

A corpus study of the prosodic features accompanying verbal irony in English

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El presente estudio intenta demostrar los resultados de una encuesta llevada a cabo con el fin de analizar una de las varias estrategias pragmáticas que un hablante que quiere ser irónico, tiene a su disposición: el uso de características prosódicas. Sesenta y cuatro textos del “London Lund Corpus of English Conversation” (Svartvicky Quirk, 1980) se analizaron minuciosamente para identificar las características prosódicas que constituyen las variables involucradas en el llamado “tono irónico de la voz”. Ochenta y ocho instancias de ironía verbal se encontraron en estos textos y las variables que se identificaron como posibles afectadoras del significado de estas elocuciones (en otras palabras, las que les da el tono de voz irónico), fueron las siguientes: 1) Entonación, 2) Énfasis en una palabra clave, 3) Tono alto en palabras claves, 4) Risa estratégica y 5) Silencio/pausas estratégicas.

Las preocupaciones principales fueron: a) ver si siempre hay un tono específico utilizado en pronunciaciones irónicas y b) investigar hasta que grado las características prosódicas, además del tono, también influyen y ocurren junto con el tono.

El análisis cuantitativo arrojó los siguientes resultados: 1) No se usa un solo tono en las elocuciones irónicas. Ocurren tanto tonos ascendentes como descendentes. Sin embargo, los resultados obtenidos por la prueba estadística X^2 muestran que existe una diferencia significativa en la distribución de tonos entre elocuciones irónicas y no irónicas; 2) otras características prosódicas, como el acento en palabras clave, tono alto en palabras clave y la risa estratégica del hablante o del oyente se presentan frecuentemente en elocuciones irónicas. El silencio estratégico o pausas no ocurren con frecuencia, pero todas estas características parecen utilizarse por los hablantes en diferentes combinaciones, como una estrategia poderosa para expresar significados irónicos. Las combinaciones más frecuentes encontradas como resultado del análisis estadístico se presentan aquí como prueba que muestra las tendencias del discurso irónico.

The present study attempts to show the results of a survey made in order to analyze one of the various pragmatic strategies that a speaker who wants to be ironic has at his/her disposal: the use of prosodic features. Sixty-four texts from the "London Lund Corpus of English Conversation" (Svartvick & Quirk, 1980) were scrutinized to identify the prosodic features constituting the variables involved in the so-called "ironic tone of voice". Eighty-six instances of verbal irony were found in these texts, and the variables identified as potentially affecting the meaning of these utterances (i.e. providing them with the ironic tonic of voice) were the following: 1) Intonation, 2) Stress on key word, 3) High pitch on key words, 4) Strategic laughter and 5) Strategic silence/pauses.

The main concerns were a) to see whether there is always a specific tone used in ironic utterances, and b) to investigate to what degree prosodic features other than tone also influence and co-occur with tone.

The quantitative analysis yielded the following results: 1) there is not only one exclusive tone used in ironic utterances. Both falling and rising tones (as well as combinations of both) occur in this kind of utterance. However, the χ^2 (Chi-square) results show that there is a significant difference in the distribution of tones between ironic and non-ironic utterance; 2) other prosodic features, like stress on key words, high pitch on key words and speaker's or hearer's strategic laughter present a high frequency of occurrence within ironic utterances. Strategic silence/pauses do not occur very frequently, but all these features seem to be handled by the speakers in different combinations as a powerful strategy to convey ironic meanings. The most frequent combinations found as a result of the statistical analysis are given herein, as evidence showing the tendencies of ironic discourse in this respect.

1. Introduction

This study is part of a major pragmatic study on verbal irony (Alba Juez, 1996), in which irony is characterized (after considering the different theories about irony and the wide possibilities of strategies available for an ironic speaker/writer) in the following way:

Verbal irony is a super-strategy embracing many subsidiary pragmatic strategies used by speakers or writers to express meanings which are based on one or more of a group of underlying semantic oppositions such as: spiritual/material, true/false, positive/negative, love/hate, self/others, etc.. These oppositions may be made manifest at different levels, such as those of the proposition, the speech act, or even the phonological level. It generally involves an attitude on the part of the speaker that shows derision in most cases but which can also build rapport among the interlocutors and/or show praise or express positive feelings; or it can also show neutrality on the part of the speaker with respect to his attitude towards the hearer or a third party. The main discourse functions fulfilled by this super-strategy are: 1) Verbal Attack, 2) Amusement and/or 3) Evaluation. (Alba Juez, 1996: 384)

The classification of examples in the corpus used for this study was made in terms of the above characterization.

The focus of this paper is on the study of one of the substrategies employed by ironic speakers: the use of intonation and other prosodic features. The emphasis is put on how and when the speakers make use of these features as a tool or as a pragmatic strategy to convey ironic meanings. As it seems evident that there exists what many people refer to as “an ironic tone of voice”, my research questions are the following:

- a) Is there any specific kind of intonation for ironic utterances in English?, or, is there a special tone used invariably when they occur?
- b) Is there any other kind of prosodic feature which may serve to signal or mark ironic utterances?

In order to answer these questions, the two kinds of research that Brown (1988) considers were carried out. First, a review of the existing literature on the topic was made, which will be discussed and will serve as a basis for the clarification and understanding of the problem. This would constitute what Brown calls *secondary research*. Second, the necessary *primary research* was done, *i.e.*, “a study derived from the primary source of information”, which in this case is the English language. To this latter purpose, I used the LONDON LUND CORPUS OF ENGLISH CONVERSATION (Svartvik & Quirk, 1980), hereinafter LLC.

The hypothesis that has been derived from the research questions is the following:

There is no specific tone used exclusively for ironic utterances. Nevertheless, the frequency of occurrence of the different tones within ironic discourse is

different from the frequency of occurrence of these tones in non-ironic discourse. Intonation and other prosodic features (such as pitch level, laughter, etc.) work together to conform the so-called "ironic tone of voice", and the use of these features constitutes only one more of the possible strategies ironic speakers have at their disposal.

1.1 Description of the corpus

The LLC is a computerized corpus, and it consists of 87 texts, each of 500 words approximately (the whole corpus occupies 8 diskettes). These texts are arranged in text groups, namely, a) face-to-face conversation, b) telephone conversation, c) discussion, interview debate, d) public, unprepared commentary, demonstration, oration, and e) public, prepared oration (priest's sermons and mass). Most of the texts contain "subtexts" in them; for instance one text labelled "telephone conversation" may include two, three or more telephone conversations in it. For the analysis carried out herein, twenty of the 87 texts were chosen on a random basis. These twenty texts contain 64 subtexts. Of these, 35 are private telephone conversations, 19 are face-to-face conversations, 5 are instances of radio discussion, debate, interview or sports comment, 4 are instances of "public, prepared oration" and one of them contains legal discourse (public, unprepared legal discourse). All these were examined for examples of ironic discourse and eighty-six instances of verbal irony were identified. An account of the different cases of irony in relation to the features studied in this paper is made, where 86 occurrences are equivalent to 100% of occurrences.

1.2 Prosody

The objective of this survey is, then, to try to determine the degree to which a particular intonation or any other kind of prosodic prominence accompanies ironic utterances or affects their possible interpretation. In order to answer the research questions and to test the research hypothesis, both a pragmatic qualitative analysis and a quantitative analysis of these features (within both ironic and non-ironic discourse) is carried out.

It is important to note that prosodic features include not only tone-units (length, distribution and structure), tone choice, pitch, range, prominence/stress, loudness, rate, rhythmicality, pause and tension (see Crystal and Davy, 1969) but also silence and voice qualifications such as sobs, laughter and giggles or cough, as Johns-Lewis (1986) remarks. The function of prosody seems to be primarily concerned with the semantics or pragmatics of the utterance, and therefore speakers' conceptions of the functions of prosody seem to be in considerable accord with psycholinguistic reality. Indeed, Cutler & Ladd (1983) come to these conclusions after analysing prosodic repairs in a great number of recorded examples: they observed that prosodic repairs were issued only when the speaker feared the hearer might be misled into an inappropriate interpretation of the utterance (1983: 91).

The opening move for this analysis will be to discuss what the researchers have found out about the different prosodic features in connection with irony and to try to check this knowledge with the data in the corpus.

2. Intonation

Many authors have studied the intonation of ironic utterances trying to find out whether a particular intonation is characteristic of irony and whether it is a necessary condition to it. As many phoneticians have noted (Pike (1945), Kingdon (1958), O'Connor and Arnold (1969), Gimson (1980), Jones (1972), Laver (1994), etc.) Intonation is significant and tones have a semantic function in language. Among the variety of meanings given to an utterance by using different tones, Kingdon points out that "implicatory statements" require a Tone III (falling-rising). Kingdon defines "implicatory statements as "statements in which the speaker intends his hearer to understand something more than the words themselves convey" (1958:222). Irony would obviously fall within this category. Likewise, Leech in his *Principles of Pragmatics* (1983) makes reference to the fall-rise tone as "an intonation often associated with indirect implicature". In effect, the rate of occurrence of this tone among ironic utterances can be said to be high (as will be shown in the results of this survey), though not *exclusive* of ironic discourse. For the sake of illustration, consider the following example in the corpus, where the falling-rising tone seems to be of high importance in the interpretation of the ironic remark. Here, two academics are criticising their Head of Department's views on Literature and how it should be taught:

[1]

B	11	*((but. ^that !is only :nVatural#))*
A	11	a ^ra*ther 'weak ch\aracter#
A	11	^d\oesn't it#
B	11	^m\ay'be#
B		* ((untranscribable murmur))*
A	11	*^not 'quite b\ig e'nough#
A	11	to ^go* and 'say Look old 'chap#
A	11	^y\ou were r\ight# -
A	11	or per^haps not _even _big e_nough _to .
A	11	r\ecog'nize#
B	11	I ^got the im:prVession#
B	11	that he ^didn't !r\ecog'nize it# .
A	11	^n\o#

A 11 *^pr\obably##*
 B 12 *^that '[@:]:([m]))* - he ^just di!g\ested the
 B 12 'id/eas#
 B 11 and ^then _came _out with _them _quite
 B 11 spontaneously and without re!fl\ection#
 B 21 *((but it's a) ^bit*
 A 11 *^[\m]##*
 B 11 **dAifficult#**
 B 11 **in a ^wVay# -**
 B 11 **that a ^person could be "!s\o unre"fl/ective#**
 B 11 **as ^not to _r^ealize#**
 B 11 **that he'd ^ch\anged his m/ind# (laughs)**

Svartvik & Quirk, LLC, (1980: S.1.6)

This dialogue presents various combinations of falling and rising tones, which help identify the whole insinuating and criticising tone of the dialogue. B is mildly ironic in his last remark (*but it's a bit difficult...*), where combinations of both RISE-FALL and FALL-RISE can be observed, as well as what Kingdon calls “Divided tone III” (labelled Fall+Rise in the LLC) in *so unreflective*, with the falling part of the tone on *so* and the rising part on the second syllable of *reflective*; and in *changed his mind*, with the falling part on *changed* and the rising part on *mind*. These falling-rising tones help the hearer understand the ironic and criticising tone of the comment. But there are here other prosodic features that are of considerable importance, such as the laughter, the “boosting” (*i.e.*, an increase of the pitch level), the pauses and the arrangement of tone groups -and consequently of information groups (see Halliday, 1985)-. These other features will also be taken into account all throughout this analysis.

In spite of the relatively high frequency with which the fall-rise can be encountered in the ironic utterances of the LLC (as shown by the quantitative analysis), it can not be said that all the cases included this tone. The following example confirms this statement:

[2]

B 11 "GAod_((damnation))#.
 B 11 Til "cr\own that _bastard#
 B 11 *((be^fore Tm finished with him# -
 B 11 it ^used to be)) the " !s\ame {with the* ^ b\oard##}/
 B 11 as ^w\ell#.

A	11	*(- laughs). ((^oh n\o#
A	11	I could ^see you sort of !s\eething#))*
A	11	^wh/at#
B	11	the ^same at the b\oard ,,meetings#
B	11	*^t\oo you* ,,know#
B	21	I mean he ^takes over
A	11	*((^y\es#))*
B	11	*the :whole bloody ((!th=ing#))*
A	13	*^he ^he ^he is* :really 'God al:m\ighty#
A	11	he ^ knows \everything# - -
B	11	((if) ^I idon't cr\own ((the) b/astard#
A	11	(- laughs) -

Svartvik & Quirk, LLC, (1980: S.1.1)

In his final comment, A uses an ironic metaphor (*God Almighty*) with a falling tone on it. A is being ironic for he evidently does not approve of this professor's behaviour (he previously referred to him as a bastard). Even though, according to Halliday (1985), the use of straightforward falling tone constitutes the "unmarked" use for statements, this tone occurs very frequently within ironic utterances (see 4). But in this example there are other clues, namely, other prosodic features such as *laughter*, the prominence given by the heavy *stress* on the metaphor, and other clues of the content of discourse and the context that allow for the ironic interpretation.

Ann Cutler (1974) underlines the importance of the intonation contours of utterances such as *Harry's a real genius*, to determine whether the speaker really admires Harry or thinks quite the opposite, i.e., that Harry is anything but a genius. Nevertheless, she also states that if the cues from the context are strong enough, no intonational cues are necessary at all. For instance, if two people walk into an empty bar and one of them says: "Sure is lively here tonight!", the utterance will be understood as ironic regardless of the intonation used (1974: 117). This seems to be a quite reasonable argument, but what would not seem so reasonable is to suggest that the same holds for other prosodic features. What I intend to say is that, as will be shown later on, when intonation is not crucial, there seem to be other prosodic features that are related to irony, i.e., features the speaker makes use of in order to convey his/her meaning. Anne Cutler herself writes about "other features" that may serve to identify sentences spoken ironically, which are: a) nasalization, b) slowed rate of speaking or c) exaggerated stress applied to one of the words (1974:117). She also comments that in certain dialects of English it is possible to achieve the same effects intonation achieves by appending the words "I don't think" (with heavy stress on *don* 7) to a sentence uttered with ironic intent, in which case additional intonational cues

are optional (1974:117). In a later paper, Cutler reconfirms her idea that the effect exercised by the intonation contour of an utterance is dependent upon the context in which the utterance occurs. Thus, in the utterance

“*Looks like a really popular place*”, the propositional content is negated (and therefore the utterance is ironic) if the speaker and audience are in the process of entering a restaurant otherwise devoid of customers, in which case the clue for ironic interpretation would be the context and not the intonation of the utterance (1977:110). In the examples found and analysed in this study, context and prosodic features seem to be parts of the whole and work together, rather than exclude each other.

Halliday (1967) treated intonation as part of English grammar, and in doing so he was the first to integrate it in the language as a whole. When analysing tone, Halliday notes that “the English tone system is based on an opposition between falling and rising pitch, in which falling pitch conveys certainty and rising pitch uncertainty” (1985:281). The falling-rising tone (Tone 4 for Halliday), is, according to his view, associated with reservations and conditions, having a general sense of “there’s a ‘but’ about it”. Tone contrasts relate to the participants in the discourse, for they represent their attitudes to and expectations of one another on the one hand, and their assessment of what is being said on the other hand (El Menoufy, 1988). Halliday gives much importance to the heavy semantic load carried by rhythm and intonation, and he distinguishes *tonicity* from *tone* (1967,1985). Tonicity refers to the division of utterances into tone groups that in turn serve to organise discourse into information units. Each information unit is organised as a pitch contour, or tone, which may be falling, rising or mixed (falling-rising or rising-falling). Information units may be used in combination with thematic structures to produce different rhetorical effects (like, for instance, being ironic). Although the combination of tonicity with Theme/rheme structures seems to be an interesting and revealing one, I will not include its occurrences in the quantification of this study, for the type of analysis intended here is what Laver (1994) refers to as a “tune-based” analysis of intonation. An account will be made of the nuclear tones used in the different ironic utterances in the corpus, in order to find out whether or not there is a dominant tone for these utterances.

I shall now proceed to discuss some of the prosodic features —other than intonation— that have shown to be present and outstanding in the ironic examples analysed.

3. Other prosodic features

Catherine Johns-Lewis (1986) exposes the difficulties there are in defining prosody and in distinguishing intonation from other prosodic features. Crystal (1969) views intonation as:

“a complex of features from different prosodic systems... the most central (of which) are tone, pitch range and loudness, with rhythmicity and tempo closely related” (1969: 195).

But prosodic systems —for Crystal— not only include the above, but also pause and tension, voice qualifiers (i.e., whispery, breathy, husky voice) and voice qualifications (i.e., sob, laughter, giggle, cough). A definition of intonation like Crystal’s presents a greater overlap with prosody than a narrow definition such as Gimson’s, involving “rises and falls in pitch level” (1980: 264). In this study intonation has been considered in its narrow sense, and the other features —which are not strictly rises and falls in pitch level— will be referred to as *other prosodic features*.

Appart from the various prosodic features taken into account by Crystal, Johns-Lewis includes **pause** phenomena (frequency, duration and distribution of pauses). **Silence** is considered by this author as a useful prosodic parameter which can even distinguish between types of discourse.

As was anticipated, in analysing the different ironic utterances in the LLC, it was observed that some prosodic features, other than intonation, tend to occur repeatedly together with irony. Stress, for example, seems to occur on words or phrases that are crucial for the ironic interpretation. Indeed, Tannen (1984) shows in her analysis of the conversation at a Thanksgiving dinner among friends, that heavy stress and breathy voice quality are used to exaggerate the content of utterances and in that way be ironic. Breathly voice quality is not marked in the LLC, and for that reason it will not be possible to account for it in this study.

Many instances have also been found in which an increase in pitch level (not necessarily accompanied by falls or rises) occurs at strategic segments in the ironic utterances. Tannen (1984) considers high pitch as part of expressive phonology used in many cases to show a mocking ironic style. In some of the ironic utterances in the LLC, both a kinetic tone and an increase in pitch occur on the same syllable, as is the case with example 2 in 2, in which we can observe a falling tone together with a “booster” mark on the second syllable of *almighty*. Both prosodic phenomena coincide or co-occur to give prominence to a key word in the ironic metaphor *God Almighty*.

Laughter and/or giggles have also proved to be recurrent prosodic features accompanying irony. Finally and interestingly, pauses and/or silence constitute features that seem to have been strategically placed by certain speakers in some of the texts to convey ironic meanings. I shall now proceed to analyse each of these features in relation to the examples in the corpus.

3.1 Stress

Most of the examples analysed in this survey display the use of stress on key words. The words which have been considered as “key” here are those which were judged to be important for the ironic interpretation. In many cases this stress coincides with the kinetic tone, but in others the kinetic tone on a given word was not enough, and the speaker considered it necessary to stress some other words which seem to have been thought of as equally important to convey the ironic meaning. The following is a clear example, in

which the word *bright* is uttered with stress on it, although it is not the one containing the kinetic stress. The speaker is being ironic about the students' attitudes and feelings and it is evident that he does not think their feelings are "bright".

[3]

A 11 (^this is where 1 to 2 sylls ![tVen@z]#)
 A 11 ^comes 'smack in the :{\eye} for !th\em#
 A 11 (- laughs) that ^students ":Vare interested#
 A 11 in ^\language#
 A 11 but then ^Tom's re'action to :th\is /is# -
 A 11 ^[=@m]#.
 A 11 [?] well they're ^only 'trying to :d\istance
 A 11 them/selves# All from ^\literature# -.
 A 11 ^well I mean !this is complete h\ooey# .
 B 11 ^[m]#
 A 11 - de^pending _how you " !\look on language# - -
 A 11 and ""^th\en#
 A 11 ^he s/ays#
 A 11 you know ^literature should be ex"__pVerienced#
 A 11 and ^not !st\udied# -.
 A 11 well ^this is !!f\ine#
 A 11 un^til you've g\ot them#
 A 11 ^writing ex" !Vams#
 A 11 **and they've ^got to 'write 'down 'these 'bright**
 A 11 **ifVeelings of 'theirs#**
 A 11 **and they ^feel 'em so d/eep#**
 A 11 **that they ^can't ex!pr\ess 'em#**
 A 11 (- laughs) *^you* kn/ow#-----

Svartvik & Quirk, LLC, (1980: S. 1.6.)

As can be observed, stress is not the only meaningful feature occurring in this ironic utterance. Intonation, stress, high pitch and laughter work together here to contribute to the ironic interpretation of this conversation.

3.2 Increase in pitch level

Many authors (Allan (1986), Brown & Levinson (1987), Tannen (1984)) have shown how a change in pitch level or pitch range can change the meaning of an utterance. When a speaker wants to convey an ironic meaning, there may be some words or phrases that s/he wants to signal as more important and more prominent by means of a shift to high pitch. In the following chunk of dialogue, which partially coincides with the example above ([3]), an increase in the pitch of some key words can be observed, as is shown by the booster symbols (: or!). The speakers (A, a female academic, and B, a male academic) are being sarcastic about the Head of Department's approach to literature:

[4]

A 11 ^he s/ays#
 A 11 you know literature should be ex"_pVerienced#
 A 11 and ^not !st\udied# -.
 A 11 **well ^this is !!fine#**
 A 11 un^til you've g\ot them#
 A 11 ^writing ex"!Vams#
 A 11 **and they've ^got to 'write 'down 'these 'bright**
 A 11 **:f\eelings of 'theirs#**
 A 11 **and they ^feel 'em so d/eep#**
 A 11 **that they ^can't ex!pr\ess 'em#**
 A 11 (- laughs) *^you* kn/ow# —
 A 11 ^\added to _which#
 A 21 **^I
 B 11 *^[m]##*
 A 11 think#
 A 11 it en"^\ourages#
 A 11 the "^\azy} M:stVudent#
 A 11 to ^go to h/im#
 A 12 and say ^II ^s\ay#
 A 11 ^this is ((is)) 'what they !d\o#.
 A 11 (- sighs) ^I ;read a b\ook last n/ight#.
 A 11 **and it ^moved me !!s\o m/uch#**
 A 11 ^I _can't t\alk a'bout it# - -

A	11	^now !this is _a " !g\orgeous#
A	11	^lazy _way \out#
A	11	^you !! s/ee#
A	11	^he's t/aken \in 'by th/is#
A	11	^dear _s/oul#
A	21	(- laughs) a*^bid*ing
B	20	*[m]* **(- coughs)**
A	11	'faith in **'English !!\it**erature#
A	11	^you kn/ow#

Svartvik & Quirk, LLC, (1980: S. 1.6)

The whole comment has an ironic tone, but there are three parts of it that seem to carry the main ironic load. The first one is when A says that the students's feelings are *bright* and that *they feel them so deep that they can't express them*. Here we notice there is an increase of pitch on the first syllable of *feelings* and on the second syllable of *express*. In both cases the syllable in question bears a kinetic tone as well. It is clearly understood here that A does not think the students' feelings are bright and, even more, that they cannot have any feelings at all (and probably this is the reason for the high pitch and the falling rising tone on *feelings*) since A believes they are lazy and will tend not to read any books if the teacher has such «crazy ideas» as the Head of Department's. The second part in which irony is heavily shown is an example of “pretence irony” (Clark and Gerrig, 1984) since the speaker (A) is mocking a lazy student in his way out of studying literature. I refer to: *I read a book last night and it...* The high pitch is given to the word *so*, which is clearly done to emphasize and exaggerate the student's supposed enthusiasm with the book in order to cause a contradictory effect: the hearer infers that obviously the student was not moved at all and did not even read the book. The victims of irony here are the lazy students, who will always — according to A— try to cheat the teacher if he allows them to do so. Indirectly, there is a second victim, namely, the Head of the Department, whose loose behaviour with the students would cause these effects. The third part of this example having a clear and identifiable ironic intention is *He's taken in by...* where the speaker increases the pitch of his voice when he utters the words *soul* and *literature*. The speaker is using here religious register (“soul”, “abiding faith in”) with a twofold purpose: 1) to ironically point to the Head of Department's naive thoughts, and 2) to imply that the students are not any “dear souls” or “innocent literature-faithful beings”. The pitch increase may serve to achieve these effects, together with other prosodic features (such as laughter and intonation). As can be observed, in most cases the high pitch and the kinetic tones coincide on the same syllable, though there are some cases in which they do not, as in the last example (*literature* has high pitch but no kinetic tone). This shows that pitch

level can be independent of intonation and that it can alone be used as a prominence marker having ironic effects at the same time.

As noted above, laughter is another of the prosodic features that very frequently accompany ironic utterances. Let us turn to it.

3.3 *Laughter*

The relationship between irony and humour is well-known. Irony and some kinds of jokes are very closely related. Verbal irony generally elicits the external or “internal” laughter of one or more of the participants.

The majority of the examples in the corpus include laughter or giggles strategically placed in connection with the ironic utterances. Tannen (1984) pinpoints the different ironic styles of two of her friends, and shows how one of them often follows his ironic comments with laughter, because his style is always dramatized through exaggerated enunciation and is mock tough, mock annoyed or mock solicitous.

In some particular cases, the laughter can be ironic (generally sarcastic) in itself, without the need of any linguistic clue. Consider the following dyad, which could occur between two people, A and B. A (a woman) knows that B (her boyfriend) is a liar and that he does not love her (he has proved so after repeated actions showing lack of care and respect):

B: I love you. Believe me.

A: Ha, Ha, Ha (sarcastic laughter).

In this case the laughter means: “That is not true and I don’t believe you. You’re a liar”.

I now turn to another of the prosodic features that appears to be meaningful when associated to verbal irony: the use of strategically placed silence or pauses.

3.4 *Silence and/or pauses*

Many scholars have directed their attention to the study of silence in discourse. D. Kurzon (1992), for instance, claims that silence may mean power in some particular situations. In certain contexts a person may opt for not giving a response to show or let his interlocutor infer that his question was so stupid that it is not worth answering. Indeed, V. Akman reinforces this argument in his squib *When silence may mean derision* (1994). Akman asserts that in some instances silence can be understood as a speech act of the form “I will not participate in order to show people (the listeners or, in general, others present) that you are a laughingstock” (1994: 213).

In the LLC I have observed cases of meaningful silence realised in the form of longer or shorter pauses which are strategically placed within a piece of ironic discourse. Consider the following:

[5]

B 13 *^well. Hast ^last yVear* we had a . we ^had a
 B 13 d\inner#
 B 11 ^no it was a : finalists' re!c\ception#
 B 11 ^w\asn't it#.
 B 11 in ^which !six f\inalists turned 'up# .
 B 11 and ^^every 'member of !st\aff#
 VAR 20 (- - - laugh)
 A 11 [e] ^\every 'member of 'staff#
 B 11 ^every 'member of :stVaff turned 'up#
 B 11 but ^only !six !f\inalists#
 C 11 ^\oh +{^G\od#}##+
 VAR 20 *(-----murmuring)*
 A 11 *+(. coughs)+ well ^that 'wasn't so :g\ood#
 A 11 ^w\as it#
 A 20 [@ : m]
 B 12 the ^Christmas '[pa:] ((at) the ^Christmas
 B 12 :p\arty#
 B 11 we ^((there was)) Istacks* of :bVooze# .
 B 11 **and a^g\ain all the st/aff 'came#**
 B 11 **+. and ((only)) ^one or two**
 B 11 **'under!gr\aduates#;—+;**
 VAR 20 **+(— laugh)+**
 C 20 **+((6 to 8 sylls))+**
 A 11 you ^mean in lother w\ords#
 A 11 in the [dhi: 'dhi:] the ^{b\usiness of [dhi:]} .
 A 11 [dhi: 'dhi:] 'staff 'student re!\ations#.
 A 12 ^it's it's ^not the !st\aff who are#.
 A 11 ^who are *. ((_making a _very _poor b=usiness#))*
 B 11 *^no n Λ0#

B 11 it's ((6 to 8 sylls it's))* the ^students :by and
 B' 11 ilVarge#

Svartvik and Quirk, LLC, (1980: S.3.3)

Pause is marked in the LLC by means of dashes (—). Each dash is a unit pause of one stress unit or “foot”. Brief pauses (of one light syllable) are marked with a plus sign (+). When B says that only one or two undergraduates came to the party he apparently is not criticising them, but the contrast that is implicitly made of the undergraduates with all the members of the staff, together with the pauses after the word *undergraduates*, give an ironic effect to his utterance. It is as if the speaker said: “I am not going to say anything else, so I will now keep silent in order for you to draw your own conclusions about the behaviour of the undergraduates”. The laughter of various participants of the conversation that comes immediately after the silence is also revealing: the listeners want to show that they received the message. Then A tries to explain the conveyed ironic meaning by expressing it “literally” (*you mean, in other words...*).

That silence can help convey and understand ironic meanings is not surprising if we consider that in all cases (even when there are no pauses or silence) much of what is interpreted is what the speaker has not said, rather than what he has said.

In view of all this, it becomes clear that there is more than one prosodic feature which can be said to be present and help the process of conveying and interpreting ironic utterances. The next step will be to show the results of the survey, which had the aim of measuring the frequency of occurrence of each of these features in ironic utterances (and, in the case of tone, also in non-ironic utterances) so as to draw conclusions related to the research questions and the hypothesis.

4. The survey: account and results

The variables taken into account in the data base were those prosodic features that were found together with the ironic utterances analysed. Specifically, I refer to the features mentioned above, namely, a) tone; b) stress on key words; c) high pitch on key words; d) laughter/giggles; and e) meaningful silence/pauses.

As regards *tone*, the procedure carried out consisted in counting the times each of the tones occurred in the 86 examples of ironic discourse found in the LLC. This was not an easy task, considering that irony many times extends to more than one tone group and even to more than one sentence; however, the tone taken into account was that which occurred in the sentence (or, sometimes, only the tone group) containing the clearer and heavier ironic load. The results of such an account are shown in Table 1 and Figure a, where the numbers have to be considered in relation to a total of 86 (eighty-six) occurrences. Notice that, in a scale from most frequent to least frequent, the order is the following:

- 1-Fall
- 2- Fall-rise
- 3- Rise
- 4- Rise-fall
- 5- Level

As can be seen, the tones that seem most likely to occur in ironic utterances are the fall (48% of occurrences) and the fall-rise (36% of occurrences), which together make 84% of the total number of occurrences. But this tendency towards the use of the fall-rise and the fall in ironic utterances would prove to be more valid -according to statistical standards- if it were somehow different from the general tendency of tones used in English in non-ironic utterances. Thus, a study of the frequencies of occurrence of the different tones was considered necessary for the non-ironic utterances in the corpus. The account was made on a random basis, using the table of random numbers for the selections of the pages to be surveyed in each of the texts. The results can be examined in Table 2 and Figure b. The total number of tone groups counted for this analysis was 2,045 (two thousand and forty-five). Table 3 and Figure c illustrate the comparative study of the occurrences of the different tones for both ironic and non-ironic utterances.

Table 1 .Percentage of occurrence of the different tones withinthe ironic utterances in the corpus

TONES	Fall-rise	Fall	Rise	Rise-fall	Level	Total
Percentage	36.0	48.8	8.2	7.0	0.0	100
Occurrence	31	42	7	6	0	86

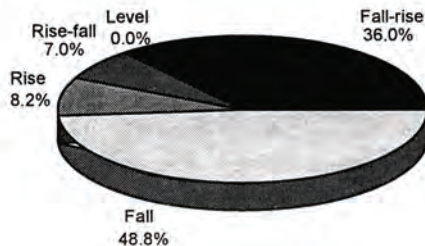


Fig. a. Pie chart showing the percentage of occurrence of the different tones within the ironic utterances in the corpus

Table 2. Percentage of occurrence of the different tones within the non-ironic utterances in the corpus

TONES	Fall-rise	Fall	Rise	Rise-fall	Level	Total
Percentage	17.9	17.8	56.6	3.0	4.7	100
Occurrence	367	363	1157	61	97	2045

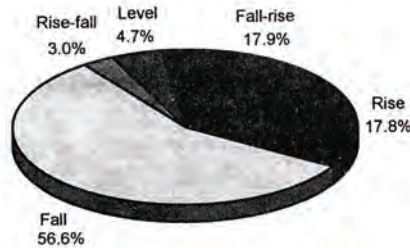


Fig. b. Pie chart showing the percentage of occurrence of the different tones within the non-ironic utterances in the corpus

Table 3. Comparison of the frequencies of occurrence of the different tones in the ironic and non-ironic utterances in the LLC corpus

TONES	Fall-rise	Fall	Rise	Rise-fall	Level	Total
Ironic utterances (%)	36.0	48.8	8.2	3.0	4.7	100
Non-ironic utter. (%)	17.9	56.6	17.8	3.0	4.7	100

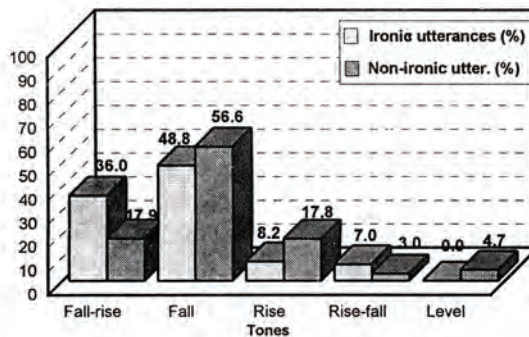


Fig. c. Comparative bar chart showing the frequencies of occurrence of the different tones for both the ironic and non-ironic utterances in the corpus

The results of the account and comparison of occurrences of the different tones, as well as the results of the statistical Chi-Squared test (which was applied to the data in question) yield the following information about the tones of the utterances of the corpus studied:

- First and foremost, both the falling and falling-rising tones appear to be the most widely used ones in both ironic and non-ironic types of discourse. However, some observations resulting from the comparison seem to be interesting:
 - * The fall has a slightly higher frequency of occurrence in non-ironic utterances than in ironic ones (56.6% vs. 48.8%);
the rise doubles its frequency of occurrence in non-ironic utterances (17.7% vs. 8.2%);
 - * the fall-rise is the one that seems to make a more significant difference, for it doubles its frequency of occurrence for ironic utterances (36% vs. 17.9%), which could indicate that there is a certain tendency for speakers to use it more when they want to be ironic than when they do not;
 - * both the rise-fall and the level tones have low rates of occurrences in both ironic and non-ironic discourse. The slight differences between the relative frequencies for these tones do not appear to be significant. The fact that there are no occurrences of level tones in the particular examples analysed here does not discard its probability of occurrence, for in fact the intuitions of native speakers tell that the level tone can also be used in ironic utterances (Craig Chaudron, 1995: personal communication);
 - * the χ^2 (chi square) results (see Appendix A) show that the tone variable has an incidence on ironic utterances, *i.e.*, there is a significant difference in the use of tones between ironic and non-ironic discourse. Thus, one part of the hypothesis stated at the beginning of this study can be accepted: there is not only one specific or particular tone used by ironic speakers in ironic utterances. All the tones are used in both ironic and non-ironic discourse, but the frequency of distribution of the different tones is different for ironic and non-ironic utterances, and consequently it can be said that these two types of discourse do not behave in the same manner with respect to tone distribution. In other words, the null hypothesis (which would be in favour of equal tone distribution for both ironic and non-ironic discourse) is not accepted: there is indeed a significant difference between ironic and non-ironic language with respect to tone for all tones.

The next step in the survey was to count the number of times that the other prosodic features (stress, high pitch, laughter or giggles and meaningful silence or pauses) occurred at strategic points in the ironic utterances studied. It is important to note here that, contrary to the case of the tone variable (where only one tone occurs for each example, the occurrence of one feature does not exclude the occurrence of any of the others, and that is why the number of occurrences for each feature cannot be summed up to reach a total and Figure d show the absolute and relative frequencies of these prosodic features with respect to the total number of ironic utterances. As can be observed, both stress and high pitch on key words are rather frequent phenomena (80.23% and 73.3% of occurrences, respectively). Laughter and/or giggles appear to be a frequent feature too. Meaningful ironic silence or pauses have not proved to be a frequent feature (representing only 3.5% of the total number of occurrences).

Table 4. Percentage of occurrences of the prosodic features (other than intonation) intervening in the ironic utterances in the corpus.

FEATURES	Stress on key words	High pitch on key words	Laughter	Strategic silence/pauses	Total
Percentage	80.2	73.3	55.8	3.5	100
Occurrences	69	63	48	3	86

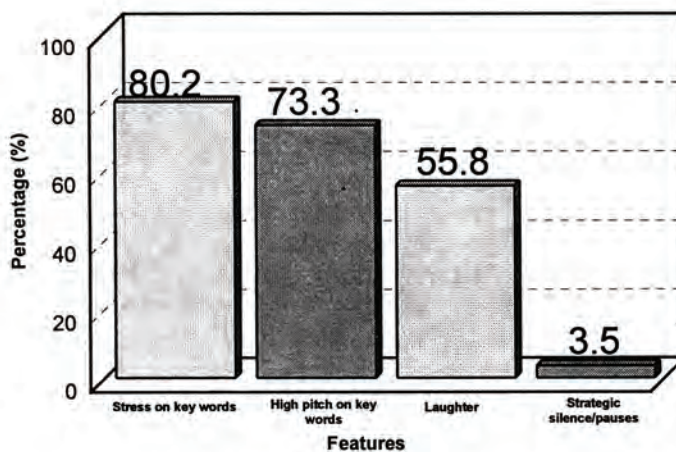


Fig. d. Bar chart showing the percentage of occurrence of the prosodic features intervening in the ironic utterances in the corpus

In order to have an idea of the tendencies of combination of the different features studied here, a statistical analysis of the possible combinations was made. This analysis showed that the four most frequent combinations of prosodic features for cases of verbal irony are the following (from most to least frequent):

- 1- Fall-rise + Stress on key words + High Pitch on Key words +laughter
- 2- Fall + Stress on key words + High Pitch on key words + laughter
- 3- Fall + Stress on key words + High Pitch on key words
- 4- Fall-rise + Stress on key words + High Pitch on key words.

As can be seen, the analysis of the combinations shows a tendency for ironic speakers to use the Fall and Fall-rise tones together with stress on key words, high pitch on key words and laughter, or stress and high pitch only. A great number of other combinations, though not as frequent as the four above, were also found. This seems to indicate precisely what was stated at the beginning of this survey, namely, that it is not only the tone used (and, within this variable, not a given tone in particular) which determines the “ironic tone of voice”, but, rather, the combination of tone with other prosodic features like pitch or stress.

5. Conclusions

In this paper I have tried to analyse the relationship between verbal irony and some prosodic features that accompany the phenomenon. The results of the analysis show that the most frequently used tones for ironic utterances are the Fall and the Fall-rise, although the Rise and the Rise-Fall also occur in a lower number of cases. This preponderance of the Fall and the Fall-rise proved to be valid also for non-ironic utterances (after the statistical analysis of the sample of non-ironic discourse), which could then mean that the preponderance of these two tones in ironic utterances does not say anything in particular of such utterances, for they do not differ from the normal tendency of all utterances in English. However, the percentage of Fall-rises used in non-ironic discourse proved to be much lower than that of ironic discourse, a figure that shows that there is a certain tendency for ironic speakers to use this tone more frequently. This is basically the conclusion drawn from applying the chi-squared test: there exists a difference between ironic and non-ironic discourse with respect to frequency of use of the different tones.

But this study has also thrown some light on certain prosodic features other than tone, which I believe have helped to clarify to a certain extent what the elements of the so-called “ironic tone of voice” are. These other features are *stress on key words*, *high pitch on key words*, *laughter/giggles* and *meaningful silence/pauses*. The statistical analysis of the possible combinations of these features with the different tones has shown a tendency

in ironic speakers to use more frequently the tones Fall and Fall-rise together with stress, high pitch and laughter, or with stress and high pitch only.

All the foregoing suggests that it is not only the tone used which determines the “ironic tone of voice”, but also other prosodic features, and all of them contribute to the interpretation of ironic utterances as such. None of these features can be labelled as the prosodic feature exclusively occurring in ironic utterances; rather, it seems more sensible to speak of a certain “collaboration” of two or more of them in most cases. The co-occurrence of these features seems to be neither predictable nor random. It varies depending on the situation, the speakers, etc..

The use of prosodic features is one of the various pragmatic strategies the ironic speaker has at his/her disposal in order to make his/her point, and a rich network of relationships can be woven among these features. I am conscious of the fact that there may be other prosodic variables intervening in the phenomenon of verbal irony which have not been taken into account in this study; however, an attempt of clarification of these relationships has been made, in order to explain one of the aspects of the multifarious phenomenon of verbal irony.

It seems reasonable to suggest, finally, that the results of this survey may contribute to reflect on the pragmatic nature of irony. The use of prosodic features is one (among many) of the pragmatic strategies that speakers have at their disposal to convey ironic meanings (see Alba Juez, 1996, chapter 8), and this strategy will in turn trigger the necessary implicatures (in most cases) for the hearer(s) to interpret the irony intended. Consequently, this will also lead the hearer(s) to understand the pragmatic function fulfilled by the utterance in question (Alba Juez, 1996, chapter 9).

Appendices

A: *Chi-squared test*

Tones (Observed and expected frequencies)

	Fall-rise	Rise	Fall	Rise-fall	Level	Row Tot.
Ironic utterances	48,8 (52,7)	8,2 (12,95)	36 (27)	7(5)	0 (2,35)	100
Non-ironic utterances	56,6 (52,7)	17,7 (12,95)	18 (27)	3(5)	4,7 (2,35)	100
Column total	105,4	25,9	54	10	4,7	200

Obtained $X^2 = 16,362 > \text{Table } X^2 = 13,277$ for $p = 0,01$ and $d.f. = 4$

Where: p = significance level
 d.f. = degrees of freedom

Conclusion: The research hypothesis is accepted

B: Prosodic notation used

End of tone group
^Yes Beginning of tone group

TONES:

Y\es FALL
Y/es RISE
YVes FALL-RISE
YAes RISE-FALL
Y=es LEVEL

PITCH:

: Yes higher than the previous syllable
!Yes high
!! very high

STRESS:

‘YES Normal
“Yes Strong

PAUSES:

Yes - - Each dash is a unit pause of one stress unit or «foot»
Yes + Brief pause

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