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# Humour and Language: An Analysis of Linguistic and Extralinguistic Features Used in Jokes 

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#### Abstract

Humour is an integral part of human behaviour. Nevertheless, its linguistic structure has not yet been fully understood. Through empirical research, this paper aims at discovering what linguistic devices make humour possible in jokes. Selecting a corpus of 200 jokes, we analysed the linguistic and extralinguistic features involved in the humoristic act. By means of a spreadsheet, we carried out a quantitative analysis, discovering all the possible linguistic, discursive and nonlinguistic devices present in the object of study. We expected linguistic devices used in jokes to be evenly distributed among the different linguistic categories. However, our main findings were that more than half of the humorous acts used lexical or phonological devices such as homophony and homography as means to generate humour. The conclusion of this investigation is that jokes are constructed from the interplay of a variety of linguistic devices, even though some of them were more prominent than others. Furthermore, jokes prove to be a useful pedagogical instrument in EFL teaching environments because of the linguistic knowledge required to understand them.


Key words: humour, joke, linguistic device, wordplay, homophony.

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## 1. Introduction

There is a general agreement that defining humour is a difficult task. Scholars have coincided on the idea that humour is a feature proper of human beings which has always been present in human communication. Vivanco, C., H. Vivanco \& C. Zenteno (1997) made a taxonomy of humoristic acts in which they defined different types of humoristic genres. Also, authors like Victoria (1941) and Ross (1998) have centred on the issue of what exactly is that makes jokes funny. They established the relation between incongruity and humour, explaining how unexpected situations provoke a comic effect. Furthermore, Ross describes some linguistic resources that are used to create ambiguity in jokes, and thus produce incongruity.

Despite this interest in the nature of humour, there is still an absence of a formal theory about it, leaving some issues undefined. One of them is the relationship between language and humour stated before. Although researchers have shown a strong interest in the topic, they have focused on specific devices or sets of devices in the analysis of jokes. This has not addressed the complexity of jokes as linguistic constructions. Moreover, these studies have given more emphasis to phonetic and lexical devices, paying little attention to suprasegmental, morphological, syntactic and discursive features. Therefore, a thorough study on the simultaneous participation of all linguistic devices in jokes needs to be done in order to broaden the understanding of this phenomenon.

In the present paper we aimed at providing a rigorous account of the linguistic, discursive and non-linguistic devices present in jokes, putting special emphasis on the former ones. Along with this, we sought to discover which of these devices were the most recurrent in the humorous acts. Additionally, a characterization of the jokes was made in order to see whether there was any connection between their properties-such as their medium-and the devices utilized. To reach this goal, we carried out a quantitative analysis of a random selection of written jokes. Using an excel sheet, we analysed a corpus of 200 jokes, from which we extracted a total number of 462 instances of linguistic, non-linguistic and discursive devices. Our results indicated that half of the linguistic devices present in the jokes were lexical and phonological in nature, being homophony the most frequent phenomenon. Furthermore, we discovered that only a small proportion of the linguistic instances relied on discursive devices-namely speech act-being the less recurrent category. The analysis also demonstrated that the great majority of jokes resorted to more than
one device at the same time. As a result, and due to the great range of linguistic devices involved in the formulation of humoristic acts, we believe that jokes can be regarded as a useful tool in the field of pedagogy, and more specifically in the construction of assessment instruments for ESL students.

This paper is divided in five different sections. The first one provides a theoretical framework on humoristic acts, linguistic theories-linguistic sign, deep and surface structure, phonetic framework and speech act theory- and linguistic devices. This review will put forward the basic notions and definitions used in the present analysis. Following, in the second section, we provide a section that specifies this paper objectives and research questions. After this, the third section gives a thorough account of the procedures of our investigation. Subsequently, the fourth section offers the main findings of the study and the pertinent analysis of the data. Finally, the last section establishes the significance of our inquiry and its possible implications for further research, alongside with practical applications in the ESL classroom.

## 2. Theoretical Framework

### 2.1. Humorous Act

Defining humour is a complex task. Cambridge Dictionary describes it as "the ability to find things funny, the way in which people see that some things are funny, or the quality of being funny" (Cambridge Dictionary, 2018). Therefore, in order to produce humour there are at least two agents that must be present: one that creates humour and other that finds that act hilarious. Along these lines, Ross defines humour as "something that makes a person laugh or smile" (1998, p. 1) and adds that laughter happens especially when in groups. Nevertheless, this definition is nowhere near to be a rule as someone can also laugh out of nervousness or shame, altogether with finding something funny and not laughing at all. Still, this are not the only definitions or approaches humour have.

In "Una Taxonomía de los Actos Humorísticos" (1997), authors Vivanco, Vivanco \& Zenteno find it pertinent to talk about humoristic act instead of just humour, in order to make a broad and systematic investigation of its different manifestations. Thus, for the purpose of this investigation, we work with the term humoristic act to refer to the humorous events or jokes analysed. According to the authors mentioned above, the concept humoristic act allows us to analyse the joke as a whole with all of its dimensions, such as its context, or its socio cultural or historical backgrounds. Vivanco's investigation gives importance to all the aspects that must be considered to analyse a joke: context, audience, genre, etc. Ours, on the other hand, will be focused on the linguistic structure of a humorous act alone, that is to say, the linguistic resources that are displayed in jokes for them to be considered funny. It is important to point out that we make use of the term because there are many different types of humorous acts. Some of these categories are riddles, different sorts of advertisement, songs and even name combinations that might have a peculiar phrase as result.

Incongruity is another relevant concept when talking about humour. Victoria (1941) states that humour is produced by the eccentricity of a situation, i.e., the nullification or rupture of what is commonly expected. In other words, the tension that is released when an event proves to be incongruent with previous expectations creates the comical effect. Ross (1998) follows this line by describing 'the incongruity theory,' which focuses on the element of surprise and states that humour is produced as a result of what the audience expects and what actually takes place in
the joke. Accordingly, as humour is created in an environment of incongruence and ambiguity, it can be said that the objective of humour is not to communicate in a clear manner, which is one of the most important aims in language use.

As previously mentioned, ambiguity is also a core element in humour. In her book, The Language of Humour, Ross categorizes different types of ambiguity. The ones that are relevant for the present investigation will be under the category of Structural Ambiguity, which can be observed in the English language at the levels of phonology, graphology, morphology, lexis and syntax (p. 8). Double meanings are characteristic of the humoristic act as they mislead the audience into thinking of a possible outcome which is later dismissed by a punchline. The punchline is another key element in humour, Crystal (1995) states that it must be part of the joke and defines it as "a recognizable climax to the recitation [the joke]" (p. 404). Therefore, jokes often present the following elements: "(a) There is a conflict between what is expected and what actually occurs in the joke. (b) The conflict is caused by an ambiguity at some level of language. (c) The punchline is surprising, as it is not the expected interpretation, but it resolves the conflict" (Ross, 1998, p. 8). These elements are relevant for our investigation as they account for the structure of jokes and facilitate the analysis that will be further developed.

Furthermore, for the purpose of this piece of research, we must conceive jokes as a cultural patrimony of all cultures and nations. For instance, many joke patterns are repeated in different languages and cultures, being three-part jokes a clear example, as Vivanco (1992) depicted in his article Análisis contrastivo de los comerciales de televisión en inglés y español en una perspectiva retórica: "Este recurso es, también, muy socorrido en chistes, aquellos en que tres personajes (generalmente de tres nacionalidades diferentes) hacen intentos: dos fallidos y uno exitoso, el de nuestro connacional, por supuesto" (p.5). This is portrayed in the following humoristic act:

An Englishman, a Scotsman and an Irishman are on a plane. During their flight the captain calls them up to the flight deck and issues them a challenge.

He says: "I will give 1 million pounds to whichever one of you can tell where we are by sticking your hand out of the window"
So the Englishman grins and steps up, puts his hand out of the plane window and thinks for a second, before saying "Manchester", the pilot tells him this isn't correct and sends
him back to his seat.
The Irishman gets up next and puts his hand out of the window, after a while he says: "Cork!", but the pilot shakes his head and sends him back.
Then the Scotsman goes up and puts his hand out of the window, after a moment he brings his arm back in and says: "Glasgow". Astonished, the pilot asks: "How did you know?", the Scotsman replies: "My watch has been stolen".

This structure is replicated in many cultures around the world. For instance, it is seen in South American jokes but with different participants: a Chilean, an Argentinian and a Peruvian.

Había un peruano, un argentino y un chileno volando en una avión, pero si no reducían peso iban a tener un accidente. Por esto el peruano sacrifico un sable de oro, el argentino, tiró un yunque de oro, y el chileno tiro una bomba, con esto se salvaron y pudieron aterrizar.

Al día siguiente, encontraron a 3 niños, el primero lloraba y le preguntaron "¿por qué lloras?" y él contesta: "es que papá estaba haciendo gimnasia y le cayó un sable en la cabeza". El segundo también lloraba y le hicieron la misma pregunta, a lo que este contesta: "es que mi papá estaba jugando fútbol y le cayó un yunque de oro en la cabeza". El tercero estaba muriendo de la risa por lo que los 3 tipos lo miran extrañados y le dicen "¿acaso te ríes de la desgracia de tus amigos?", a lo que el chico contesta: "no, es que me tire un gas y ¡explotó la casa!"

Examples like this depict how jokes are universal and belong to public domain rather than a specific humourist.

### 2.2. Language Theories

Many authors have developed language theories and proposed concepts that are pertinent for the aim of this study. We draw concepts from Saussure's Course in General Linguistics
(1916), Chomsky's Aspects of the Theory of Syntax (1965), segmental and suprasegmental phonology, and speech act theory.
2.2.1. Linguistic sign. On his Course in General Linguistics (1916), Ferdinand de Saussure proposed the idea of the linguistic sign. He explains that the linguistic unit is a double entity which is constituted by the interrelation of two different terms. He points out that these terms "are psychological and are connected by the brain with an associative bond" (p. 65) which is of an arbitrary nature. Finally, he proposes that " $[t]$ he linguistic sign unites, not a thing and a name, but a concept and a sound-image" (p. 65). That is to say, the linguistic sign is a composition of a signified and a signifier, respectively.

For the purpose of this piece of research, the principle of the arbitrary nature of the linguistic sign has a huge importance. The main reason for this is that, regardless of the linguistic sign already being arbitrary in relation, the reader must be willing to play with the relationship between the concepts and the acoustic-images in order to get the humoristic meaning of the joke. Because, if this does not occur, jokes would not fulfil its main purpose: to make people laugh. The audience of these jokes will have to create a new, once again, arbitrary concept/acoustic image relation to thoroughly recognize the humoristic act's meaning. Saussure claims that the arbitrary nature of the linguistic sign is unmotivated, because there is no natural connection between a concept and its acoustic-image. Once the linguistic community makes the agreement of association between the signified and the signifier, the individual does not have the power to change it. Along with this, the reader must also know the multiple concepts or signifieds associated with a particular acoustic image or signifier.

However, there are some exceptions to this theory. First we find onomatopoeias, which can be chosen to prove that the relation between the concept and the sound-image is not always arbitrary, because some words like Tick-tock (clock sound) or Glug-glug (swallow) are approximations or imitations of certain sounds. Yet, onomatopoeias are very limited, and they represent a reduced group of words in English and other languages. The second exception to the rule are interjections. To some researchers, interjections as well as onomatopoeias are evidence that words are approximations or imitations of certain natural sounds. In this case, they are produced by automatic responses, like the word Ouch! (reaction of pain) (Saussure, 1916).

Nonetheless, in Saussure's words "Onomatopoeic formations and interjections are of secondary importance, and their symbolic origin is in part open to dispute" (1916, p. 71).
2.2.2. Deep and surface structure. As well as Saussure, who proposed the concept of the linguistic sign as a double entity, Chomsky (1965) refers to the deep structure and surface structure as two important determiners of certain components of grammar. He explains that grammar has many syntactic components, being his focus the phonological and semantic ones. The former determines a sentence's phonetic form: "it relates a structure generated by the syntactic component to a phonetically represented signal" (p.16); it interprets the surface structure of a sentence, which establishes the phonetic interpretation of it. The latter determines a sentence's semantic interpretation: "it relates a structure generated by the syntactic component to a certain semantic representation" (p. 16); it interprets the deep structure, which establishes the semantic interpretation of the sentence. Thus, both components, phonological and semantic, are interpretative because "[e]ach utilizes information provided by the syntactic component concerning formatives, their inherent properties, and their interrelations in a given sentence" ( p . 16). According to this, we may assume that surface structures and deep structures are distinct from each other; they are both generated from a syntactic component and, therefore, interrelated.

Along these lines, Chomsky defines grammar as "a system of rules that expresses the correspondence between sound and meaning" (1970, p. 62). Thence, as deep and surface structures are considered an infinite class, meaning that there is not a precise number of existing structures, grammar plays a role in the specification of them both. As mentioned before, first, surface structures not only determine the phonetic interpretation of a sentence, but are also mapped onto a phonetic representation - the way in which a word or a sentence sound will correspond to its surface structure. Secondly, as deep structures determine the semantic interpretation of a sentence - the meaning of a sentence- we may correctly assume that this meaning is determined by both the semantic content of the lexical items out of which the sentence is composed, and the way these lexical items' deep structures are related. These concepts of deep and surface structure will be used to refer to both a word level and a sentence level.
2.2.3. Phonetic framework. Another branch of linguistics that was of great importance for the present investigation is phonetics. According to Cruttenden (2014), phonetics is a science that deals almost completely with the spoken language and is heavily dependent on instruments, computers and scaled measurements. This is understandable as this area deals with a physical phenomenon-the production and reception of speech. Additionally, phonetics affects the other subjects of linguistics, namely morphology (in the use of inflexions), syntax (distinction of word classes by accent placement), pragmatics (use of intonation) and so on (Cruttenden, 2014). Its influence can also be seen in lexicology in the case of homophones, which will be explained in a further section of this work.

In order to understand the theory regarding sounds, it is important to first establish the distinction between phonetics and phonology. As stated by Cruttenden (2014) phonetics studies the articulatory, acoustic and auditory characteristics of sounds, which are concrete and can be present in any language. In other words, phonetics deals with the description of isolated sounds. On the other hand, phonology studies the relationships between sounds in a specific language as well as their distribution in the constitution of syllables (Roach, 2009). That is, the behaviour of sounds in speech. An example of the different approaches of these sciences is their definitions of vowels. Phonetics defines a vowel by its physical characteristics (median, oral, frictionless, continuant, etc.); contrarily, phonology defines it as the segment which occurs at the centre of syllables (Cruttenden, 2014). An interesting case that makes the distinction even clearer is the existence of some special sounds that can be regarded either as vowels or consonants depending on the approach that is given to them; these are semivowels and syllabic consonants (Cruttenden, 2014).

However, is not easy to separate a sound from the speech continuum. Traditionally, the stream of speech is analysed into a sequence of contrastive sounds, or segments (Cruttenden, 2014). But sounds are never uttered in the same way, so what is called a segment is only an abstraction made from the variables most common in a speech community (Brown, 1990). Additionally, a contrastive analysis is conducted to select the sounds that are linguistically meaningful to a language. If by changing a segment in an utterance its meaning also changes, then the segment is meaningful; these segments are called phonemes. If the contrary occurs, and the replacement of a segment by another does not have any impact in meaning, that means that both segments are allophones (Cruttenden, 2014; Roach, 2009).

Phonetics also studies the mechanisms and procedures that allow us to communicate (Cruttenden, 2014). The formulation of utterances takes place in the brain, and then the message is transmitted by the nervous system to the organs of speech which will transform it in a particular sound pattern. This pattern consists of a continuum of sound limited by silences (pauses), and not only contains information on the articulatory activity of the speaker, but also on the suprasegmental features that accompany it. When the listener receives this pattern, the hearing apparatus will transmit the information to the brain, which will decode it as language and divide it into smaller units-clauses, words, morphemes and phonemes. It is important to take into account the productive and receptive parts of speech since descriptions of sounds rely on articulatory and auditory criteria. Consonants, for example, are described in terms of articulation as we can feel the movements involved. On the contrary, vowels are better described with auditory impressions (Cruttenden, 2014; Roach, 2009).

Another distinction that is important to highlight within the field of spoken language is the one between segmental and suprasegmental features. These two categories are fundamental for any investigation that deals with the oral aspect of language since their delimitation allows to focus the study on vowel and consonant sounds, or on those aspects that go hand in hand with their production and that are equally important for an effective communication, such as prosody. For the purpose of this work, we are going to make use of both classifications. According to Vivanco (2009), connected discourse is made of units called segments which are usually vowels and consonants. Thus, a sequence like bed consists of three segments, two consonantal: $[\mathrm{b}]$ and [d], and one vocalic: [e]. These two portions of connected speech shape what we know as segmental features. On the other hand, suprasegmental features refer to pitch, loudness and length (Cruttenden, 2014). These features, which are also known as prosodic elements, extend over bigger portions of the utterance than segments, and thus they are called suprasegments (over the segments). We will refer to both categories in depth remarking those aspects which are more relevant for this study.

Concerning segmental features, different approaches have arisen to analyse and explain various phenomena of the English phonemic system. One of them is the distinctive features approach, which is based on the principle that phonemes should not be regarded as independent and indivisible units, but instead as combinations of different features (Roach, 2009). According to Vivanco (1981), distinctive features are those characteristics of a sound that make it different
from another, thus $/ \mathrm{m} /$ differs from $/ \mathrm{n} /$ in just one characteristic, the point of articulation (bilabial and alveolar respectively). It is worth mentioning that distinctive features play a major role in the differentiation of minimal pairs (a pair of words that differ in only one sound). Thus, it is not the phoneme [k] itself what makes the word 'cot' different from 'pot,' it is the point of articulation of each phoneme what makes both words dissimilar (velar and bilabial respectively).

Regarding suprasegments, there is a general consensus that they make it easier for the listener to understand what the speaker wants to express (Vivanco, 2009). Among them, we find intonation and stress. Intonation is defined as the rising and falling of the voice (Vivanco, 2009). This prosodic feature has a variety of functions which help the listener to correctly decode the message. These are the attitudinal, accentual, grammatical, cohesive, naturalness and lexicosemantic function. The attitudinal or expressive function makes it possible to express emotions. The accentual, informational or focusing function allows the speaker to assign prominence to certain syllables to indicate contrast or emphasis. The grammatical function facilitates the recognition of the grammatical structure of the utterance. The cohesive or discourse function makes the listener know what has to be taken as new and old information. The naturalness function makes speech sound natural. Finally, the lexico-semantic function occurs in tone languages in which intonation may change the meaning of a word completely (Vivanco, 2009).

Stress is defined as a combination of loudness, pitch and duration (Wells, 2006), or as the "sensation of the relative loudness of sounds" (Cruttenden, 2014, p. 23). Some authors use the terms stress, loudness and prominence as synonyms. Stress has also a lexico-semantic function, i.e., stress position may change the meaning of a word. Such is the case of the word "object", which, depending on the prominence of the first or the second syllable, will have two different meanings: noun and verb respectively (Vivanco, 2009).

Finally, another suprasegmental phenomenon that is present in speech is juncture. Juncture is defined by Roach as "the relationship between one sound and the sounds that immediately precede and follow it" (2008, p. 144). In other words, it is the degree of linking between two phonetic segments. This connection between sounds sometimes makes it difficult to determine the meaning of an utterance because there is no clear separation between the two elements. Thus, the utterance /arskri:m/ might be decoded as 'I scream' or 'ice cream' (Vivanco, 2009). Vivanco (2009) also suggests that there are three different types of juncture: closed, internal open and external open juncture. Closed juncture refers to the linking produced between
the sounds of the same syllable. In this case the degree of linking will be high. Internal open juncture occurs when there is a union between the final sound of a syllable and the initial one of the following syllable. This degree of linking will be lower than in the previous case. Finally, external open juncture occurs when there is a pause that prevents the linking between two segments. Accordingly, the linking between $/ \mathrm{t} / \mathrm{and} / \mathrm{I}$ / in 'tip' is a case of closed juncture, in 'it is' we find a case of internal open juncture, and in 'look at that. It's beautiful' we distinguish a case of external open juncture.

As it has been seen, phonetics comprises a wide range of areas, being the most significant ones the study of segmental and suprasegmental features. While segments form the core of speech, suprasegmentals complete their meaning. Prosody also relates to the speech act theory. Being phonetics so interconnected with the other sciences of speech, it is no wonder that it could be present in any communicative exchange-all the more in jokes.
2.2.4. Speech Act Theory. It is a widely acknowledged idea in language studies that utterances usually carry an underlying meaning. Speakers attempt to accomplish something with their spoken or written words; they intend to have a specific effect on the reader or listener. According to Austin in his seminal work How to do Things with Words (1962), a speech act occurs when we utter something that has an intention, or more precisely, an utterance that performs an action with language. The underlying intentions behind speech acts are varied, they may denote a command, a question, a request, an exclamation, a wish, and so on. Therefore, a performative utterance could be understood as a way of action that has implications in the real world, which allows speakers to accomplish a host of other intended behaviours.

### 2.2.4.1. Locutionary, illocutionary and perlocutionary acts.

Austin (1962) claims that whenever we say something there are three acts entailed in the utterance: locutionary, illocutionary and perlocutionary. The locutionary act is saying something in its "full normal sense" (p. 94), i.e., when the form of the utterance (string of phonemes) matches the act of saying something. The illocutionary act is related to whatever is done by the act of uttering, in other words, the specific goal the speaker had in mind when saying something. Finally, the perlocutionary act has to do with the effect that an utterance will produce on the hearers as a consequence, like a feeling, a thought or an action. Such utterances may persuade,
convince or even irritate the listener depending on the context. Considering this, if someone asks, "Can you pass the salt?" the locutionary act would be the uttering of the sounds that compose this sentence, the illocutionary act would be the request of the speaker, and the perlocutionary act would be the action of the interlocutor of passing the salt.

In addition to Austin's definition of Speech Acts, it is also important to take into consideration Halliday's Functions of Language (1973) as a conceptual extension regarding locutionary, illocutionary, and perlocutionary acts. These functions are classified as: ideational, interpersonal, and textual. As a related term to Austin's locutionary act, the ideational function works as an interpreter for models of experience (Halliday, 1973), i.e. it helps us to understand the underlying intention within an utterance through the comprehension of its literal meaning. Additionally, the interpersonal function (related to the illocutionary act) has to do with affecting social relationships (Halliday, 1973), in other words, making social interaction work according to our intentions. The effectiveness of this function is especially determined by intonation, so our specific intention in the utterance can be understood in relation to the different prosodic features we employ. Finally, the textual function helps us to understand the context of an utterance by pointing out specific segments within it. These segments are mainly highlighted by the use of intonation and syntactic distribution. Thus, the realization of a speech act depends on other linguistic features, namely lexis, phonetics and grammar. The theory of speech acts-and especially the notions of locutionary, illocutionary and perlocutionary act-was significant for our analysis as it provides another source of misunderstanding that jokes can exploit.

### 2.3. Linguistic Device

For the matter of our investigation we must separate the terms humoristic act from linguistic device. For the purpose of this paper, a linguistic device is the single, isolated element that causes the reader or listener to laugh, that is to say, the unexpected element. The humoristic act contemplates the whole structure. For example, in the joke:

My wife told me to take a spider out instead of killing it. We went and had drinks. Cool guy, wants to be a web designer.

The joke itself contemplates the two sentences separated by a period. Notwithstanding, this joke has a variety of elements that can be considered as funny. First, the relation between 'taking out' the spider and having drinks with it; what was expected of him was to take the spider to the garden and leave it there, not to have a date. In this case, there is a conflict between the illocutionary and the perlocutionary speech acts, as there is a misunderstanding between the intention of the wife and the reaction of the husband. The reason of this is the ambiguous character of the fixed expression 'take out'. Second, the fact that a spider could have a job as a web designer, which could be referring to a website or an actual spider web. This is due to the homophony and homography of the word. Therefore, this one single joke has five different linguistic devices that generate humour: a fixed expression, homophony, homography, the illocutionary speech act and the perlocutionary speech act. We will see how this analysis works in more detail in the results section. Having all this framework in mind, we move to state the objectives and research questions of this study.

## 3. Objectives

### 3.1. General Objective

The general objective of this study is to provide a rigorous account of the linguistic, nonlinguistic and discursive devices present in jokes. With this, we attempted to give a linguistic explanation of the inner workings of humour, which would result in a deeper comprehension of this subject.

### 3.2. Specific Objectives

1. To discover which kind of devices were the most recurrent in the humorous act.
2. To find out which specific device was the most frequently used to provoke the humorous effect.
3. To determine how background information is integrated in jokes.

### 3.3. Research Questions

Additionally, this research sought the answer for the following questions:

1. What are the most frequent devices used in jokes?
2. Is there more than one device present in the same joke?
3. To what extent are extralinguistic features relevant to understand humorous acts?

## 4. Methodology

### 4.1. Instrument

Table 1. Instrument of analysis


|  | Life and Living Things |  |
| :---: | :---: | :---: |
|  | The Body: its Functions and Welfare |  |
|  | People and the Family |  |
|  | Buildings, Houses, the Home, Clothes, Belongings, and Personal Care |  |
|  | Food, Drink, and Farming |  |
|  | Feelings, Emotions, Attitudes, and Sensations |  |
| Background Info | Thought and Communication, Language and Grammar |  |
| Background info | Substances, Materials, Objects, and Equipment |  |
|  | Arts and Crafts, Science and Technology, Industry and Education |  |
|  | Numbers, Measurement, Money, and Commerce |  |
|  | Entertainment, Sports, and Games |  |
|  | Space and Time |  |
|  | Movement, Location, Travel, and Transport |  |
|  | General and Abstract Terms |  |


| Non-Lingusitic | Visual |  |
| :--- | :--- | :--- |
|  | Aural/Oral |  |
|  | Gestural |  |
|  | Situation |  |
|  | Information |  |


| Speech Act | Locutionary |  |
| :--- | :--- | :--- |
|  | Illocutionary |  |
|  | Perlocutionary |  |

For the analysis of the jokes, we designed an Excel sheet (Figure 1.) which considered the following seven categories: 1. Translatable, 2. Humorous License, 3. Medium, 4. Linguistic (divided in Phonetic, Lexical, Morphological and Syntactic), 5. Non-Linguistic, 6. Background Information and 7. Speech Act. The definitions for the five first categories, their corresponding subcategories included, and the category of Speech Act were obtained from A First Dictionary of Linguistics and Phonetics (Crystal, 1980) and the Longman Dictionary of Applied Linguistics (Richards, Platt and Weber, 1985). Regarding the category of Background Information, we used the fourteen main topics in which the Longman Lexicon of Contemporary English (McArthur, 1986) divides words and their related meanings. Additionally, there are ten terms included in the chart which were given a definition according to what we believed pertinent for the analysis of the jokes. These terms are Addition, Overpronunciation, Similarity, Vowel/Consonant, Non-

Linguistic, Aural/Oral, Gestural, Situation, Information and Background Information. The next section presents a list with the corresponding definitions for each category.

### 4.1.1. Definitions of the Excel spreadsheet's categories

- Translatable: Related to the concept translation equivalence, which is "the degree to which linguistic units can be translated into another language without loss of meaning" (Richards, Platt and Weber, 1985).
- Humorous license: A joke is marked with humorous licence when, for the purpose of the humoristic act to be understood, the audience must believe a fantastic or unreal fact.
- Medium: "A term used in the study of communication to refer to the functionally distinct dimensions in which a message is transmitted" (Crystal, 1980). These dimensions can be oral or written.
- Segmental: referring to Segmental phonology, or, "the analyses [of] speech into discrete segments, such as phonemes" (Richards, et all., 1985).
- Addition: The addition of a sound, morpheme, or word which was not in the original structure.
- Elision: "The leaving out of a sound or sounds in speech" (Richards et all., 1985)
- Metathesis: "Refers to an alteration in the sequence of elements in a sentence - usually of sounds" (Crystal, 1980)
- Substitution: A term used in linguistics to "refer to the process or result of replacing one item with another in a particular place in a structure" (Crystal, 1980).
- Overpronunciation: When a word or part of it is pronounced in an exaggerated manner.
- Homophony: "A term used in semantic analysis to refer to words (i.e. lexemes) which have the same pronunciation, but differ in meaning" (Crystal, 1980). This term was used in the Phonetic and Lexical sections of the sheet as it involves the two phenomenasound and meaning.
- Similarity: This term was used whenever two words sounded similar but were not identical in pronunciation-as homophones.
- Vowel/Consonant: The categories of 'vowel' and 'consonant' were added to account for the specific segment that was changed in the segmental categories Addition, Elision, Metathesis, Substitution, Overpronunciation and Similarity.
- Suprasegmental: concerning the "analyses [of] those features which extend over more than one sentence, such as intonation contours" (Richards, et all., 1985).
- Juncture: "Refers to the phonetic boundary features which may demarcate grammatical units such as morpheme, word or clause" (Crystal, 1980).
- Stress: "The pronunciation of a word or syllable with more force than the surrounding words or syllables" (Richards, et all., 1985).
- Intonation: "Refers to the distinctive use of patterns of pitch, or melody" (Richards, et all., 1985).
- Pause: "The general sense of this term applies in linguistics, phonetics and psycholinguistics, where and attempt is made to give a precise account of the types and distribution of 'pausal phenomena' and to draw conclusions concerning their function in speech" (Crystal, 1980).
- Lexical: "Refers to the vocabulary of a language" (Crystal, 1980).
- Synonym: "A word which has the same, or nearly the same, meaning as another word" (Richards, et all., 1985).
- Antonym: "A word which is opposite in meaning to another word" (Richards, et all., 1985).
- Homographs: "Words which are written in the same way but which are pronounced differently and which may have different meanings" (Richards, et all., 1985).
- Fixed Expression: "A string of elements treated as a unit for purposes of analysis and discussion" (Crystal, 1980).
- Neologism: "A new word or expression which is introduced into a language" (Richards, et all., 1985).
- Morphological: Related to "the branch of grammar which studies the structure of forms of words, primarily through the use of the morpheme construct" (Richards, et all., 1985).
- Transposition: "Transformations [that] modify an input structure by re-ordering the elements it contains" (Richards, et all., 1985).
- Syntactic: "A traditional term for the study of the rules governing the way words are combined to form sentences in a language" (Crystal, 1980).
- Function, Form: These categories were used to analyse which aspect of syntax was keener to alterations. Function is "The relationship that a constituent in a sentence has with the other constituents" (Richards, et all., 1985), for example, subject, object, etc; and Form "refers to the phonological/grammatical/lexical characteristics of linguistic units, such as sentences, morphemes, lexemes, nouns, etc" (Crystal, 1980).
- Non-linguistic: When there is a non-linguistic element present in the humoristic act which is relevant for its understanding.
- Visual: When there is the need of "something such as a picture, photograph, or piece of film used to give a particular effect or to explain something", in this case, the joke (Cambridge Dictionary, op. cit.).
- Aural/Oral: When there is the need of hearing a sound in order to understand the joke.
- Gestural: When there is the need of a movement of the body in order to understand the joke.
- Situation: When the joke has an important situational element which cannot be grasped by linguistic devices.
- Information: When there is the need to know extra information for the joke to be understood.
- Speech Act: "Refers to a theory which analyses the role of utterances in relation to the behaviour of speaker and hearer in interpersonal communication" (Crystal, 1980).
- Locutionary act: "The saying of something which is meaningful and can be understood" (Richards, et all., 1985).
- Illocutionary act: "Using a sentence to perform a function" (Richards, et all., 1985).
- Perlocutionary act: "The results or effects that are produced by means of saying something" (Richards, et all., 1985).
- Background information: The extra knowledge needed to understand the joke.

Following, the list of topics taken from Longman Lexicon of Contemporary English (McArthur, 1986):

- Life and Living Things: Life and Living Things: Living Creatures Generally, Animals/Mammals, Birds, Reptiles and Amphibians, Fish and Other Water Creatures, Insects and Similar Creatures, Parts of Animals, Kinds and Parts of Plants, Plants Generally.
- The Body: its Functions and Welfare: The Body Generally, The Body: Overall, The Head and the Face, The Trunk, Arms, and Legs, The Skin, the Complexion, and the Hair, Fluids and Waste Products of the Body, Bodily States and Associated Activities, Bodily Conditions Relating to Health, Sickness, and Disability, Diseases and Ailments, Medicine and General Medical Care.
- People and the Family: People, Courting, Sex, and Marriage, Friendship and Enmity, Death and Burial, Social Organization in Groups and Places, Government, Politics and Elections, Political Tension and Trouble, Social Classifications and Situations, Law and Order Generally, Courts of Law and Legal Work, The Police, Security Services, Crime, and Criminals, Prison and Punishment, Warfare, Defence, and the Army. Fighting, War, and Peace, The Armed Forces, Religion and Beliefs.
- Buildings, Houses, the Home, Clothes, Belongings, and Personal Care: Architecture and Kinds of Houses and Buildings, Parts of Houses, Areas Around and Near Houses, Residence, Belonging and Owing, Getting and Giving, Furniture and Household Fittings, Clothes and Personal Belongings, Cleaning and Personal Care.
- Food, Drink, and Farming: Food Generally, Food, Drinks, Cigarettes and Drugs, The Preparation and Quality of Food, Places and People Associated with Food and Drink, Farming.
- Feelings, Emotions, Attitudes, and Sensations: Feeling and Behaviour Generally, Liking and Not Liking. Good and Evil, Happiness and Sadness, Anger, Violence, Stress, Calm, and Quietness, Fear and Courage, Admiration, Pride, Contempt, and Abuse, Kindness and Unkindness, Honesty, Loyalty, Trickery, and Deceit, Relaxation, Excitement, Interest, and Surprise, Actions of the Face Related to Feelings, Senses and Sensations.
- Thought and Communication, Language and Grammar: Thinking, Judging and Remembering, Knowing and Learning, Communicating, mainly by Speaking and Talking, Communicating, mainly Reading and Writing, Printing and Publishing, Radio and Television, Communication and Information, Language, Grammar, General

Grammatical Words.

- Substances, Materials, Objects, and Equipment: Substances and Materials Generally, Objects Generally, Specific Substances and Materials, Equipments, Machines, and Instruments, Tools, Containers, Electricity and Electrical Equipment, Weapons.
- Arts and Crafts, Science and Technology, Industry and Education: Making Things, Arts and Crafts, Science and Technology, Industry and Work, Education.
- Numbers, Measurement, Money, and Commerce: Numbers and Quantities, Mathematics, Measurement, Money, Banking, Wealth, and Investment, Commerce, Shopping and General Expenses, Business, Work, and Employment.
- Entertainment, Sports, and Games: Entertainment Generally, Music and Related Activities, Recording Sound, Listening to the Radio, etc, Drama, the Theatre, and Show Business, Sports and Games Generally, Indoor Games, Children's Games and Toys, Outdoor Games.
- Space and Time: The Universe, Light and Colour, Weather and Temperature, Geography, Time Generally, Beginning and Ending, Old, New, and Young, Periods of Time and their Measurement, Grammatical Words and Phrases Relating to Time.
- Movement, Location, Travel, and Transport: Moving, Coming, and Going, Putting and Taking, Pulling and Pushing, Travel and Visiting, Vehicles and Transport on Land, Places, Shipping, Aircraft, Location and Direction.
- General and Abstract Terms: Being, Becoming, and Happening, Possibility, Chance, and Necessity, General, Usual, Unusual, etc, Size, Importance, and Availability, Doing Things, Causing, Resemblance, Difference, and Change, Rightness, Fairness, Purpose, Use, and Strength, Fullness, Heaviness, Thickness, Stiffness, Roughness, etc, Actions and Positions, Cutting, Joining, Breaking, and Destroying, Showing, Hiding, Finding, Saving, and Similar Words.


### 4.2. Corpus Description

The data that constituted the corpus of our investigation consisted of 200 written jokes. These jokes were randomly gathered from different online sources such as webpages and social media. As the aim of this study was to analyse linguistics features, the only requisite for jokes to
integrate our corpus was that their humoristic effect was based in at least one linguistic device. Every joke had to present a linguistic aspect, in opposition to jokes that only display humour in a situation or event. We considered short jokes-usually no more than three lines-to be more suitable for this study than longer jokes because the latter tend to rely a lot more on the situational context in which they are being told. Most of the jokes collected were the ones that have a 'question and answer' format and those that have a small statement with a punchline.

### 4.3. Procedures

The first stage of this study was the creation of an Excel spreadsheet that included all the possible characteristics and devices that we could find in our corpus. To do this, we revised our previous knowledge on linguistics and supported our decisions with pertinent literature (see section 4.1.1). Next, we collected an amount of 200 written jokes (Appendix) and analysed them with our instrument. In this analysis, we considered the basic characteristics of the jokes, e.g., if they were translatable into another language (Spanish) or not, if they were intended to be read, told, or both (their ideal medium of transmission), and if their comprehension relied on a humorous license or not. Then, the core of our analysis was the recognition of linguisticphonetic, lexical, morphological and syntactical-devices, non-linguistic devices-visual, aural/oral, gestural, situational and information, and discursive features-speech acts. Additionally, we looked for the kinds of background information that were needed to understand the jokes, if they were needed at all.

The collection and analysis process were carried out simultaneously, assigning a separate Excel spreadsheet to each joke's analysis. Once we finished the analysis, we revised it and organised the results from the separate Excel spreadsheets into a single chart, where the information was quantified. This chart received the name of 'Breakdown of results' (Appendix). Finally, we organised our results in pie charts and discussed their implications.

## 5. Results and Analysis

After the analysis of the 200 jokes we extracted a total amount of 462 linguistic and nonlinguistic devices that generate humour. Thus, these humour-inducing linguistic devices more than doubled the quantity of selected jokes. A possible explanation for this is that humour is usually constructed from relations between different linguistic features. For instance, jokes that contained homophony could also contain homography at the same time. Even more, some of the jokes presented pairs of homophones and pairs of homographs. Thus, it was a common trend to find jokes in the corpus that included two or three devices simultaneously. From the total of them, 455 were linguistic and 7 were non-linguistic. In the following section, we will present both the results and the analysis of the linguistic ones. Non-linguistic devices will only be commented as they are not the focus of our study. Additionally, we will also discuss other relevant aspects of jokes such as medium, the use of a humorous license and translatability-as well as their reliance on background information.

### 5.1. Linguistic and discursive devices

Figure 1.
Linguistic and discursive devices


The chart above depicts the percentage of occurrence of both linguistic and discursive devices. The reason why both categories were analysed together is that, in spite of the fact that
discursive devices are features that go beyond the sentence, they also have an inevitable effect on linguistic devices. Besides, we considered that both categories constituted the most relevant realms for the purpose of our investigation. As the chart illustrates, the number of linguistic and discursive devices found were divided into five categories: phonetic, lexical, morphological, syntactic and speech acts. The results depict two prevailing types of linguistic devices: lexical and phonetic. The first one accounts for more than half of the total devices ( $\mathrm{n}=234$ ) and the second one accounts for roughly a quarter of the total $(\mathrm{n}=119)$. The syntactic, speech act and morphological categories stand as a minority with $9 \%(\mathrm{n}=42), 8 \%(\mathrm{n}=37)$ and $5 \%(\mathrm{n}=23)$ respectively. This is not surprising, as the basic level at which jokes work is words. That is to say, lexical, as well as phonetic and morphological features change a characteristic of a word to transform it into another, therefore the change is more evident and easier to produce and understand. Although the areas of influence of these features are different (semantics, phonemics, morphemics) the outcomes of all of them are the same: a new word. Hence, a great amount of jokes with phonetic and morphological devices also include a lexical feature.

Nonetheless, the small percentage of morphological devices accounts for the complexity required to create jokes that rely on this these device, in contrast with the one needed for lexical jokes.

Syntactic and speech act features, on the other hand, function in a more complex level, influencing the whole statement of the joke. Therefore, it is harder to use these devices when creating jokes. According to Victoria (1941), jokes need to be simple, so the audience can get their meaning right at the end of the joke. If the joke is too long or complicated, the humorous effect of it may suffer. This might be the reason why these features rarely appear in jokes. In the following charts will analyse each category in detail, accounting for the results of each subcategory.

### 5.2. Phonetic Devices

Figure 2.
Phonetic devices


The first category to be analysed is Phonetics. In order to provide a deeper analysis of the Phonetic devices, we decided to divide them into segmental and suprasegmental features. The former stands for a $64 \%(n=76)$ of the phonetic devices, almost doubling its counterpart which occurred in $36 \%(n=43)$ of the cases. This result might be explained by the fact that we obtained the corpus from a written source rather than an oral one. On the one hand, suprasegmental features are closely related to connected speech and can be more easily identify in oral utterances, hence are less likely to be present in the written form. On the other hand, some of the segmental features, such as homophony, can be more easily depicted in the written form due to their close relation with lexical homophony and homography. The following sections dedicate a thorough description of the segmental and suprasegmental features found in jokes.

### 5.2.1. Segmental devices.

Figure 3.
Segmental devices


Jokes depending on segmental features rest on the ambiguity produced by identical or similar sounds with different meanings. From the results obtained, we can assert that devices of complete equality of sounds-homophony-are far more frequent than any instance where sounds are partially divergent. Homophony is present in more than half of the segmental devices $(\mathrm{n}=42)$, which correlates with the also majority of homophones in the lexical devices (approximately half of them). This preference for homophones can be explained through Chomsky's theory of deep and surface structures (Chomsky, 1965). Jokes that rely on homophony, provide an acoustic image (surface structure) which is paired with two different references in our minds (deep structure). For example, in the joke number 41 Which days are the strongest? Saturdays and Sundays. The rest are weak days, the surface structure /wi:k/ has two different references: a period of days and the opposite of strong. The disparity of these mental references is what makes it possible for homophones to generate a humorous effect.

The second most recurrent feature is substitution, with a fifth of the devices $(\mathrm{n}=15)$. When a word differs from another just by one or a few segments, the substitution of these segments makes both words sound alike. However, segments are not randomly substituted. The capability of a segment to replace another depends on how many features away they are (Vivanco, 1981). For example, the segments /s/ and /J/ in the words selfish and shellfish share two out of three phonological features: both are voiceless and fricatives. As they only differ in their point of articulation, they can be easily interchangeable. For this reason, substitution goes
hand in hand with the similarity category-which has the third majority of devices ( $\mathrm{n}=9$ ) -as substitution can only take place in words that have a similar pronunciation. In that sense, substitution seems to be present in order to make cases of the similarity category act as homophones. Additionally, substitutions are also used as a resource that facilitates juncture in the suprasegmental category.

There were three possible outcomes when substitution occurred. The first is when the change of one segment in a word results in another word which is similar in pronunciation. For example, in the joke number 65 Q: How many Mexicans are necessary to screw in a light bulb? A: Only Juan, the substitution of /ws/ in the word 'one' for /xwa/ generates the word 'Juan'. In this case the humoristic effect is possible thanks to the similarity of the semivowel and short vowel in /w $/$ with the Spanish diphthong /wa/. In the second case, the substitution of a segment in a word generates a completely new term, i.e. a neologism, as in joke 20 Q: What do you call a frozen dog? A: A pupsicle. In this case, the substitution of $/ \mathrm{p} /$ for $/ \Lambda /$ in the first segment of the word popsicle (pop for pup) produces the neologism pupsicle. As both vowels are short and open, this allows the resemblance between the two segments. Finally, the third case occurs when the substitution of a segment facilitates the juncture phenomenon as depicted in joke number 78: Beer may not make you smart, Budweiser. Here, the two words but wiser get together and become the beer trademark 'Budweiser', thanks to the substitution of /t/ for /d/, phonemes that share the point (alveolar) and manner of articulation (plosive). Cases of juncture will be analysed in depth in the suprasegmental section of the results.

The other four categories stand for a minority of occurrence. Elision, with only an $8 \%$ of occurrence ( $\mathrm{n}=6$ ), is present in jokes that rely at the same time on devices such as juncture or similarity. In the first case (elision + juncture), the elision of certain segments in a word facilitates its cohesion with another one as in the joke number $111 Q$ : What does the man in the moon do when his hair gets too long? A: Eclipse it. In this joke, the sound /h/ has been removed from the original answer he clips it in order to construct the phrase eclipse it. The second case (elision + similarity) can be seen only in joke 110: Q: What do you call a Frenchman wearing sandals? A: Phillipe Phillope. This joke has a wordplay between the words Phillipe Phillope and flip flop which sound similar, thus, and in order to get the underlying meaning of the joke, the audience must elide the first /i/ sound in both names.

Metathesis and Over Pronunciation only appeared in two cases each. The first occurs in two different ways: within a word forming another different one as in joke 92: A dyslexic man walks into a bra, in which both the vowel and the final consonant sound of bar have suffered a change of position turning into the word bra. This example also features morphological transposition, which will be explained below. The second possible way is a metathesis between two different words, as in the following joke (number 127) in which the sounds $/ \mathrm{kr} /$ of crusty and /b/ of bus change of positions forming the words busty and crustacean: $Q$ : What's the difference between a dirty bus stop and a lobster with breast implants? A: One's a crusty bus station and the other a busty crustacean. Over pronunciation also appears in two different ways. The first one is related to the emphasis of a specific sound within a word and the other to the over pronunciation of vowels in a complete sentence as way of imitating a particular accent. Both cases can be seen in the following jokes (number 144 and 32 respectively): What is a cat's favourite colour? Purrrple (over pronunciation of /r/ within the word purple), as an onomatopoeia of a cat's purr. And in the following joke: Cop: You're driving on the wrong side of the road. Driver: Sorry, I'm English. Cop: (shouting) It's the wrong soid of the roade ye was droivin down, innit? (over pronunciation of vowels in the whole sentence). It is important to mention that, in order to provoke the desired effect of remarking a different accent, the previous joke also makes a substitution of the standard pronunciation of the vowels for a dialectal one.

Finally, the addition category did not occur in any humorous device, probably because it might be difficult to recognize the original word. If we are given a word to which a certain sound has been previously added (e.g. adding $/ \mathrm{m} /$ to the beginning of the word eat to form the word meat), it is very hard to evoke the original word and the change it suffered to form the final one, annulling this way the humoristic effect. Furthermore, the fact that phonetic addition, although scarce, is more recurrent in oral speech than in writing, added to the fact that we are analysing a written corpus may account for the lack of this device.

### 5.2.2. Segments.

Figure 4.
Segments


As the segmental devices affect segments directly, it was interesting to discover which ones-vowels or consonants-were most repeatedly employed. The results illustrate a preference for vowels in approximately more than a half of the devices ( $\mathrm{n}=17$ ). A possible explanation for this is in Cole et al.'s paper (1996). They carried out three different experiments in which they replaced either the vowels or the consonants in a recorded speech by noise. The results demonstrated that subjects were much more able to recognize words on the basis of their vowels than of their consonants. Thus, vowels seem to be more crucial than consonants for the comprehension of words. Applying this to our study, it may be the case that it is easier for an individual to get the joke when vowels are altered, as we can decipher the words more rapidly after the alteration.

### 5.2.3. Suprasegmental devices.

Figure 5.
Suprasegmental devices


As the chart depicts, $86 \%$ of the suprasegmental devices correspond to juncture ( $n=37$ ). As has been seen, the cases in which juncture can occur are abundant in connected speech (there are cases of closed, internal open and external open juncture). This is probably the reason why it was the most common suprasegmental feature that caused a humoristic effect. An example of this can be observed in joke number 156 of our sample: $Q$ : What do bees say about the summer weather? A: Swarm. As the logical answer would be '[it] is warm' it could be interpreted as 'swarm' when said faster. The same happens in joke 7 Q: Did you hear about the kidnapping at school? A: It's okay. He woke up. This joke relies on phonetic juncture to form the word 'kidnapping' instead of the two separate words 'kid' and 'napping,' so the hearer would be worried about the abducted kid to subsequently realize that (s)he was actually just taking a nap. Likewise, there were jokes such as number 4: I'm on a seafood diet. Everytime I see food, I eat it! in which there is a high degree of linking between 'see' and 'food', and thus, the hearer catches the similarity between the utterances 'see food' and 'seafood.'

Stress was the second most used suprasegmental category, occurring in a $9 \%$ of the cases ( $\mathrm{n}=4$ ). As mentioned earlier, stress may be modified by rhythmical or contrastive reasons. This is especially relevant to our study since a joke would have to be uttered with a degree of ambiguity in its stress pattern, for it to work in connected speech. For instance, in the joke 73: Why don't ants go to church? Because they are in sects, the juncture that occurs between 'in' and 'sects' creates the word 'insects,' being the difference between the two elements just a matter of stress:
'insects' stressed on the first syllable, and 'in sects' on the final one. In all the cases in which the stress device was employed, the juncture device also occurred. The only exception was joke 28: Shout out to the people who ask what the opposite of "in" is, which rests on the ambiguity of the collocation 'shout out'. When stressed in the first word, it is an informal way to give credit or to mention someone, and when stressed on the second word it means to yell 'out' to someone, wrapping out the pun at the end with the word 'in.'

Pause has one of the lowest percentages in the suprasegmental category. In fact, there were only two jokes which presented this feature. As previously mentioned, this might be due to the fact that our sample was in written form, and that the feature of pause is more easily perceived when performed orally. However, this feature can also be portrayed in the written form with the absence of punctuation marks. As an example, the joke 25: What's the difference between a good joke and a bad joke timing, lacks the spelling of a colon to indicate the pause, therefore the word 'timing' has to be pronounced immediately after the previous word. This has a humorous effect because the joke is lacking good timing since it does not possess the pause. The other joke (number 46) that also presented pause is quite similar in nature: Commas are important people. Commas aren't people. This joke also lacks a pause orthographically, that is, the pause between 'important' and 'people.' Nonetheless, this is what makes the joke funny.

The chart also depicts that intonation did not occur in any joke. As it is a feature that can only be perceived through orally uttered words it does not occur in our sample of written jokes. However, it is important to mention that changes in intonation will always be present when other phonetic changes occur. For example, the joke 66: When you get depressed in the middle of winter, just chuck some butter from your window. You'll see a butterfly, provokes a humorous effect because of the juncture between 'butter' and fly', which together form the noun 'butterfly'. However, this confusion occurs in connected speech, because the intonation of the last sentence of the joke changes with the juncture. Where the sentence you'll see a butterfly would end with a rising intonation and the sentence you'll see a butter fly would end with a falling intonation.

### 5.3. Lexical Devices

Figure 6.
Lexical devices


As it is shown in figure number 1, the majority of samples fall into the lexical category - 234 out of 455 humoristic devices. This tendency is explained given the nature of the samples, which, as we have mentioned all along this paper, is written. Even though morphological and syntactic devices are also explained by the sample's written form, it is evident that most of the linguistic devices will be lexical, because it is the less complex linguistic resource that can be used to make humour. Therefore, the main purpose humour, to make people laugh, is in no way limited by the use of lexical devices, but it is in fact intensified as lexical jokes are likely to be understood by a wider range of people. While first, in a morphological joke, a new linguistic unit needs to be created by the combination of different morphemes in order to be funny; and, second, in a syntactic joke, it tends to be either the form or the function of a word that is changed in order to create a joke.

Within the lexical section, which was divided into six subcategories: homophones, homographs, fixed expressions, neologisms, antonyms and synonyms; a great number of cases were homophones-108 devices. Some examples in which we found homophony are the following:

Sample 1. Joke 79: I couldn't find my favorite tv show. I guess it was Lost.
Sample 2. Joke 11: What type of sandals do frogs wear? A: Open-toad!

Sample 3. Joke 17: The world tongue-twister champion just got arrested. I heard they're gonna give him a really tough sentence.

The first sample presents exclusively homophony as linguistic device. The humoristic factor can be explained through the Chomskyan categories of deep structure and surface structure, in the sense that the word 'Lost' in its surface has the same structure but its semantic structure has two meanings, the TV series called 'Lost' and the action of "not knowing where you are and how to get to a place" (Cambridge Dictionary, op. cit.). The second sample does not only have homophony in the lexical sense, but also shares a phonological aspect. In this sample the joke is in the word 'open-toad', specifically 'toad'; word that shares its pronunciation with 'toed'. Even though there is no such expression as 'open-toad', there is 'open-toed', used to talk about shoes that do not cover the toes (Cambridge Dictionary, op. cit.). Then, the reason why sample 2 is both lexical and phonological, is because of 'toad' and 'toed' being homophones and not homographs, but coincidental. Lastly, Sample 3, within the lexical category, corresponds to both homophone and homograph that is they have exactly the same pronunciation and spelling. In here, the joke is in the word 'sentence' - the grammatical unit and "a punishment given by a judge in court to a person or organization after they have been found guilty of doing something wrong" (Cambridge Dictionary, op. cit.). A large number of homophony devices shared both homophony and homography.

The second largest category was homography, with $32 \%$ of the lexical devices ( $\mathrm{n}=74$ ). What is interesting about this is that every case of homography is also a case of homophony, given that the main reason homographs would have a different pronunciation (in which case they would not be homophones) is if these homographs had a different syntactic function. Let's say, in Lightning sometimes shocks people because it just doesn't know how to conduct itself, conduct is only a homograph because when changing from a noun to a verb its pronunciation changes: /'kpn.d $\mathrm{d} k \mathrm{kt} /$ to /kən'd $\lambda k t /$. However, this was not the case for us and all the homography devices are similar to Sample 3.

Subsequently, the third largest chunk of linguistic devices are Fixed Expressions - 35 cases- which can also be explained considering the concepts of the deep structure and surface structure. Under the premise that a fixed expression can be understood by the meaning of the whole grammatical unit, which is its deep structure, it can also be understood by its surface
structure, which means word by word. The two cases of humoristic devices occur in the sample. For instance, the following example (joke number 8) Why did the school kids eat their homework? A: Because their teacher told them it was a piece of cake is funny because the fixed expression "piece of cake" is understood by the literal meaning associated with its surface structure, literally a piece of cake, and not by the meaning of one of its deep structures that is "something that is very easy to do" (Cambridge Dictionary, op. cit.) In contrast, the second example (joke number 124) Thank you student loans for getting me through college. I don't think I can ever repay you is understood by its fixed expression that is "repay you" which means reward all the loan did for him/her, but also can be understand like literally repay it.

The next category with more linguistic devices is Neologisms - nine occurrences. The linguistic model of word formation sketched in Halle (1973) suggests that neologisms are formed by an incorrect affixation and the main reason because these words are funny is that they are unexpected. In the following example (joke number 64) we can appreciate this phenomenon: Why aren't koalas actual bears? They don't meet the koalafications. Here, the word 'koalafications' refers to 'qualifications' which means "an ability, characteristic, or experience that makes you suitable for a particular job or activity" (Cambridge Dictionary, op. cit.). The neologism is created by the similarity of the pronunciation of koala / $\mathrm{k} \partial \sigma^{\prime} \mathrm{a}: . \mathrm{l} \partial /$ and the first morpheme in qualifications / , kwpl.ı.fi'keı.fən/.

The less recurrent lexical devices were antonyms and synonyms with four and three cases respectively. These jokes can be explained in Saeed's (2009) words about lexical relationships and his idea of understanding "the lexicon as a network" of words. First, an example of antonymy is joke 123: I've been dating a homeless woman recently, and I think it's starting to get serious...She's asked me to move out with her. In this sample the humoristic element is 'out' and its contrast with 'in' in the expression 'move in', which means 'to go to a different place and begin to live or work there". This relation of opposites, as Saeed (2009) calls antonyms, falls into the category of reverses: "terms describing movement, where one term describes movement in one direction and the other $\rightarrow$ the same movement in the opposite direction $\leftarrow "(\mathrm{pp} .67-68)$. Secondly, an example of synonymy is joke 47: The hypothalamus plays a major role in the regulation of basic biological drives related to survival, including the so-called "four Fs": fighting, fleeing, feeding, and mating. In this last example the humoristic element is "mating"
which means to have sex (Cambridge Dictionary, op. cit.). Therefore, it is a synonym of "fucking," that will correspond to the fourth F in the joke. As mentioned by Saeed, "An important source of synonymy is taboo areas where a range of euphemisms may occur, for example in the English vocabulary of sex, death and the body" (p. 65).

In short, the numbers of devices in each category can be explained by Saussure's theory of the linguistic sign, that is a two-part unit - concept-meaning and sound-image. Homophones and homographs, by having the same sound-image, are much easier to recognise because of their similarity, i.e. there is already half of the sign covered. They are an easy humoristic resource, which explains why they together complete more than half of the linguistic devices in total. These are followed by fixed expressions and neologisms that, although not as similar as homophones and homographs, have a closer linguistic sign relationship within each other; the former with the same sound-image and the latter with a significantly similar one. Lastly, as it is expected, the ones with the most distant relationship out of all: synonyms and antonyms. These are the fewest because, even if they have the same or a pretty similar meaning, as its image is different it is harder to perceive the relation between words; the reason why the joke itself may neither be understood, nor created as easily.

### 5.4. Morphological Devices

Figure 7.
Morphological devices


Morphological devices comprise only a 5\% of the linguistic devices in the corpus-a quite small portion. From them, addition and substitution are the most frequent types of morphological change. One example of addition is found in joke number 33: My three-year-old and I were hanging ornaments and she found some without a way to hang them, so she said, "We better go get more hookers out of the basement." Here, the word 'hooks' is mispronounced 'hookers', which adds the derivational suffix '-er' to the root 'hook'. Hence, the addition of a morpheme changes the meaning of the word-from an object to an agent. Moreover, in this specific joke the word 'hooker' entails a totally different connotation, so the humoristic effect is reinforced by the fact that a little child is saying this word. In this way, the addition of a morpheme produces changes in other levels of language.

The additions we found in the corpus were either derivational affixes, or parts of other words that sounded similar, such as the joke 136: What do you call an alligator wearing a vest? A: An investigator. In this case, the merging of the words 'alligator' and 'vest' only works due to the existence of another word that contains them, 'investigator'. In some other cases, the addition of morphemes creates a neologism: My socks got really holy. I can only wear them to church. Here the suffix '-y' is added to the base 'hole' /həul/ and results in the word 'holy' which looks like an actual word, but it is not. It is interesting to mention that the additions commented here do not restrict the medium of the joke, that is, the joke is in a written and an oral form-which is not always the case with morphological devices, as we will see.

There were two interesting cases regarding substitution. The first occurred when a morpheme was substituted by another that sounded identical, as in Eyelashes are supposed to prevent things from going into your eyes, but whenever I have something in my eye it's always an eyelash. Eyeronic. The segment ' $i$ ' of the word 'ironic', which is not an affix, is replaced by the word 'eye'. Although this joke could be in a written or oral medium, it is more suitable to the former, as the reference to the eyes is too obscure for a listener to catch it (they would only understand 'ironic'). The second one involves the substitution of inflexion, which is very rare in our corpus. In joke 45: A: Tell me something I don't know B: The past tense of William Shakespeare would be Wouldiwas Shookspeared, the writer's name is parsed into five segments that resemble one pronoun and four verbs, which in turn are changed into past tense. This joke is
very particular, because it relies in the coincidence of the writer's name with names of verbs. Again, because of this particularity, it would be difficult to immediately understand the punchline of this joke, what would make it less effective.

Elision and transposition are the least common type of morphological change in the sample. The same as in the examples described above, the reason of the scarcity of these devices seems to be the higher effort that is needed to understand them and produce them. This is due to the fact that not all morphemes can stand alone, so the success in using a morphological device would depend on the use of words that have a specific structure. Even so, the parcellation of words may seem artificial. Additionally, the relation between the phonological and orthographical components of the morphemes has to be taken into account.

### 5.5. Syntactic Devices

Figure 8.
Syntactic devices


Due to the inflexibility of syntactic structures, most of the jokes that presented syntactic devices relied on substitution, i.e. this device appeared in 40 jokes corresponding to a significant $95 \%$ of the syntactic instances. Jokes 21 and 66 were the only which presented addition and elision respectively, while transposition was not present in any joke.

Some humoristic devices of syntactic substitution were also complemented by other cases of substitution regarding different linguistic terms. One of these devices was phonetic substitution which can be seen in joke 107: Why wouldn't the shrimp share his treasure? Because he was a little shellfish. This joke works particularly well in phonetic terms due to the similarities between the consonants $/ \mathrm{J} /$ and $/ \mathrm{s} /$, making the word 'selfish' very close in articulatory terms to 'shellfish'. This phonetic substitution leads to a syntactic form of substitution since there is a shift in the category of the word from adjective to noun.

An example of lexical homophony in terms of form is present in joke 22: Why is it so hard for a leopard to hide? Because he's always spotted. Here, the word spotted is a homophone, but in order to make the humoristic device noticeable, it is necessary to understand the change of word category. 'Spotted' as a verb, works as the direct answer for the joke's question: Why is it so hard for a leopard to hide? 'spotted': 'found'. While 'spotted' as an adjective is related to the leopard's skin pattern.

Addition was also a phenomenon which implied a relation with syntactic transposition. Joke 60 makes use of the suffix '-er' to create lexical homophony: Vegans believe meat eaters and butchers are gross. But those who sell you fruits and vegetables are grocer. In lexical terms, the use of the suffix makes the word 'grocer' seem like the comparative form of 'gross'. In this way, the noun 'grocer' would change its category into an adjective.

Joke 50 was the only sample in which substitution appeared in both morphological and syntactic levels: She texted me: "Your adorable." I replied: "No. You're adorable." Now she likes me. All I did was point out her typo. Besides a change in terms of form, in which 'your' as a possessive pronoun gets corrected into 'you're' as subject and verb, a morphological device appears in the addition of the abbreviated verb form 're. Both syntactic and morphological devices are present in the same word.

### 5.5.1. Function and form.

Figure 9.
Function and form


Following the syntactic notion described above, it was found that jokes which presented substitution at a syntactic level had significantly more instances of form change than of function change. The 34 instances of form substitution, in contrast with the 6 instances of function substitution, showed us that it is less common to appreciate function variations in a sentence to generate a specific linguistic device. On the other hand, there is a sort of flexibility when substituting single words, considering that most of substitution instances in the corpus were formed by words which carried post-modifiers. It is also important to mention that none of the 6 syntactic, function substitution jokes presented cases of lexical homophony while most of form substitution jokes did.

### 5.6. Speech Acts

Figure 10.
Speech Acts


Jokes based on speech acts constitute a small portion of the corpus analysed; around $8 \%$ of the jokes relied on some ambiguity between the three different acts. This accounts for a total of 37 out of 200 humoristic acts found in the sample. Almost half ( $49 \%$ ) of the speech act-based jokes rest on the misunderstanding of a locutive act, specifically in the literal understanding of a fixed expression instead of its figurative meaning. For instance, in joke 200 Claustrophobic people are more productive thinking out of the box the figurative meaning of the expression 'to think outside the box' is roughly understood as "thinking in an open space" instead of "to think imaginatively" (Cambridge Dictionary, op. cit.). Therefore, the literal meaning can be related to the notion that claustrophobia causes fear of being in closed spaces, i.e. inside a box in this case. This agrees with Hancher (1980), who states in his essay about speech acts and jokes that a common resource found in them is to pretend to understand indirect requests literally. He exemplifies: $Q$ : 'Can you pass the salt?' $A$ : 'Yes, I can.' However, this example fits better within the analysis of jokes that rely on the illocutive act which will be explained below.

Jokes that operate within the illocutive act comprise $27 \%$ ( 10 out of 37 ) of speech act based jokes. Almost all of the illocutive act based puns feature a dialog between two interlocutors, one of them gives a response that violates the felicity conditions of the illocutionary act. Jokes that rely on the surface ambiguity of a locutionary act, result in the deviation of the illocutionary act, an effect that Austin called "illocutionary infelicity" i.e. taking advantage of the ambiguity and deviate from the intended illocutionary act (Hancher, 1980). Joke 117, A horse walks into a bar. The bartender says, "Hey." The horse replies, "Sure." exemplifies that the response to an initial illocutionary act results in the unintended sequel of
another illocutionary act due to the ambiguity of the surface structure of the word hey /heI/: "A horse walked into a bar, the barman said 'Hey' the horse replied 'Sure', the initial illocutionary act response to salutation is deviated to another illocutionary act where the word 'hey' is understood the homophone 'hay'.

Finally, perlocutive acts also stand for approximately a quarter ( $24 \%$ ) of the speech actbased instances. Jokes in this category not only presented a figurative statement taken literally, but also portrayed a hilarious act as a consequence of this. In the majority of cases, this act was the punchline, and not the locutive issue. This is why many of them do not go hand in hand with other types of speech acts. Also, the fact that these jokes imply an action, and not only a dialogue between characters may suppose a bigger imaginative effort, what could explain why these instances are a minority.

### 5.7. Humorous License

Figure 11.
Humorous license


As the data collected consisted in jokes that had a linguistic aspect, they played mainly with language, and not with reality itself. Therefore, the fact that this chart had a majority of linguistic devices not using license was expectable. Even though, the percentage of jokes that do use license is still considerable: $37 \%$ ( 74 jokes). This means that humoristic acts based on animals and inanimate objects are very frequent. In these humoristic acts though, it is not the unreal situation what is funny, but rather the intrinsic features of the entities. For example, in
joke 144: Q: What is a cat's favourite colour? A: Purrrple humour resides in the manipulation of the name of a colour so as to include this characteristic cat sound; the core of the joke is not on the fact that cats can be capable of liking colours, but in the similarity between the homophonic segment /pz:/ from 'purple' and the onomatopoeia 'purr'.

### 5.8. Translatable Jokes

Figure 12.
Translatable jokes


The previous chart stands for the percentage of translatable jokes and not translatable jokes, where $83 \%$ of the jokes is not translatable and the other $17 \%$ is translatable from English to Spanish. Even though we have some theories about the reason why some jokes are translatable, and the majority is not translatable, it would be important to develop this topic in a different research, in order to improve this idea and get a valid conclusion. Still, as an inference, some of the jokes can be translated from English to Spanish because some words are true cognates and some fixed expressions have a counterpart in Spanish. Also, some of the jokes use speech acts which make them translatable. On the other hand, non-translatable jokes are present because there is not counterpart in Spanish for them. The reason for this is the presence of false cognates, non-translatable wordplay, and the absence of fixed expressions. Phonetic differences between English and Spanish are also an important reason.

Additionally, it is relevant to make a connection between this category and the linguistic one. As all of the jokes analysed conveyed a linguistic feature in them, it is expected for them to only work in the original language they were created. The majority of the data collected worked on a word-play basis and the few times that a translation was possible it seemed to be a coincidence, as it was only because the words were true cognates in Spanish. On the other hand, situational or story-type jokes (which were not analysed for the purpose of this research) in which there are no linguistic features involved in the creation of the punchline, seem to be easier to translate as the situation happening in the joke is what is funny and not the actual language or wordplay used, as in the case of linguistic jokes.

### 5.9. Medium

Figure 13.
Medium


This chart states the medium (written, oral or both) in which the humorous acts work. When analysing this chart, it is important to point out that the collected data was all in written form, however, not all the jokes work exclusively in this medium. As it can be depicted, this category represents a minority in the pie chart. Only a few jokes could only be understood in writing, an example of this is joke number 50: She texted me: "Your adorable." I replied: "No. You're adorable." Now she likes me. All I did was point out her typo. As your and you're are pronounced the same, the difference between them can only be appreciated when they are
written. Therefore, if this joke were to be told orally, it would be difficult for the audience to understand it right away without being told the way in which 'your' and 'you're' were written respectively.

Furthermore, there is a strong relation between the oral medium of the jokes and the second majority that represents the phonetic aspect in the data collected. Most of the jokes presented word alterations, and even though they were all written, in some cases it was impossible to represent both of the meanings intended in the joke. For instance, in joke number 143: Q: Why was the cat disqualified from the game? A: It was a cheetah. One can only see cheetah and not its homophone cheater /'t $\mathrm{fi} . . \mathrm{t}$ /, to which the joke is also referring to. This phenomenon is also illustrated in the humoristic acts that present juncture, as in joke number 108: What do you call a Mexican who has lost his car? Carlos. where Carlos and car loss sound the same in connected speech. Thus, as explained in the previous example, only one form could be written and that is reason why the joke works in a better way when told orally.

### 5.10. Background Information

Figure 14.
Background information


Most of the jokes needed background information of some sort (pictured in figure 15.) The reason for this is that most of them deal with cultural aspects and require knowledge of some kind. Yet, some of the jokes do not need background information and this is explained mostly
because they are purely linguistic, which means that they only require basic knowledge of English, so they can be understood by any native speaker.

Figure 15.
Type of background information


When it comes to Background Information, the category of Thought and Communication, Language and Grammar has the biggest percentage within the pie chart. The jokes that were chosen to carry out this investigation were specifically selected because of their linguistic example phenomena, therefore for most of these jokes it is mandatory to have knowledge over some aspects of language, whether it is grammar (e.g. What do you call Santa's helpers? Subordinate Clauses), knowing Spanish or French (e.g. I asked my French friend if she likes to play video games. She said, "Wii"), or the use of particular concepts with different acousticimages (e.g. If you ever get cold just stand in a corner for a bit, they are usually 90 degrees).

The following five categories with the biggest score within the pie chart are Food, Drink and Farming, Life and Living Things, People and the Family, Arts and Crafts, Science and Technology, Industry and Education and The Body: its Functions and Welfare. The mentioned
categories are strongly related to the everyday life, a resource that is commonly applied to humour.

Finally, it is essential to point out that this pie chart is not considering all of the humorous acts, only the ones in which it is compulsory to have a knowledge beyond what is ordinary. Thus, the fact that some categories do not have a larger percentage does not mean the themes were completely absent from our humorous acts, but that they might not need a deeper understanding of the subject.

### 5.11. Non-linguistic devices

We only found 7 non-linguistic devices within our corpus: one visual, three situational and three informational ones. One example is joke number $9, Q$ : What's the best thing about Switzerland? A: I don't know, but the flag is a big plus. Here, we need to actually picture the flag in our minds to understand the joke. It is not only about knowing the flag, but about having an image of it. That is why it is a non-linguistic visual instance. As we said before, we will not expand on this type of features, though it is important to recognize its presence in humorous acts.

## 6. Conclusion

As we stated at the beginning of this investigation, humour is quite a complex topic to address. Despite its universality, it is extremely hard to describe a formal theory related to how, why, and when humour is created. What is certain, however, is that humour has always been present in human communication, and it is an essential part of it. Several authors have worked on the subject. However, our discussion was mainly based on Victoria (1941) and Ross's (1998) incongruity theory, which states that jokes are fundamentally created by the appearance of an unexpected element in language. Ambiguity also plays an important part in this theory, as Ross defines it in her work, structural ambiguity entangles all of the linguistic resources that our investigation included.

In order to carry out this research, it was important to define that humour needs two basic agents: the creator and the receiver. The second most relevant point was to define the different types of humorous devices that exist and choose one to work with. To identify the various types of humorous devices that exist we used the taxonomy made by Vivanco, C., H. Vivanco \& C. Zenteno (1997). Different varieties of humorous devices were included among the general samples we examined. Riddles, memes, jingles, and story-type jokes were present in the overall data collected. Therefore, we decided to focus exclusively on puns and question-answer type jokes.

Although humour has been addressed before by several authors, we considered that linguistic resources were not particularly studied in their investigations. Therefore, in this investigation some of the linguistic elements that were examined include suprasegmental, morphological, syntactic, and discursive devices, as a way of acknowledging the complexity that entangles the understanding of a joke.

The aim of this investigation was to explore the different elements that would make a joke funny from a linguistic point of view. We identified linguistic, non-linguistic and the different discursive devices that might have been present in a joke. The main objectives that guided us throughout this research were to identify and analyse what are the main linguistic devices used in humoristic acts; and determine the patterns that are present in the use of puns, establishing correlations between linguistic devices or predicting their behaviour. Among the linguistic categories, we found phonetic, lexical, syntactic, and morphological aspects. It was
also important to consider the speech acts present in some of these jokes, defining whether the act was locutionary, perlocutionary or illocutionary.

The study was carried out in a quantitative manner, working with a total of 200 jokes. The data collected resulted in 462 devices. Interestingly, the highest percentage of linguistic devices belonged to the category of lexical devices, however, the main conclusion was that jokes are commonly constituted by several linguistic features, operating together as a single device in a single joke. We also highlighted the pivotal role of background information in the overall understanding of particular jokes. Although information that has to be known beforehand is crucial when identifying specific linguistic devices, it is not a requisite for their composition. The clearest example for this were the 7 non-linguistic devices which all included background information.

The way in which we approached the present study made it necessary for us to limit the data to a certain kind of jokes and only in a written form. Still, it is important to point out that humour comes in all shapes and forms, and the oral part of it is just as relevant as the written. It would be interesting to encourage future research in this subject that also include visual representations of humour such as memes and other types of humorous act like stand-up comedy, as these have become the preferred sort of humour of people our age.

Considering again the absence of a formal theory for humour's nature, this investigation was useful in the field of giving a more thorough view of humour as a practical tool for ESL teaching and learning. Bearing this in mind, we highlight the importance of humour as a multicultural language resource, which makes this accessible for people of all ages, countries, gender, ethnicities, and social backgrounds. This research has, doubtless, helped us to acknowledge the narrow relation between language and humour, demonstrating the essential part of language that humour represents.

## 7. Further research

Given this investigation findings, we propose that, due to the cultural information contained in jokes and the level of language competence required to fully understand them, using jokes in in-class contexts for pedagogical purposes could be an interesting tool for language competence evaluation matters. As said by Dornyei and Skehan (as cited in Cook, 2010) having the right attitude, motivation and learning style are crucial for the process of learning a second language, especially in artificial classroom learning settings. For this matter, as catchy as jokes can be, they seem to be effective when working with students' motivation. Accordingly, we have created two test samples, each targeted to a different group of students and aiming for evaluating different levels of language competence; from a task as simple as distinguishing vocabulary in context, to identifying various linguistic devices present in a single joke.

The first test sample, based on Beglar and Nation's Vocab Size Test model (2007), aims to evaluate the recognition of the different meanings of lexical items within the joke. Specifically, the instruction is for students to underline the word where the humoristic instance occur and then write down two different meanings; the literal meaning and the humoristic one. As we have seen on the theory of noticing proposed by Schmidt (2010), the motivation is a crucial part of the process of learning but also it proposes that the most you see a lexical unit in different context, the faster you acquire it. Hence, this exercise allows students to see lexical units in two different ways, understanding two different meanings facilitating the acquisition of the word. This sample is targeted for intermediate learners of English because it requires a more specific lexical knowledge. An example of the instructions and questions used in this first sample are the following:

Each of the following questions consists on a joke. First, identify and underline the word by which the humoristic act is being produced; and second, taking into account the linguistic ambiguity present in the joke, write down the literal meaning of the word (not funny, L) and the humoristic meaning of it (funny, H).

Example: I wouldn't buy anything with velcro. It's a total rip-off.
L. A fraud
H. To tear

By increasing complexity levels, the second test sample, based on Nation's Recognition Test (1990), is not only targeted to English language learners, but also to linguistics students. The instructions for this sample call for students to identify the linguistic devices used in the joke each question has. For this matter, a table with a brief definition of the linguistic devices students may encounter along the test is provided. The aim is to evaluate the level of linguistic knowledge students have. An example of the questions found in this sample, with its corresponding set of instructions and an explanation of how the questions are meant to be solved, would be the next:

Identify the linguistic device/devices used in each joke and fill the lines with the right letter. More than one letter could be correct. The definition of each linguistic device is given in the following table.

Example: I'm on a seafood diet. Every time I see food, I eat it!

In this example, the three linguistic devices used are homophony, juncture and syntactic substitution. The first one occurs between "sea" and "see" as they both have the same pronunciation. The second one is seen in the joining of "see" and "food", getting "seafood" as a result in pronunciation. The third one is portrayed in the fact that the noun "seafood" changes into verb "sea" + object "food", corresponding to syntactic substitution.
a. homophony
b. syntactic substitution $\qquad$
c. morphological substitution $\qquad$
d. juncture $\qquad$
e. neologism
f. homography

For the purpose of validating the above shown assessment instrument, the tests were presented to two experts in both linguistics and grammar. The feedback provided was positive in terms of the test's functionality-it evaluates what is meant to evaluate- and the test motivation - it was enjoyable to answer. The only commentary given by the experts pointed to the length of the first sample, which was considered quite drawn-out. So, in general terms the tests were well received by the experts.

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## 9. Appendix

### 9.1 List of jokes

1. 'Waiter!'
'Yes, sir.'
'What's this?'
'It's bean soup, sir.'
'No matter what it's been. What is it now?'
2. Q: Why are hairdressers never late for work? A: Because they know all the shortcuts.
3. Did you hear about the guy whose left side was cut off? He's all right now.
4. I'm on a seafood diet. Every time I see food, I eat it!
5. What did the ocean say to the beach? Nothing, it just waved!
6. What do you call Santa's helpers? Subordinate clauses.
7. Q: Did you hear about the kidnapping at school? A: It's okay. He woke up.
8. Q: Why did the school kids eat their homework? A: Because their teacher told them it was a piece of cake.
9. Q: What's the best thing about Switzerland? A: I don't know, but the flag is a big plus.
10. Q: How do trees access the internet? A: They $\log$ in.
11. Q: What type of sandals do frogs wear? A: Open-toad!
12. Q: Why shouldn't you write with a broken pencil? A: Because it's pointless!
13. Q: Why did the painting go to jail? A: It was framed.
14. Q: Why is 10 afraid of 7? A: Because 7-8-9.
15. I'm Friends with 25 letters of the alphabet, I don't know why.
16. Q: Which type of vegetable tries to be cool, but is only partly successful at it? A: The radish.
17. The world tongue-twister champion just got arrested. I heard they're gonna give him a really tough sentence.
18. Q: What do dogs do after they finish obedience school?

A: They get their masters.
19. Q. What happened when one cannibal arrived late to the dinner party?
A. The others gave him the cold shoulder.
20. Q: What do you call a frozen $\operatorname{dog}$ ? A: A pupsicle.
21. Q: What do you call a large dog that meditates? A: Aware wolf.
22. Why is it so hard for a leopard to hide? Because he's always spotted.
23. Q: What's the difference between a cat and a comma?

A: One has claws at the end of its paws, while the other is a pause at the end of a clause.
24. Q: Why did the cat run away from the tree? A: It was scared of its bark.
25. What's the difference between a good joke and a bad joke timing.
26. Moses had the first tablet that could connect to the cloud.
27. Q. What starts with "e," ends with "e," and contains one letter? A. An envelope.
28. Shout out to the people who ask what the opposite of "in" is.
29. Me: I'm dying, I was eating an apple...

Doctor: you eat apples a lot?
Me: one a day
Doctor: you're on your own
30. Whenever I undress in the bathroom, my shower gets turned on.
31. My wife told me to take a spider out instead of killing it. We went and had drinks. Cool guy, wants to be a web designer.
32. Cop: You're driving on the wrong side of the road.

Driver: Sorry, I'm English.
Cop: (shouting) It's the wrong soid of the roade ye was droivin down, innit?
33. My three-year-old and I were hanging ornaments and she found some without a way to hang them, so she said, "We better go get more hookers out of the basement"
34. Why does Peter Pan fly all the time? Because he Neverlands.
35. Professor: Have you heard of Pavlov? A: It rings a bell.
36. Q: Why were the Middle Ages called the Dark Ages? A: Because there were too many knights.
37. I liked the Harry Potter books and movies but... I just feel like the character Nearly Headless Nick was a bit poorly executed.
38. I got a new pair of gloves, they are both lefts, which, on one hand is great... but on the other it's just not right.
39. At a wedding:

Priest: Repeat after me.
Groom: after me
Priest: is he serious?
Bride: No, his name is Gary.
40. Customer: Cargo space?

Salesman: Car no do that. Car no fly.
41. Which days are the strongest? Saturdays and Sundays. The rest are weak days.
42. When you speak two languages but start losing vocabulary in both of them. Byelingual.
43. -Can February March?
-No, but April May.
44. At first I wasn't interested in a brain transplant, but then I changed my mind
45. -Tell me something I don't know.
-The past tense of William Shakespeare would be Wouldiwas Shookpeared.
46. Commas are important people.

Commas aren't people.
47. "The hypothalamus plays a major role in the regulation of basic biological drives related to survival, including the so-called "four Fs": fighting, fleeing, feeding, and mating."
48. What if soy milk is just regular milk introducing itself in Spanish?
49. "I just got pulled over by a cop. He asked if I had a police record. Apparently "Roxanne" wasn't the answer he wanted to hear!"
50. She texted me: "Your adorable."

I replied: "No. You're adorable."
Now she likes me. All I did was point out her typo.
51. Sign: "VIP \& Premier Gold Card. Please show your member to our staff"
52. Today at the bank, an old lady asked me to help check her balance. So I pushed her over.
53. I asked my boss if I can come to work a little late today. He said "Dream on." I think that was really nice of him.
54. What do you call a guy with a rubber toe? Roberto.
55. Why did the old man fall in the well? Because he couldn't see that well.
56. Parallel lines have so much in common. It's a shame they'll never meet.
57. And the lord said unto John, "Come forth and you will receive eternal life". John came fifth and won a toaster.
58. What did the traffic light say to the car? Don't look! I'm about to change.
59. Why did the balloon go near the needle? He wanted to be a pop star.
60. Vegans believe meat eaters and butchers are gross. But those who sell you fruits and vegetables are grocer.
61. Do you know how they make holy water? They boil the hell out of it!
62. Coffee is the silent victim in our house. It gets mugged every day.
63. Did you hear about the claustrophobic astronaut? He just needed a little space.
64. Why aren't koalas actual bears? They don't meet the koalafications.
65. How many Mexicans are necessary to screw in a light bulb? Only Juan.
66. When you get depressed in the middle of winter, just chuck some butter from your window.

You'll see a butterfly.
67. My socks got really holy. I can only wear them to church.
68. Who does a pharaoh talk to when he's sad? His mummy, of course.
69. Why can't you hear a pterodactyl in the bathroom? Because they have a silent p .
70. What do you call a deer with no eyes? No eye deer.
71. What do you call a cheese that isn't yours? Nacho Cheese.
72. Why is dark spelled with a k and not a c ? Because you cannot see in the dark.
73. Why don't ants go to church? Because they are in sects.
74. Simba was walking slow so I told him Mufasa.
75. A crazy wife says to her husband that moose are falling from the sky. The husband says, it's reindeer.
76. What did the grape said when it got crushed? Nothing, it just let out a little wine.
77. I saw a girl today who had 12 nipples. Sounds crazy, dozen tit?
78. Beer may not make you smart, Budweiser...
79. I couldn't find my favorite tv show. I guess it was Lost.
80. How many tickles does it take to make an octopus laugh? Ten tickles.
81. A: I saw a man-eating shark at the aquarium.

B: That's nothing. I saw a man eating herring at the deli.
82. How do you make a turtle fast? Take away his food.
83. Blind woman gets new kidney from dad she hasn't seen in years.
84. New study on obesity looks for larger test group.
85. Marijuana issue sent to a joint committee.
86. Kicking-baby considered to be healthy.
87. A hole has been found in the nudist camp wall. The police are looking into it.
88. The surgeon was unfamiliar with the new leg operation. It was too hip for him.
89. Juvenile Court Tries Shooting Defendant.
90. Bishops agree sex abuse rules!
91. I was going to make myself a belt made out of watches, but then I realized it would be a waste of time.
92. A dyslexic man walks into a bra.
93. How does NASA organize a party? They planet.
94. I couldn't believe that the highway department called my dad a thief. But when I got home, all the signs were there.
95. Sometimes I tuck my knees into my chest and lean forward. That's just how I roll.
96. I think I want a job cleaning mirrors. It's just something I could really see myself doing.
97. If you ever get cold just stand in a corner for a bit, they are usually 90 degrees.
98. Q:Why did the toilet paper roll down the hill? A: He wanted to get to the bottom.
99. Q: What do lawyers wear to court? A: Lawsuits!
100. Q: Why didn't the skeleton cross the road? A: Because he didn't have any guts!
101. It was an emotional wedding. Even the cake was in tiers.
102. - What is your idea of "the perfect date"?

- DD/MM/YYYY, other formats can be confusing really.

103. Q: What do you call a snake which is exactly 3.14 meters long? A: A $\pi$ thon.
104. Eyelashes are supposed to prevent things from going into your eyes, but whenever I have something in my eye it's always an eyelash. Eyeronic.
105. I'm so good at sleeping. I can do it with my eyes closed.
106. Did you hear about the italian chef that died? He pasta way.
107. Why wouldn't the shrimp share his treasure? Because he was a little shellfish.
108. What do you call a Mexican who has lost his car? Carlos.
109. Why don't skeletons ever go trick or treating? Because they have no body to go with.
110. What do you call a frenchman wearing sandals? Phillipe Phillope.
111. What does the man in the moon do when his hair gets too long? Eclipse it.
112. I hate Russian dolls...so full of themselves.
113. Q: What do you call a bear with no teeth? A: A gummy bear!
114. My wife told me I had to stop acting like a flamingo. So I had to put my foot down.
115.A: I love you.

B: I love you too.
A: I love you three.
116. I submitted 10 puns to a joke-writing competition to see if any of them made the finals.

Sadly, no pun in ten did.
117. A horse walks into a bar...

The bartender says, "Hey."
The horse replies, "Sure."
118. What did the Buddhist say to the hot dog vendor? Make me one with everything.
119. What is a Mexican's favorite sport? Cross-country.
120. Your momma is so ugly she made One Direction go another direction.
121. Two windmills are standing in a field. One asks the other, "What kind of music do you like?" The other one says, "I'm a big metal fan."
122. What do you call a sad strawberry? A blueberry.
123. I've been dating a homeless woman recently, and I think it's starting to get serious...She's asked me to move out with her.
124. Thank you student loans for getting me through college. I don't think I can ever repay you.
125. Why do Native Americans hate snow? Because it's white and settles on their land.
126. What's the tallest building in your city? The library because it has the most stories.
127. What's the difference between a dirty bus stop and a lobster with breast implants? One's a crusty bus station and one's a busty crustacean.
128. What do french people call a really bad thursday? A trajeudi.
129. Can a kangaroo jump higher than a house? Of course, a house doesn't jump at all.
130. What's the difference between roast beef and pea soup? Anyone can roast beef, but nobody can pee soup!
131. What do you call blueberries playing the guitar? A jam session.
132. Why did the scarecrow keep getting promoted? Because he was outstanding in his field 133. My girlfriend's birthday is in two days. And she told me "Nothing would make me happier than a diamond ring". So, I bought her nothing!
134. What is Mozart doing right now? Decomposing.
135. What is the colour of the wind? Blew.
136. What do you call an alligator wearing a vest? A: An investigator.
137. I'm a big fan of whiteboards. I find them quite re-markable.
138. Yesterday, a clown held the door open for me. It was such a nice jester!
139. Two fish are in a tank. One says to the other, "Do you know how to drive this thing?"
140. Did you see the movie about the hot dog? It was an Oscar wiener.
141. I wouldn't buy anything with velcro. It's a total rip-off.
142. I asked my French friend if she likes to play video games. She said, "Wii."
143. Q: Why was the cat disqualified from the game? A: It was a cheetah.
144. Q: What is a cat's favourite colour? A: Purrrple
145. Organic Chemistry is difficult. Those who study it have alkynes of trouble.
146. A bicycle can't stand on its own because it's two tired.
147. A man walks into a zoo. The only animal in the entire zoo is a dog. It's a shitzu.
148. Don't worry if you are a kleptomaniac. You can always take something for it.
149. Dead men are simply very cool.
150. Why is it so hard for dwarves to get work? Employers don't like paying people under the table.
151. I don't know much about politics, but I can recognise a good party when I see one.
152. Why should all former senators be buried 100 feet deep when they die? Because deep down, they're really good people.
153. How do you wake Lady Gaga up from a nap? Poker face.
154. There's a fine line between fishing and just standing on the shore like an idiot.
155. Why was the duck arrested? He was suspected of selling quack.
156. What do bees say about the summer weather? Swarm.
157. What kind of murderer has fiber? A serial killer.
158. Why are tall people always so well rested? They sleep longer in bed.
159. What did the mayonnaise say to the refrigerator? Close the door! Can't you see I'm dressing?
160. How did the hipster burn his tongue? He tried to eat his food before it was cool.
161. Did you hear about they're making a movie about constipation? The movie doesn't come out in a while.
162. What did the leper say to the prostitute? Keep the tip.
163. A woman gets rid of polish with chemicals and no one bats an eye The Germans got rid of polish with chemicals and everyone lost their mind.
164. What's the difference between mexicans and stoners? Stoners actually have papers.
165. Why does everyone at school make fun of the cripple kid? Because he can't stand up for himself.
166. What did the letter say to the stamp? Stick to me and we'll go places.
167. What's the worst part about breaking up with a Japanese person? You have to drop the bomb twice before they get the message.
168. What is the hardest part of a vegetable to eat? The wheelchair
169. How many police officers does it take to screw in a light bulb? None, they just beat the room for being black.
170. Who are the fastest readers in the world? $9 / 11$ Victims, they went through 89 stories in 7 seconds.
171. Why can't orphans play baseball? They don't know where home is.
172. IKEA is being accused of evading over $\$ 1$ billion in taxes. Prosecutors have actually been after IKEA for years. They've just been having a hard time putting their case together. 173. My dog used to chase people on a bike a lot. It got so bad, finally I had to take his bike away.
174. I just watched a program about beavers. It was the best dam program I've ever seen.
175. Q: What letter is looking for causes? A: Y.
176. A naked man broke into a church. The police chased him around and finally caught him by the organ.
177. Q: Where do you find giant snails? A: On the ends of their fingers.
178. Innkeeper: "The room is $\$ 15$ a night. It's $\$ 5$ if you make your own bed."

Guest: "I'll make my own bed."

Innkeeper: "Good. I'll get you some nails and wood."
179. Q: What did the beaver say to the tree? A: "It's been nice gnawing you!"
180. Q: Can a match box? A: No, but a tin can.
181. Q: Why did they have to bury George Washington standing up? A: Because he could never lie.
182. I didn't like my beard at first. Then it grew on me.
183. Hickory Dickory Dock. Two mice ran up the clock. The clock struck one and the other got away with minor injuries.
184. Have you heard the story of the magic sandwich? Never mind, it's just a bunch of bologna.
185. Q. What do the British call a cookie that got wet? A. Limp Bizkit.
186. Why couldn't Cinderella be a good soccer player? A: She lost her shoe, she ran away from the ball, and her coach was a pumpkin.
187. "Doctor, my nose is 11 inches long!"
"Come back when it grows into a foot!"
188. I was arrested at the airport. Just because I was greeting my cousin Jack! All that I said was "Hi Jack", but very loud
189. I hear this new cemetery is very popular. People are just dying to get in.
190. My friend said he knew a man with a wooden leg named Smith. So I asked him "What was the name of his other leg?"
191. Q: Why are fish easy to weigh? A: Because they have their own scales.
192. Q: Why couldn't Dracula's wife get to sleep? A: Because of his coffin.
193. What kind of shoes are made from banana skins? Slippers.
194. Why didn't the melons get married? Because they cantaloupe.
195. What did the tyrannosaurus rex do after he drank all the water in Toronto? He started to drink Canada Dry.
196. What age followed the Mesozoic Age? The Clean-up-ozoick age.
197. What's the difference between snowmen and snowwomen? Snowballs.
198. Gary, the grammar cactus will never find love:
-Gary, you need to be less selfish. Remember it's cact-us.
-Actually, sweety, the plural is cact-I.
199. The first computer dates back to Adam and Eve. It was an Apple with limited memory, just one byte. And then everything crashed.
200. Claustrophobic people are more productive thinking out of the box.

### 9.2. Assessment Instrument

## English Assessment Test

40. Each of the following questions consists on a joke. First, identify and underline the word by which the humoristic act is being produced; and second, taking into account the linguistic ambiguity present in the joke, write down the literal meaning of the word (not funny, L) and the humoristic meaning of it (funny, H).

Example: I wouldn't buy anything with velcro. It's a total rip-off.
L. A fraud
H. To tear

1. Q: Why did the cat run away from the tree? A: It was scared of its bark.
L. $\qquad$
H. $\qquad$
2. Who does a pharaoh talk to when he's sad? His mummy of course.
L. $\qquad$
H. $\qquad$
3. Q: Why did they have to bury George Washington standing up?

A: Because he could never lie.
L. $\qquad$
H. $\qquad$
4. Can February March?

No, but April May
L. $\qquad$
H. $\qquad$
5. Dead men are simply very cool
L. $\qquad$
H. $\qquad$
6. Q: What do you call a large dog that meditates? A: aware wolf
L. $\qquad$
H. $\qquad$
7. Why did the scarecrow keep getting promoted? Because he was outstanding in his field
L. $\qquad$
H. $\qquad$
8. Did you hear about the claustrophobic astronaut? He just needed a little space.
L. $\qquad$
H. $\qquad$
9. Which days are the strongest? Saturdays and Sundays. The rest are weak days.
L. $\qquad$
H. $\qquad$
10. It was an emotional wedding. Even the cake was in tiers.
L. $\qquad$
H. $\qquad$
11. Q: What do dogs do after they finish obedience school? A: They get their masters.
L. $\qquad$
H. $\qquad$
12. Whenever I undress in the bathroom, my shower gets turned on.
L. $\qquad$
H. $\qquad$
13. Why is it so hard for a leopard to hide? Because he's always spotted.
L. $\qquad$
H. $\qquad$
14. The world tongue-twister champion just got arrested. I heard they're gonna give him a really tough sentence.
L. $\qquad$
H. $\qquad$
15. I'm Friends with 25 letters of the alphabet, I don't know why
L. $\qquad$
H. $\qquad$
41. Identify the linguistic device/devices used in each joke and fill the lines with the right letter. More than one letter could be correct. The definition of each linguistic device is given in the following table.

| Neologism | A new word or expression which is introduced into a language. |
| :--- | :--- |
| Antonym | A word which is opposite in meaning to another word. |
| Homograph | Words which are written in the same way but which are <br> pronounced differently and which may have different meanings. |
| Homophone | Words which have the same pronunciation, but differ in meaning. |
| Phonetic similarity | Words that sound similar but are not identical. |
| Juncture | The phonetic boundary features which may demarcate <br> grammatical units such as morpheme, word or clause. |
| Morphological addition | The addition of a morpheme in the original structure. |
| Syntactic addition | The addition of a grammatical unit which was not in the original <br> structure. |
| Morphological elision | The leaving out of a morpheme in a word. |
| Syntactic elision | The leaving out of a grammatical structure in a sentence. |
| Morphological <br> substitution | The process or result of replacing one morpheme with another in a <br> particular place in a word. |
| Syntactic substitution | The process or result of replacing one item with another in a <br> particular place in a sentence. |
| Phonetic substitution | The process or result of replacing one sound with another in a <br> particular place in a structure. |
| Illocutionary act | The use of a sentence to perform a function. |
| Perlocutionary act | The results or effects that are produced by means of saying <br> something. |

Example: I'm on a seafood diet. Every time I see food, I eat it!
In this example, the three linguistic devices used are homophony, juncture and syntactic substitution. The first one occurs between "sea" and "see" as they both have the same pronunciation. The second one is seen in the joining of "see" and "food", getting "seafood" as a result in pronunciation. The third one is portrayed in the fact that the noun "seafood" changes into verb "sea" + object "food", corresponding to syntactic substitution.
a. homophony
b. syntactic substitution $\qquad$
c. morphological substitution $\qquad$
d. juncture $\qquad$
e. neologism
f. homography

1. What age followed the Mesozoic Age? The Clean-up-ozoic age.
a. antonymy
b. juncture
c. morphological addition
$\qquad$
d. neologism
e. syntactic addition
f. illocutionary act
2. Why couldn't Cinderella be a good soccer player? A: She lost her shoe, she ran away from the ball, and her coach was a pumpkin.
a. homophony
b. antonymy
c. homography
d. syntactic substitution
e. neologism
f. morphological elision
3. Beer may not make you smart, Budweiser.
a. morphological substitution
b. homophony
c. syntactic substitution
d. phonetic similarity
e. phonetic substitution
f. juncture
4. When you get depressed in the middle of winter, just chuck some butter from your window. You'll see a butterfly.
a. syntactic substitution
b. phonetic substitution
c. illocutionary act
d. morphological addition
e. juncture
f. syntactic addition
5. Why aren't koalas actual bears? They don't meet the koalafications.
a. juncture
b. phonetic substitution
c. syntactic substitution
$\qquad$
d. phonetic similarity
e. neologism
f. morphological substitution
6. She texted me: "Your adorable."

I replied: "No. You're adorable."
Now she likes me. All I did was point out her typo.
a. morphological substitution
b. perlocutionary act
c. syntactic substitution
d. phonetic similarity
e. phonetic substitution
f. illocutionary act
7. What do you call an alligator wearing a vest? A: An investigator.
a. syntactic elision
b. morphological addition
c. syntactic addition
d. juncture
e. morphological elision
f. neologism
8. What's the difference between roast beef and pea soup? Anyone can roast beef, but nobody can pee soup!
a. neologism
b. homophony
c. phonetic similarity
d. homography
e. phonetic substitution
f. syntactic substitution
9. Why did the scarecrow keep getting promoted? Because he was outstanding in his field.
a. syntactic substitution
b. illocutionary act
c. homography
d. homophony
e. fixed expression
f. juncture
10. 'Waiter!'
'Yes, sir.'
'What's this?'
'It's bean soup, sir.'
'No matter what it's been. What is it now?'
a. syntactic substitution
b. phonetic similarity
c. homophony
d. perlocutionary act
e. illocutionary act
f. phonetic substitution

## 9. 3 Breakdown of results



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