between the time the boat’s engine was started and anchor was weighed and now, my time, the time of speaking, with me as the *deictic centre*.

From the 1980s onwards, *ago* has been associated with one of two different grammatical patterns in its semantic role as circumstance expressing ‘position’ in time: Some grammarians (Quirk et al. 1985, Greenbaum, 1996, Biber et al. 1999), representing what I will call here more ‘traditional’ accounts of English grammar, have dealt with it in their respective chapters on Adverbs and have treated it as a postposed adverb modifying a Noun Phrase (NP) circumstance; others (Williams 1994) propose to analyse *ago* as an *intransitive preposition*, claiming that its analysis as a postposition does not work and, consequently, arguing for a strong case of *initial headness* in English prepositional phrases.

Yet a third way of looking at *ago* (Huddleston 1984, Pratt & Brée 1994, Morley 2000, Huddleston & Pullum 2002) –and the one adopted in this monograph– is proposed by those who argue strongly in favour of a ‘prepositional’ treatment of *ago*, and deal with it under the general term ‘prepositions’, remarking on its use as a postposed ‘head’ of a Prepositional Phrase (PP) with an obligatory preceding complement.

### **2.3.2 *Ago* as an ‘adverb’ in traditional accounts**

In their *Comprehensive Grammar of the English Language* (CoGEL), Quirk et al. remark that ‘temporal relations are especially dependent for their expression upon figurative extension of locative items such as *in* and *at*’ (1985:481), and class *ago*

among such items within the group of time adjuncts expressing fixed ‘position’ on a temporal scale<sup>10</sup> or ‘time as stasis’ (p. 481). They also point out the frequency with which such adjuncts of time are realised through the use of noun phrases and prepositional phrases, as they illustrate with these examples (1986:526-27, my brackets):

- 37. We were in France *last year*. (NP)
- 38. They lived (*for*) *several years* in Italy. (NP)
- 39. She met him *that afternoon*. (Determiner + NP)
- 40. They put on the play *a month ago*. (Determiner + NP + Postposed Adv.)
- 41. We hoped to see Veronica on Monday. (PP)

However, NPs seem to have limitations in this area, as ‘pinpointed time positions cannot usually be realised by a noun phrase’ (p. 527), and PPs seem much more fit for this purpose:

- 42. He arrived this morning *at ten-fifteen*.

NPs with *ago* would, in my view, constitute an exception, since it seems perfectly possible in English to give the exact location of an event in time, as in:

- 43. The message was received *two hours and forty-five minutes ago*, sir.

Interestingly enough, Quirk et al. would also argue that *ago*, ‘used for a span back to a point in time in the past’ (p. 688), functions as a ‘postposed adverb’, thus modifying the preceding NP. However, the NPs in the following examples from page 452 are classed as ‘Premodifiers’ of the adverb Heads *across* and *apart*:

- 44. The lake is *two miles* <across>. [‘wide’]
- 45. They live *five miles* <apart>.

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<sup>10</sup>In fact, both Quirk et al. (1985) and Biber et al. (1999), in their lengthy descriptions of English grammar, provide the same classificatory scheme for the semantic roles played by ‘time’ adverbials: (a) position, (b) duration, (c) frequency, and (d) relationship. Though *ago* is dealt with as a ‘position’ time adverbial expressing ‘backward’ span’ –never explicitly stated but to be inferred from the examples–, I suspect that it can also be argued to establish temporal relationships, especially when two events or states are being contrasted.

46. I met her *a week* before.

The reason for this latter classification seems to be that a question with *how* would render the NP as the answer:

47. How wide is the lake? Two miles.

48. How far apart do they live? Five miles.

49. How long before did you meet her? One week.

This being so, then, one could also suggest a similar question for *I met her a week ago*:

50. How long ago did you meet her? One week.

which would prompt us to believe that the same test applied to *ago* would immediately render it as Head of the group rather than as a postposed modifier.

Biber et al. (1999) lump together *enough* and *ago* with a small group of adverbs that ‘must be placed after the adjectives they modify (p. 545, my highlighting):

51. That seems *so long ago*.

In keeping with Quirk et al.’s view, NPs with *ago* are also the most commonly used wording to express the semantic role of time. Both coincide in their treatment of *ago* as a mere modifier of the obligatorily preceding NP or Adj Head.

In *The Cambridge Grammar of English* (CGE), Carter & McCarthy (2007), one of the latest contributions to the EFL world, continues the same tradition in treating *ago* as an adverb. In its section on deixis, the authors remark the following:

‘References to the immediate situation are achieved mainly by means of determiners such as *this, these, that, those*, adverbs such as *here, now, there, then, ago* and personal pronouns such as *I, we, him, us*.’ (p. 178).

However, unlike the two previous approaches, any NP occurring with the postposition is seen as pre-modifying the ‘adverb’ head:

52. We agreed that *two meetings ago*. (Premodifier of adverb)’ (p. 319)

### 2.3.3 *Ago* as an ‘intransitive preposition’

Williams argues against treating *ago* either as an adverb or as a postposition; rather, she seems to think that a better way into the dilemma is to think of *ago* as an *intransitive preposition*, one which ‘does not license a complement’ (1994:2) and makes her point by comparing it to other prepositions:

53. Long ago

54. 5 minutes in the past

55. A few days before the party

In 54 and 55 the time specifications (5 minutes, a few days) precede the prepositions, as in 53 (long), which is a possibility for prepositions in English; In 54 and 55, however, the prepositions *in* and *before* have complements to their right, while *ago* does not. Williams thus argues that (a) the time specifications are optional for all prepositions except for *ago*, and (b) that all prepositions have complements to their right, except for *ago*, which bears none and thus seems to behave intransitively. Such an approach goes, in my view, nowhere further than to ensure that English has no postpositions but *prepositions* only!

### 2.3.4 *Ago* as a ‘postposition’

One year before the CoGEL was published, Huddleston (1984) used the term ‘adposition’ to refer in general terms to items that we typically know as prepositions, whose complements immediately follow (‘pre’-position), as well as items that behave like prepositions but whose complements precede them, in which case they could be rightly called ‘post’-positions. This position he has maintained in his two last co-authored grammars, Huddleston & Pullum 2002 and Huddleston & Pullum 2005. The



distinction between pre- and post-positions, thus, is made on the basis of their position relative to their complements. English adpositions are mostly prepositions,

‘but we find one or two items that might most appropriately be analysed as postpositions. Thus in *I saw it three weeks ago, these errors notwithstanding, my uncle’s car*, for example, *ago, notwithstanding* and the possessive clitic are functionally analogous to prepositions yet follow their complements.’ (p. 337)

Huddleston then goes on to blame the exceptional character of these elements for the kind of treatment they have received in traditional grammars.

The latest addition in this direction is Aarts’ *Oxford Modern English Grammar* (2011), which unlike most contemporary grammars, does include a section on *postpositions*. These are defined as prepositions whose complements precede rather than follow the head, and are listed in the table below:

Postpositions
ago
apart
aside
notwithstanding
through

*Table 2: English postpositions*

Kurzon (2008) provides some insights into an acceptable classification of *ago* as one –if not the only– English postposition. He rejects its classification as an adverb out of hand in the basis of (a) its inability to occur without a complement and (b) its ability to modify verbs only. However, classing it as an adposition is not without problems: the NP that precedes *ago* cannot be replaced by a pronoun:

56. Five years ago >\*them ago

Even so, in Kurzon's own words:

since (i) there are transitive adpositions in English, (ii) postpositions do exist in world languages, and (iii) *ago* is head of a phrase with a complement, we may accept the original analysis of *ago* as one of the few postpositions of English, if not the only one (ibid:20).

It all seems to indicate that the argument in favour of treating *ago* as a postposition –as is the case in the present work– is growing stronger and, as we may expect to be the case with most grammar words, its prosodic behaviour can be more or less predicted from its role in the grammar: a deictic word like *here*, *there*, *now* and *today* who rarely receive discourse prominence in the form of an intonational nucleus and, if any, may receive some secondary prominence if the rhythm of English so requires it. The rest of the present work will focus on the prosodic behaviour of this English preposition with the aim of determining whether and in what contexts it receives rhythmic/intonational prominence, and the reasons why this may be so.

### 3. Methodology

The present research focuses on the analysis of patterned prosodic variation in a corpus of spoken English consisting of recordings from advanced EFL textbooks (C1/C2 levels) used in Argentina. The aim of the study is to describe the prosodic behaviour of the postposition *ago* in the range of contexts in which it appears in the corpus, and draw conclusions as to its accentual patterning against the background presented in the previous chapter.

More specific objectives underpinning this study seek to both ascertain whether *ago* receives prominence in the discourse and under which conditions, and to contribute to the classification of *lexical vs. non-lexical items* proposed in the literature with insights into the behaviour of the postposition.

The literature review section revealed several weaknesses concerning the treatment of the postposition *ago* in the intonation manuals surveyed in this study. For a start, authors rarely –if ever– presented a satisfactory number of utterances containing *ago* in their published works, so drawing inferences as to their position in this matter was often difficult. When a few examples did manage to creep up into the manuals, the author/s disagreed both explicitly and in transcription as to whether *ago* should be given primary or secondary prominence, if at all.

#### 3.1 The corpus

For the purpose of studying the prosodic behaviour of *ago* a corpus of recordings was manually compiled by the researcher, extracted from advanced EFL textbooks at C1/C2 levels within the CEFR<sup>11</sup>. The corpus consists of the totality of audio recordings available on compact disc or as MP3 files for each of the textbooks used in the study, and whose transcripts appear in the ‘audioscripts’ section at the end of each student's book, or in the teacher's book. Since each textbook includes several components, only the Student's Book audio material was used. More specifically, and in order to maximise

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<sup>11</sup> [http://www.coe.int/t/dg4/linguistic/cadre1\\_en.asp](http://www.coe.int/t/dg4/linguistic/cadre1_en.asp)

the occurrence of different text types, one textbook –and sometimes two or more– representing each of the following levels was selected to form part of the corpus of recordings:

- Certificate of Proficiency in English (CPE)
- International English Language Testing Service (IELTS General)
- Advanced (C1) Level in multi-level series
- Cambridge Advanced English (CAE)

The gathered corpus amounts to a total of nearly 10 hours of mp3 audio. Unfortunately, the corpus used in this study presents one serious limitation: The spoken material, unlike what should normally be the case in studies like this one, consists largely of scripted material which is either read aloud or acted out by native speakers of English with, mostly, British English accents. However, one advantage of collecting a corpus like the one used here is that it is the kind of speech our Argentine students are exposed to in most kinds of EFL classrooms at an advanced level, either in general English courses or in exam preparation classes, and therefore becomes the kind of English (most of) our students have access to in order to notice linguistic regularities.

### **3.2 The annotation of the corpus**

In order to choose a practical transcription system for intonational notation, Knowles at al.'s (1996) set of criteria was followed. Three of their criteria seem most relevant to the present work and have motivated the researcher's choice for annotating the present corpus: First, the transcription system should “express all and only the linguistically relevant suprasegmental phenomena” (p.41) set out by a particular theory. Second, the transcription system used should be easily and reliably applicable across transcribers of a corpus for enhanced validity of the observations. Third, a transcription system

(...) should be practical to use, from the point of view of both transcriber and reader (...) should yield a compact representation that can be easily handled physically, and ideally should also be printer-friendly as regards the ease of typesetting and avoidance of the need to use special techniques. It should be

possible for the transcriber to use the system at dictation speed (or with only a few repetitions if using taped material at true speed), and it should also be possible for the reader to reproduce the intonation from a transcription by sight-reading in (almost) real time (*ibid*).

The prosodic annotation system selected resembles that used in the IBM/Lancaster Spoken English Corpus (Lin, 2013) and it was selected because of its iconicity and clarity, as well as for its resemblance to the intonational transcription system used within the British School of intonational studies. The transcription system also resembles very closely that used by Wells (2006) and is akin to the system called *Tonetic Stress Marks* and popularised in the works of Kingdom (1958), O'Connor & Arnold (1961/73) and Crystal (1969). The symbols used

take the form of diacritic marks of various shapes added to the text, together with bar-lines to mark the boundaries of intonational units. The shape of the tonetic marks reflects the appropriate pitch movement, and so the notation is more iconic (...) fairly easy for the reader to sight-read (...) is compact, relatively easy to print, and efficient for both transcriber and reader. It was originally formulated with the needs of foreign learners of English in mind" (Knowles et al., 1996:47).

Only a subgroup of prosodic symbols were used, to cater for the fact that it is only the presence or absence of prominence –either primary or secondary– that is relevant to this work, irrespective of the movement of the pitch on accented syllables, and also with the aim of simplifying the transcription system for the external transcriber.

The basic unit of speech in the adopted system is the tone-unit. Major and minor tone-unit boundaries are represented by || and | respectively. Prominent syllables were marked with ' if pre-nuclear, \ √ or / if nuclear, and · if in the tail. These symbols were judged to indicate sufficient prosodic details for the purposes of this work. Although the main function of tonetic stress marks is to specify pitch direction, which falls outside the purpose of this thesis, these marks were preferred over Wells' (2006) underlining of the nucleus, on the basis of the latter's lack of association with intonation transcription systems within the British School of Phonetics.

In order to unify criteria for nucleus placement in the case of complex pitch movement, each occurrence of a *Fall-Rise* tone was marked using the *mononuclear* tonetic stress mark  $\vee$  at the syllable on which the tone was perceived to start, in order to avoid the ambiguity that might be caused by the following transcription variations:

1. ...| some 'twenty  $\vee$ years ago ||
2. ...| some 'twenty \years a/go ||

Both, examples, 1 and 2, can be rendered valid by present-day intonational accounts within the British School of Phonetics, with transcription (2) even recommended nowadays (Cruttenden, 2014:280) and clearly more iconic and practical for EFL students in the pronunciation class, but which could also threaten to obscure and problematize the notion of prominence assignment for the present study.

### **3.3 Auditory transcription of the corpus, reliability of prominence judgments and transcriber differences**

Initially, each audioscript section from each textbook was visually scanned for instances of *ago* while listening to the corresponding tracks, and sentences containing the postposition were highlighted. Each source textbook from which the audio samples were extracted was lettered A-N, and each utterance containing *ago* was numbered. A total of 75 utterances were selected and transcribed auditorily by the researcher, using the annotation system described in 3.2.

The purpose of transcribing large amounts of spoken data prosodically is to provide a reasonably accurate picture of the prominence and intonation patterns of the spoken material. However, as with any perceptual phenomenon, perceptions of the phenomenon in question will tend to vary from transcriber to transcriber, even in the presence of clear phonetic cues and/or unquestionable physical evidence.

Since the transcriptions of the spoken corpus were expected to provide reliable cues as to the prosodic behaviour of the postposition *ago*, and as the corpus was annotated manually for prosody on the basis of trained auditory perception alone, the 75

(seventy-five) utterances which make up the selected corpus were also independently transcribed by one external phonetician familiar with the transcription system used in this study. This phonetician has been transcribing spoken material prosodically using the British School approach to phonetics for many years, and has been teaching English intonation to university graduates for a substantial amount of time, so it was judged that no further instructions were needed.

In order to unify criteria, the transcriber was provided with a written set of copies containing the total number of utterances included in the study in regular English spelling and specifications as to the notation system adopted. The external transcriber was also supplied with the corresponding digitised high quality audio for each of the utterances, and was asked to listen to each track as many times as was deemed necessary, and transcribe prosodically only the portion of the utterance containing *ago*.

### **3.4 Transcription data analysis**

The transcription system outlined above was applied by both transcribers to a corpus of 75 (seventy-five) utterances each containing one instance of *ago*. Both transcriptions of the selected corpus, the researcher's and the external transcriber's, were compared and contrasted to ascertain the degree of agreement or discrepancy in the transcribed data. It was decided that only those utterances for which the two transcribers showed 100 per cent agreement would be used in the study. Disagreement as regards the specific tone used was not taken into account.

The data was tabulated in two stages. Initially, a four-column table (See Table 1) was created to register both transcribers' rendering of their auditory analysis. From left to right, the first column listed all the numbered utterances from the corpus alphanumerically (a letter for the source textbook and a number for each track), while the second and third columns showed a transcribed portion of each utterance and the nuclear item as perceived by the researcher and the external transcriber respectively; the fourth column summarised nucleus position for those utterances where agreement was finally reached.

<b>Track</b>	<b>Transcriber 1</b>	<b>Transcriber 2</b>	<b>Nucleus position</b>
A1	(prominent word/s)	(prominent word/s)	
A2	(prominent word/s)	(prominent word/s)	
B1	(prominent word/s)	(prominent word/s)	
...			

*Table 3: Prominence allocation by transcribers*

This table allowed the researcher to compare and contrast prominence assignment and to observe similarities and differences in the allocation of prominences in each of the utterance portions with *ago*.

Next, differences in transcription were noted and the instances over which the transcribers disagreed were isolated. Eight out of seventy-five utterances differed in the placement of prominences. Due to the infrequent occurrence of *ago* in the corpus, a second round of prosodic transcription was carried out for the eight differing utterances in order to confirm individual perceptions of (a) primary prominence and (b) secondary prominence in the corpus to ensure that the smallest number of instances were discarded, if necessary. Consequently, only those utterances which showed disagreement between transcribers were listened to and transcribed again by both transcribers using the same procedure as described above.

After this second stage in the transcription of the corpus, both transcribers' final version for each utterance was compared, and it was noticed that the differences that remained were all but one associated specifically with the assignment of primary prominence in each phrase, not with the assignment of prominences in general, so only one of the eight re-transcribed utterances had to be discarded, leaving a total of 74 (seventy-four) utterances constituting the final corpus for this study.

It was judged that differences in the *degree* of prominence –rather than solely its presence or absence– would still allow the researcher to assess the prosodic behaviour of the postposition. This decision was taken in view of the presence of two instances of *ago* which received secondary, non-nuclear prominence.



The total number of utterances with *ago* were then arranged into a more complex, double entry table which sought to establish a set of criteria to describe prominence placement. These criteria were then used to codify the results of a diagnostic test (described in 3.5 below) given to undergraduate students at the time the corpus was being collected.

Each utterance was thus assigned a slot down a horizontal column in the table, with each criterion established being assigned to a different vertical column to the right (See Appendix A).

### 3.5 Diagnostic test

As mentioned in chapter 1, an important purpose of this study was to increase awareness among English learners and prospective teachers/translators of the accentual behaviour of the postposition *ago* so as to foster more accurate speech production.

Therefore, in order to corroborate the degree of consensus existing among EFL students at teacher training college regarding the allocation of prominence(s) in utterances with *ago*, and to support the need for clarification as to its prosodic behaviour, a test<sup>12</sup> was designed and administered to 20 student volunteers in their fourth year at teacher training college, all of whom had attended and passed three English phonetics courses spread throughout the first three years of their programme of studies.

All of the students had, up to that point in their training, received instruction and practice in all three aspects of intonation, namely *Tonality* (chunking discourse into tone units), *Tonicity* (the allocation of the main prominence in each tone unit) and *Tone* (the selection of pitch movement on the tonic syllable), but no explicit focus on the prosodic behaviour of *ago* was ever made in any of the courses, beyond a fleeting remark as to the instability of its treatment in intonation manuals.

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<sup>12</sup> The test can be found as an appendix.

Four sentences (See Appendix B1) were given to each of the twenty students for prosodic transcription, with an instance of *ago* in the second and fourth sentences only. The first and third sentences were intended as distractors. The task required that the students first read the sentences carefully and then assign tonality –i.e. divide the material up into tone groups– following the guidelines stated in previous pronunciation courses. Once they had done this, the students were then asked to underline the likely tonic syllable –intonational nucleus– in each intonation group.

Once collected, the sentences were tabulated (See APPENDIX B2) and the students' answers were used to ascertain the extent to which prosodic prominence is associated with the postposition *ago* when focused on a task which explicitly asks them to pay attention to *tonality* and *tonicity* in a general sense. The instructions did certainly require that they assign both aspects, since the so-called *three Ts* (Wells, 2006:6) had been introduced and practised in class, but they were told that only *tonality* was in focus in this task, and that the instructor would be checking (a) the extent to which their division into intonation phrases matched the guidelines offered by authors and (b) how much it reflected their reading of the bibliography. No mention of *tonicity* assessment was made whatsoever in the verbal or written instructions.

The next chapter will present the researcher's analysis of the findings in both the transcription of the utterances in the corpus and the test administered to the student volunteers. Interpretations of the findings will be offered.

## 4. Results and discussion

This section aims to provide in-depth description and interpretation of the data in order to answer the research questions proposed in Chapter 1. Firstly, the transcribers' annotation of the corpus of recordings and follow-up analysis of it will be presented, with the researcher's interpretation of the prosodic treatment of the postposition *ago* by native speakers. Secondly, the results of the transcription test with student volunteers will be described in order to show advanced students' prosodic treatment of the postposition *ago* in the context of intonational transcription. The treatment of *ago* by students will then be compared and contrasted with the results obtained during analysis of the spoken corpus. At the end of each section the researcher's interpretation of the findings will be offered against the theoretical framework presented in chapter 2, and the likely connections to the existing literature will be established.

### 4.1 *Ago* in the spoken corpus

As explained in detail in Chapter 3, the transcription of the corpus was carried out by two transcribers: the researcher himself and a colleague working in the same Phonetics department. Discrepancies in transcription of a small number of utterances led to a second round of transcription work, with modifications introduced by both transcribers and elimination of tokens for which no agreement could be reached.

#### 4.1.1 Results

Out of a total of 75 tokens, only one had to be discarded due to lack of agreement between the transcribers. This study was thus based on a total of 74 utterances containing one instance of the postposition *ago* each.

One observation that must be made concerning native speaker treatment of *ago* is that although in a few instances the postposition was made prominent, it did not always carry the main prominence in the intonation phrase –i.e. it was not always made

nuclear. *Ago* was also found to occur with a secondary degree of prominence<sup>13</sup> when speakers selected other elements as nuclear.

On the basis of the findings in the spoken corpus, the following set of categories was judged both exhaustive and sufficient to account for all the instances of the postposition:

1. The Postposition *ago* bearing the Nucleus in the intonation phrase, or *PN* (Postposition Nuclear), e.g. three years ago;
2. The Postposition *ago* receiving non-nuclear prominence in either the Head or the Tail of the intonation group (henceforth *PNNP* = Postposition Non-Nuclear but Prominent), e.g. 'three years a'go today;
3. Final Element in the Noun Phrase (NP) Complement made nuclear, or *FEC* (Final Element in Complement), e.g. three years ago;
4. Nucleus placed outside the phrase containing *ago* altogether, with the phrase thus becoming Non-Nuclear, or *NN*, and *ago* receiving no prominence, e.g. ...living there a few years ago.

Four examples taken from the annotated corpus may serve to illustrate the above-mentioned categories more clearly:

1. (G1) ...because I know that my dad | 'years a/go | wrote a book
2. (M6) ...productivity actually went down quite sharply | a \year or so a°go ||
3. (N4) || Corporate sponsorship of the arts is up about 50% on | 'ten \years ago  
||
4. (J3) || I under'stand you were the 'subject of a \brain study a few °years ago  
||

An analysis of the annotated corpus using the four categories proposed above reveals the following total percentages:

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<sup>13</sup> As explained above in Chapter 2, section 2.1.4.

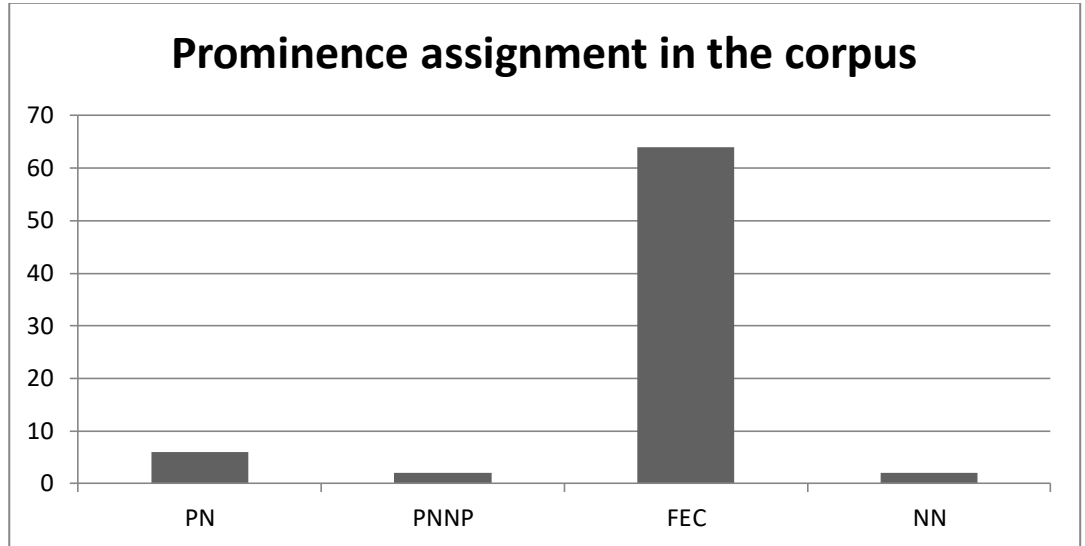


Table 4: Distribution of prominences in phrases with *ago* in the corpus.

As the table above shows, out of a total number of 74 tokens from the corpus, over 60 tokens selected the complement as nuclear in phrases with the postposition *ago*. More precisely, 64 cases were found where the main prominence in the phrase was located in the *final element of the complement* and, when the complement was a Noun Phrase, the nucleus was invariably the Head Noun.

*Ago* did receive prominence in 8 tokens out of a total of 74: six cases showed *ago* as nuclear, bearing the main prominence in the intonation phrase, and two other cases showed *ago* receiving some degree of rhythmical prominence either in the *Head* or *Tail* of the intonation phrase. The apparent reasons for native speakers making this choice will be analysed below.

The absence of intonational nuclear prominence in the phrase containing *ago* was noted in only two instances in the corpus.

Percentages for the four cases found in the corpus are as follows:

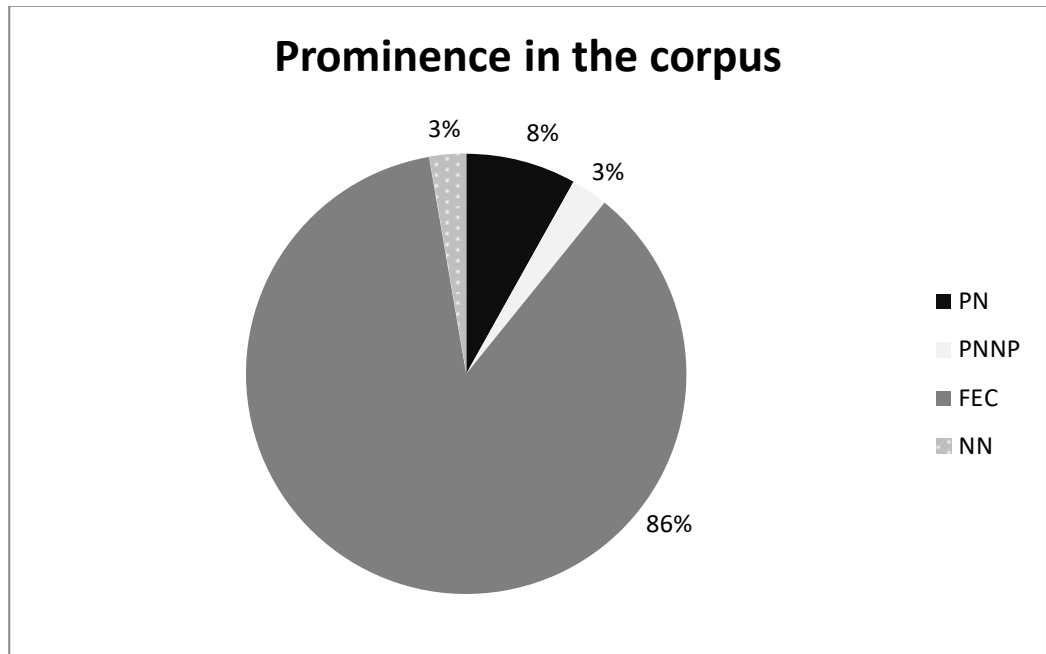


Figure 3: Percentages for each of the prominences categories found in the spoken corpus.

## 4.1.2 Discussion

The prosodic behaviour of *ago* in the spoken corpus is noteworthy in at least three important respects: (a) its lack of prominence in over 80% of the tokens; (b) the invariable prosodic behaviour of its complement in non-contrastive contexts, (c) its accentability in potentially contrastive and/or rhythmically well-formed utterances<sup>14</sup>.

### 4.1.2.1 Postpositional complement nuclear *by default*

The high percentage of occurrence (86%) of the intonational nucleus in the complement of the postposition *ago* seems to support the researcher's view that phrases containing *ago*, if nuclear, will *by default* bear the intonational nucleus on the complement of the postposition, as the following examples from the corpus illustrate:

A2. || A 'few \months ago | I spent a week in Moscow.

C2. ...my community are celebrating a victory in a battle | which happened 'hundreds and 'hundreds of \years ago ||

D3. || Many trees | were 'planted over a 'hundred \years ago ||

<sup>14</sup> See 2.1.2 above.

- D4. || Well | we 'did a 'programme 'not \long ago | about shopping by Internet ||  
 G3. || The nineties | feels like 'such a long \time ago ◦now | but lots...

This seems to have been consistently the case with native speakers throughout the corpus, thus allowing the researcher to state with a certain degree of confidence that if the prepositional phrase governed by *ago* is to be made nuclear, non-native learners of English would be well advised to locate the tonic syllable on the complement, in order to be in accordance with native speaker treatment of the postposition.

#### 4.1.2.2 Nucleus on the final element of the complement *by default*

The five examples above, taken randomly from the corpus, clearly illustrate a strong tendency in the speech of native speakers to locate the main intonational prominence on the *final* element of the postpositional complement in neutral, non-contrastive contexts, thus allowing the researcher to also propose with certain confidence that this is the *default tonicity* for phrases with *ago* in neutral contexts, i.e. where no particular contrast or emphasis are being expressed. This is a significant finding in view that this aspect, as we will see below, proved a rather problematic area for the advanced students involved in the transcription test.

In a couple of instances, *ago* was followed by a tonic *now*, which was also thought of grammatically as part of the complement –potentially paraphrasable as “exactly”– and thus seen as behaving prosodically in accordance with the *default* pattern, albeit with overtones of emphasis:

- F1. ... in Tokyo for about two years | 'this was about 'two 'years ago \now |  
 urm it was...  
 F2. ...urm | I 'joined about I sup'pose 'six 'months ago \now | urm because I  
 just...

An argument could also be put forward, however, for this to be a case of emphatic accentuation, where *now* is emphasising the exact amount of time elapsed up to the present.

#### 4.1.2.3 Intonationally and rhythmically prominent *ago*

This section focuses on the eight examples from the corpus where *ago* was perceived to receive some degree of prominence: six instances of nuclear *ago* and two instances of the postposition receiving secondary prominence. An attempt will be made at explaining these deviations from the default pattern proposed above.

Out of the 74 utterances which make up the corpus, six utterances show native speaker selection of *ago* as *tonic word* in the intonation phrase:

E3. || A 'few years a/go || TV presenter John Lloyd thought up a formula...

E6. || I saw a picture in The Observer | some 'years a/go | of someone scoring a goal...

G1. ...because I know that my dad | 'years a/go | wrote a book on how to write a hit song...

H1. || Well, it's a very special ring | that was 'crafted a 'long, long 'time a\go | by the Dark Lord...

I6. || A 'couple of 'years a/go | I thought I'd make contact with an old friend...

J5. || What you will know of course | is that e'xactly 'fifty 'years a/go | the 31<sup>st</sup> March was also...

It could be hypothesised here that by placing the intonational focus on the postposition *ago*, these speakers seem to be emphasising the temporal distance existing between the described situation/event and the present moment, or in Reichenbach's terms (see 2.3.1 above), the speakers could be highlighting the distance between 'Speech Time' and 'Event Time' by making intonationally salient the word around which temporal deixis revolves.

Although the researcher does not dare discard this possibility, it is the researcher's view that what is at work here is an underlying temporal phenomenon of a psychological and more pervasive nature in language: It is proposed here that the six examples above illustrate the strong psychological urge to follow the universal tendency



to impose an alternating rhythm on spoken language, with speakers' selection of *ago* as the intonational nucleus partially or completely determined by the allocation of prominences in the Head of the intonation phrase. The choice to make prominent an element right before the postposition, coupled with the fact that it is sometimes the only prominent element in the Head, may eventually trigger the psychological need to create another rhythmical 'hook' in the intonational structure of the phrase.

Somewhat similarly, the following two examples might reinforce this view:

D1. || Almost 'twenty years a'go to the /day | I was waiting for a bus after another...

N6. ... productivity actually went down quite sharply | a \year or so a°go ||

Both examples seem to be the perfect illustration of Couper-Kuhlen's *optimisation strategies* at work, as described in Chapter 2 above. In D1, the accenting of *ago* creates a more even distribution of the prominences, and the addition of a rhythmical beat in N6 does add up to a more rhythmical effect to counteract the weight added by the two syllables *or so*.

Unfortunately, this tendency to impose an alternating rhythm on speech may be a partially idiosyncratic feature in cases where *ago* is involved, to judge by the large number of speakers who chose not to make *ago* prominent irrespective of other nearby prominences in the same intonation phrase. It seems that at the time of production, these six speakers 'judged' it less awkward-sounding to also accent *ago* and thus produce a more evenly spaced-out rhythmic pattern. This tendency could also be observed in pre- and post-nuclear patterns in utterances following the FEC (Final Element in Complement) default accentuation proposed above:

B4. || But only 'eighteen √months ago | being on a tour meant...

D6. || 'Well it was some \time ago °now | in the 1960s in fact ||

E4. || Ever since my children were born | even before my children were born | which is a very 'very long /time ago °now | we've used alternative medicine...

F1. ... in Tokyo for about two years | 'this was about 'two 'years ago \nnow |  
urm it was...

F2. ...urm | I 'joined about I sup'pose 'six 'months ago \now | urm because I  
just...

G3. || The nineties | feels like 'such a long \time ago °now | but lots...

J7. || One of my colleagues, Juliet –a chemistry teacher– | had a 'really 'nasty  
\shock a few °weeks ago ||

The examples above make the case for the principle of Stress Alternation simply too strong to overlook, with stress shift created in B4 and several instances of (nearly) perfectly balanced *feet* –to invoke Halliday’s well-known term–, with an (almost) equal number of non-salient syllables following each ictus.

## 4.2 Advanced students’ prosodic treatment of *ago* in transcription

One initial observation is that when the categories used for the analysis of the spoken corpus were applied to the student corpus of transcriptions, these proved not enough to explain a number of prominence allocations in the transcriptions. One extra category needed to be created in order to account for cases where the nucleus was placed on a *non-final element of the complement*, or NFEC. This is one area where the most discrepancy was found between native speakers’ assignment of nuclear prominences and advanced students’. Also, category 2 above was found to contain zero tokens in the absence of any relevant example in the students’ transcriptions.

### 4.2.1 Results

Four cases were found to occur in the transcription test, with a new category being introduced to fully account for all the tokens (category 5). The slightly re-elaborated set of categories for the analysis of student transcriptions is as follows:

1. The Postposition *ago* bearing the Nucleus in the intonation phrase (**PN** = Postposition Nuclear), e.g. three years ago
2. The Postposition *ago* receiving non-nuclear prominence in either the Head or the Tail of the intonation group (henceforth **PNNP** = Postposition Non-Nuclear but Prominent), e.g. 'three years a'go today;
3. Final Element in the Noun Phrase (NP) Complement made nuclear (**FEC** = Final Element in Complement), e.g. three years ago;
4. Nucleus placed outside the phrase containing *ago* altogether, with the phrase thus becoming Non-Nuclear (**NN**), e.g. ...in the north three years ago;
5. Non-Final Element in the NP Complement (henceforth **NFEC** = Non-Final Element in Complement), e.g. three years ago;

An example for each case as transcribed by the students might help to see the categories more clearly (with the exception of category 2, for which no token could be found):

1. (C4) || About fifty years ago | when treasure hunters were out...
2. (no occurrences in the student corpus)
3. (G4) || About fifty years ago | when treasure hunters | were out...
4. (P2) || There are numerous indicators | that the earth was in existence billions of years ago | but...
5. (H4) || About fifty years ago | when treasure hunters were out...

The following table shows the distribution in the allocation of primary prominence for the total of 52 sentences that the student volunteers transcribed prosodically. Each bar reflects the number of sentences which selected for one of the five choices above.

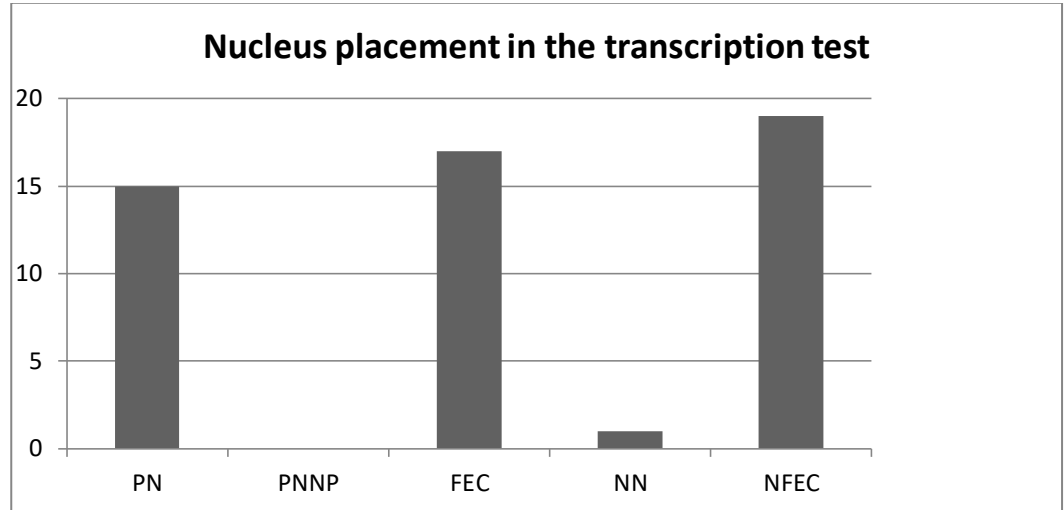


Table 5. Number of occurrences of different nuclei in phrases with *ago* in the test.

As the table above shows, *ago* was selected as nuclear 15 times in the transcription test consisting of a total of 52 transcribed sentences containing the postposition under scrutiny; 19 other sentences selected a non-final element in the postpositional complement and one sentence selected an element outside the prepositional phrase altogether. Only 17 out of 52 student transcriptions matched native speaker tendency for treatment of prepositional phrases with *ago* in non-contrastive contexts, namely with the nucleus on the final element in the complement: [*three years*] *ago*. No occurrences were found of the postposition being made prominent but not nuclear (PNNP) –i.e. bearing some degree of prominence other than nuclear.

The chart below, which includes percentages, summarises the findings and is more visually revealing of two aspects that merit discussion, one of them a rather unexpected result:

### Nucleus placement in the transcription test

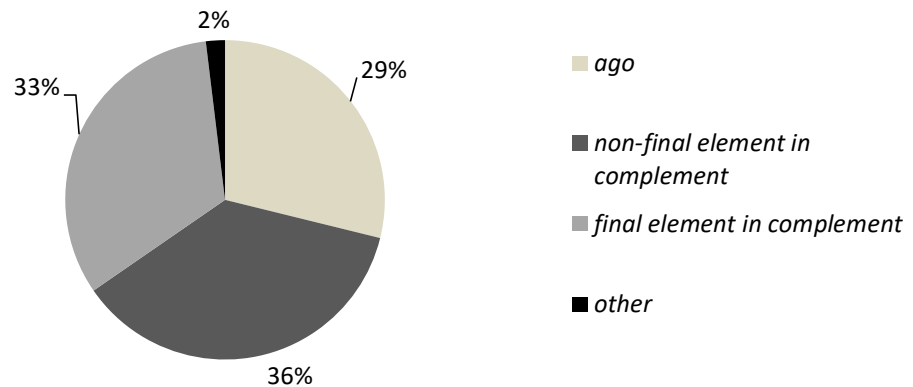


Figure 4: Distribution of prominences in phrases with *ago*.

#### 4.2.2 Discussion

Initially, the results of the student transcription test raise, in my view, at least two important issues:

- (a) the number of instances of nuclear *ago* in transcription, although somewhat significant, does not seem to represent such a serious issue as was previously thought on the basis of the frequency with which the researcher heard *ago* as nuclear in the volunteers' spoken English, the single most important factor which triggered this piece of research. This undoubtedly suggests that further study including a comparison of student recordings with their own predictions when transcribing might throw more light into the researcher's perceived discrepancy. Perhaps the extra time at their disposal when predicting nucleus placement in transcription allows students to weigh up all the words in a group against each other in terms of semantic load and thus shy away from accenting *ago* as often as they would do in speech, where real time production leaves little room for weighing up possibilities.
- (b) The percentage of sentences selecting as nucleus a non-final element in the postpositional complement (typically consisting of an NP with a

Determiner preceding a Head Noun) suggests a further problematic area: that of accenting NPs denoting time –such as *three years*– incorrectly. Students made the determiner nuclear in 36% of the cases: *three years*. Such a case of accentuation is judged to be appropriate only in contrastive contexts, which was never the case with the sentences used in the transcription test, since they were devoid of any contextual hints.

### **4.3 Prosodic behaviour of *ago*: NS spoken corpus versus student transcriptions**

Unlike what happened in the native speaker corpus, the student corpus showed a considerable number of examples of nuclei being placed on an earlier –thus, contrastive– element in the complement, as in [*three years*] *ago*. The numerous tokens of this uncalled-for contrastive pattern cannot but raise concern for a deviation in student predictions from what native speakers would normally do, as well as lack of awareness among students as to the communicative value of an ‘earlier than expected’ nucleus in the complement, especially when this complement is a Noun Phrase.

What was initially thought of as a problematic area in the speech of advanced English learners has unexpectedly been shunted into a mere second place: students showed more difficulty in properly accenting the NP complement of *ago* in non-contrastive contexts than in deaccenting *ago* altogether. The relatively high percentage of nuclei on the NP Determiner rather than its Head, albeit only moderately higher than that for nuclear *ago*, becomes a more pressing concern for the teaching of accentual patterns in English. Revisiting the accentuation of NPs in isolation may just not be enough; embedded NPs may go unnoticed if students’ attention is not drawn to this fact.

### **4.4 *Ago*: A non-prominent postposition by default?**

It was argued in chapter 2 that non-lexical items such as articles and prepositions typically remain non-prominent in contexts where no contrast is intended. Although many contemporary grammars will class *ago* as an Adverb, most of the intonation manuals surveyed (Armstrong & Ward, 1926; O’Connor & Arnold, 1973; Wells 2006)

provide numerous transcribed examples in which *ago* is prosodically treated as a functional item in the grammar, i.e. with no prominence assigned to it.

However, the intonational manuals consulted for this study do not formally address nucleus placement in prepositional phrases with *ago*, and the examples extracted from them, although slightly suggestive of a non-prominent treatment of the postposition, do not seem to help even the more curious students –i.e. those who find it easier than the average student to notice recurrent patterns in the linguistic data.

The spoken corpus suggests that a *default* type of accentuation with the nucleus on the postpositional complement then seems to be the expected prosodic behaviour of phrases containing the postposition *ago* in present-day English. Departures from this default could be largely attributable to either

- (a) Speakers highlighting the temporal gap between an event/situation in the past and the present –thus stressing the deictic nature of the postposition–, or
- (b) Speakers’ seemingly strong psychoacoustic need to impose regularity on the spoken material produced in real time, but adopting compensating *optimisation strategies* in order to distribute prominences more evenly in speech at the risk of accenting material not usually highlighted.

Still, the native speaker data lends convincing support to the more contemporary view of *ago* as a non-lexical, deictic item in the grammar of English, not only on the basis of its licensing a pre-posed complement and therefore becoming one of a few –if not the only– postpositions in English, but also on account of its largely non-accentual character in the speech of native speakers.

## 5. Conclusion

The main purpose of this study was to investigate the prosodic behaviour of the English postposition *ago* in the speech of native speakers of English. More specifically, this study sought to ascertain whether *ago* receives any kind of prominence in discourse and under what circumstances this occurs. With this purpose in mind, the researcher collected a corpus of recordings extracted from popular advanced (C1-C2) English language textbooks used in EFL classrooms in Argentina. The corpus consisted of many hours of recordings accompanying such textbooks.

Due to the lack of consensus in intonation manuals regarding the accentual treatment of the postposition and the perceived variation of its prosodic treatment in non-native speech, the researcher judged it was paramount to observe native speakers' use of *ago* in spoken discourse. The results are expected to contribute not only to the description of its patterned prosodic behaviour, but also to lend support to a recent re-classification of *ago* as belonging to the small set of English postpositions, also including *notwithstanding*.

In addition, the researcher designed and implemented a diagnostic transcription test to find out how advanced EFL students treated *ago* intonationally in phonemic/prosodic transcription in neutral –i.e. non-contrastive– contexts. This test was motivated by the researcher's perceived over-accenting of the postposition in the speech of these students during class time.

It was both the absence of any description or prosodic treatment of *ago* in intonation manuals, and the frequency with which the postposition was perceived as prominent in the speech of non-native speakers that prompted the researcher to collect the spoken English corpus of quasi-authentic recordings from EFL textbooks and the non-native speaker corpus of transcriptions, in order to observe and describe the prosodic behaviour of *ago* in both groups.



## 5.1 The research questions revisited

It seems necessary at this stage to reintroduce the research questions which have guided this study from the very beginning. They were stated in the introductory chapter as follows:

5. Does the English postposition *ago* receive nuclear prominence in present-day English, or does it shy away from prosodic highlighting?
6. Does the rhythmical structure of the phrase containing *ago* influence the prosodic behaviour of the postposition?
7. Why does *ago* behave the way it does?
8. How do advanced students of English treat *ago* in their phonetic transcriptions?

This study revealed some interesting findings in relation to questions one and two, which led the researcher to propose both default and rhythmical explanations to account for these findings in an attempt to answer to the third question above. In addition, the diagnostic test showed a marked deviation in students' treatment of *ago* versus native speakers' treatment of the postposition in the corpus of recordings.

## 5.2 Nuclear and non-nuclear prominence in phrases with *ago*

One important conclusion of this study is that the English postposition *ago*, as suspected at the outset of this study, behaved in the spoken corpus in much the same way as most other members of the non-lexical classes: it was found to be non-prominent in a high percentage (86%) of occurrences in the spoken corpus. More importantly still, the choice of nucleus placement in the NS corpus was found to be almost invariably the last element of the postpositional complement. This led the researcher to propose two *default* patterns in order to account for the prosodic behaviour of *ago* in the corpus:

1. The postposition *ago* is *non-prominent by default*

2. Nuclear prominence in phrases with *ago* will fall *on the last element of the postpositional complement by default*.

Both these *default* patterns are confidently thought to account for most occurrences of *ago* in the corpus of recordings and, it is further hypothesized, in NS speech at large. Further research in this area of nucleus placement is suggested in 5.4 below.

As for those cases where *ago* did receive prominence (only 11% of all instances in the corpus), 6 instances were found to carry nuclear prominence and only 2 instances were identified as bearing some degree of non-nuclear, rhythmical prominence. In view of the theoretical framework proposed in the literature review, nuclear *ago* is interpreted in this study as reflecting the speakers' intention to reinforce the temporal distance between the time of utterance and that of the event being referred to. As a present-day marker of *Scalar Deictic Localisation in the Pastor SDLP* (Bourdin 2011), *ago* serves to locate in time a specific past event, and, as explained in chapter 2, it does so by specifying through a Noun Phrase complement the temporal span existing between the time of speaking and the time of the event. Making the postposition nuclear would seem to strengthen in a somewhat contrastive fashion the past localisation of the event in question as opposed to some other –and qualitatively different– situation at the time of utterance –i.e. the present.

However, primary prominence was not the only kind of prominence evidenced in the corpus. And before I turn to the conclusions in this respect, a few ideas introduced in chapter 2 merit being revisited at this stage. Following Couper-Kuhlen (1986) it was argued that “it is a basic principle of English speech rhythm that stressed and unstressed syllables alternate rather regularly” (p.14). This principle, known among intonologists as the Principle of Rhythmic Alternation (PRA), is a powerful determining factor of the distribution of prominences in English discourse in many contexts, although speakers very often may produce sequences of stresses deviate from the physical regular patterning ascribed by the PRA. Optimisation strategies deployed by speakers in cases where lexicogrammatical structure would seem to force them to abandon rhythmic regularity might imply the accenting of items such as prepositions, which belong to the non-prominent class of words.

It was also argued above that if a structure is ‘ill-formed’ in terms of the PRA, strategies are applied so that it conforms more closely to the ideal, regular –i.e. isochronous– pattern. These rules operate to add/delete/move prominences around to ensure periodicity and isochrony. So pervasive has this tendency been found to be that it has led researchers to argue for the existence of native speaker strategies to produce rhythm-friendlier sequences or constellations of syntactic elements; these regulatory strategies may have historically helped to even shape the grammar of English.

In fact, evening out the location of stresses in utterances has long been considered to affect most –if not all– languages in the world, to the point of being classed as a set of linguistic universals. At the heart of this universal tendency may be, as stated in chapter 2, the very human desire to enhance both ease of articulation of the message and ease of perception of the incoming signal.

Turning now to the question of overall presence versus absence of prominence on *ago* in the corpus, regardless of its nature or degree, it is the researcher’s view that there seems to be –at least for some speakers in the corpus– strong rhythmical forces governing the distribution of prominences in the analysed utterances. When the postposition was found to receive prominence at all –be it nuclear or non-nuclear– it did so in the apparent need of a few speakers to impose regularity on spoken discourse and to keep to the well-balanced, alternating rhythmical structure which was claimed above to have a very strong psychological basis in native speaker speech. More specifically, phrases with *ago* constituting intonation phrases in themselves, were, in the researcher’s opinion, strong candidates for a rhythmical structure consisting of two beats, one on the complement and one on the postposition, thus lending support to a view of rhythm as a strong determinant of the prosodic behaviour of *ago* in a few cases.

To sum up the conclusions reached thus far, the overwhelming majority of cases in the native speaker corpus in which the postposition remained non-prominent with the last element of its complement being made nuclear, have led the researcher both to interpret this as the *default* location of the nucleus and to propose a case of *default tonicity* for phrases with *ago*, stated as follows:

The nucleus of phrases containing the postposition *ago* will fall by default on the last element of the postpositional complement, unless rhythmical and/or contextual forces dictate otherwise.

Further analysis incorporating other types of corpora might help strengthen the case for a) the lack of prominence of *ago* in most contexts and b) its prominent nature in cases of enhancement of the rhythmical balance of an utterance and/or temporal contrast.

### 5.3 A reappraisal of *ago* in the grammar of English

For years, *ago* has been described and taught as an *adverb* in mainstream grammars, textbooks and dictionaries, and has thus been classed among the so-called *content words* of the English lexicon. Pronunciation manuals have stated time and again that the classical distinction between *content* and *function* words is paramount and decisive when it comes to assigning prominences in speech. Therefore, it is to be expected that Spanish-speaking learners of English and teacher trainees, as well as EFL teachers and translators might want to assign prominence to the word *ago* whenever they are faced with the choice either in transcription or in actual speech. However, there is much imprecision today in instruction materials as to how to treat *ago* prosodically, since it is rarely mentioned in pronunciation instruction and when it has been, prominence assignment through examples has been shown to vary greatly.

In recent years, arguments have been put forward by grammarians –albeit rather unsuccessfully and/or singlefoldedly, in the researcher’s opinion– to reconsider the role of *ago* in the grammar of English (Bas Aarts, 2011; Huddleston & Pullum, 2002; Kurzon, 2008; Williams, 1994). Either positing it as a *postposition* governing a preposed complement, or as an *intransitive preposition* with no complement and premodified by a temporal expression, these treatments seem to agree in one important respect: what is semantically relevant is the time expression ‘accompanying’ *ago*, rather than *ago* itself, irrespective of the syntactic link present. Since prominences in discourse are naturally found on the semantically heavier slots in an utterance, and these slots are typically filled by content words, this study seems to lend support from the phonology to the re-categorisation grammarians have been proposing for *ago*,

namely as belonging to the non-lexical word category of ‘pre/postposition’. In other words, the corpus used in this study seems to point towards a more realistic and observable treatment of *ago* as one of the very few postpositions in English, rather than towards its more traditional classification as *Adverb*.

## 5.4 Intonational treatment of *ago* in non-native speaker transcriptions

I now turn to the diagnostic transcription test, aimed at observing and measuring the assignment of prominence by advanced EFL students in utterances containing the postposition. Analysis and tabulation of the data provided new insights into how non-native speakers may treat *ago* intonationally. Contrary to the researcher’s expectations, namely that the non-native speaker will tend to assign prominence to *ago* without any consideration for its true grammatical nature or for the rhythmical structure of the utterance, the small number of instances with prominence located on *ago* in the corpus of transcriptions showed this to be less of a worry than previously thought. The researcher’s original perception with regard to this issue –a perception that motivated this study in the first place– proved to be inaccurate in most cases. Non-native speakers’ perceived overuse of prominent *ago* could not be corroborated through their transcriptions. This suggests further enquiry could be made through a corpus of non-native speaker recordings to delve more deeply into the perceived discrepancy.

One finding from the analysis of the non-native transcriptions suggests an unforeseen problematic area. Noun Phrases are typically double-accented, and those acting as complement of the postposition *ago* should be no exception. However, non-native speakers all too often made prominent the *first*–rather than last– element of the postpositional complement for no apparent reason, since no contrast was triggered by any of the sentences –a carefully controlled variable. This is perceived as a case of faulty allocation of prominence and suggests care should be taken during lessons to cater for enough practice in this area. Accenting Noun Phrases correctly in neutral contexts is perceived as a necessary prerequisite for appropriate accentuation of phrases with *ago*.

## 5.5 Limitations of the present study and suggestions for future work in the area

One serious limitation of this study resides in the origin and reduced size of the corpus of recordings used. Containing mostly scripted speech from a selection of Advanced (C1) EFL textbooks, the corpus fails to some extent to represent spontaneous spoken English. Also, in order to make it a manageable corpus, it had to be reduced to only a few hours of recordings. A much larger corpus of naturally-occurring speech from a variety of backgrounds and containing a wider selection of genres would no doubt help to shed more light on the prosodic behaviour of the postposition *ago*, with more realistic observations that could span not only different ages, social classes, and regional accents, but also texts belonging to different genres and on different topics.

Further study in this respect could provide a much clearer picture of this neglected but frequent deictic item in the grammar of English which has long straddled between its adverbial and prepositional personalities in grammars and intonation manuals. Conclusions provided by a more varied and realistic corpus would no doubt better inform classroom instruction in the area of English prosody and, more specifically, accentuation and nucleus placement.

Another aspect which clearly shows limitations lies at the heart of what initially motivated the researcher to undertake this study: the corpus of transcriptions collected from non-native speakers. A perceived discrepancy between what the researcher heard advanced EFL students say and what he believed to be the case in the speech of native speakers led to the implementation of a diagnostic test to compare what non-native speakers did in relation to the behaviour of *ago* in the spoken corpus. Although the transcriptions did prove useful in highlighting a phenomenon which, to the best of my knowledge, was not previously considered as worthy of too much attention in the classroom, –namely offering students additional practice in accenting Noun Phrases–, it remains to be seen what non-native speakers actually do with *ago* in spoken English produced in a variety of tasks. Recording students referring to past events in different situations in which they are prompted to produce language might help to clarify the

researcher's still largely unconfirmed perception of non-native speakers regularly over-accenting the postposition.

Further study in this area in English intonation would, then, largely benefit from a more eclectic, larger corpus of both native and non-native speaker recordings from a variety of backgrounds and engaged in the production of different texts. Phonetic analysis of the prosodic cues present at syllables with different degrees of prominence would further help to corroborate –or reject– the transcribers' perceptions through auditory analysis. This is not to suggest that auditory analysis alone is inadequate or insufficient, since it is the researcher's view that it is ultimately what the ear can perceive that matters rather than all the minutiae that can be shown on a computer equipped with the appropriate software. What is meant here is that the use of the appropriate technology can ultimately help to assess transcribe differences –and, why not, agreement as well– with higher degree of accuracy.

To conclude, then, it can be said that the evidence –albeit rather limited– found in this study strongly suggests that recommending students to shy away from making *ago* prominent both in transcription and in speech at large is an altogether more realistic idea than they might get from the treatment of *ago* either in grammars and in pronunciation manuals . Indeed, this idea of the existence of 'default' patterns in the teaching of grammar and pronunciation does seem to alleviate the burden of processing language in students with low or intermediate level language skills. It also seems to simplify the teaching of these complex aspects of language. Therefore, positing a default tonicity for phrases with *ago* might help along these lines.

In addition, exposure to authentic listening material and training in observing natural data will also help students to better figure out how this linguistic feature behaves prosodically. Departures from a 'default' nucleus placement can thus be better noticed and likely explanations can be entertained in class taking into account rhythmical phenomena such as stress alternation, as well as pragmatic considerations involving speakers creating temporal contrasts in discourse.

## 6. References

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## Appendix A

### TRANSCRIBER AGREEMENT AND NUCLEUS ASSIGNMENT IN THE CORPUS

Track	Transcriber 1 (Researcher)	Transcriber 2 (Colleague)	Nucleus position
A1	years	years	FEC
A2	months	months	FEC
B1	years	years	FEC
B2	years	years	FEC
B3	seasons	seasons	FEC
B4	months	months	FEC
C1	moons	moons	FEC
C2	years	years	FEC
C3	years	years	FEC
C4	years	years	FEC
C5	generations	generations	FEC
C6	years	years	FEC
D1	AGO...day (head prom)	AGO...day (head prom)	FEC w/AGO rhythmical
D2	months	months	FEC
D3	years	years	FEC
D4	long	long	FEC
D5	month	month	FEC
D6	time	time	FEC
D7	years	years	FEC
D8	years	years	FEC
D9	decades	decades	FEC
D10	years	years	FEC
D11	years	years	FEC
D12	long	long	FEC
D13	years	years	FEC
D14	year	year	FEC
E1	while	while	FEC
E2	years	years	FEC
E3	AGO	AGO	contrast
E4	time	time	FEC
E5	time	time	FEC
E6	AGO	AGO	constrast
F1	now	now	FEC
F2	now	now	FEC
<b>F3</b>	<b>Rome</b>	<b>years</b>	<b>Transcr disagreement! Discarded from corpus</b>
G1	AGO	AGO	rhythmical
G2	years	years	FEC
G3	time	time	FEC

G4	years	years	FEC
H1	AGO	AGO	contrast?
H2	years	years	FEC
H3	ages	ages	FEC
H4	years	years	FEC
H5	years	years	FEC
I1	years	years	FEC
I2	while	while	FEC
I3	weeks	weeks	FEC
I4	year	year	FEC
I5	years	years	FEC
I6	AGO	AGO	AGO contrast
I7	year	year	FEC
J1	years	years	FEC
J2	years	years	FEC
J3	brain	brain	FEC
J4	years	years	FEC
J5	AGO	AGO	AGO contrast
J6	years	years	FEC
J7	shock	shock	FEC
K1	years	years	FEC
K2	years	years	FEC
K3	years	years	FEC
L1	century	century	FEC
L2	years	years	FEC
L3	years	years	FEC
L4	day	day	FEC
M1	years	years	FEC
N1	years	years	FEC
N2	years	years	FEC
N3	decade	decade	FEC
N4	years	years	FEC
N5	years	years	FEC
N6	year	year	FEC w/AGO rhythmical
N7	week	week	FEC
N8	years	years	FEC
N9	years	years	FEC

## Appendix B1

READ THE FOLLOWING INSTRUCTIONS VERY CAREFULLY. THEN DO THE EXERCISE.

Chunk the following sentences. Then underline the TONIC SYLLABLE(S) (in the case where you might think a chunk selects for a fall + rise, you must underline two syllables).

*DO NOT mark any tones.* Use // and / for the ‘chunking’, and underlining for the tonic(s) in each chunk, as illustrated in the following ‘made-up’ example:

//We’d been up since dawn // As nobody felt like walking anymore / we took the bus home for a change //

1. Shaken passengers told of their terror after a Cross-channel car ferry ploughed into a dock yesterday, hurling them 12 feet into the air.
2. There are numerous indicators that the earth was in existence billions of years ago but it still is impossible to prove exactly how many millions.
3. Solicitor John Duncan, from Rayleigh, Essex, said: ‘I saw some hitting each other. The children were terrified.’
4. About fifty years ago, when treasure hunters were out looking for it in the jungle, no one suspected that the village was buried under their very feet.

## Appendix B2

STUDENT	AGO	NON FINAL ELEMENT IN COMPLEMENT	FINAL ELEMENT IN COMPLEMENT	OTHER
1			XX	
2			XX	
3	XX			
4			XX	
5		X	X	
6	X		X	
7			XX	
8		XX		
9		XX		
10		XX		
11		XX		
12	XX			
13		X	X	
14		XX		
15		X	X	
16		X	X	
17	X	X		
18			XX	
19	XX			
20		XX		
21		X		X
22	XX			
23			XX	
24	X	X		
25	XX			
26	XX			
	15	19	17	1

## Appendix C

### CORPUS OF TRANSCRIPTIONS OF NATIVE SPEAKER USES OF AGO

#### A. CPE Practice Tests (Harrison)(Test 1, part 1, extract 2)

1. We did an exercise on ticketing | 'five \years ago |
2. || A 'few \months ago | I spent a week in Moscow.

#### B. Proficiency Masterclass (Gude/Duckworth)

1. || 'Thousands of \years ago | Australia was inhabited by huge animals such as...
2. || That is until '50,000 \years ago give or take five thousand years |
3. || Un'til a few \seasons ago | they were just smelly shoes for sport.
4. || But only '18 \months ago | being on a tour meant seven of us in a van...

#### C. Cambridge English Proficiency Masterclass (Gude et al.)

1. Gosh | many \months ago | I'm not sure where or when...
2. ...my community are celebrating a victory in a battle | which happened 'hundreds and 'hundreds of \years ago ||
3. And 'then about 'seven \years ago | I came to the UK and I thought I'd fit in perfectly.
4. Well, I guess when I first arrived in this country | 'many many 'years a>go | people couldn't, simply couldn't understand a word I was saying
5. 'Seventy 'thousand gene>rations ago | our ancestors set this program in motion,
6. But a 'few \years ago | we were lucky enough to come into some money, so that widened our horizons quite considerably.

#### D. Objective Proficiency (2002/2013)

1. Speaker 5: It could be a story in *True Romance*, but it really happened just like this || Almost 'twenty 'years ago to the /day | I was waiting for a bus after another mind-numbingly awful day at work, no bus in sight, of course.
2. ...over three-quarters of 12- to 19-year-olds said they kept track of their money | 'up from 'twelve \months ago ||
3. Many trees | were 'planted over a 'hundred \years ago ||
4. Mike: Well | we 'did a 'programme 'not \long ago | about shopping by Internet. One of the big supermarkets will deliver to your door for £5 if you order online.
5. Kevin (halfway thru the conv): What I've got is a nice flat I hardly ever see, a high-profile, high-stress job in share-dealing, no girlfriend, | because she 'dumped me a \month ago | so life's not exactly a bed of roses.
6. What do I remember about being at school? || 'Well it was some \time ago now | in the 1960s in fact.
7. A friend of mine studies village life in central Africa || A 'few \years ago | she paid her first visit to a remote area where she. 'as to carry out her fieldwork.

8. || Yet as 'little as 10 \years ago | the term was hardly used, either in the academic literature or in everyday language.
9. The global marketplace, they say, is much more developed | than even 'two or 'three \decades ago | and is indifferent to national borders.
10. That's right, and we're finally tying the knot next month || 'Just 'over five \years ago | I met this bubbly little lady – Abby.
11. || If you were living 'two or 'three hundred \years ago | you were in the hands of God or Fate and if you were struck down by a mortal disease you thought you'd been sinful, but you also had your beliefs to console you - you'd go to paradise or heaven or whatever.
12. Absolutely || I 'know that 'not so very /long ago | we used to see jobs for life as the norm, with unquestioning company loyalty, and a golden handshake at the end of it all...
13. || 'Four \years ago | I had the same doubts as you -but every week the net advances, and it never ceases to amaze me what people buy online.
14. Compare this week's marketing job adverts | to 'those of a \year ago | and you'll see that practically everyone wants e-commerce and new media experts and this is how it should be.

### E. New English File Advanced

1. || I 'read a \while ago | that in Iceland in possibly the 70s or 80s...
2. ...and if you ask me || it was 'something that could have been 'written 'fifty \years ago || or more. (Kate: Definetely not. To tell you the truth...
3. || A 'few years a/go || TV presenter John Lloyd thought up a formula...
4. Ever since my children were born, even before my children were born | which is a very 'very long /time ago 'now | we've used alternative medicine...  
I think is very true is what another Brit said to me | some \time ago ||
6. I saw a picture in The Observer | some 'years a/go | of someone scoring a goal...

### F. Total English Advanced (Wilson/Clare)

1. When I lived in Japan, actually in Tokyo, for about two years | 'this was about 'two \years ago | \now - urm, it was, as you can imagine...
2. Urm, | I 'joined about I sup'pose 'six \months ago ,now | urm because I just fancied giving ballroom dancing a go...

### G. Speak Out Advanced (Damian Williams 2010)

- 1....because I know that my dad | 'years a/go | wrote a book on how to write a hit song...
2. How many people spoke the language we are conversing in | say '600 \years ago ||
3. The nineties | feels like 'such a long \time ago /now | but lots
4. You know | the 'telephone was in'vented many \years ago | why do we not use it? Phone first.

### H. New Inside Out Advanced (Jones et al. 2010)

1. Well, it's a very special ring | that was 'crafted a 'long, long 'time a\go | by the Dark Lord, ...
2. Um | it was \years ago || I was a student...



3. I was at a party with my girlfriend, and I saw this guy I'd known | \ages ago | at school.
4. || A 'few \years ago | there was an American talk show...
5. || 'Two \years ago | my family camped amidst the California redwoods.

### I. Premium Advanced C1

1. || I 'think it was 'only a couple of \years ago | that one was captured...
2. Having heard the film star Joaquin Phoenix | a \while ago | talking about the link between...
3. || About 'three \weeks ago | we placed an advert for the piano on a UK national freebie piano-for-sale website.
4. One of them was the Estate Agent who sold our own UK house | over a \year ago |
5. The other is Head of Department at the very same workplace that my wife worked at | about 'twenty \years ago ||
6. || A 'couple of 'years a/go | I thought I'd make contact with an old friend...
7. ...he then informs me he sold the phone | about a \year ago |...

### J. Straightforward Advanced

1. ...I'm still sharing a rented flat just like I was | 'ten \years ago ||
2. ...I did this | a few \years ago | and yes, you're right.
3. || I under'stand you were the 'subject of a \brain study a few years ago ||
4. || So a 'few \years ago | I was commissioned by erm er British television...
5. What you will know, of course | is that e'xactly '50 'years a/go | the 31<sup>st</sup> March was also...
6. || I was doing an MBA | a 'couple of \years ago |
7. One of my colleagues, Juliet –a chemistry teacher– | had a 'really 'nasty \shock a few weeks ago ||

### K. Proficiency Gold

1. || Some /years ago | I was observing a teacher taking a science lesson.
2. || A 'hundred \years ago | investigation of the paranormal did command a certain respect.
3. ...some of the big national space projects | that 'seemed so ex'citing 'thirty \years ago | ...

### L. Language Leader Advanced

1. || A /century ago | there were millions of elephants...
2. ...| '20 \years ago | there were about 1 million...
3. In the film we experience the Hajj as Battuta did | over '700 \years ago |
4. H: Oh that's annoying. I did mention it | a 'couple of \days ago |

### M. IELTS Masterclass

1. We know that humans were walking upright | 'one and a 'half million \years ago ||

### N. Business Benchmark Advanced

1. ...and nowadays designers and consulting engineers have to compete a lot more on price |than they 'had to maybe '30, '40 \years ago | so price is certainly...
2. Over-the-counter sales volumes are about 10% lower | than they were 'ten \years ago ||
3. As a result, we can sell much higher volumes nowadays with just about the same staffing levels | as a \decade ago ||
4. Corporate sponsorship of the arts is up about 50% on | 'ten \years ago ||
5. They got companionship from work, they were protected by their trade unions and professional associations | in ways which disappeared | '20-or-so \years ago | and when ...
6. In my company, in one factory, | productivity actually went down quite sharply | a \year or so ago ||
7. Claudio: Now I know why you're here. It's that email I sent you | a \week or so ago | isn't it?
8. Still, the main reason given me by someone speaking on behalf of one of our best known chains, was that it's what people want | 'just the 'same as a 'few >years ago | they started looking for organic food...
9. ||A 'hundred \years ago | a disaster in Europe would almost certainly not have affected businesses in Japan or Argentina the way it might in today's world...