Trabajo Fin de Grado

Aspects of the Syntax – Semantics Interface in the Lexical Subdomain of ‘Verbs of Sound Emission Indicating an Emotion’.

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1. Summary

In this project we will analyze a group of verbs with the purpose of arriving at a final list of verbs which share the core-meaning of –to make a sound indicating an emotion—. The verbs will be analyzed both from a paradigmatic and syntagmatic perspective, in order to illustrate the meaning relations among the verbs and also the relations that the verbs have with their arguments.

The paradigmatic and syntagmatic analysis is crucial for this study because it will allow us to show how the interface syntax semantics modifies the meaning of the verbs under study. These two perspectives will give a structuralist vision to this study because they are related to the structuralist approach to language, which considers the meaning of words as ‘relational’. Löbner (2002:128) states that this approach defends the idea that “we cannot determine the meaning of a lexeme independently, but only its relations to the meaning of other lexemes.”

The theoretical part of this study is based on Levin’s seminal work *English Verb Classes and Alternations: A preliminary investigation* published in 1993 and the Theory of Frame Semantics by Fillmore (1997). Levin’s research is very important for our study because the author defines the notion of ‘diathesis alternations’ and ‘constructions’; which is essential to illustrate the interface between syntax and semantics.

We will take the verbs laugh and cry as a starting point, since they can be considered as representative of making a sound indicating a positive and negative emotion, respectively. According to Levin (1993: 219), the verbs laugh and cry belong to the verb class of ‘Verbs of Non-Verbal Expression’. Hence, the verb selection of this study will be based on this verb class, as it corresponds to the verbs that share the core-meaning of our domain.

The relevance of the Theory of Frame Semantics (by Fillmore 1997) is related to the fact that our study adopts Framenet—a lexical database of English based on Fillmore’s idea of semantic frames—as a tool that will allow us to see the different meanings that the words acquire with respect to their distinct usage taken from real texts.
The first chapter of this project is devoted to the theoretical framework. In this section, we will introduce Levin’s (1993) seminal work with the aim of explaining her theory about ‘constructions’ and ‘alternations’. We will explain why Levin (1993: 219) categorizes the domain of this study within the verb class of ‘Verbs of Non-Verbal Expression’.

The second chapter illustrates the process that we will carry out to arrive at the verb selection of this study, which will be based on the verb class of ‘Verbs of Non-Verbal Expression’. Furthermore, we will explain why some verbs from this verb class (‘Verbs of Non-Verbal Expression’) are also included in other verb classes such as ‘Verbs of Manner of Speaking’ or ‘Verbs of Sounds Made by Animals’ by Levin (1993:204).

Chapters 3 and 4 show the paradigmatic and syntagmatic analysis of the verbs, which will allow us to illustrate the meaning relations among the verbs and also the relations that the verbs have with their arguments. Furthermore, these analyses will display which verbs share the core-meaning of this study, and thus, which verbs will be included in the final list of this study.

Finally, the last chapter is dedicated to the main results of this project in which we will see how the paradigmatic and syntagmatic analyses have allowed us to arrive at the final list of verbs that make up our corpus, which includes the following verbs: cackle, chortle, chuckle, cry, giggle, groan, growl, guffaw, hiss, hoot, howl, jeer, laugh, moan, scream, sigh, shout, shriek, snigger, snivel, snort, sob, squall, titter, utter, weep, whimper, whine and whistle.

Key Words: Alternation, Construction, Paradigmatic, Syntagmatic, Verb Class.
2. Introduction

The study of the interface between syntax and semantics has been a source of investigation in linguistics for many years. According to Koening (2014: 428), the German mathematician Frege stated that: “the meaning of an expression is a function of the meaning of its parts and the way the parts are combined”, he considered therefore, that meaning is compositional.

In this study we share this compositional approach to meaning and adopt as a theoretical basis Levin’s seminal work *English Verb Classes and Alternations: A Preliminary Investigation*, published in 1993, this work focuses on the syntactic and semantic properties of the English Lexicon. Levin’s research is based on the idea that “the behavior of a verb, particularly with respect to the expression and interpretation of its arguments, is to a large extent determined by its meaning” (Levin 1993:1). Through the study of diathesis alternations, which are alternations in the arguments a verb may appear with, she explains the behavior of English verbs and groups them under different categories.

Following Faber and Mairal’s (1999) division of lexical domains, in this project we will study a specific verbal subclass, ‘making a sound indicating an emotion’, within the lexical domain of sound. We will take the verbs laugh and cry as a starting point, since they can be considered as representative of making a sound indicating a positive and negative emotion, respectively.

According to Levin (1993: 219), the verbs laugh and cry belong to the verb class of ‘Verbs of Non-Verbal Expression’. Hence, the verb selection of this study will be based on this verb class as it corresponds to the verbs that share the core-meaning of our domain. They will be analyzed both from a paradigmatic and syntagmatic perspective, in order to illustrate the meaning relations among the verbs and also the relations that the verbs have with their arguments. The ultimate aim of our analysis is to discover how the interface syntax semantics influences the meaning of the verbs, and to arrive at a final list of verbs that share the core meaning ‘making a sound indicating an emotion’.

FrameNet –a lexical database of English— based on the Theory of Frame Semantics developed by Fillmore (1997) will be used as a tool that will allow us to verify that the verbs
belong to the domain of our study and to see the different meanings that they have according to their usage. Furthermore, the British National Corpus—a 100 million word collection of samples of written and spoken British English—will be used as a source of examples which will help to verify our analysis. This project is organized as we can see in the following description:

Chapter 3 illustrates the theoretical preliminaries that this study will follow to compile our final list of verbs. In this section, we will make a brief description of Levin’s (1993) seminal work with the aim of explaining her theory about ‘constructions’ and ‘alternations’. Moreover, some constructions and alternations will be explained so that the theory can be better comprehended.

Chapter 4 shows the final list of verbs and the process that we will carry out to arrive at this decision. The verbs that make up our corpus will be related to the three different verb classes distinguished by Levin (1993); these verb classes will be explained separately and accompanied by examples, taken from FrameNet or the Oxford English Dictionary, in order to give veracity to our study.

Chapter 5 is based on the paradigmatic analysis of the verbs selected, focusing, therefore on the meaning relations that hold among the verbs under study. These relations in meaning will be explained by means of lexical relations such as hyponymy and related words; and a Stepwise Lexical Decomposition, with which we will show our list of verbs in a visual semantic representation. Moreover, in this section, we will develop a Lexematic Analysis of the verbs selected for this study, which will allow us to see all the semantic features of each verb and to what extent they are similar or different to each other.

Chapter 6 illustrates the syntactic analysis of our list of verbs. This section will show the selection restrictions of each verb; and the constructions in which they can appear. The last part of this chapter will be based on the interface between syntax and semantics as the constructions are going to display how the meaning of a verb can change depending on the arguments around it.

Finally, in chapter 7 we will include the main conclusions of our study.
3. Theoretical Preliminaries

According to Lyons (1932:107), semantic fields are ‘‘meaning of words, simultaneously, in terms of the external, interlexical, relational structures in which semantically related and interdefinable words, or word-meanings, function as units’’. Another definition of semantic field is that provided by Brinton (2000:112) ‘‘a segment of reality symbolized by a set of related words. The words in a semantic field share a common semantic property’’. In our case, a group of verbs are related in meaning and these interrelated verbs constitute the semantic field of this study; the concept of semantic field, therefore, is very important as it is considered the starting point of our research.

The purpose of this study is to arrive at a final list of verbs which share the core-meaning— to make a sound indicating an emotion —. These verbs will then be analyzed in order to establish the relations of meaning which they share.

Taking into account that the semantic field of this study is determined by the core-meaning of making a sound indicating an emotion, the verbs laugh and cry will be taken as the starting point since they can be considered as representative of ‘indicating a positive emotion and negative emotion’, respectively.

This study also attempts to illustrate the interface between meaning and syntax, thus, the verbs are going to be analyzed both from a paradigmatic and syntagmatic point of view. These two perspectives will give a structuralist vision to this study because they are related to the structuralist approach to language, which considers the meaning of words as ‘relational’. Löbner (2002:128) states that this approach defends the idea that “we cannot determine the meaning of a lexeme independently, but only its relations to the meaning of other lexemes.”

According to Murphy (2010:108), syntagmatic relations deal with “relations between words that go together in syntactic phrases […] in other words, words in syntagmatic relations ‘touch’ each other in phrases”. For example, the noun phrase ‘the ridiculous girl’ is a syntagm — a complex unit— of words, therefore, the relations that hold between these three words are syntagmatic relations.
The paradigmatic perspective will represent the meaning relations among the verbs selected for this study, which are defined as paradigmatic relations. The paradigmatic relations are described by Löbner (2002:130) as “meaning relations such as hyponymy, meronymy, and the more specific relations structuring certain lexical fields”. Moreover, these words form a paradigm—“set of all elements that can fill a certain position in a syntagm”—; and “relations between the elements of a paradigm” are known as the paradigmatic relations.

The following figure, taken from Arab (2012); shows the syntagmatic and paradigmatic axis. The horizontal axis represents the syntagmatic relations; and the vertical axis, the paradigmatic relations. In the vertical or paradigmatic axis, there are four paradigms which make reference to words that can occur in these positions; and the semantic relations between these words are what determine the paradigmatic relations. For example: the noun ridiculous can be substituted by silly, foolish, funny, crazy or klutzy.

![Diagram showing syntagmatic and paradigmatic axis](image)

The theoretical part of this study is based on Levin’s seminal work *English Verb Classes and Alternations: A preliminary investigation* published in 1993, which shows the results of a preliminary and continuous investigation of syntactic and semantic properties of the English Lexicon.

The following paragraph, included in the introductory section of Levin’s book, can serve as a summary of the author’s definition of verbs:
‘This work is guided by the assumption that the behavior of a verb, particularly with respect to its expression and interpretation of its arguments, is to a large extent determined by its meaning. Thus verb behavior can be used effectively to probe for linguistically relevant pertinent aspects of verb meaning’. This book offers an attempt at delimiting and systematizing the facets of verb behavior’ (Levin, 1993: page 1).

The relevance of this book for the present study is that the first part allows us to see the different constructions and diathesis alternations in which our list of verbs can appear. According to Levin (1993:2), the diathesis alternations are “alternations in the expressions of arguments, sometimes accompanied by changes of meaning”. The author introduces these constructions with the aim of showing how the verb’s position in a sentence and the arguments that accompany it can modify its meaning.

Löbner (2002:101) provides the following definition of arguments: “the meanings of the predicating words in the sentence are concepts that concern one or more entities […] the entities they concern are the arguments”. Thus, arguments help to construct the meaning of a predicate which is characterized by having one, two or three arguments, as we can see in the following example:

1. *Jonathan likes Luisa*

Sentence 1 has two arguments as it is a transitive verb: *Jonathan* is the subject argument and *Luisa* is the object argument of the verb *likes*.

The following diathesis alternations consist of two cases in which the arguments modify the meaning of the sentences; and speakers, as a consequence, interpret the meaning of the verbs differently depending on their arguments. The following examples illustrate Levin’s theory of alternations and constructions and why speakers should not analyze the verbs as individual items but taking into account the participants around them which usually modify the meaning of the verb (Levin, 1993: 11).

2. a) My mother loaded oranges into the basket

   b) My mother loaded the basket with oranges
The verb’s arguments in sentences 2(a) and (b) modify the meaning of the sentences because speakers could interpret that the basket of sentence (a) can be filled or not with oranges. However, sentence (b) is interpreted as if the basket is full of oranges. This is known as the ‘holistic/partitive’ effect.

3. a) The chair broke (inchoative variant)

b) My brother broke the chair (causative variant)

Sentences 3(a) and 3(b) indicate the diathesis alternation known as ‘causative/inchoative alternation’ which displays the change from an inchoative variant to a causative variant. Sentence (a) does not suggest that the chair is broken by someone but that it is only broken; this sentence would correspond to the inchoative variant. However, sentence (b) makes reference to a causer of the action, that is, ‘my brother’. In this case, this sentence represents the causative variant. Arguments, therefore, modify the meaning of the verbs which supports Levin’s theory about the interconnection between syntax and meaning in English verbs.

The latter part of her book deals with a large amount of verbs classes with the purpose of grouping verbs according to their meaning. Each group is represented by a main verb to indicate the constructions and alternations where they can be found accompanied by a brief explanation of this selection. Furthermore, both parts are linked, as most of the verbs that appear in the first part are located in one or more verb classes of the second part; that is, if one verb is characterized by different constructions which change its meaning; the verb will appear in different verb classes depending on these meanings. This part will be explained extensively in the next section.

Another theory which is going to play an important role in this study is the Theory of Frame Semantics developed by Fillmore (1997). The relevance of this theory is related to the fact that our study adopts Framenet—a lexical database of English based on Fillmore’s ideas of semantic frames—as a tool that will allow us to see the different meanings that the words acquire with respect to their distinct usage taken from real texts.

The theory of Frame Semantics defends the idea that words should not be defined in isolation but that they should be described by means of semantic frames—recompilation of
information that determines the main characteristics, attributes or the association of a word with other important things—; that is, the English lexicon seems to be better comprehended if people bear in mind the events that words make reference to; and its relations with the participants. In addition, it is related to Levin’s theory as both sources attempt to illustrate the interface between meaning and syntax

Another important lexical database of the English Lexicon is the British National Corpus, which is also going to be used as a tool to verify the meaning of the verbs selected for this study. This Corpus was created by Oxford University Press (1980s-early 1990s) and provides examples of written and spoken English, which we will use to illustrate the behaviour of the verbs under study.
4. Verb Selection

As stated previously, to arrive at a final classification of the verbs which share the core meaning of making a sound indicating an emotion, the verbs *laugh* and *cry* will be taken as the starting point of this study as they can be considered as representative of the meaning ‘indicating a positive emotion and negative emotion’ respectively.

The semantic field of our study is categorized by Levin (1993:219) within the group of ‘Verbs of Nonverbal Expression’ in which the verbs ‘laugh and cry’ appear, among others. Some of the verbs included in this verb class can also be found in other groups such as ‘Verbs of Manner of Speaking’ and ‘Verbs of Sounds Made by Animals’ depending on the constructions in which they appear.

Therefore, the main requirement for the verb selection of this study is that the verbs have to share the core-meaning of making a sound indicating an emotion; that means that they should appear in the verb class of ‘Verbs of Non-Verbal Expression’ distinguished by Levin (1993:219). After analyzing which verbs are going to be included in our final list from this verb class, we will explain which verbs also appear in the verb classes of ‘Verbs of Manner of Speaking’ and ‘Verbs of Sounds Made by Animals’ and why they are related to these two verb classes.

In order to verify that the verbs included in the verb class ‘Verbs of Non-Verbal Expression’ belong to the domain under study, they were searched for, in FrameNet, in the frame that refers to making sounds: ‘make noise’. The semantic frame ‘make noise’ corresponds to the semantic field of this study –to make a sound indicating an emotion—and groups those verbs that make reference to a living being (person or animal) that emits a sound expressing an emotion.

Furthermore, some verbs, as I said previously, are also characterized by the frame of ‘communicating noise’; which would correspond to the verb class of ‘Verbs of Manner of Speaking’ by Levin (1993: 204). The frame of ‘communicating noise’ refers to the verbs that use sounds as a tool to intensify the meaning of the message that they want to communicate. For example:

4. ‘I’ve missed you so much…’ He **groaned**.
In sentence 4, we can see how the verb *groan* refers to the frame of ‘communicating noise’ as the subject wants to transmit the message of longing and the sound of groaning emphasizes this feeling of nostalgia; and thus, the sound intensifies the meaning of the message.

### 4.1 The final list of verbs

The objective of this section is to arrive at the final list of verbs which share the core-meaning of making a sound indicating an emotion; and shows the process that will be followed to select this final list of verbs.

The three verb classes—‘Verbs of Nonverbal Expression’, ‘Verbs of Manner of Speaking’ and ‘Verbs of Sounds Made by Animals’—will be defined separately; and then, we will explain why some verbs appear in more than one verb class. This analysis will be accompanied by examples, taken from FrameNet or The British National Corpus.

The corpus under analysis consists of 29 verbs which are illustrated in the following list in alphabetical order: *cackle, chortle, chuckle, cry, giggle, groan, growl, guffaw, hiss, hoot, howl, jeer, laugh, moan, scream, sigh, shout, shriek, snigger, snivel, snort, sob, squall, titter, utter, weep, whimper, whine* and *whistle*.

#### 4.1.1 Verbs of Nonverbal Expression

The verb class ‘Verbs of Nonverbal Expression’ groups all the verbs that express an emotion without speaking. In this verb class, several verbs refer to the causer of a sound in order to indicate an emotion, for instance, *guffaw, sob or giggle*. However, other verbs either express the emotion with facial expressions (but without any kind of sound such as *smile, grimace or scowl*) or refer to making a sound without transmitting any emotion, for example, *snore or gasp*.

Therefore, this research has only included the verbs that have the core meaning of making a sound indicating an emotion, which are: *cackle, chortle, chuckle, cry, giggle, groan, growl, guffaw, howl, jeer, laugh, moan, sigh, snigger, snivel, snort, sob, titter, weep* and *whistle*. The behaviour of these 20 verbs is going to be shown through sentence examples which have been taken from FrameNet or the British National Corpus.
6. Killion cackled with pleasure at the trouble he was causing.

7. Who's Riva?" Oh, Anyushkeleh,' I chortle,' do you have a surprise coming...!' I may be heading.

8. Besides she chuckled and waved her hand at him in a dismissing gesture.

9. I better just ask you and do you know I thought he was going to cry.

10. She began to giggle, trying desperately to hide her mouth with her hand.

11. He raised his glass to offer a toast, the telephone rang. The whole family groaned, and then burst out laughing'.

12. You don't want to let the cops walk all over you,' he growled.' Anyway, I knew it was nothing when he came in.

13. Slater laughed, pointing and guffawing, at what Graham had written.

14. Before the two note ding-dong had faded, a baby had started to howl inside.

15. …thumped his fists on his knees.' Huh,' he jeered.' Exemplary suicide, indeed? What's that? Suicide that sets u.

16. My clothes have always stayed on except when I have a bath,' she laughed

17. He moaned more loudly and the people at the next table held their drinks in mid-air.

18. He sighed tiredly, as though he had been working for a full day with stone.

19. I turned away I heard him snigger and say, `You have to kick 'em, you know.

20. She snivelled weakly, on and on. They said nothing, but sat facing each other.

21. She snorted softly and he could imagine her smiling in the darkness.

22. Tommy’s got his head in his hands, sobbing uncontrollably.
23. He tittered nervously as he tried to see through the glare of the flames.

24. Do not stand at my grave and weep, I am not there, I do not sleep.

25. He was glad she was happy and whistled softly to himself as he tied his tie.

4.1.2. Verbs of Manner of Speaking

According to Levin (1993), the verbs that belong to the verb class ‘Verbs of manner of speaking’ are characterized by the way in which they emit the sound; that is, they can be distinguished from each other through the type of sound transmitted.

Nevertheless, for this study we will adopt as requirement for the inclusion of the verbs of this group that they should also appear in the verb class of ‘Verbs of Non-Verbal Expression’ by Levin (1993:219). These verbs, thus, can emit a sound to express a message which can also be used as a way to indicate an emotion.

For this reason, most of the verbs included in the verb class ‘Verbs of Manner of Speaking’ by Levin (1993: 204) have not been taken into account for this research because they do not appear in the verb class of ‘Non-Verbal Expression’ by Levin (1993:217) and thus, they do not have the core-meaning of making a sound indicating an emotion, as we can see in the following list: babble, bark, bawl, bellow, bleat, boom, bray, burble, call, carol, chant, chatter, chirp, cluck, coo, croak, croon, crow, drawl, drone, gabble, grumble, grunt, holler, jabber, lilt, lisp, mumble, murmur, mutter, purr, rage, roar, rumble, screech, sing, snap, snarl, snuffle, splutter, squawk, squeak, squeal, stammer, stutter, thunder, tisk, trill, trumpet, twitter, wail, warble, wheeze, whimper, whine, whistle, whoop, yammer, yap, yell, yelp and yodel.

The verbs that Levin (1993: 204/) cross-lists within the groups of ‘Verbs of Manner of Speaking’ and ‘Verbs of Non-Verbal Expression’ are: cackle, cry, groan, growl, howl, moan and whistle. The inclusion of these verbs in both verb classes means that they can be used in these two ways: both as a verb of nonverbal expression and as a manner of speaking verb; that is, the verbs can refer to the emission of a sound indicating an emotion; and this sound can also be used as a way of communication.
The following examples, taken from FrameNet, are important for our study because they illustrate the verbs of our list from two different perspectives: as verbs of non-verbal expression and as verbs of manner of speaking.

34. a) `You get wife now!' interjected Jan and he **cackled** with laughter. ("Cackle." Def. Make Noise. FrameNet)

   b) 'Oh, we've got him now', I **cackled**, capering with glee. ("Cackle." Def. Communicating Noise. FrameNet)

35. a) The little girl fell down and **cried** for mummy ("Cry." Def. 2. Oxford English Dictionary Online)

   b) “Don’t treat me as a child” she **cried** scornfully. ("Cry." Def. Communicating Noise. FrameNet)

36. a) We all **groaned** a bit and snivelled like kids, and we were putting it on, but we were only putting. ("Groan." Def. Communicating Noise. FrameNet)

   b) ‘I’ve missed you so much…’ **He groaned.** ("Groan." Def. Make Noise. FrameNet)

37. a) She moaned softly as he caressed her and again Martin **growled**. ("Growl." Def. Make Noise. FrameNet)

   b) Fabulous! "he had **growled** sarcastically. ("Growl." Def. Communicating Noise. FrameNet)

38. a) Before the two note ding-dong had faded, a baby had started to **howl** inside. ("Howl." Def. Make Noise. FrameNet)

   b) You’re making me mad, ” he **howled** ("Growl.” Def. Communicating Noise. FrameNet)

39. a) He **moaned** more loudly and the people at the next table held their drinks in mid-air. ("Moan.” Def. Make Noise. FrameNet)

40. A lot of people clapped and whistled. (“Whistle.” Def. Make Noise. Framenet)

Sentences 34 a), 35 a) 36 a), 37 a), 38a), 39 a) and 40 are representative of the verb class ‘Verbs of Non-Verbal Expression’, which refer to the way in which the message is emitted, in this case, some kind of emotion.

In sentences 34 a) and 40, the subjects indicate a sound of happiness or delight, whereas, the subjects, in sentence 35a), 36a), 37a), 38 a) and 39 a), are transmitting a sound of complaint or suffering. Thus, when people hear the sound emitted, they are able to know what people are feeling without the necessity of a verbal interaction.

As opposed to the previous examples, sentences with the letter (b) are instances of the group ‘Verbs of Manner of Speaking’ as they have as objective to communicate a message which is emphasized with the sound transmitted. For instance, sentence 34b) communicates the message ‘oh, we’ve got him now’ which is intensified with the sound of cackling with glee.

The subject, in example 35 b), refers to her pain or complain by crying; or in sentence 36 b), the subject wants to transmit the message of longing; and the sound of groaning emphasizes this feeling of nostalgia.

Sentence 40 is very important because even though the verb whistle is included in both groups by Levin (1993: 204/209), which means that this verb can be used as a verb of manner of speaking and as a verb of non-verbal expression; it has been difficult to find examples that show the meaning of whistle as ‘communicating noise’. In fact, FrameNet only includes it in the frame of ‘make noise’, which would mean that this verb only has the meaning of non-verbal expression. We have been able to find examples in which the verb refers to the meaning of ‘non-verbal expression’, as is the case in example 40, but not as a communication verb.

Furthermore, there are some verbs that Levin (1993:204) only includes in the verb class ‘Verbs of Manner of Speaking’, which seems to indicate that the verbs scream, hiss,
whine, whimper, hoot, and shriek only have the meaning of ‘manner of speaking’. Nonetheless, after analyzing the definitions of each verb, we have decided to include these verbs in our study because their definitions verify that they also have the meaning of ‘non-verbal expression’.

The following definitions, taken from the Oxford English Dictionary, illustrate that these verbs refer to the making of a sound indicating an emotion.

41. **Shout**: to utter a loud cry, typically as an expression of a strong emotion.

42. **Scream**: to make a long, loud cry or sound, esp. expressing emotion, pain or Amusement

43. **Hiss**: to make a sound in order to show disapproval and dislike.

44. **Whine**: to make long, high-pitched complaining cries or sounds.

45. **Whimper**: to make a series of low, feeble sounds expressive of fear, pain or discontent.

46. **Hoot**: to shout loudly in scorn, disapproval or merriment.

47. **Shriek**: to utter a high-pitched piercing sound, especially as an expression of terror, pain or excitement.

In order to verify our analysis of the previous verbs scream, hiss, whine, whimper, hoot, shriek and squall, we have looked for examples, taken from the Oxford English Dictionary and FrameNet, with the aim of illustrating that these verbs can be on the one hand, verbs of non-verbal expression (a) and, on the other, verbs of manner of speaking (b).

48. a) Jesus **screamed** with pain and surprise.

   b) “To the walls!” he **screamed**.

49. a) Spectators booted and **hissed** at the colony's new Governor. (“Hiss.” Def. ‘Make Noise’. FrameNet)
b) "You're mad, you're crazy, you're insane," hissed Jessica. (“Hiss.” Def. ‘Communicating Noise’. FrameNet.)

50. a) In the corner by the stove Rosie **whined** and pulled against her chain. (“Whine.” Def. ‘Make Noise. FrameNet)

   b) “Please don’t,” **whined** the shopkeeper, but It was too late. (“Whine.” Def. ‘Communicating Noise’. FrameNet)

51. a) The boy was **whimpering** with pain and his left leg was twisted awkwardly. (“Whimper.” Def. ‘Make Noise. FrameNet)

   b) Before she could speak, however, Jessie **whimpered** at her, `I'm sorry. (“Whimper.” Def. ‘Communicating Noise’. FrameNet)

52. a) Lee and Leslie began **hoot**ing with glee. (“Hoot.” Def. ‘Make Noise’. FrameNet)

   b) “Follow and Find!” he **hoots**. (“Hoot.” Def. ‘Communicating Noise’. FrameNet)

53. a) Chehl tried to get free, **shrieking** in pain and terror, but he couldn't break loose. (“Shriek.” Def. 3. Oxford English Dictionary Online)

   b) ‘I'm pregnant!” she **shrieked**. (“Shriek.” Def. ‘Communicating Noise’. FrameNet.

Sentences from 48 a), 49 a) 50 a), 51 a), 52 a), and 53 a) are representative of the verb class ‘Verbs of Non-verbal Expression’ where we can see how the verbs denote different sounds through which the agent transmits an emotion.

All sentences with the letter (b) refer to the use of the sounds to emphasize the message that people want to communicate. For example, the subject of sentence 48 b)
can be interpreted as somebody who intensifies his/her authority or irritation by means of screaming.

4.1.3. Verbs of Sounds Made by Animals

The verb class ‘Verbs of Sounds Made by Animals’ groups the verbs that animals make and the sound uttered is the important aspect to consider because it is what differentiates one verb from another since the verbs show the typical sounds of each group of animals (Levin, 1993:212).

The verbs that Levin (1993:212) cross-lists in the verb classes of ‘Verbs of Non-Verbal Expression’ and ‘Verbs of Sound Made by Animals’ are: cackle, growl, hoot, howl, scream, snort, whimper and whine. The reason for the inclusion of these verbs in these two verb classes is based on the fact that the action can be performed by animals but also by humans, being therefore, verbs of ‘non-verbal expression’.

The following examples, taken from FrameNet, show how these verbs refer to actions that can be performed by people as well as by animals. The sentences with the letter (a) are cases in which animals execute the action of the verbs.

54. a). It was indeed amazing that the geese did not cackle.

b). Henry saw himself in the air, Elinor above him, cackling wildly.

55. a). Anyway, this two-three-four-foot-long black cat was growling and spitting in the dining.

b) You don't want to let the cops walk all over you,' he growled.' Anyway, I knew it was nothing when he came in.

56. a) Then an owl suddenly hootedT nearby, making her jump, and she hastily decided she had done enough for one evening.

b) Half out of her dress, she hooted with amusement.

57. a). That Bloody dog was howling again like a banshee in the night.
b) Bissel howled then, like some kind of demented animal.

58. a) The gull screamed.

b) The child screamed and sobbed, and Jack’s face, usually so impassive twisted with pain.

59. a). Then an animal snorted quietly and broke the momentary stillness.

b). She snorted softly and he could imagine her smiling in the darkness.

60. a). The monkey began whimpering again, his sad eyes looking at them imploringly, and Sophie’s heart was wrung with pity.

b). the boy was whimpering with pain and his left leg was twisted awkwardly.

61. a) It was night when I became aware of the dogs whining somewhere and called them.

b) They may whine and cry; sputter about everything.
5. Lexical Semantic Analysis.

As announced in the first section, this study has the aim of providing a syntagmatic and paradigmatic analysis of the verbs that belong to the semantic field of ‘making a sound indicating an emotion’. Our list of verbs, therefore, will be analyzed from these two different perspectives.

In contrast to the syntagmatic relations, which are defined by Arah (2012) as ‘links and dependencies between linguistic elements that coexist simultaneously in a linear series (text)’; paradigmatic relations are described by Löbner (2002:130) as “semantic relations between the elements of a paradigm”. Paradigmatic relations are very important for this study because they allow us to show the semantic relations that exist between the verbs that make up our corpus.

Once we have arrived at the final list of verbs, the important aspect to analyze is the different relations in meaning that the verbs have in common. Thus, in the next section, the verbs are going to be analyzed from a paradigmatic point of view.

5.1. Lexical Relations

According to Murphy (2010:108), “semantic relations are relations between senses. Some cases of semantic relations can also be lexical relations in which it is not just the meaning that is related, but also other aspects of the lexemes, like morphological form or collocational patterns”.

Although, the verbs that have been selected for this study have in common the ‘core-meaning’ of making a sound indicating an emotion, the emotions transmitted display different kinds of feelings, in other words, they transmit positive or negative emotions. For this reason, this list of verbs will be divided into two groups: those verbs that refer to the uttering of emotions related to happiness, amusement or excitement and those that indicate feelings of sadness, fear or pain.

This division of verbs will be analyzed by means of the lexical relation of hyponymy and related words, which is going to illustrate the semantic relations among the verbs of our list.
5.1.1. Hyponymy

According to Löbner (2002: 85), the lexical relation of hyponymy is defined as “a relation between words that results from a relation between their meanings and leads to a relation between their denotations: the meaning of the hyponym contains the meaning of the hyperonym, and the denotation of the hyponym is a subcategory of the denotation of the hyperonym”. Another definition of the lexical relation of hyponymy is that provided by Riemer (2010: 69) “hyponymy is a relation of inclusion. A hyponym includes the meaning of a more general word and the more general term is called the superordinate or hypernym”. For example: the semantic relation between the words cheese and cheddar is of hyponymy as cheese is considered the general term (hyperonym), and cheddar is a type of cheese (hyponym). (Murphy, 2010: 113)

The lexical relation of hyponymy is related to the definition of meaning by genus and differentia, which is considered a strategy of cognitive definition as the definition of the words are based on their relationship with other words. According to Reimer (2010), Aristotle stated that this way of definition “involves specifying the broader class to which the definiendum belongs (often called the definiendum’s genus), and then showing the distinguishing feature of the definiendum (differentia) which distinguishes it from the other members of this broader class”; that is, the general meaning common to all the verbs is defined as genus whereas the meaning which makes the verbs different from the rest is considered the differentia.

In relation to this study, the verbs included in our list show the lexical relation of hyponymy as some verbs share the genus with the verb laugh or cry, depending on the emotion transmitted; and then, they have an additional meaning which makes them different, that is the differentia.

As said above, we have divided our list of verbs into two groups: those verbs that make reference to emotions related to happiness, delight or pleasure; and those verbs that denote the emotions of fear, pain or anger. The relevance of these two groups for our study is that they will show the lexical relation of hyponymy according to these two different types of emotions.
The verbs *cackle, chuckle, chortle, giggle, guffaw, snigger, snivel and titter* share the *genus* (general meaning) of the verb *laugh* but they are also defined as specific ways of laughing, which would correspond to the *differentia*. Thus, they show the lexical relations of ‘inclusion’ or hyponymy in which these eight verbs are the hyponyms of the verb *laugh*, and the verb *laugh* is considered the hyperonym or, in other words, the general word whose meaning is included in these eight verbs.

Moreover, these eight verbs can be considered co-hyponyms among them. This term is defined by Murphy (2010:109), as “a group of senses that make up a set, but which contrast with one another, for example *heart/club/spade/diamond*. That is, they are different varieties within a single type – in this case, playing card suits”. Therefore, these verbs make up a set since they share the general meaning of *laugh*, but then, they contrast in the way in which they refer to laughing.

The following definitions have been taken from the Oxford English Dictionary, which show how these eight verbs denote different ways of laughing.

- Cackle: to laugh or talk in a **loud, high voice**.
- Chuckle: to laugh **softly or to oneself**.
  - Chortle: to chuckle **gleefully**.
- Giggle: to laugh **nervously or foolishly**.
- Guffaw: to laugh **crudely and boisterously**.
- Jeer: to laugh or shout **disrespectfully** at a person or thing.
- Snigger: to laugh at someone or something **childishly and often unkindly**.
  - Titter: to snigger, especially, **derisively or in a surprise way**.

The verbs *snivel, sob, squall and weep* share the *genus* of the verb *cry* but they are also defined as different ways of crying, that is, the *differentia*. They are, therefore, hyponyms of *cry* as shown by the following definitions taken from the Oxford English Dictionary.

- Snivel: to cry slightly in a way that is **weak** and does not make other people feel sympathy for you.
- Sob: to cry while making **short burst of sounds** of sadness or fear.
- Squall: to cry (of a **baby or small child**) noisily and continuously.
• Weep: to cry as an expression of grief or unhappiness.

5.1.2. Related Words

The final list of verbs consists of 29 verbs which share the core-meaning of ‘making a sound indicating an emotion’ but these emotions can be negative or positive. Twelve verbs have already been correlated through the lexical relations of hyponymy. However, the rest of the verbs that build up our corpus are defined as related words because their meaning is similar, but they do not mean exactly the same.

For instance, the following two examples, taken from the Oxford English Dictionary, show that the verbs *sigh* and *groan* share the core-meaning of this study as they refer to the making of a sound indicating an emotion, but the emotions are different, thus, they do not mean exactly the same.

62. ‘Harry sank into a chair and *sighed* with relief’.

63. ‘Marty *groaned* and pulled the blanket over his head’.

The importance of the related words for the present study is similar to the lexical relation of hyponymy as these relations in meaning allow us to see which verbs transmit positive or negative emotions; and in which way they indicate these feelings.

The verbs selected, in this section, are also going to be divided into positive or negative emotions as they are distinguished from each other depending on the emotion transmitted.

The verbs *cry, groan, growl, sigh, shriek, scream, shout, whine,* and *whimper* are related because they denote an emotion of pain, anger or unhappiness as it is illustrated in the following definitions:

• Cry: to make a loud sound expressing fear, sadness or other feelings.
• Groan: to make a long sound showing great pain, suffer or unhappiness.
• Growl: to make a low rough sound, usually in anger or pain.
• Sigh: to make a long, deep exhalation expressing sadness, tiredness, unhappiness etc.
• Shriek: to make a high cry resulting from anger, fear etc.
• Scream: to make a long, loud cry or sound, esp. Expression emotions of pain or fear.
• Shout: to utter a loud cry, typically as an expression of a strong emotion.
• Whine: to make a long, high-pitched complaining cry or sound.
• Whimper: to make a series of low, feeble sounds expressive of fear, pain or discontent by animals or people.

The verbs *hiss, hoot* and *snort* transmit another kind of emotion, that is, discontent or disapproval as it is shown in the following definitions:

• Hiss: to make a sound in order to show disapproval and dislike
• Hoot: to shout loudly to show disrespect or disapproval
• Snort: to make a snort to express strong feelings of annoyance, disapproval or impatience.

### 5.1.3. Stepwise Lexical Decomposition

The aim of the previous two sections was to illustrate the semantic relations between the verbs which indicate positive or negative emotions; and to what extent they are different from the general verbs ‘laugh’ and ‘cry’.

In this section, we will show the semantic relations of the verbs of our list as a whole; that is, the verbs will not be divided into groups but they are going to be related among them without distinctions. To arrive at this semantic representation, we have used the system of Stepwise Lexical Decomposition which “defines predicates in a hierarchical order, from more specific to more generic superordinate terms, i.e. each predicate frame is defined in terms of the configuration of other lexical items of the same language” (Martín L.: 231)

The relevance of this analysis for our study is that it will display the relations in meaning of our list of verbs through a relation of inclusion, that is, the lexical relation of hyponymy. Furthermore, it will be used as a tool to verify that all the verbs that make up our semantic field share the core-meaning of this research ‘to make a sound indicating an emotion’.
In order to create this semantic representation of all the verbs, we have searched for a general verb which shares the core-meaning of this study without indicating any type of emotion, that is, the verb *utter*. This verb is defined as ‘to make a sound with the voice’ by the Oxford English Dictionary, whose definition is included in all the verbs selected for this study, as we will see in the Lexematic Analysis. The verbs, therefore, can be grouped under the verb *utter* as they share the *genus* of this verb; and then, they have an additional meaning which makes them different, *the differentia*.

The following Stepwise Lexical Decomposition uses a leaning representation of meaning, which allows us to see this lexical relation between the verbs better. The verb located in the left side is the hypernym of this semantic field, that is, the verb *utter*; and the rest of the verbs that are situated more to the right side are the hyponyms of the verbs on the left. For instance: the verbs *cry, laugh, shout, groan, scream, sigh, hiss, snort, moan, whimper, whine, yowl and growl* are the hyponyms of the verb *utter* whereas the verbs *guffaw, giggle, chuckle, snigger and jeer* are hyponyms of the verb *laugh*.

**Stepwise Lexical Decomposition.**

**Field:** sounds.

**Dimension:** to make a sound indicating an emotion.

**Utter:** to make a sound with your voice.

Cry: to make loud sounds expressing fear, sadness, or other feelings.

Weep: to cry as an expression of grief or unhappiness.

Sob: to cry while making short bursts of sounds of sadness or fear.

Squall: to cry (baby or small child) loudly and violent.

Laugh: to make the inarticulate sounds, the movements of facial muscles…

Guffaw: to laugh loudly, and perhaps rudely.
Giggle: to laugh nervously or foolishly.

Chuckle: to laugh quietly to oneself.

Chortle: to chuckle gleefully.

Snigger: to laugh in a half-suppressed, typically scornful way.

Titter: to snigger, especially derisively or in a surprise way.

Jeer: to laugh or shout disrespectfully.

Shout: to utter a loud cry, typically as an expression of strong emotion.

Hoot: to shout loudly, esp. to show disrespect or disapproval.

Groan: to make a deep long sound showing great pain or unhappiness.

Growl: to make a low rough sound, usually in anger by animals.

Scream: to make a long, loud cry or sound, esp. expressing emotion or pain.

Sigh: emit a sigh (=a deep, audible exhalation expressing sadness, tiredness…)

Hiss: to make a sound in order to show disapproval and dislike.

Snort: to make a snort (=strong feelings of annoyance, disapproval…)

Moan: to utter or to make a moan.

Whimper: to make low, feeble sounds expressive of discontent or fear.

Whine: to make a long, high-pitched complaining cry or sound.
5.2. Lexematic Analysis

Once the paradigmatic relations of our list of verbs have been analyzed, which have served as a tool to verify that all the verbs selected are related in meaning; this part will illustrate the semantic features of each verb with the aim of showing which features they have in common and to what extent they are different. To obtain the meaning components of the definition of each verb, we are going to use the Functional Lexematic Analysis.

According to Rubiales (page: 134), the Lexematic Analysis is defined by Mingorance (1998) as “a formalized ‘grammatical’ lexicon, organized on onomasiological principles, for the description of the core vocabulary of a language”. The relevance of this analysis for our study is that, on the one hand, it will provide us with information about all the features of the verbs selected and, on the other, it will illustrate the meaning they have in common that should correspond to the core-meaning of this research.

Through the Lexematic Analysis, we will illustrate the notion of seme, sememe, lexeme, archilexeme or archisememe. According to Allan (2009: 113) “the values of the oppositional dimensions (S1, S2, etc.) are called semes and the meaning of a lexeme (lexical unit) is a sememe”. Geeraerts, Grondelaers and Bakema (1994:117) provide a definition of the terms archilexeme and archisememe, that is, “the categorical feature of all items in a field shared is called the archisememe; an item such as skirt, whose lexical meaning coincides with the archisememe, is called an archilexeme”.

The following table shows the Lexematic Analysis of a specific group of lexemes, which are utter, laugh, cackle, chuckle, chortle, giggle, guffaw, jeer and snigger; with the aim of explaining the different parts of this Lexematic Analysis such as semes, sememes, archisememes and archilexemes from a visual perspective. The Lexematic Analysis of the complete list of verbs is included in Appendix 1.
To make a sound (S1) | Loud (S2) | Positive (S3) | To oneself (S4) | Nervously (S5) | Disrespectfully (S6)
---|---|---|---|---|---
Utter | + | - | - | - | -
Laugh | + | + | + | - | + | +/-
Cackle | + | + | + | - | - | -
Chuckle | + | - | +/- | + | - | -
Chortle | + | - | - | + | + | -
Giggle | + | +/- | + | - | - | -
Guffaw | + | + | +/- | - | - | +
Jeer | + | + | - | - | - | +
Snigger | - | +/- | - | - | - | +

The Lexematic analysis of this specific group of verbs allows us to see the meaning component of each verb; the positive or negative values are what confirm if the linguistic unit has this semantic feature or not. For example: the verb *snigger* is a *lexeme* characterized by the semes of ‘make a sound’, which can be loud or not and it is disrespectfully; these semes constitute the *sememe* of the verb *snigger*.

Furthermore, the table illustrates that the archilexeme common to all the verbs is the verb *utter* that, as I said above, is the general verb whose meaning is included in all the verbs of our list. The archisememe is ‘to make a sound’ because it is the meaning shared by all the verbs, which shows that all the verbs have the core-meaning of our semantic field.
6. Syntagmatic Analysis

As mentioned in the Theoretical Preliminaries, the verbs will also be examined from a syntagmatic point of view. In contrast to the paradigmatic analysis, the syntagmatic analysis is based on the study of the surface structure of a text; that is, the syntagmatic analysis illustrates the relationship of a word with the other words that precede and follow it. Therefore, it does not portray a relation in meaning but studies the rules that establish the way in which the words should be located in a sentence.

Thus, in this part, the verbs selected are going to be analyzed as ‘constituents’. This type of analysis illustrates the selection restrictions of each verb and the constructions or alternations typical of each of them. Both analyses—selection restrictions and constructions—are significant for this research because they portray the relationship between meaning and syntax which constitutes one of the aims of this study. These two analyses shall be explained in the following sections.


According to Lübner (2002: 114), selection restrictions are “logical conditions on arguments. The notion is motivated by the idea that a predicate term selects, and thereby restricts, the range of possible arguments”. Sentences cannot be constituted with arbitrary complements because the logical conditions restricted by the arguments of a verb have to be considered.

The relevance of the selection restrictions for this study is that it allows us to see which verbs are transitive or intransitive; and the number of arguments of each verb selected, which will be indicated with the letters x and y. Moreover, we will use the binary system known as Aarts & Carberts (1979) to show the selection restrictions of each verb. This system is defined by Aarts and Meijs (1986) as “one of the most detailed descriptions of a decompositional feature model, which can serve as a very convenient working basis for the semantic system to be developed”. This binary system is included in Appendix 2 so the selection restrictions can be better comprehended.
The concept of selection restrictions will be illustrated with examples so its definition can be better comprehended.

People can construct different syntactically correct sentences because these sentences obey the pattern established by the English language, however, some of them sound very odd or strange such as the following examples:

64. The bed is listening to my mother.

65. My computer studies mathematics.

Examples (64) and (65) are syntactically correct because they follow the sentence pattern of Subject + Verb + Object, however, their meanings are not considered suitable. Thus, these examples illustrate how the predicate imposes the semantic content of its arguments; that is, the predicate chooses its arguments and establishes the conditions of meaning on them—subjects and objects—; these conditions correspond to the selection restrictions dealt with in this section.

Sentence 64 shows how the subject contradicts the selection restriction of the predicate listen as the subject does not correspond to a person who has the ability of hearing something but an object; and the same occurs with my computer in example 65 since the subject of study must be animate and human.

The selection restrictions show that all the verbs selected for this study are intransitive verbs so they have one argument, which is represented by the letter ‘x’. As said above, some of these verbs can be performed by people as well as by animals such as growl, cackle, howl, snort, hiss, scream, hoot, whine or whimper.

Moreover, there are some verbs which can appear as transitive and intransitive verbs, as we can see in the following list: laugh, cry, jeer, hiss, sob, utter and weep which have two arguments: the ‘x’ argument makes reference to the subject; and the ‘y’ argument refers to the direct object. In these cases, we will include the examples, taken from the Oxford English Dictionary Online, so that it can be better comprehended.
Cackle: (x: +/human)

Chortle: (x: +human)

Chuckle: (x: + human)

Cry:  (x: + human)

(y: - conc + perc -state - physical) ‘He cried tears of joy’

Giggle: (x: + human)

Groan: (x: + human)

Growl: (x1: +/human)

Guffaw: (x:+ human)

Hiss:  (x: +/- human)

(y: -conc + perc -state -physical) ‘he was hissed off the stage’. (‘Hiss’. Def. 1.1. Oxford English Dictionary).

Hoot: (x: +/- human)

Howl: (x: +Human)

Jeer:  (x:+ human)

(y: -conc +perc-state – physical). ‘Councilors were jeered and heckled’

Laugh: (x:+ human)

(y: -conc +perc-state – physical). ‘She laughed a little tinkling laugh again’.

Moar:(x: +human)

Scream: (x: + human)
Shout: (x: + human)

Sigh: (x: human)

Snigger: (x: +human)

Snivel: (x: + human)

Snort: (x: +human)

Sob: (x: + human)

(y: -conc +perc-state – physical). ‘But above all, we have seen people dying, heard people sobbing their last words’ (‘sob’. Def. 1.1. Oxford English Dictionary).

Squall: (x: +human)

Titter: (x: +human)

Utter: (x: +human)

(y: -conc + perc – state – physical). ‘He uttered an exasperated snort’

Weep: (x: + human)


Whimper: (x: +human)

Whine: (x: +human)

Whistle: (x: + huma)
6.2 Constructions

The aim of the previous sections was related to the analysis of our list of verbs from two different perspectives: paradigmatic and syntagmatic. It allowed us to see the semantic relations among our verbs; and the relationship of the verbs with the other words that precede and follow them.

In this part, we will illustrate the interface between syntax and meaning, which constitutes one of the most important aims of this study. The constructions, also known as diathesis alternations, are defined by Levin (1993:2) as “alternations in the expressions of arguments, sometimes accompanied by changes of meaning”; that is, the verb’s position in a sentence and the arguments that accompany them can modify their meaning. Levin’s perspective is related to the structuralist approach of language, which defends the idea that “we cannot determine the meaning of a lexeme independently, but only in relation to the meaning of other lexemes” (Löbner; 2002: 128).

Thus, in the following sections, we are going to show the different constructions in which our list of verbs can appear and how their meaning changes depending on the arguments that they are surrounded by. Each construction will be explained and accompanied by examples of the verbs that make up our study.

6.2.1. Intransitive Verbs

In the first construction, we can see the behaviour of our list of verbs as intransitive verbs. Examples (65, 66, 67), are representative of the verbs as intransitive –verbs without direct object—. They can appear alone without any participants (sentence 65); or they can also be accompanied by adverbials which are optional and do not modify the meaning of the verb as shown in example 66 in which the verb is accompanied by ‘softly’; or in sentence 67, by ‘like kids’. All the examples where we can see our list of verbs as intransitive verbs are included in Appendix 3.

65. My clothes have always stayed on except when I have a bath,’ she laughed.

66. . .She snorted softly and he could imagine her smiling in the darkness.
67. We all groaned a bit and snivelled like kids.

As I said previously, there are some verbs that can appear as transitive or intransitive verbs such as laugh, cry, jeer, hiss, sob, utter and weep, which show a change in meaning depending on the arguments that they are surrounded by. We are going to include two examples, taken from the Oxford English Dictionary, of the same verb as transitive and intransitive with the aim of illustrating the change of meaning.

68. He broke down and sobbed like a child.

69. But above all, we have seen people dying, heard people sobbing their last words.

Sentence 68 presents the verb sob as intransitive; the only argument is the subject. However, sentence 69 shows the same verb as transitive since this sentence has two arguments: the subject argument and the direct object argument, that is, ‘their last words’.

These two examples illustrate different interpretations of the same verb, for example, sentence 68 shows the basic meaning of this verb, that is, to make a sound indicating an emotion of pain, hurt and so on. However, sentence 69 can be interpreted in a different way as the inclusion of the direct object ‘their last words’ modifies the meaning of this verb. In this case, people are saying their last words; and the sound of sobbing intensifies the emotion of pain or fear. Sentence 69 could be more related to the semantic frame of ‘communicating noise’ rather than the semantic frame of ‘make noise’.

6.2.2. Zero ‐ Related Nominal

According to Levin (1993: 3), the construction known as ‘Zero-related Nominal’ refers to those linguistic units that can be used in two lexical categories; that is, a word can be used as a noun and as a verb. All the verbs selected appear in this construction since they can also be used as a noun. The following examples taken from The British National Corpus show how the verbs snivel, sob, squall and guffaw can behave as a verb and as a noun. The rest of examples that illustrate that the verbs selected can be used as a noun are included in Appendix 4.

72. I began to whimper. The whimper became a snivel.
72. But why? " A wretched sob escaped before she could swallow it down. Hateful that she should be weak before…

73. …fields with the Chosen Man and has been chased from her duties by the sudden squall. " Ma Teffny! " cries Jace.

74. Cat still got your tongue? " Loretta asked with a husky guffaw.

### 6.2.3. Cognate Object

The Zero-related Nominal is associated to the ‘Cognate Object’ construction because all the verbs that have been selected have zero-related nominal; and some of them normally use these nominals as cognate objects; that is, some verbs take the noun form, seen in the previous construction, as direct object.

Moreover, cognate objects do not seem to add any information to the predicate since the verb as well as the direct object are the same word with the distinction that they belong to different lexical categories. For this reason, they should be accompanied by an adjective or modifier which will add information to the meaning of the sentence.

Even though Levin (1993: 95) states that some verbs from the verb class ‘Verbs of Non-Verbal Expression are characterized by this construction, such as chuckle, cry, giggle, howl, laugh, sigh, snort, sob, weep and whistle; we have looked for examples of each verb in order to verify that these verbs can appear in this construction but we have had difficulties to find examples where these verbs use their noun form as direct object.

The only example that we have been able to find in the British National Corpus is the verb laugh as it is illustrated in the following example:

75. She laughed a little tinkling laugh again.

### 5.2.4. Reaction Object

Another construction in which all the verbs selected, both from the verbs classes of ‘Verbs of Non-Verbal Expression’ and ‘Verbs of Manner of Speaking’, appear is the ‘Reaction Object’ which portrays the verbs as transitive. This construction involves those
verbs that use nonsubcategorized objects—objects that do not seem to be necessary for the verb— which show an emotion or reaction, for instance, disapproval, assent or admiration. In addition, the verbs can be substituted by ‘express (a reaction/emotion) by V-ing’. (Levin, 1993: 98).

Even though Levin (1990: 98) states that all the verbs included in the verb classes ‘Verbs of Nonverbal Expression’ and ‘Verbs of Manner of Speaking’ appear in this construction, we have had difficulties to find the examples of our verbs in this construction.

However, we have been able to find examples that show that some of our verbs are characterized by this construction. The following examples, taken from the British National Corpus and the Oxford English Dictionary, are some cases in which the verbs appear as transitive verbs and can be substituted by ‘express (a reaction/emotion) by V-ing’.

76. …but above all, we have seen people dying, heard people sobbing their last words.

→ They express their last words by sobbing

There are some verbs that are considered intransitive verbs as we could see in the Selection Restrictions such as growl, howl, shout or scream. However, they appear as transitive verbs in this construction, which implies a change of meaning as we can see in the following examples:

77. Surkov growled his irritation, but Rozanov seemed to enjoy our floundering.

→ Surkov expressed his irritation by growling.

78. (adversary leaving him)…lurched forward to seize his prize, and as the demons howled their triumph like a frenzied pack of wolves falling upon their slaughtered prey.

→ They express their triumph by howling

79. There are the odd occasions where they shout and scream abuse and are taken off to Westlea Police Station

→ They express abuse by screaming and shouting
As we saw in the previous sections, the verbs *growl, howl, shout* and *scream* share the core-meaning of making a sound indicating an emotion as intransitive verbs. When they appear in this construction, there is a direct object that refers to a reaction (an emotion or disposition).

The action the verb refers to is carried out in order to express the associated emotion, for example, his irritation in 77 and their triumph in 78.

6.2.6. *‘At phrases’*

According to Levin (1993:220), “verbs often take *at* phrases: some *at* phrases seem to indicate the person the action is directed at, while others seem to indicate what the action is a reaction to”. After analyzing the examples of all the verbs that make up our corpus, we have found examples that illustrate that most of the verbs selected are characterized by the two uses of *at* phrases. Nevertheless, there are some verbs such as *cry, cackle, chortle, weep, sob* and *hoot* that only have the use of ‘to show that the action is a reaction to’.

Moreover, even though Levin (1990, page 219) indicates that the verb *sigh* is characterized by this construction, we have not been able to find any example that shows that this verb takes *at* phrases.

The following examples, taken from the British National Corpus, show how some of the verbs selected can take *at* phrases indicating its two uses: examples (a) correspond to the use of ‘the action is directed at’ whereas examples (b) refers to the use of ‘the action is in reaction to’. The rest of the examples are included in Appendix 5.

80. a) You mean an astrologer?” You’re laughing at me and I laughed at myself

   b) They have gaped at their nakedness and laughed at the rituals they do not understand

81. a) I'm an old man, Nogai.' Arghatun and some of the younger men jeered at him. Nogai only smiled

   b) The question that Williams had raised when he jeered at' parodies of the middle ages.
82. a) Before she could speak, however, Jessie whimpered at her,' I'm sorry. I'm sorry, Aggie

b) Julia was so far out of her usual self-control that she whimpered at the prick of the needle.' It's all right, my love

Sentences 80(a), 81(a), and 82(a) show the preposition at before a personal pronoun; that is, the prepositions add information to the meaning of the sentence as it makes reference to the direction of the verb’s action; these three examples show how the action of the verbs is directed to someone.

In contrast to the examples with the letter (a), sentences 80(b), 81(b), and 82(b), illustrate another meaning of the preposition at, as these examples do not make reference to any direction. However, they show a meaning of reaction; that is, the subject performs the verb’s action in reaction to something, for instance, jokes or fear.

As opposed to the previous sentences, the following examples show that the verbs cackle and sob only have the meaning of ‘to show that the action is a reaction to’.

83. Killion cackled with pleasure at the trouble he was causing.

84. Brownie, because if she hadn’t been she would surely have broken down and sobbed at missing her great chance of winning the bicycle

Thus, through this section, we have seen how the meaning of the verb changes depending on the arguments of the predicate; that is, if the preposition at is followed by a personal pronoun, it makes reference to the direction of the verb’s action, whereas, if the preposition is followed by a phrase, it illustrates that the action is a reaction to.

4.2.6. Resultative Construction

According to Levin (1993: 101), the resultative construction is defined as “a XP which describes the state achieved by the referent of the noun phrase it is predicated of as a result of the action named by the verb”; that is, the resultative phrases show someone or something that has undergone a change in state as consequence of the action ‘named by the verb’.
Sentences 85 and 86, taken from the Oxford English Dictionary, show how *laugh* and *cry* can be found in this construction. Example 85 shows how the subject has undergone a change in its state as a consequence of the action of the verb; in this case, the result of laughing is that Paul becomes sick.

85. ‘Paul laughed himself sick’

86. ‘He cried himself asleep’

Whereas example 86 illustrates that the subject changes his state as a result of the action of the verb, that is, he becomes asleep by crying.

Thus, in this construction, we can see how the meaning of the verbs also changes depending on the arguments of the predicate. The subjects are making a sound indicating an emotion but the real meaning of these sentences is that the subjects have undergone the action of the verb, which implies a change in the state of the subjects.
7. Conclusion

The objective proposed in this project was to compile a list of verbs under the domain of ‘making a sound indicating an emotion’, which has resulted in a group of verbs different from those included in Levin’s verb class of ‘Verbs of Non-Verbal Expression’.

We have focused our attention on those verbs that share the core-meaning of our domain; which has implied the exclusion of several verbs that Levin lists in the verb class of ‘Verbs of Non-Verbal Expression’ because they either express the emotion with facial expressions (but without any kind of sound such as smile, grimace or scowl) or refer to making a sound without transmitting any emotion, for example, snore or gasp.

According to Levin (1993:219), the verbs hiss, hoot, scream, shout, shriek, whine and whimper are not included in the verb class of ‘Verbs of Non-Verbal Expression, which would suggest that these verbs do not have this meaning. However, after analyzing the definition of each verb, we have included them in our final list because their definitions have illustrated that they have the core-meaning established for this project.

The paradigmatic and syntagmatic analysis of this study have been paramount for this project because they reveal the meaning relations among the verbs and the relations that the verbs have with their arguments. In relation to the paradigmatic analysis, it has allowed us to see the main features of the verbs, to what extent they are similar or different; and thus, which verbs share the core-meaning of our domain.

As opposed to the paradigmatic analysis, the syntagmatic analysis has illustrated the relationship of a word with the other words that precede and follow it; by means of the selection restrictions and the constructions typical of each of them. The analysis of the different constructions in which our verbs can appear was one of the aims of this study: to illustrate how the interface syntax semantics modifies the meaning of the verbs. The ‘Resultative Object’ and ‘At phrases’ are some of the constructions in which we could explain how the semantics of the verbs is influenced by the arguments that they are surrounded by.
Through the analysis of the constructions, we have also discussed some aspects of Levin’s theory about constructions. According to Levin (1993: 219), most of the verbs from the verb classes ‘Verbs of Non-Verbal Expression’ and ‘Verbs of Manner of Speaking’ normally appear in the constructions studied. However, we had some difficulties to find the examples that verify that all the verbs selected for this study appear in these constructions.

In the case of the ‘Cognate Object’ construction, Levin (1993:95) states that the verbs chuckle, cry, giggle, howl, laugh, sigh, sob, weep and whistle are characterized by this construction. Nevertheless, we had problems to find examples where these verbs use their noun form as direct object in fact we were able to find only one example, which corresponds to the verb laugh.

The conclusions provided by the paradigmatic and syntagmatic analysis have allowed us to arrive at the final list of this study, which consists of 29 verbs which are illustrated in the following list in alphabetical order: cackle, chortle, chuckle, cry, giggle, groan, growl, guffaw, hiss, hoot, howl, jeer, laugh, moan, scream, sigh, shout, shriek, snigger, snivel, snort, sob, squall, titter, utter, weep, whimper, whine and whistle.

This project has defined the verbs in relation to other verbs, instead of describing them independently as we defend the idea that the English Lexicon can be better comprehended if people bear in mind the events that words make reference to; and the relations with the participants. This has allowed us to arrive at a final list of verbs which share both their core-meaning and their syntactic behavior.
References


Appendix 1: Lexematic Analysis

<table>
<thead>
<tr>
<th></th>
<th>To make a sound</th>
<th>Amusement</th>
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<th>Oneself</th>
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Appendix 2: Aarts & Calbert’s (1979) Binary features.
Appendix 3: Sentence examples, taken from FrameNet, of the verbs as intransitive verbs

**Cackle:** Killion *cackled* with pleasure at the trouble he was causing.

**Chortle:** Who's Riva?" Oh, Anyushkeleh,' I *chortle,' do you have a surprise coming...!' I may be heading.

**Chuckled:** Besides she *chuckled* and waved her hand at him in a dismissing gesture.

**Cry:** I better just ask you and do you know I thought he was going to *cry*.

**Giggle:** She began to *giggle*, trying desperately to hide her mouth with her hand.

**Groan:** He raised his glass to offer a toast, the telephone rang. The whole family *groaned*, and then burst out laughing.

**Growl:** You don't want to let the cops walk all over you,' he *growled*.

**Guffaw:** Slater laughed, pointing and *guffawing*, at what Graham had written.

**Hiss:** Will you listen to me!' she *hissed*. Will you listen to me!' Frank raised his eyes angrily.

**Hoot:** Lee and Leslie began *hooting* with glee.

**Howl:** Before the two note ding-dong had faded, a baby had started to *howl* inside.

**Jeer:** Thumped his fists on his knees.' Huh,' *hejeered.' Exemplary suicide, indeed? What's that? Suicide that sets u.
**Laugh**: My clothes have always stayed on except when I have a bath,’ she **laughed**.

**Moan**: He **moaned** more loudly and the people at the next table held their drinks in mid-air.

**Scream**: Then a door opened behind him, and a woman **screamed**.

**Sigh**: He **sighed** tiredly, as though he had been working for a full day with stone.

**Shout**: shove off! They **shouted**.

**Shriek**: “Keep your distance!” She **shrieked**.

**Snigger**: I turned away I heard him **snigger** and say, `You have to kick ’em, you know."

**Snivel**: She **snivelled** weakly, on and on. They said nothing, but sat facing each other.

**Snort**: She **snorted** softly and he could imagine her smiling in the darkness.

**Sob**: Tommy’s got his head in his hands, **sobbing** uncontrollably.

**Squall**: The infant was lying on a table to the side, **squalling**.

**Titter**: He **tittered** nervously as he tried to see through the glare of the flames.

**Weep**: Do not stand at my grave and **weep**, I am not there, I do not sleep.

**Whimper**: The boy was **whimpering** with pain and his left leg was twisted awkwardly.

**Whine**: In the corner by the stove Rosie **whined** and pulled against her chain.
Whistle: He was glad she was happy and whistled softly to himself as he tied his tie.
Appendix 4: Zero-relational nominal.

Cackle: She treated herself to a short cackle. 'I enjoy that.' Thank God we don't have Proportional Representation.

Chortle: What is that? she enquired, when Thomas gave a sudden chortle. She walked forward to investigate.

Chuckle: Ellwood smiled; the smile became a chuckle; the chuckle grew into a brief laugh.

Groan: he was going to draw her away, but he gave a low groan and his mouth moved against hers again.

Guffaw: Cat still got your tongue? " Loretta asked with a husky guffaw. She pinched my ear and offered me a sip of her brandy.

Cry: It's a hungry cry, a human cry, closer to laughter than sadness.

Giggle: It was a high-pitched, staccato giggle. A giggle of fear and panic -- the kind he hadn't experienced since he was very…

Growl: " He gives a growl of exasperation. " The scene wasn't over till four in the morning.

Hiss: My voice became a hiss normally reserved for bad things in dark alleys: " I know what you're.

Hoot: He let out a soft hoot of laughter. " Are you as stoned as half these other skaters? "

Howl: It all seemed useless, a howl of pain. She was a yelling policeman who'd caught him red-handed in…

Laugh: he laughed a little tinkling laugh again.
Jeer: The room erupted in a collective jeer, like a gang of fifteen-year-old Heathers cutting down some hapless nerd.

Moan: through the vicious wind, she thought she also heard a moan. A pained moan. She stood. " Maybe someone's trying to get inside,

Scream: We followed the stone path and heard another scream.

Sigh: Michelle gave a wistful sigh. " I don't know how much longer I can hold out.

Shout: Whatever she said provoked a shout and then came terrible sobs.

Shriek: A burst of deep laughter a girlish shriek a snatch of ribald song # I pushed past a nubile young thing wearing only…

Snigger: “To prepare you for school, Mr Lockwood?” he asks with a little snigger.

Snivel: I began to whimper. The whimper became a snivel.

Snort: …for possessing a feline companion animal in your home jurisdiction. " # A loud snort served as my reply.

Sob: " But why? " A wretched sob escaped before she could swallow it down. Hateful that she should be weak before.

Squall: the Chosen Man and has been chased from her duties by the sudden squall. " Ma Teffny! " cries Jace.

Titter: Evelyn's scarlet lips twitched, and she allowed herself a small titter.

Weep: She still has little weeps to herself when she thinks about Donald but she's on the mend. (Oxford Dictionary).

Whimper: I heard a muffled sound, like a little whimper, come from the bedroom right next to us.
**Whine:** The dog stayed back, his eyes dark with worry, a low **whine** indicating his concern.

**Whistle:** He is just a baby, and she killed him. " # He gave a low **whistle.** " So your mom is a praying mantis of the demon world, eh…
Appendix 5: Construction ‘at phrases’.

Sentence examples, taken from the British National Corpus, with the letter (a) corresponds to the meaning of ‘directed to’ and with the letter (b) ‘in reaction to’.

**Laugh:**

a) 'You mean an astrologer?' You're laughing at me and I laughed at myself.

b) have gaped at their nakedness and laughed at the rituals they do not understand.

**Cackle:**

b) Killion cackled with pleasure at the trouble he was causing.

**Chortle:**

a) it rocked on a concealed axle so that he seemed to chortle at the absurdity of human antics. It was the smile she wanted with her.

**Chuckle:**

a)...boozamon chuckled at him, then coiled and made a leap that carried him over Proctor's.

b) Basil used to tease us about movement and chuckled at our claims for its fundamental importance in the education of young children.

**Cry:**

b) Ooh, did I cry at the end!' Mrs Hollidaye was right.

**Groan:**

a)...And these people who are moaning and groaning at Jesus,

b) I groan inwardly at the prospect of a night playing Happy Families with a bunch of desk-jockeys.

**Growl:**

a) He won't growl at me but he'll grow at Reggie.

b) She growled at the ceiling, disgruntled at being awake and stressing over something that…

**Guffaw:**

a) He guffawed at me, much to my anger.

b) Slater laughed, pointing and guffawing at what Graham had written.
Howl: a) Tallis whispered.' I can't go any faster.' And Morndun howled at her, its spectral presence insinuating cold fingers into her mind, a tentative.

b) BNP’s unions have howled at Mr Pbereau's appointment.

Jeer: a) the question that Williams had raised when he jeered at parodies of the middle ages.

b) At one of them sat the men who, she was sure, had jeered at her from the wall beside the petrol pumps and were now slapping down playing.

Moan: a) She returned his kiss, hearing him moan at her response.

b) I might be wrong, but he moans at me cos I knock me.

Snigger: a) call his own mother 'Smallfry'. The boys at school were sure to snigger at him behind his back, and the Irishman and his rough friends would have…

b) I despised the other actors for not sticking up for me, and for sniggering at the accent when I finally did it.

Snort: a) How they would snort with laughter at the idea that this could really happen in England.

b) … scriptorium, seated at a small desk, writing out a list of facts, snorting with fury at his own mistakes which he would angrily cross out with a score.

Weep: b) Why, Nana, why must I have shoes?’ Martha felt ready to weep at the unfairness of it.

Whine: a) Jeopardy made a scornful sound.’ That should make no difference. Don’t whine at me!’ Lucien tried to pull away.
b) Julia was so far out of her usual self-control that she whimpered at the prick of the needle. 'It's all right, my love.'

Hiss: a) Crevecoeur. It's not just love, is it?! Jahsaxa Penumbra hissed at the helpless form of her recaptured employee.

b) The hand lifted a fraction, and she sucked in air. The voice hissed at her.' Why did you open the letter?' Her blood surged

Giggle: a) someone else who was on the large side, also stood up and they all giggled at him, and he said he'd had enough of this fattist language.

b) She giggled at a sudden thought. 'I best not tell Nancy, or she might…

Sob: b) Brownie, because if she hadn’t been she would surely have broken down and sobbed at missing her great chance of winning the bicycle.

Hoot: a) She drove slowly in Conterchi so as not to miss the turning and Italians hooted at her or raised their fingers in gestures she knew to be obscene.

Scream: a) The people at the front were shouting He screamed at me, calling me an evil bitch who had tried to trap him at him, the news of his message was running through the crowd.

b) If a child thinks she'll get clobbered or screamed at whenever she does something wrong…

Shout: a) The noise is deafening. Richardson shouts at them. They shout at him back.

b) It's the time you shout at your boss and your colleagues because you're sick of being taken for granted.

Whistle: a) …let the implications of Hayman's words sink in. When they did, he whistled the sheer audacity of the plan.
b) …center of attention as she gyrated around him suggestively and the other women hooted and whistled at them