Universidad de Valladolid

Facultad de Filosofía y Letras

Máster en Profesor de Educación Secundaria Obligatoria y Bachillerato, Formación Profesional y Enseñanza de Idiomas

Especialidad: Inglés

Explicit Instruction: a study on production and interpretation of Noun-Noun and Adjective-Noun constructions

Pablo Fernández Lastras

Tutor/a: Sonja Mujcinovic

Departamento de Filología Inglesa

Curso 2022-2023

ABSTRACT

This dissertation aims at exploring the role that explicit instruction plays in the L2 English classroom to determine the effectiveness of this kind of instruction in L1 Spanish students in the first year of Bachillerato (Spanish High School). To do so, this dissertation employs two grammatical structures: Noun-Noun (NN) and Adjective-Noun (AN) constructions. Two different groups took part in developing this project: i) an instructed group and ii) a non-instructed group. Both groups were exposed to two different tasks: i) a production task and ii) an interpretation task. The results obtained in the project indicate that the instructed group outperformed the non-instructed group, suggesting that explicit instruction has positive effects on students' performance. The instructed group achieved a higher grammaticality in the production of NNs and ANs than the non-instructed group. Therefore, explicit instruction results effective when teaching L2 English to L1 Spanish students.

Keywords: NNs, ANs, explicit instruction, L1 Spanish – L2 English, premodification

RESUMEN

Este trabajo pretende explorar el rol que la instrucción explícita tiene en la enseñanza del inglés como segunda lengua para determinar la efectividad de este tipo de instrucción en estudiantes españoles en primer curso de Bachillerato. Para lograrlo, se analizan dos estructuras gramaticales: los compuestos (NN) y las construcciones Adjetivo-Nombre (AN). Dos grupos diferentes formaron parte en el desarrollo de este proyecto: i) un grupo instruido, y ii) un grupo no instruido. Ambos grupos han sido expuestos a dos tareas: i) una tarea de producción, y ii) una tarea de interpretación. Los resultados obtenidos indican que el grupo instruido supera al grupo no instruido, lo que sugiere que la instrucción explícita tiene efectos positivos en los estudiantes. El grupo instruido logra una mayor gramaticalidad en la producción de NNs y ANs que el grupo no instruido. Por lo tanto, la instrucción explícita resulta efectiva en la enseñanza de inglés como segunda lengua a estudiantes cuya primera lengua es el español.

Palabras clave: NNs, ANs, instrucción explícita, L1 español – L2 inglés, premodificación

Table of contents

1. Introduction 1
2. Theoretical framework 3
   2.1. Grammatical constructions 3
      2.1.1. Noun-Noun constructions in English 3
      2.1.2. Adjective-Noun constructions in English 5
      2.1.3. Noun-Noun and Adjective-Noun constructions in Spanish 7
   2.2. Jackendoff's classification of NN constructions (2009) 8
   2.3. The concept of instruction 11
      2.3.1. Implicit vs explicit instruction 12
3. Previous studies on the instruction of NN and AN constructions 15
4. Methodology 18
   4.1. Participants 18
   4.2. Tasks and procedure 18
      4.2.1. Tasks 18
      4.2.2. Procedure 19
5. Results and discussion 22
   5.1. Research question 1 22
   5.2. Research question 2 25
   5.3. General considerations of these results 28
6. Didactic proposal 30
7. Conclusions 36
8. References 37
9. Appendix 42

1. Introduction

This dissertation explores the role that explicit instruction plays in the L2 English classroom in order to determine the effectiveness of this type of instruction. To do so, two specific structures have been selected: Noun-Noun (NNs) and Adjective-Noun (ANs) constructions. These grammatical constructions will be applied to examine the effectiveness of explicit instruction from two different perspectives. First, this study will focus on the production of NNs and ANs by L1 Spanish students who are in the first year of Bachillerato (Spanish High School). Then, this study will focus on the interpretation of NNs made by these students.

When teaching English grammar, the effectiveness of instruction has been a subject of study. Several researchers have suggested that its effectiveness depends on different variables, including the type of learner, the type of language proficiency or the linguistic aspect considered, the specific instructional approach employed, and the nature of the grammatical item under instruction (Hulstijn & De Graaff 1994; DeKeyser 1998; Norris & Ortega 2000; Ellis 2001, among many others). Other studies have found evidence of a development of grammatical accuracy, highlighting that length of exposure plays a significant role not only in the short term but also in long term (Macaro & Masterman 2006; Martínez-Flor & Usó-Juan 2017; Fernández Fuertes et al. 2022, among others). Nevertheless, there is scarcity of research regarding the relationship between explicit instruction and NN and AN constructions. To the best of our knowledge, only a limited number of studies have focused on both concepts (for example, Fernández Fuertes et al. 2020, and Gómez-Garzarán & Fernández Fuertes 2020).

Moreover, concerning the Spanish educational law currently applied in the first year of Bachillerato, its curriculum does not specifically include NNs and ANs (LOMLOE, 2020). Also, considering the region of Castille and León (Spain), the legislation currently applied in this course does not incorporate these contents in its curriculum either (Decreto 40, 2022). Therefore, the main aim of this dissertation is to investigate the role of explicit instruction on students in the first year of Bachillerato, introducing NN and AN constructions to these students as innovative contents. Additionally, another aim is to shed more light on this topic, since more studies on the relationship between explicit instruction and NNs and ANs are necessary.

Therefore, the objectives to be fulfilled are the following: i) to describe NN and AN constructions in both English and Spanish, including their structure, types and other specific features; ii) to provide an overview of the concept of instruction and its different types, as well as including some previous research including instruction and NN and AN constructions; and iii) to explore the role of explicit instruction in the L2 English classroom including a specific analysis of the participants' production and interpretation of these grammatical constructions.

Based on the previous studies on explicit instruction, the main hypothesis is that explicit instruction results effective in students' performance, and consequently leads them to perform better than their non-instructed peers. Thus, to achieve the objectives, and to test this initial hypothesis, the research questions formulated are the following:

1. How does explicit instruction affect premodification in general, and the NNs and ANs in particular?
2. What role does task modality play? Do L2 English speakers perform better in a production task or in an interpretation task?

This dissertation is organized as follows. The first section focuses on explaining the NN and AN constructions, both in English and Spanish, as well as a description of Jackendoff's model for classifying NNs. Additionally, this section covers the concept of instruction and its two different types: implicit and explicit instruction. Lastly, several previous studies on this topic are dealt with.

Subsequently, the second section includes research that has been developed with the purpose of addressing the research questions previously mentioned. In this section, two different tasks (production and interpretation) are described.

Finally, the third section shows the results obtained in the study both in the production and interpretation tasks. The main conclusions drawn are also included in this section.

2. Theoretical framework

2.1. Grammatical constructions

The term 'construction' when referring to English grammar can be a complex concept. The terminology may differ depending on the source or the content, although the grammatical element involved may be identical. For instance, a widely employed term to name the constructions that contains two words is 'compound words' (or 'compounds'), which The Cambridge Dictionary of Linguistics (Brown and Miller, 2013, p.93) defines as 'a word consisting of two or more stems which may themselves be words, as in *arm* + *chair*, or parts of words, as in *retro* + *spect*'. In other words, if *arm* and *chair* are linked, *armchair* is created.

In this study, these grammatical items will be referred to as 'constructions'. This section focuses on describing two types of constructions: Noun-Noun (NNs) and Adjective-Noun constructions (ANs). Their structure and principal types, both in English and in Spanish, are described below.

2.1.1. Noun-Noun constructions in English

Noun-Noun constructions (NN) are grammatical components whose structure is composed of two nouns, which are combined in order to acquire a completely different meaning or to alter the meaning of one of the nouns that is part of the structure itself. Morphologically, the structure of these constructions is composed of two elements: a *head*, which is the main component of the construction, and a *modifier*, which assigns a property to the head. Most English compounds are modifier-head constructions, also called endocentric compounds; they commonly retain the meaning of the head, and often of the modifier. Thus, a *bedroom* can be paraphrased as a room (head) with a bed (modifier) (Snape and Krott, 2022, p.133). In this context, Wisniewski (1996) provides another model that may be applied to endocentric NN constructions called *slot filling*. According to this model, the nouns are represented as frames (i.e., a knowledge structure that represents a concept or a noun) composed of slots and fillers. Within these frames, the slots of the main concept (head) are filled with the modifying concept (modifier). For instance, a frame for *tiger* could be filled of the slots COLOR (*orange*) and LOCATION (*jungle*). The examples below provide an explanation of these concepts:

(1)

(a) *football*

(b) *dining room*

(c) *truck-driver*

In first NN (1a), the head is *ball*, and the modifier is *foot* (*a ball that is kicked with the foot*). Also, according to the slot filling model, a frame for *football* may be filled of the slots COLOR (*black and white*) and PHYSICAL QUALITY (*big*). Moreover, regarding the second NN (1b), the head is *room,* and the modifier is *dining*, because the last one modifies or attributes a characteristic to the first one, in this case, function (*a room made for dining*). Another example is (1c), where the modifier (*truck*) is describing the head (*driver*) (*a person who drives trucks)*. So, in the case of the noun to the left, it modifies the head (the noun to the right).

Moreover, among the NN constructions there are two categories: lexicalized and novel. Lexicalized NNs are included in dictionaries and encyclopaedias and approved by international grammatical institutions. Among their characteristics, they are no longer derived by a productive morphological process, their phonological form undergoes changes, and they possess a specific meaning of their own (Tarasova, 2013, p.21). The NN constructions illustrated in (1) are examples of lexicalized NNs. Conversely, novel constructions are generated and used in specific situations and they are not collected in the lexicon of a dictionary. This could be the main reason for their complexity, since the meaning of lexicalized constructions can be retrieved directly from the lexicon and, in contrast, the meaning of novel or less familiar constructions must be computed because the meaning has not yet been established (Gagné, 2002, pp.723-724). To interpret novel NN constructions, Tarasova (2013, p.53) states that "the hearer/reader has to turn to the linguistic templates (based on their own stock of established compounds) that are stored in their own memory or to templates that seem to possess similar features to the new coinage". Two examples of novel constructions are shown below:

(2)

(a) *pig ball*

(b) *banana brush*

The examples (2a&b) illustrate that English novel NN constructions possess a peculiar ambiguity, which means that these constructions can receive various interpretations depending on the context, since the relation that exists between the head and the modifier results in an ambiguous structure. In example (2a), the head is *ball*, and the modifier is *pig*, so this novel NN can be interpreted as *a ball with the shape of a pig*, *a ball with a picture of a pig*, *a ball made for pigs to play with it*, among others. Also, in example (2b), where the head is *brush* and the modifier is *banana*, this construction can receive several interpretations, such as *a brush that is similar to a banana*, *a brush with a banana on it*, *a brush made of bananas*, etc.

Therefore, whereas the meaning of lexicalized NNs can be transparent, novel NNs require an interpretation that must be linked to the context. This issue will be discussed in section 4.2, where a model of interpretation of Noun-Noun constructions presented will be presented.

2.1.2. Adjective-Noun constructions in English

Adjective-noun constructions (AN) are composed of an adjective and a noun that are combined to create a new structure. In these constructions, the adjective acts as the modifier, while the noun is the head of the construction. The adjective provides a specific property to the noun (for instance, colour, size, or shape) and includes additional information to its meaning. Regarding directionality (word order), Nicoladis (2006, p.17) indicates that,

> "the order of adjective-noun strings depends on whether the focus is on the surface realization of order or on the underlying structure […] With a few exceptions, simple English adjectives appear pre-nominally (e.g., *big dog*, *green tree*). The exceptions include strings with some quantifiers (e.g., *something big*, *anyone new*; cf. *a big something*) and a few adjectives usually borrowed from French (e.g., *night errant*, *boyfriend extraordinaire*). Heavy or modified adjectives can appear post-nominally (e.g., *the pony faster than the zebra* or *the road less travelled by*)".

The examples displayed below are Adjective-Noun constructions:

(3)

(a) *blackberry*

(b) *long-distance*

(c) *green table*

(d) * *table green*

The AN constructions shown in (3a) and (3b) are lexicalized constructions, as they are listed as part of the permanent lexicon rather than generated by a productive rule (Bennett, 2002, pp.1-2). In (3a) the adjective *black* is modifying the noun *berry* (head), assigning the property COLOUR to it (*a berry whose colour is black*). Another example is (3b), where the adjective *long* assigns the property LENGTH to the noun *distance* (*a distance that is long*). Nevertheless, the AN construction in (3d) is ungrammatical because English adjectives must appear pre-nominally as shown in (3c).

Furthermore, there is a possibility to find constructions involving nouns and adjectives together. A Noun-Noun construction may appear along with an adjective that may alter the meaning of the construction, and that attributes a property to one of the nouns or to both of them. Consequently, a certain ambiguity may be encountered in the construction, as in the examples below:

(4)

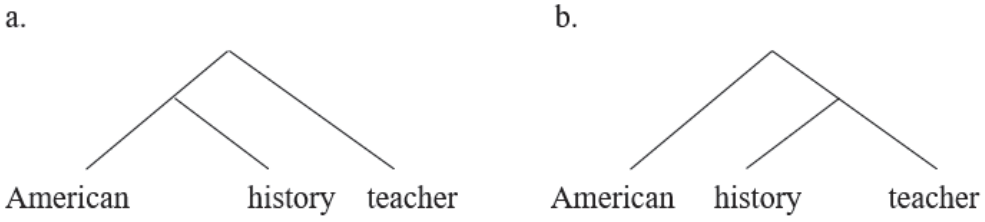


Figure 1. *NN ambiguity* (Szymanek, 2013, p.301)

In (4a) the adjective *American* is modifying the noun *history*, so the interpretation of the construction is "*a teacher who teaches American history*". On the other hand, in (4b) the adjective is modifying the NN construction (*history teacher*), so the interpretation of the construction is "*a history teacher who is from America*".

The following section will proceed to provide an overview of these constructions in Spanish. This description will focus on the main similarities and differences between NN and AN constructions between both languages.

2.1.3. Noun-Noun and Adjective-Noun constructions in Spanish

Spanish grammatical constructions share some similarities with English constructions. Regarding their structure, Spanish constructions also include a head, which serves as the core of the construction, and a modifier that gives a property to the head. Nevertheless, two main differences can be found between the two languages.

First, English constructions are right-headed (*police dog*), whereas Spanish constructions are left-headed (*perro policía*) (Piera, 1995, p.305). In the NN construction *perro policía*, the modifier (*policía*) is placed after the head (*perro*), so this is called a post-modifier. However, regarding AN constructions, in Spanish the adjective usually appears to the left of the noun, although it also can appear to the right of the noun. This can be appreciated in the AN constructions shown below. Whereas in English, the adjective is always placed to the left of the head, including only a few exceptions as described in the previous section.

(5)
(a) *altamar*
(b) *pelirrojo*
(c) *red-haired*
(d) **haired-red*

The examples (5a) and (5b) are Spanish AN constructions, where it can be observed that the adjective can appear to the left of the noun (5a), or to the right of the noun (5b), depending on the construction. Nevertheless, the examples (5c) and (5d) are English ANs, where the adjective (*red*) should be placed to the left of the noun (*haired*), as it is shown in (5c). The AN construction in (5d) is ungrammatical, because it does not follow the English grammatical rules and the adjective cannot be placed to the right of the noun.

Secondly, English constructions are recursive (for example: *Drug Enforcement Administration police dog*), whereas Spanish are not (for example: **perro policía*

Departamento de Narcóticos) (Piera 1995). In other words, these constructions are employed more frequently in English than in Spanish. Moreover, the usage of these constructions is simpler in English than in Spanish. Piera (1995) states that the simplicity of producing these constructions in English suggests that Spanish must have properties regarding a morphological nature amounting to limitations on their production. Similar to Piera's words, Liceras and Díaz (2000, p.198) state that,

> "NN compounding is not a very productive construction in Spanish […] In languages such as English, NN compounding is a highly productive strategy, whereas Spanish-like languages prefer a derivational strategy (*manzano – apple tree*), a 'case marking' strategy (*caja de herramientas – toolbox*) or adjectival modification (*vaca lechera – dairy cow*).

Therefore, English constructions are more easily shaped than Spanish constructions. Whereas English constructions are recursive, as they can be grammatically "moulded" without major difficulties, Spanish constructions require attention in order to employ grammatical constructions and to avoid breaking grammar rules.

Section 4.1. has provided a general explanation of Noun-Noun and Adjective-Noun constructions, both in English and Spanish. Their structure, types and several examples have been observed in order to obtain a detailed description of these grammatical constructions. The following section will be focused on the interpretation of NN constructions in English, which will contribute to a broader comprehension of their complexity.

2.2. Jackendoff's classification of NN constructions (2009)

Noun-Noun constructions could present a significant ambiguity that may complicate the identification of a meaning; therefore, a classification of the various possible interpretations regarding the NN constructions is required. From a semantic approach, Jackendoff (2009) investigates a possible classification of NN constructions. To do so, Jackendoff's investigation is based on Parallel Architecture Theory, which indicates that semantic structures are not generated by combining syntactic units, but rather they are composed of semantic units that possess their own features and these do not correspond precisely to syntactic categories. Regarding novel NN constructions, Jackendoff (2009, p.6) states that:

> "the general principles yield only a vast range of possible meanings. The language user must home in on the intended meaning of a novel compound by making use of (a) the semantic details of the constituent words and (b) the discourse and extralinguistic context".

Thus, to tackle the difficulties associated with ambiguous NN constructions, Jackendoff (2009) proposes a model in which the semantic relation between the head and modifier can be established by using an external function F (N_1, N_2) which is a representation of the meaning of the constituents making up the construction (Toquero-Pérez, 2020, p.2). Through this model, Jackendoff does not intend to provide a specific meaning to a NN construction, but he aims to determine the possible interpretations that a NN can have. When establishing the semantic structure of a NN construction, Jackendoff (2009, p.16) indicates that there are two ways in which N_1 and N_2 can be connected semantically: argument schema and modifier schema. Argument schema does not need an external function as this function is already represented by the head of the NN construction, which specifies a function. On the other hand, in modifier schema the function has an essential role. The following scheme summarizes both concepts:

(a) *Argument schema*: 'a N_2 by/of/… N_1'
(b) *Modifier schema:* 'an N_2 such that F is true of N_1 and N_2'

Figure 2. *NN compound schemata* (or *constructions*) (Jackendoff 2009, p.16)

(6)
(a) Argument schema*: saxophone player*
(b) Modifier schema: *car attack*

In example (6a), the head/N_2 (*player*) specifies the function (*play*), that is attributed to the modifier/N_1 (*saxophone*) functioning as its argument (e.g., *'-er who plays saxophone'*). On the other hand, in example (6b), the function (*attack*) could include two different interpretations: i) *an attack* (N_2) *on a person by a car* (N_1), or ii) *a car* (N_2) *whose function is to attack* (N_1) *people.*

Therefore, Jackendoff provides a classification for the basic functions (interpretations) of English NN constructions, as shown in table 1.

Function	Schema	Example
CLASSIFY	N_1 classifies N_2	Beta cell
BE	Both N_1 and N_2	Singer-songwriter
SIMILAR	N_1 and N_2 are the same/similar	Crocodile pin
KIND (+)	N_1 is a kind of N_2 N_2 is a kind of N_1	Pine tree Seal pup
BE (AT/IN/ON) (+)	N_1 is located at/in/on N_2 N_2 is located at/in/on N_1	Raincloud Tree house
COMP (+)	N_1 is composed of N_2 N_2 is composed of N_1	Sheet metal Meat ball
MADE FROM (+)	N_2 is made from N_1 N_1 is made from N_2	Apple juice Rubber tree
PART OF (+)	N_2 is part of N_1 N_2 with N_1 as a part N_2 that forms part of N_1	Doorknob Ham sandwich Cake flour
CAUSE	N_2 caused by N_1	Diaper rash
MADE BY (+)	N_2 made by N_1 N_2 that makes N_1	Anthill Honeybee
X SERVES AS Y	N_2 that serves as N_1	Guard dog
HAVE (+)	N_1 that has N_2 N_2 that has N_1	Gangster money Glamour girl
PROTECT	N_2 protects N_1 N_2 protects from N_1	Chastity belt Flea collar

Table 1. *Jackendoff's thirteen basic functions* (Jackendoff, 2016, pp.27-30)[1]

Note:
The symbol (+) refers to those functions where ambiguity can be found.

[1] This table has been designed by Toquero-Pérez as a summary of Jackendoff's classification of basic functions of English constructions (2009, pp.17-18)

According to table 2, an example of different interpretations of the NN construction *tower forest* may be:

(7)
(a) MADE FROM: *a forest made of towers* [*a forest* (N_2) MADE OF *towers* (N_1)]
(b) BE (IN): *a forest that has towers in it* [*towers* (N_1) that ARE LOCATED IN *a forest* (N_2)]
(c) HAVE: *a tower that has a forest on it* [*a tower* (N_1) that HAS *a forest* (N_2) ON IT]

Nevertheless, although the model presented by Jackendoff has obtained a prominent role in the research on the ambiguity of the NN constructions, other researchers have also conducted studies attempting to classify NNs. An instance is the research presented by Krott et al. (2009), in which children's inference processes for NN construction interpretations and compares these processes with those of adults. According to the results obtained in their study, both children and adults employ familiar constructions as an analogical base when interpreting novel constructions, although adults rely on knowledge of modifiers in familiar constructions, whereas children it on knowledge of heads (Krott et al. 2009).

Then, the following section of this theoretical framework will focus on instruction, both its meaning and its two different types: implicit and explicit. It will facilitate the comprehension of this concept adequately, on which the study presented further on this research is based.

2.3. The concept of instruction

Instruction is a fundamental basis that constitutes the starting point for the teaching-learning process. Nevertheless, one must differentiate between the concepts of "instruction" and "education". Concerning the concept of instruction, Latorre (2016, pp.1-2) claims that:

> "instruction involves the transmission of information by an instructor (teacher), who transmits knowledge to an instructed (student), who acquires this knowledge and assimilates it […] Instruction is part of the teaching-learning process, but not the entire process. Being instructed implies to learn something, but this knowledge can be non-systematic. In other words, this knowledge may not be applied and used properly, which will not allow the learning process".

So, this means that a proper instruction will lead to a more effective acquisition of knowledge, hence it is essential to choose the most appropriate methodologies and strategies in the instructional process. Furthermore, this instruction must not simply be based on theoretical contents since a practical application must be incorporated to provide a more efficient instruction.

On the other hand, education deals with the development and application of all the learners' abilities through their critical and individual reflective capacity. Education is a long-term process, while the length of the instructional process is variable. Therefore, education comprises instruction, learning and training, and involves complementary components such as personalization, improvement, and integral development of the person, among others (Latorre, 2016, p.4).

2.3.1. Implicit vs explicit instruction

Instruction involves numerous factors to achieve its accurate development. These factors include different teaching strategies and methodologies used, and the ways the lessons are planned and organized. Moreover, two types of instruction can be distinguished: implicit and explicit. Concerning English grammar, Scott (1990, p.779) indicates that "implicit instruction suggests that students should be exposed to grammatical structures in a meaningful and comprehensible context in order that they may acquire, as naturally as possible, the grammar of the target language". Moreover, Schurz and Coumel (2020, p.4) add that "implicit instruction seeks to make learners infer underlying rules without being aware of the process, i.e. while they are focusing on something else". In other words, this type of instruction implies that learners must employ their reflective skills to explore why a specific grammatical aspect is employed, as it is not directly explained by the instructor.

On the other hand, an explicit approach to teaching grammar insists on the value of deliberate study of grammar rule in order to recognize linguistic elements efficiently and accurately (Scott 1990, p.779). The instructor gives direct instruction about the grammatical aspects to the learners, including a theoretical explanation combined with practical exercises.

Additionally, several researchers have related implicit and explicit instruction to other two approaches: deductive and inductive. In McBeath's words (1992, p.39), "the deductive

method starts with a statement, a definition, etc., followed by examples that can be presented by the instructor or drawn from students by questioning and discussion". On the contrary, "the inductive method consists of facts, examples, or situations that are stated or observed; from them the generalization is derived. The instructor might present it, or students may be encouraged and guided to discover it" (McBeath 1992, p.39). Furthermore, DeKeyser (2003, p.314) establishes a relationship between the different approaches (see table 2), and he indicates that:

> "via traditional rule teaching, learning is both deductive and explicit. When students are encouraged to find rules for themselves by studying examples in a text, learning is inductive and explicit. When children acquire linguistic competence of their native language without thinking about its structure, their learning is inductive and implicit. The combination of deductive and implicit is less obvious, but the concept of parameter setting in Universal Grammar could be seen as an example; supposedly learners derive a number of characteristics of the language being learned from the setting of the parameter, and this clearly happens without awareness".

	Deductive	Inductive
Explicit	Traditional teaching	Rule discovery
Implicit	Using parameters	Learning L1 from input

Table 2. *The inductive/deductive and implicit/explicit dimensions.*

The effectiveness of these two approaches has been at focus of researchers and educators over time, attempting to determine which one is more successful in teaching. For instance, a study conducted by Ke et al. (2021, p.17) points out that "the effectiveness differs when it comes to specific linguistic aspects. However, the deeply rooted belief in the importance of explicit grammar instruction, especially for accuracy concerns, may be overstated".

To conclude, the previous sections have shown that Noun-Noun and Adjective-Noun constructions are complex, although apparently, they do not seem it at first glance. Several researchers have attempted to classify NN constructions and have presented diverse models,

but this study will employ Jackendoff's model. Moreover, the concept of instruction has been presented, as well as the two different types of instruction, which have notable differences and must be appropriately selected and implemented according to the context. The subsequent section will focus on examining the existing studies regarding NN and AN constructions and instruction.

3. Previous studies on the instruction of NN and AN constructions

Before starting to review these studies, it is necessary to note that there is a scarcity of research concerning the relationship NNs and ANs, and their instruction being predominantly the studies dealing with their acquisition.

First, an investigation conducted by Bychkovska (2021) examines writing by undergraduate students enrolled in L2 writing courses to analyse the role of explicit instruction and to test its effectiveness. The participants were 60 undergraduate multilingual students enrolled in L2 first-year writing courses (FYW) in the United States who produced several essays. The participants were divided into two different groups: i) Noun Phrase Instruction (NP-I) group, composed by 30 students who received explicit instruction on noun phrases as part of a FYW curriculum, and ii) Regular Instruction (Reg-I) group, composed by 30 students who were not instructed in noun phrases. In order to determinate whether explicit instruction of complex noun phrases (including Noun-Noun constructions and modifiers) might lead to more adequate use of these features. To do so, the participants performed several writing tasks, from which this study examines their diagnostic and their final writings.

According to the results obtained, Bychkovska (2021) indicates that the instructed group in noun phrases (NP-I group) uses a higher number of nouns with modifiers than the non-instructed group in noun phrases (Reg-I), increasing the average frequency of their use from diagnostic to final writing. Moreover, the NP-I group has demonstrated an increasement in pre- and postmodification, while the Reg-I group has increased premodification use only. Therefore, this study concludes that explicit instruction has a beneficial impact on writers' use of more appropriate noun phrases.

Moreover, another study by Fernández Fuertes et al. (2022) focuses on the interaction between length of exposure and instruction in the L2 English acquisition. The study was conducted in a bilingual school in Castille and León (Spain) for a period of 2 years. The participants were 95 L1 Spanish children who were learning English as primary school students. These participants were divided into four experimental groups: i) the non-NN instructed groups (younger and older) and the NN instructed groups (younger and older). The age range of the participants is from 7 to 10 years old. In each instructed group, the difference between the younger and older is the length of exposure to L2 English in a school context. Whereas the

younger groups have been exposed to 2 years of L2 English, the older groups have been exposed to 4 years. This research pretends to test the implicit vs explicit instruction through English NN constructions, considering two variables: i) the amount of exposure to L2 English at school, and ii) the NN exposure received by half of the participants as part of a specific instruction program (NN instructed and non-NN instructed groups). To do so, an acceptability judgment task was conducted.

The results shown that the length of exposure seems to have an impact of how participants detect ungrammaticality, while grammaticality is more stable across the two years. Therefore, length of exposure plays a significant role in participants' performance. Concerning explicit instruction (NN instruction vs non-NN instruction), the NN instructed group has a higher correction rate than the non-NN instructed group. The NN instructional program has affected positively the results of the NN instructed group. In terms of age, no significant interaction between age and instruction was found. In conclusion, this research states that length of exposure and explicit instruction play a significant role on the performance of the students, indicating that explicit instruction outweighs length of exposure.

Lastly, Gómez Garzarán and Fernández Fuertes (2020) conducted another research on the impact of explicit instruction in learning English Noun-Noun and Adjective-Noun structures by L1 Spanish school children. This investigation was conducted in a Spanish school where a bilingual section is included. The participants are 96 L1 Spanish schoolchildren, who started learning English as a L2 at the age of three. These participants were divided into two homogeneous and controlled groups: i) a non-instructed group who has received implicit instruction in NN and AN constructions, and explicit instruction only for ANs in English as an L2 subject, and ii) an instructed group who has received especially designed NN instruction for a period of five months, and the participants of this group have been exposed to implicit and explicit instruction in NN and AN constructions. It was checked that both groups have received explicit instruction in AN constructions and implicit instruction both in NNs and ANs, whereas only the instructed group has been exposed to explicit instruction in both NNs and ANs. This study focuses on addressing the role of implicit and explicit instruction regarding NN and AN constructions in a CLIL context. To do so, two tasks were provided to them: an acceptability judgement task and a production task.

Concerning the grammaticality in the production of NNs, the results indicate that the instructed group outperforms the non-instructed group in both tasks. Moreover, this study has found that a higher number of AN correct judgement rates leads is increased with NN explicit instruction. Therefore, this research concludes that explicit instruction has a positive and direct effect stating that the combination of instruction and age could play a significant role in approaching native-like performance.

In conclusion, the previous studies have emphasized the relevance of explicit instruction and its effectiveness when learning NN and AN constructions showing positive results in their performance.

4. Methodology

To achieve the objectives of this research, an empirical-analytical methodology has been implemented. The results obtained will be discussed in a subsequent epigraph. This type of methodology has been selected mainly because of a preference for collecting data personally, and also for developing and implementing an innovative study.

Within this epigraph of the present research, the main objective is the design and implementation of a project to investigate the role of instruction. To be more precise, the type of instruction involved is explicit instruction, which has been previously presented in the theoretical framework. Therefore, the subsequent sections will discuss the participants involved in the project and the tasks and procedure applied to obtain the results.

4.1. Participants

This project has been implemented in a high school in Valladolid (Spain), and the participants were 32 L1 Spanish students of L2 English. These students are currently in the first year of Bachillerato (Spanish high school), and their age ranges are between 16 and 18 years.

The participants have been subdivided into two separate groups: the instructed group and the non-instructed group. Each group was composed of 16 participants. The instruction took place over two weeks, utilizing several of their English classes to conduct the specific sessions. The instructed group had two sessions: one session for instruction and the other session for task development. On the other hand, the non-instructed group had only one session in which they completed the tasks.

4.2. Tasks and procedure

4.2.1. Tasks

To obtain the results, two different tasks were developed. Hence, the results collected and their further discussion will be classified accordingly. The results will be categorized into two independent groups: an instructed group and a non-instructed group.

The first task deals with the production of NN and AN constructions, for which 25 handmade drawings were designed. Of these drawings, 15 drawings have been aimed at finding the production of NN constructions, while the other 10 drawings have been aimed at obtaining AN constructions (see Appendix 1). Once the results have been collected, a list of expected responses from the participants has been developed, in order to classify their responses more systematically.

The second task focuses on the interpretation of novel 25 NN constructions, which are ambiguous (see Appendix 2), meaning that there is more than one possible interpretation. Once the results were obtained, the interpretation of these constructions is discussed and classified according to Jackendoff's classification (2009), previously explained in the theoretical framework.

The average English level of the participants is B1. Nevertheless, several participants have a more elemental level, while other participants have a more advanced level. Therefore, all the vocabulary used in both tasks has been checked to ensure that the participants are familiar with this vocabulary. Their English textbook glossary was reviewed to check this vocabulary, and also, the list of words that students should be familiar with in B1 official qualifications.

4.2.2. Procedure

As mentioned previously, the main objective of this project is to investigate the role of explicit instruction and its impact on the performance of the English learners. Therefore, the project has been developed into two tasks: production and interpretation. A pilot trial of both tasks was performed before presenting the final methodology to the selected participants. Once the pilot trial was successfully concluded, the study was conducted with the selected participants.

Thus, the tasks have been presented to two different groups: an instructed and a non-instructed. Both groups have completed the same tasks, with no change between the instructed group and the non-instructed group. Nevertheless, the procedure has been different, and this is described from below.

On the one hand, the instructed group completed the project in two sessions. The first session was the instruction session, in which the participants were introduced on NN and AN constructions. To do so, the participants were first introduced to a theoretical background on their use, structure and types (lexicalized and novel). Also, to check if they had understood these constructions, there were two practical activities throughout the session. In the first activity, the participants were given several structures of these constructions, and they had to find several instances in Spanish and English. For instance, "*An example of structure S+V or V+S"*, and the participants could answer *"abrelatas", "haircut",* and *"sacacorchos"*, among others. In this way, the participants could try to search for the constructions they already were familiar with. Regarding the second activity, it was conducted at the end of the session, and the participants had to create three new constructions and write them on a piece of paper, for instance, *"pear car", "blue table",* and *"pig ball"*. Once these constructions were written, the pieces of paper were collected and distributed among the participants, who had to guess if these constructions were lexicalized or novel constructions and also provide a brief definition according to what they interpreted these construction as. The purpose of this activity was to observe if the participants understood the difference between lexicalized and novel constructions as well as to observe their production and interpretation.

In the second session, the instructed group completed the tasks. Before doing them, they briefly reviewed what they had learned in the instruction session, and then, the participants started with task 1 (production). They were informed about how they had to complete the task, as well as given some instances of how to complete it (see Appendix 3). Then, the participants received a Google Forms link to the task through their Teams class group. They had about 15 minutes to complete it on their mobile phones. Once they had completed the task 1, they proceeded to task 2 (interpretation), where they were also explained what they had to do and they were given several instances. For instance, it was indicated to them that if they saw something like *"toothbrush"*, they could define it as *"a thing that is used to brush your teeth"*, or *"sad girl"* as *"a girl that is sad"*. Afterwards, they received the other Google Forms link and had the rest of the session to finish the task. While completing the tasks, they received the necessary support and answered any doubts they might have, and also the vocabulary terms unknown to them.

On the other hand, the non-instructed group did not receive an instruction session, and they performed the two tasks in a unique session. Similar to the instructed group, in this session

the non-instructed group was provided with an explanation of how to complete the tasks, as well as similar instances as the instructed group. Also, the non-instructed group was assisted during the development of the activities and the participants belonging to this group had the needed vocabulary doubts clarified, so they did not have any difficulty in completing the activities.

5. Results and discussion

In this section, the results of the methodology are discussed. Considering that this project aims to address two research questions, the results are also presented into two parts accordingly. These results have been adjusted and summarized to be discussed throughout this section. To consult the individual results (that is, per item) see appendixes 4-6.

5.1. Research question 1

The first research question deals with how explicit instruction affects premodification in general, and the NNs and ANs in particular. To address this research question, this section focuses on the results obtained in the production task (Task 1), where participants had to produce NNs and ANs. The results are displayed in table 3 (production of NNs) and table 4 (production of ANs).

GROUP	PRODUCTION *	OTHER NNs **	TYPE ***		OTHER ****
			Accurate word order	Inaccurate word order	
Instructed group	61.25% [147]	25.83% [62]	5.83% [14]	1.67% [4]	5.42% [13]
Non-instructed group	57.5% [138]	25% [60]	3.75% [9]	0% [0]	13.75% [33]

Table 3. *Production of NNs by both groups*

Note:

** "Production" refers to the production of expected NNs, independently of directionality. For instance, "apple dog" and "dog apple".*

*** "Other NNs" refers to the production of different NNs from the expected ones (non-expected NNs). For instance, "fruit dog" where "apple dog" is expected.*

**** "Type" refers to the production of ANs where NNs, and "accurate word order" and "inaccurate word order" refers to the directionality of the ANs. For instance, "orange sofa" (accurate word order) and "sofa orange" (inaccurate word order).*

***** "Other" refers to the terms produced that have no classification or place in the study.*

Table 3 shows that the instructed group has produced a high number of NNs, accounting for 61.25% of expected NNs, and 25.83% of non-expected NNs. For instance, in Item 1 *apple dog*, most participants produced an expected NN (93.75%), whereas the rest produced *dog apple*. Being both productions NNs, the issue to be considered here is the directionality. In Item 4 *turtle bird*, there were more non-expected NNs (56.25%), such as *turtle duck* or *tortoise gull*,

than expected NNs (43.75%), such as *turtle bird* (see Appendix 4). Regarding the non-instructed group, there is also a high production of expected NNs by the participants of this group (57.5%), while they have provided a similar number of responses to the instructed group involving non-expected NNs (25%). Nevertheless, when considering the responses by item, the results of the non-instructed group are highly varied. For instance, in Item 11 a large proportion of the responses are expected NNs (87.5%), such as *carrot eye*, whereas in Item 4, where the expected response was *turtle bird*, 68.75% of the NNs produced are non-expected, such as *penguin turtle*, *duck turtle* or *tortoise duck* (see Appendix 5).

Concerning the production of ANs where NNs, both groups have produced a relatively low number of ANs. While the instructed group barely had any errors related to directionality (1.67%), the non-instructed group presented ANs with no directionality errors (0%).

According to the results in the production of NNs, both groups have tended to employ nouns as premodifiers, producing a broadly similar amount of NNs. Nonetheless, the participants of the non-instructed group have employed other categories instead of employing nouns for premodification, as it can be observed in the category "Other", accounting for 13.75%, being their results higher than the instructed group (see Appendix 5). For instance, the non-instructed group has employed lexicalized NNs as premodifiers instead of producing novel NNs, such as *football racket* instead of *rugby racket*, or verbs, such as *fly bus* instead of *plane bus*.

GROUP	**PRODUCTION** *		**OTHER ANs** **		**TYPE** ***	**OTHER** ****
	Accurate word order	**Inaccurate word order**	**Accurate word order**	**Inaccurate word order**		
Instructed group	**26.87% [43]**	**4.37% [7]**	**18.13% [29]**	**2.5% [4]**	**29.38% [47]**	**18.75% [30]**
Non-instructed group	**17.50% [28]**	**0% [0]**	**23.75% [38]**	**5% [8]**	**25% [40]**	**28.75% [46]**

Table 4. *Production of ANs by both groups*

Note:

** "Production" refers to the production of expected ANs, and "accurate word order" and "inaccurate word order" refers to the directionality. For instance, "happy girl" (accurate word order) and "girl happy" (inaccurate word order).*

*** "Other ANs" refers to the production of different ANs from expected ones (non-expected ANs), and "accurate word order" and "inaccurate word order" refers to the directionality. For instance, "happy face" (accurate word order) and "face happy" (inaccurate word order).*

**** "Type" refers to the production of NNs where ANs.*

***** "Other" refers to the terms produced that have no classification or place in the study.*

Table 4 illustrates that the instructed group has produced 26.87% of expected ANs without any directionality error, while the ANs that include directionality errors are very limited (4.37%). Regarding non-expected ANs, the results are very similar to the expected ones. The instructed group has produced a correct number of ANs (for instance, *hot cup* or *hot coffee* where *blue cup* was expected). Among these responses, 18.13% are non-expected ANs with no directionality errors, so these ANs are valid, while a scarce proportion of these ANs have directionality errors (2.5%). Concerning the non-instructed group, the results show that the number of responses including expected ANs is 17.50%, and this group had no directionality errors. Furthermore, the production of non-expected valid ANs is significant (23.75%), being even higher than the expected ANs (17.50%). For instance, in Item 9, where the expected response was *blue cup*, 75% of the responses have been non-expected ANs, such as *hot cup* or *blue tea* (see Appendix 5). Nevertheless, in the production of NNs where ANs, both groups have produced a high number of NNs, accounting 29.38% for the instructed group and 25% for the non-instructed group.

Unlike the results in the production of NNs, the production of ANs shows significant differences in the premodification employed by both groups. The instructed group tends mostly to use expected ANs, whereas the non-instructed group uses most other ANs (non-expected ANs). Moreover, the participants of both groups have preferred to use NNs instead of expected ANs for premodification, as show in several items (see Appendixes 4 and 5). For instance, in Item 2 *orange sign*, both groups have not used expected ANs, employing mostly NNs instead of ANs, such as *sign places* or *distance city*. Another example is Item 6 *brown box/chest*, where both groups have employed mostly NNs where ANs were expected, such as *mystery chest* or *treasure chest*. Concerning the category "Other", both groups have produced a considerable number of constructions with have no place or classification in the study, being these results higher in the non-instructed group (28.75%). Observing these results by item (see Appendix 4), the instructed group does not show significant results in this category, except in Item 8 *grey/ecological city* (75%), where this group has tended to employ verbs as premodifiers, such as *recycle city* or *town recycle*. On the other hand, also considering the results by item, the non-instructed group shows more relevant results than the instructed group (see Appendix 5).

Similar to its results in the category "Other" in the production of NNs, the non-instructed group has employed lexicalized NNs as premodifiers, for example, *sunglasses sun*, or verbs, such as *recycle city* or *cry boy*.

Concerning the first research question, the previous results do not show significant differences between both groups when dealing with premodification particularly of NNs or ANs. This similarity in the results of both groups may emphasize the potential role of length of exposure suggesting that more extensive length of exposure, as well as explicit instruction over time would be required to observe more noticeable results. If this is the case, these findings would support the study presented by Fernández Fuertes et al. (2022), in which it is confirmed that the length of exposure plays a crucial role in participants' performance. Notwithstanding, considering general premodification results, there is a clear tendency to employ nouns as premodifiers in both groups, being remarkable the preference for using NNs over ANs.

5.2. Research question 2

The second research question focuses on the role that the task modality plays, that is whether L2 English speakers perform better in the production task or in the interpretation task. To explore this research question, this section shows the overall results presented by the participants in the production task (Task 1), which are displayed in table 5, and the overall results obtained in the interpretation task (Task 2) are shown in table 6.

GROUP	**NNs**		**ANs**	
	Total NNs	**Other**	**Total ANs**	**Other**
Instructed Group	94.14% [209]	5.86% [13]	70.59% [72]	29.41% [30]
Non-instructed Group	85.71% [198]	14.29% [33]	58.93% [66]	41.07% [46]

Table 5. *Overall number of NNs and ANs produced in Task 1.*

Table 5 emphasizes that both groups have produced a significant number of NNs in Task 1: the instructed group has produced 94.14% of NNs, while the non-instructed group has

produced 85.71%. Likewise, regarding ANs, both groups have also produced a high number of ANs: the instructed group has produced 70.59% of ANs, and the non-instructed group has produced 58.93%. On the other hand, the categories "Other" of both NNs and ANs show that the results of the non-instructed group are higher than the results of the instructed group. In other words, the non-instructed group has employed a broader number of elements with no classification or relevance in this study, such as verbs or other grammatical categories.

Therefore, as the overall results indicate, the instructed group has performed better in the production task than the non-instructed group, which means that the instructed group was being successful in producing a higher amount of NNs and ANs than the non-instructed group. Moreover, the instructed group has adapted their responses more closely to what was required in the production task, as the results obtained in the category "Other" indicate. These findings provide a positive insight on the role of explicit instruction, which may affect positively to students' L2 competence in English, assisting them to improve their performance in English language skills; specifically, grammar. Therefore, the previous results seem to affirm what previous studies discussed above (Gómez Garzarán and Fernández Fuertes 2020; Bychkovska 2021; Fernández Fuertes et al. 2022), which highlighted the relevant role of explicit instruction when teaching English grammar.

After observing the overall results in the production task (Task 1), the analysis proceeds to the results of the interpretation task (Task 2). The overall results for each group are summarized in table 6 below:

GROUP	INTERPRETATION*					
	SIMILAR	BE	MADE FROM	X SERVES AS Y	HAVE	OTHER
Instructed group	27.25% [109]	16% [64]	14% [56]	14.5% [58]	16% [64]	12.25% [49]
Non-instructed group	27.5% [110]	20.5% [82]	9% [36]	14.25% [57]	14% [56]	14.75% [59]

Table 6. *Overall interpretation results in Task 2.*

Note:

** The categories that appear in the interpretation task belong to Jackendoff's model, which was presented in section 4.2. Among the thirteen classifications included in this model, the most frequently employed by the participants have been selected in this classification.*

According to table 6, both groups have several similarities and differences in their results. Both groups tend to mostly use the category SIMILAR to explain the relationship between the two nouns in the construction, having a comparable number of responses (27.25% and 27.5%). For example, both groups have interpreted the NN *banana car* as SIMILAR TO, accounting for 93.75% in this category (*a car shaped like a banana*, *a car similar to a banana*). Following this category, the most frequently employed category by both groups is BE (location), being the responses even higher in the non-instructed group (20.5%) than in the instructed group (16%). Also, the instructed group has obtained a similar number of responses in the categories HAVE (location & property) and BE, accounting for a total of 16% in both categories. Subsequently, regarding other categories, both groups have similarly employed the category X SERVES AS Y (function), being the results of 14.5% and 14.25%. Also, the instructed group provided more interpretations including MADE FROM (14%) than the non-instructed group (9%). So, the overall results indicate that the preferred interpretation in both groups is SIMILAR TO.

Lastly, concerning the category "Other", which includes different interpretations of the ones in the table, the total number of responses by the instructed group is 12.25%, while the non-instructed group has a number of 14.75%. As it can be observed, both groups have provided a high number of responses in this category (see Appendix 6), including other categories of Jackendoff's classification which have not been classified owing to their limited number of interpretations. For example, in the NN 3 *snake building*, several participants in both groups have employed the category MADE BY (*a building made by a snake*). Moreover, a peculiarity presented in this category is the fact that both groups have provided metaphorical interpretations with no place in Jackendoff's classification employed in this study. For instance, in Item 10 *bomb book*, several participants in both groups have interpreted this item as a very interesting book or a book with an unexpected plot twist (*a book that is cool or with a surprising ending*, *a book which has a very good plot twist which can blow the lector's mind*, etc.). Another instance is Item 22 *stone brain*, in which both groups have interpreted this item as a very stubborn person or a person who does not think (*brain useless*, *an adjective that describes someone who doesn't change his mind*, etc.).

Unlike the results obtained in the production task, the interpretation task does not indicate clearly which group has performed better in this task, as it is not possible to know it with these results. Both groups have understood properly what they were required to do in the

task, so they have been able to give an interpretation to those novel NNs. In other words, both groups have established a semantic relation between both nouns in the construction by assigning them the role of head and modifier, as Jackendoff's model (2009) indicates. For a better comprehension, see the example below:

(8) CHEESE MOON: *a moon similar to / with the shape of a cheese* [*a moon* (N_2) SIMILAR TO a *cheese* (N_1)]

As it can be observed in the previous example (8), according to the preferred interpretation employed by both groups (SIMILAR TO), the participants have successfully applied the external function SIMILAR TO between both nouns. This indicates that, despite that it is not possible to determine which group has performed the best based on these results, Jackendoff's model has been successfully implemented by both groups, independently whether they have received explicit instruction or not. Nevertheless, by observing the results obtained in the category "Other", these findings may slightly suggest that the participants of the instructed group have adapted better their responses to the interpretation task. In other words, these results may indicate that the instructed group has reflected further on how to establish an interpretation between both nouns in the construction, and this could have been influenced by the explicit instruction previously received by this group.

5.3. General considerations of these results

As mentioned previously, the purpose of this project is to investigate the role of explicit instruction in L2 English classroom. More specifically, this project aims at determining the effectiveness of explicit instruction through a study on the production and interpretation by L1 Spanish students of L2 English.

In general, the previous findings report that the instructed group outperforms the non-instructed group, independently of the task modality. As mentioned, these results support the research previously examined in section 3 (Gómez Garzarán and Fernández Fuertes 2020; Bychkovska 2021; Fernández Fuertes et al. 2022). Moreover, the findings of this research confirm the main hypothesis established providing evidence that explicit instruction is effective in students' performance; the instructed group performs better than their non-instructed peers.

Regarding productivity and accuracy, explicit instruction influences the number of grammatical structures produced by the students who achieved a higher grammaticality in their NNs and ANs. This finding supports the research by Gómez Garzarán and Fernández Fuertes (2020), which states that the group who has received explicit instruction on these structures has a higher accuracy rate in their production. What is more, Rahimpour and Salimi (2010, p.1745) conclude that explicit instruction of the language would result in improvement in L2 learner accuracy and provide a favourable condition for L2 acquisition. A possible reason for this higher accuracy could be a better interpretation of the structure of the NN and AN constructions influenced by the explicit instruction. This means that, via explicit instruction, students have a clearer comprehension of how NNs and ANs are formed, and also the processes involved in creating these structures. Based on Piera's words (1995, p.302), no other language can produce these constructions as freely and productively as English does. Therefore, students may benefit from explicit instruction, since they are aware that they can produce freely these grammatical structures in English, which is not possible in their native language.

Based on DeKeyser's dimension model (2003, p.314), this project has applied an explicit deductive dimension that is traditional rule teaching. This means that students have been presented to NN and AN constructions through an explanation followed by examples by the instructor (McBeath, 1992, p.39). Nevertheless, more extensive research is required in order to observe whether this traditional rule teaching is effective over time. Ellis's research (2015, p.330) indicates that it is complicated to observe how short term explicit interventions can have anything but a superficial effect on the acquisition of entirely new features. Therefore, the present research confirms Ellis' statements (2015, p.330) indicating that explicit instruction helps learners to gain more control over grammatical features that they have already assimilated, what means that explicit instruction may have a long term indirect effect. If this is the case, this would once again strengthen the research by Fernández Fuertes et al. (2022), which states that length of exposure and length of exposure over time are crucial in order to analyse the performance of the students. However, more research will be necessary to reinforce these findings.

6. Didactic proposal

The following didactic proposal deals with explicit instruction, and NN and AN constructions and it is intended to be implemented in the subject of Foreign Language (L2 English classroom) in the 1st year of Bachillerato (Spanish High School). This didactic proposal consists of one session divided into four different activities, which can be implemented in any term of the course.

Regarding the national context, this proposal is based on the current educational law in Spain (LOMLOE), as well as Real Decreto 243/2022, by which the organisation and teaching of Bachillerato are determined. More specifically, the regional context (Decreto 40/2022) is considered, by which the organisation and curriculum of Bachillerato in Castille and León are determined. Therefore, based on Real Decreto 243/2022, the general objectives stipulated in this didactic proposal are as follows:

b) To act in a respectful and independent way, and to develop a critical attitude. To detect and peacefully solve conflicts, as well as possible violent situations.

e) To be proficient, both orally and in writing, in Spanish and, if applicable, in the co-official language of their region.

f) To express oneself fluently and accurately in one or more foreign languages.

k) To reinforce the enterprising attitude through creativity, flexibility, teamwork, self-confidence, and critical thinking.

Thus, based on these general objectives, this didactic proposal aims for students to achieve the following specific objectives:

a) To comprehend the structure of the NN and AN constructions through interactive activities and games.

b) To employ the NN and AN constructions in a practical manner after understanding the theory.

c) To express themselves in English as fluently and accurately as possible, being supported by the teacher and the classmates.

d) To be creative and reflexive in the proposed activities, as well as being participative and respectful of their teamwork.

Stage: Bachilerato (Spanish High School)	Level/Course: 1º	Timing: 1 session
Key competences 1) Competence in linguistic communication. 2) Plurilingual competence. 5) Personal, social, and learning to learn competence.	**Specific competences** 1 3 4	

Contents

A) Communication

1) Self-confidence, initiative, and assertiveness. Strategies for self-repair and self-assessment as a way to progress in the independent learning of language.
3) Knowledge and skills to perform mediation activities in everyday situations.
10) Common and specialized vocabulary relevant to the students, as well as lexical enhancement strategies (derivation, composition, lexical families, etc.).

B) Plurilingualism

2) Strategies to identify, organize, and creatively use linguistic units (lexicon, morphosyntax, sound patterns, etc.) from linguistic units based on the comparison of the languages.

C) Interculturality

1) Foreign language as a means of communication between people, and as a tool for social participation and personal enrichment.

Assessment criteria

1.1
3.1
4.2

Activities

Reviewing NNs and ANs

Guess it!

Reading researchers

Grammatical broken phone

Session 1			
Specific competences 1 3 4	**Can do statements** The student… 1.1.1. Interprets and understands the contents through the explanations provided by the teacher. 1.1.2. Extracts and analyses relevant information from a written text. 3.1.1. Performs brief oral interventions with a cooperative and respectful attitude. 3.1.2. Performs brief physical interventions with a cooperative and respectful attitude. 4.2.1. Tries to facilitate communication in order to communicate information, adapting his/her responses to the communicative context.		
Competency descriptors CCL1, CCL2, CCL4, CCL5, CD1, CD3, CP1, CP2, STEM1, CPSAA3.1, CPSAA3.2, CC3, CC4, CE3			
Contents A) 1, 3, 10 B) 2 C) 1	**Transversal contents** 2		
Activities	**Specific competences**	**Contents**	**Can do statements**
Reviewing NNs and ANs	1 3	A)1,10	1.1.1 3.1.1
Guess it!	3	A)1,3,10 B) 2 C)1	3.1.1 3.1.2
Reading researchers	1	A)1,10 B)2	1.1.2
Grammatical broken phone	3 4	A)3,10 B)2 C)1	3.1.1 4.2.1

Activity 1 / Session 1		
Title: Reviewing NNs and ANs	**Type:** Reviewing activity	**Timing:** 10 minutes
Class management: All the students	**Resources:** No resources needed.	

In the first activity, students review the NN and AN constructions, being the theoretical part of the explicit instruction. Teacher asks the students some questions about the NNs and ANs. For instance, *"can anyone tell me how a NN/AN is structured?"*, or *"can you give me an example of a NN/AN?"*. Once the students have replied to the questions, the teacher briefly gives the correct answers to the students. Nevertheless, if students know the answer, teacher assists them to complete it.

Activity 2 / Session 1		
Title: Guess it!	**Type:** Warm-up activity	**Timing:** 15 minutes
Class management: Work in pairs	**Resources:** Small pieces of paper	

The second activity consist of a mime game, where students must try to guess a NN in order to check whether they have understood these constructions. Students have to work in pairs, so they have to sit together. Each pair has to write a NN on a small piece of paper (this NN can be lexicalized or novel). Then, the teacher collects all the pieces of paper and mixes them, giving a different piece of paper to each pair, who have to try to mime the NN written in the paper. For example, if the NN written is *pig ball*, this pair must try to imitate a ball shaped as a pig, or a pig bouncing a ball. The rest of the pairs must try to guess it. If the NN is difficult to guess, the pair can give some clues to the other pairs. For example, they can mention the semantic field of one of the words included in the NN, or both of them (*"one of the nouns is an animal and the other noun is an object"*).

Activity 3 / Session 1		
Title: Reading researchers	**Type:** Reading activity	**Timing:** 15 minutes
Class management: Work in pairs	**Resources:** A reading text including ANs, chosen by the teacher (a description, a book fragment, etc.)	

The third activity is a reading activity where students have to try to find ANs in a text chosen by the teacher. In pairs, students have five minutes to try to find as much ANs as possible and underline them. Once the five minutes are over, each pair has to say how many ANS they have found and, compare their responses to the other pairs. Then, the teacher tells them the correct number of ANs in the text and, helps students to find all of them.

Activity 4 / Session 1		
Title: Grammatical broken phone	**Type:** Closing activity	**Timing:** 10 minutes
Class management: All the students	**Resources:** No resources needed.	

In the last activity, students employ both NN and AN constructions, so the teacher lets them know about this before starting the activity. Following the classical game *Broken Phone*, students must try to guess a NN or a AN construction. To do so, a student starts the game choosing a NN or AN, for example, *corkscrew*. Then, this student must briefly describe this NN or AN to another student without telling them what it is. For example, "*It is something that you use when you want to open a bottle, and it has a very strange shape".* Then, students must communicate this description to the rest of the students, trying to maintain the original form. The last student who receives this information has to try to guess the NN or AN described by the first student, having three opportunities to guess it.

7. Conclusions

To conclude, this dissertation has examined: i) the grammatical structure of the NN and AN constructions in both Spanish and English, as well as their different types, ii) the concept of instruction and their different types, and iii) the role of explicit instruction when learning English as a L2 through a methodological study.

The theoretical framework has described the NN and AN constructions showing the complexity presented by these grammatical structures were described. In order to comprehend how these structures operate both in Spanish and English, it is necessary to bear in mind that they are formed by two main components (*head* and *modifier*). Also, this section has included a classification for interpreting NNs. Moreover, in this theoretical framework the concept of instruction, including their two main different types: implicit and explicit, was described.

Then, the study presented in this dissertation has shown that explicit instruction has positive effects on L1 Spanish students of L2 English. Explicit instruction in the L2 English classroom plays a crucial role in the assimilation of the theoretical knowledge by the students, and also in its subsequent practical application. Through this kind of instruction, students have been able to comprehend better the structure and types of the NN and AN constructions, which has led them to obtain more productive results and perform better than their non-instructed peers. Therefore, this would confirm the main hypothesis formulated, which states that explicit instruction results effective in students' performance, in line with previous studies such as Macaro & Masterman 2006, Martínez-Flor & Usó-Juan 2017, and Gómez Garzarán & Fernández Fuertes 2020. Thus, this project has contributed to exhibit the relevance of explicit instruction in the L2 classroom as it has demonstrated its effectiveness.

Nevertheless, although the effectiveness of explicit instruction has been demonstrated, further research, such as the one conducted by Fernández Fuertes et al. (2022), is needed to see effectiveness of length of exposure regarding explicit instruction in the long term and on the relationship between explicit instruction, and these grammatical constructions.

8. References

Bennett, P. (2002). English Adjective-Noun Compounds and Related Constructions. *GEMA Online Journal of Language Studies*, *2* (1). http://journalarticle.ukm.my/716/1/GemaVol1.1.2001No1.pdf

Brown, E. K., and Miller, J. E. (2013). *The Cambridge Dictionary of Linguistics.* Cambridge University Press.

Bychkovska, T. (2021). Effects of explicit instruction on noun phrase production in L2 undergraduate writing. *Journal of English for Academic Purposes, 54*. https://doi.org/10.1016/j.jeap.2021.101040

Decreto 40/2022, de 29 de septiembre, por el que se establece la ordenación y el currículo del bachillerato en la Comunidad de Castilla y León. *Boletín Oficial de Castilla y León, 190, del 30 de septiembre de 2022,* 49543-50352. https://bocyl.jcyl.es/boletines/2022/09/30/pdf/BOCYL-D-30092022-4.pdf

DeKeyser, S. (1998). Beyond Focus on Form: Cognitive Perspectives on Learning and Practicing a Second Language. In C. Doughty, & J. Williams (Eds.), *Focus on Form in Classroom Second Language Acquisition*, (pp. 42-63). Cambridge University Press.

DeKeyser, R. (2003). Implicit and explicit learning. In C. Doughty, & M. Long (Eds.), *The handbook of second language acquisition*, (pp. 313-348). Blackwell.

Ellis, R. (2001). Investigating form-focussed instruction. *Language Learning*, *51*, 1-46. https://doi.org/10.1111/J.1467-1770.2001.TB00013.X

Ellis, R. (2005). *Understanding Second Language Acquisition* (2nd ed.). Oxford University Press.

Fernández Fuertes, R., Gómez Garzarán, E. & Mañas Navarrete, I. (2020). Noun-Noun compounds in a game task: what child data can tell us about teaching practices. In M. Planelles Almeida, A. Foucart, & J. Muñoz Liceras, *Perspectivas actuales en la enseñanza y el aprendizaje de lenguas en contextos multiculturales / Current Perspectives in Language Teaching and Learning in*

Multicultural Contexts, (pp. 481-505). Civitas Aranzadi Thomson Reuters. https://doi.org/10.32029/2605-4655.14.01.2020

Fernández Fuertes, R., Gómez Garzarán, E., Mujcinovic, S. & Mañas Navarrete, I. (2022). When teaching works and time helps: Noun modification in L2 English school children. *Open Linguistics*, *8* (1), 475-495. https://doi.org./10.1515/opli-2022-0219

Gagné, C. (2002). Lexical and Relational Influences on the Processing of Novel Compounds. *Brain and Language*, *81* (1-3), 723-735. https://doi.org/10.1006/brln.2001.2559

Gómez Garzarán, E., & Fernández Fuertes, R. (2020). Is explicit instruction effective? The learning of English noun-noun and adjective-noun structures by L1 Spanish school children (*¿Es efectiva la instrucción explícita? El aprendizaje de las estructuras nombre-nombre y adjective-nombre del inglés por escolares de L1 español*). *Culture and Education, 32*, 1-41. https://doi.org/10.1080/11356405.2020.1741872

Hulstijn, J. & De Graaff, R. (1994). Under what conditions does explicit knowledge of a second language facilitate the acquisition of implicit knowledge? A research proposal. *AILA Review*, *11,* 97-112. https://hdl.handle.net/11245/1.428191

Jackendoff, R. (2009). Compounding in the Parallel Architecture and Conceptual Semantics. In R. Lieber, & P. Stekauer, (eds.) *The Oxford Handbook of Compounding*, (pp. 105-128). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199695720.013.0006

Jackendoff, R. (2016). English Noun-Noun compounds in Conceptual Semantics. In P. Ten Hacken, P. (ed.) *The Semantics of Compounding*, (pp. 15-37). Cambridge University Press. https://doi.org/10.1017/CBO9781316163122.002

Ke, H., Luo, Y., Piggott, L., & Steinkerauss, R. (2021). Long-term effects of explicit versus implicit instruction on EFL writing. *Dutch Journal of Applied Linguistics*, *10*. https://doi.org/10.51751/dujal9361

Krott, A., Gagné, C., & Nicoladis, E. (2009). How the parts relate to the whole: Frequency effects on children's interpretations of novel compounds. *Journal of child language, 36* (1), 85-112. https://doi.org/10.1017/S030500090800888X

Latorre, M. (2016). Educación, Instrucción, Aprendizaje y Formación. *Universidad Marcelino Champagnat*, 1-4. https://marinolatorre.umch.edu.pe/educacion-instruccion-aprendizaje-y-formacion/

Ley Orgánica 3/2020, de 29 de diciembre, por la que se modifica la Ley Orgánica 2/2006, de 3 de mayo, de Educación. *Boletín Oficial del Estado, 340, del 30 de diciembre de 2020,* 122868-122953. https://www.boe.es/boe/dias/2020/12/30/pdfs/BOE-A-2020-17264.pdf

Liceras, J. M. & Díaz, L. (2000). Triggers in L2 acquisition: The case of Spanish N-N compounds. *Studia Linguistica 54* (2), 197-211. https://doi.org/10.1111/1467-9582.00060

Macaro, E., & Masterman, L. (2006). Does intensive explicit grammar instruction make all the difference? *Language Teaching Research 10* (3), 297-327. https://doi.org/10.1191/1362168806lr197oa

Martínez-Flor, A., & Usó-Juan, E. (2017). The Long-Term Effects of Instruction on EFL Learners' Use of Complaining Formulas. In C. Vargas-Sierra (ed.). *Professional and Academic Discourse: an Interdisciplinary Perspective*, (pp. 69-74). https://doi.org/10.29007/5xsb

McBeath, R. (1992). *Instructing and Evaluating in Higher Education. A Guidebook for Planning Learning Outcomes*. Educational Technology Publications.

Nicoladis, E. (2006). Cross-linguistic transfer in adjective-noun strings by preschool bilingual children. *Bilingualism: Language and Cognition*, *9* (1), 15-32. https://doi.org/10.1017/S136672890500235X

Norris, J.M. & Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning*, *50* (3), 417-528. https://doi.org/10.1111/0023-8333.00136

Piera, C. (1995). On Compounding in English and Spanish. In H. Campos, & P. Kempchinsky, *Evolution and Revolution in Linguistic Theory*. (pp. 302-315). Georgetown University Press. https://www.academia.edu/908162/On_Compounding_in_English_and_Spanish

Rahimpour, M., & Salimi, A. (2010). The impact of explicit instruction on foreign language learners' performance. *Procedia Social and Behavioral Sciences, 2* (2), 1740-1746. https://doi.org/10.1016/j.sbspro.2010.03.976

Real Decreto 243/2022, de 5 de abril, por el que se establecen la ordenación y las enseñanzas mínimas del Bachillerato. *Boletín Oficial del Estado*, *82*, *del 6 de abril de 2022,* 46047-46408. https://www.boe.es/eli/es/rd/2022/04/05/243/con

Scott, V. M. (1990). Explicit and implicit grammar teaching strategies: New empirical data. *The French Review*, *63* (5), 779-789. https://www.jstor.org/stable/395525

Schurz, A. & Coumel, M. (2020). Grammar teaching in ELT: A cross-national comparison of teacher reported practices. *Language Teaching Research*. https://doi.org/10.1177/1362168820964137

Snape, S., & Krott, A. (2022). The challenge of relational referents in early word extensions: Evidence from noun-noun compounds. *Journal of Child Language*, *49* (1), 131-163. https://doi.org/10.1017/S0305000920000793

Szymanek, B. (2013). Structural ambiguity in English word-formation. In A. Bondaruk, & A. Malicka-Kleparska, (Eds.) *Ambiguity. Multifaceted structures in syntax, morphology and phonology* (pp. 299-316). Wydawnictwo KUL. https://pracownik.kul.pl/files/11463/public/structural_ambiguity.pdf?1461781799457

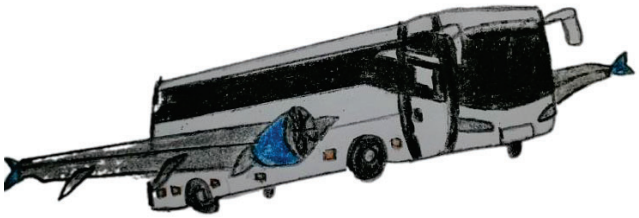
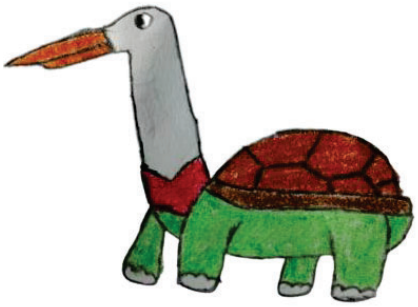
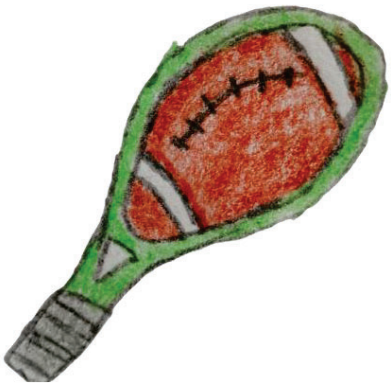
Tarasova, E. (2013). *Some new insights into the semantics of English N+N compounds*. Victoria University of Wellington. https://doi.org/10.26686/wgtn.17004787

Toquero-Pérez, L. M. (2020). The semantics of Spanish compounding: An analysis of NN compounds in the Parallel Architecture. *Glossa: a journal of general linguistics*, *5* (1), 1-31. https://doi.org/10.5334/gjgl.901

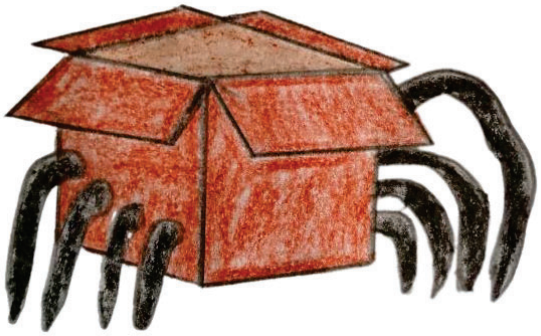
Wisniewski, E. J. (1996). Construal and Similarity in Conceptual Combination. *Journal of Memory and Language, 35* (3), 434-453. https://doi.org/10.1006/jmla.1996.0024

9. Appendixes

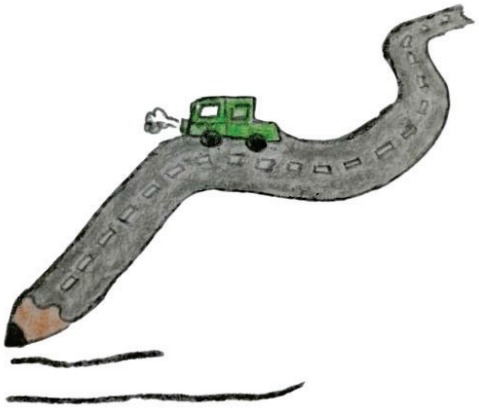
Appendix 1: Task 1 (Production of NNs and ANs)

NNs drawings & expected responses	
1. Apple dog 	**2. Onion dress** 
3. Plane bus 	**4. Turtle bird** 
5. Rugby racket 	**6. Rabbit cat** 

7. Spider box

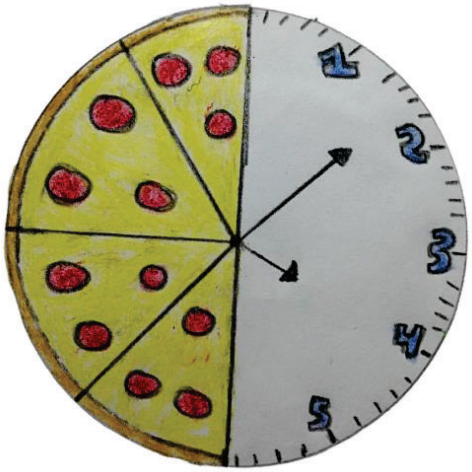


8. Pencil road



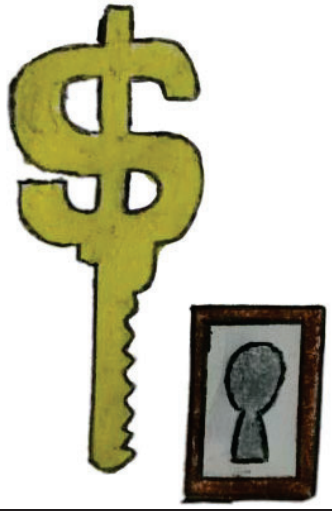
9. Umbrella gun

10. Pizza clock



11. Carrot eye

12. Dollar key



13. Computer tree

14. Coffee book

15. Flower pen

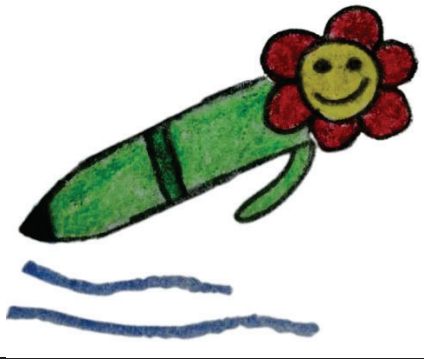
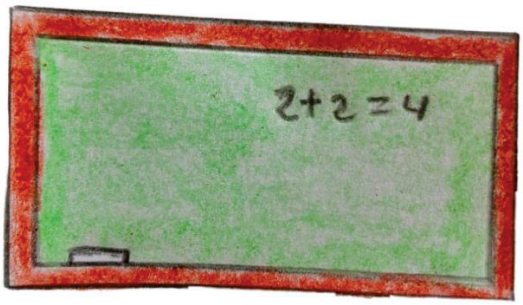
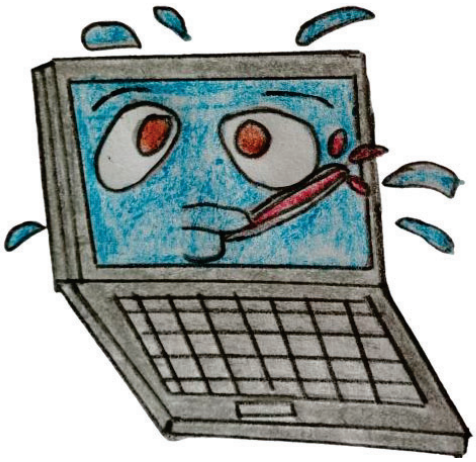


Figure 3. *NN drawings and expected responses*

ANs drawings & expected responses	
1. Blackboard/Greenboard	**2. Orange sign**
	

3. Purple hair 	**4. Happy sun** 
5. Sad boy 	**6. Brown box/chest** 
7. Sick computer 	**8. Grey/ecological city** 

9. Blue cup	10. Orange sofa
	

Figure 4. *AN drawings and expected responses*

Appendix 2: Task 2 (Interpretation of NNs)

1) BANANA CAR
2) APPLE BOX
3) SNAKE BUILDING
4) FRUIT PIERCING
5) MAP BAG
6) WATER SHOP
7) DOG TAXI
8) TREE OFFICE
9) RABBIT HILL
10) BOMB BOOK
11) DRAGON CANAL
12) ROCKET PENCIL
13) EGG JUICE
14) PLANET CITY
15) BALL SALAD
16) COW SOCKS
17) SCHOOL TRUCK
18) JAM FLOOR
19) PEAR DESK
20) SUGAR ISLAND
21) MOUSE BALL
22) STONE BRAIN
23) SALMON POOL
24) CHEESE MOON
25) STAR PAPER

Appendix 3: Examples of Task 1

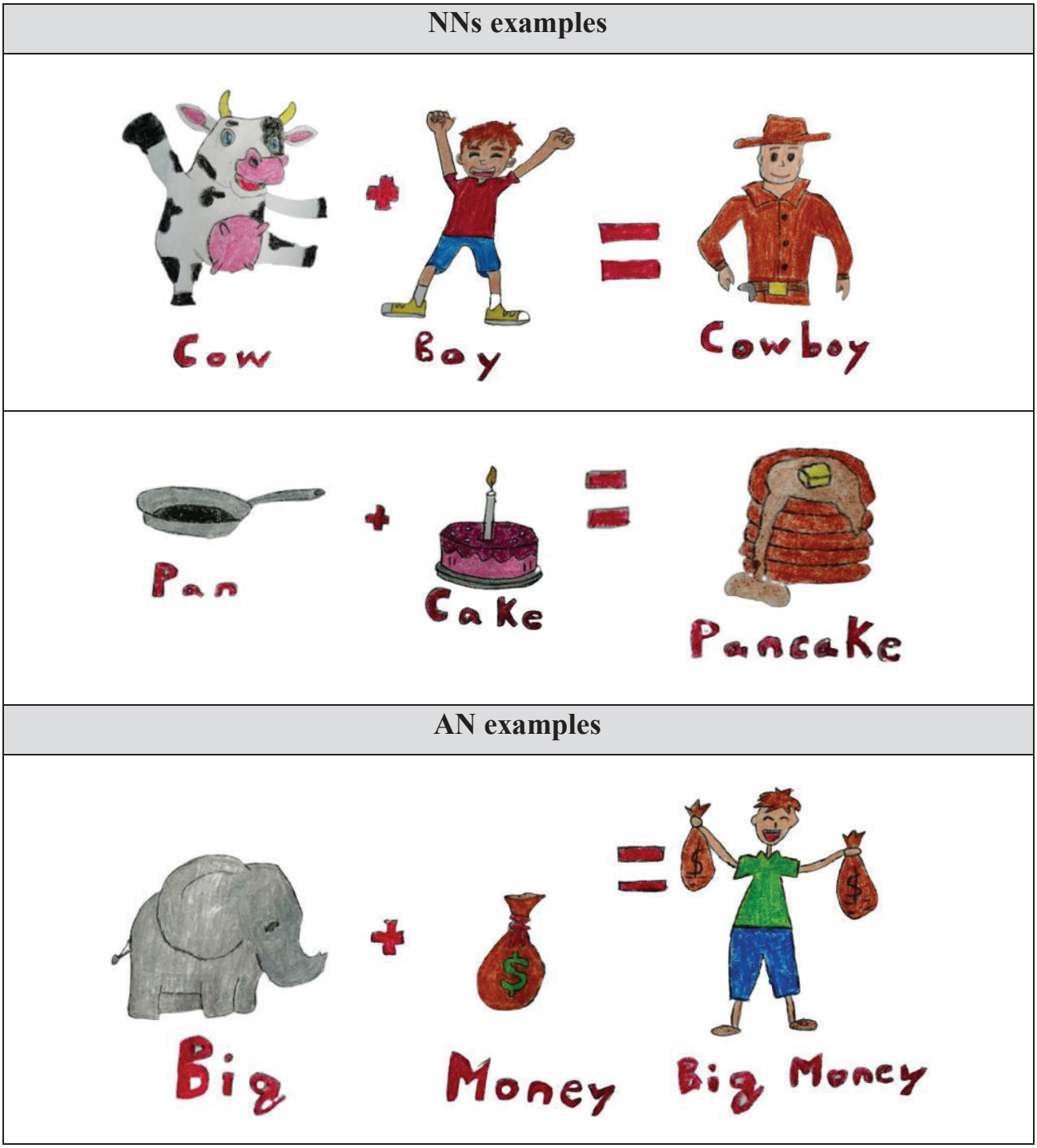


Figure 5. *Examples of Task 1*

Appendix 4: Results per Item of the Instructed Group in Task 1 (production)

TYPE	ITEM	PRODUCTION *	OTHER NNs **	TYPE ***		OTHER ****
				Accurate word order	Inaccurate word order	
NN	1	93.75% [15]		6.25% [1]		
	2	62.50% [10]	25% [4]			12.50% [2]
	3	37.50% [6]	18.75% [3]	31.25% [5]	6.25% [1]	6.25% [1]
	4	43.75% [7]	56.25% [9]			
	5	43.75% [7]	56.25% [9]			
	6	62.50% [10]	12.50% [2]	6.25% [1]	12.50% [2]	6.25% [1]
	7	68.75% [11]	25% [4]			6.25% [1]
	8	43.75% [7]	50% [8]			6.25% [1]
	9	68.75% [11]	18.75% [3]			12.50% [2]
	10	87.50% [14]	6.25% [1]	6.25% [1]		
	11	75% [12]	12.50% [2]	6.25% [1]		6.25% [1]
	12	56.25% [9]	31.25% [5]	12.50% [2]		
	13	56.25% [9]	12.50% [2]		6.25% [1]	25% [4]
	14	62.50% [10]	31.25% [5]	6.25% [1]		
	15	56.25% [9]	31.25% [5]	12.50% [2]		
TOTAL NN		**61.25% [147]**	**25.83% [62]**	**5.83% [14]**	**1.67% [4]**	**5.42% [13]**

Table 7. *Production of NNs by the instructed group*

TYPE	ITEM	PRODUCTION *		OTHER ANs **		TYPE ***	OTHER ****
		Accurate word order	Inaccurate word order	Accurate word order	Inaccurate word order		
AN	1	12.50% [2]				62.50% [10]	25% [4]
	2			12.50% [2]	6.25% [1]	75% [12]	6.25% [1]
	3	62.50% [10]		6.25% [1]	6.25% [1]	6.25% [1]	18.75% [3]
	4	37.50% [6]	6.25% [1]	18.75% [3]		25% [4]	12.50% [2]
	5	50% [8]	18.75% [3]	25% [4]		6.25% [1]	
	6			18.75% [3]		75% [12]	6.25% [1]
	7	37.50% [6]		12.50% [2]	12.50% [2]	18.75% [3]	18.75% [3]
	8			12.50% [2]		12.50% [2]	75% [12]
	9	12.50% [2]		68.75% [11]		6.25% [1]	12.50% [2]
	10	56.25% [9]	18.75% [3]	6.25% [1]		6.25% [1]	12.50% [2]
TOTAL AN		**26.87% [43]**	**4.37% [7]**	**18.13% [29]**	**2.5% [4]**	**29.38% [47]**	**18.75% [30]**

Table 8. *Production of ANs by the instructed group*

Appendix 5: Results per Item of the Non-Instructed Group in Task 1 (production)

TYPE	ITEM	PRODUCTION	OTHER NNs	TYPE		OTHER
				Accurate word order	Inaccurate word order	
NN	1	81.25% [13]	18.75% [3]			
	2	43.75% [7]	43.75% [7]	6.25% [1]		6.25% [1]
	3	62.50% [10]	12.50% [2]	6.25% [1]		18.75% [3]
	4	25% [4]	68.75% [11]			6.25% [1]
	5	62.50% [10]	12.50% [2]	6.25% [1]		18.75% [3]
	6	62.50% [10]	18.75% [3]	18.75% [3]		
	7	93.75% [15]	6.25% [1]			
	8	50% [8]	31.25% [5]	6.25% [1]		12.50% [2]
	9	43.75% [7]	6.25% [1]	6.25% [1]		43.75% [7]
	10	81.25% [13]	18.75% [3]			
	11	87.50% [14]				12.50% [2]
	12	50% [8]	37.50% [6]			12.50% [2]
	13	25% [4]		6.25% [1]		68.75% [11]
	14	31.25% [5]	62.50% [10]			6.25% [1]
	15	62.50% [10]	37.50% [6]			
TOTAL NN		**57.5% [138]**	**25% [60]**	**3.75% [9]**	**0% [0]**	**13.75% [33]**

Table 9. *Production of NNs by the non-instructed group*

TYPE	ITEM	PRODUCTION		OTHER ANs		TYPE	OTHER
		Accurate word order	Inaccurate word order	Accurate word order	Inaccurate word order		
AN	1	18.75% [3]		6.25% [1]		31.25% [5]	43.75% [7]
	2			6.25% [1]		87.50% [14]	6.25% [1]
	3	50% [8]		25% [4]	6.25% [1]	12.50% [2]	6.25% [1]
	4	25% [4]		25% [4]		6.25% [1]	43.75% [7]
	5	37.50% [6]		25% [4]		6.25% [1]	31.25% [5]
	6			18.75% [3]	12.50% [2]	68.75% [11]	
	7	6.25% [1]			6.25% [1]	18.75% [3]	68.75% [11]
	8			31.25% [5]	12.50% [2]	6.25% [1]	50% [8]
	9			75% [12]	6.25% [1]	6.25% [1]	12.50% [2]
	10	37.50% [6]		25% [4]	6.25% [1]	6.25% [1]	25% [4]
TOTAL AN		**17.50% [28]**	**0% [0]**	**23.75% [38]**	**5% [8]**	**25% [40]**	**28.75% [46]**

Table 10. *Production of ANs by the non-instructed group*

Appendix 6: Results per Item of both groups in Task 2 (interpretation)

INTERPRETATIONS (INSTRUCTED GROUP)						
	SIMILAR	**BE**	**MADE FROM**	**X SERVES AS Y**	**HAVE**	**OTHER**
1	93.75% [15]		6.25% [1]			
2	25% [4]	56.25% [9]		12.50% [2]		6.25% [1]
3	75% [12]	6.25% [1]				18.75% [3]
4	50% [8]		25% [4]	6.25% [1]	12.50% [2]	6.25% [1]
5		25% [4]	6.25% [1]	6.25% [1]	56.25% [9]	6.25% [1]
6				93.75% [15]		6.25% [1]
7	18.75% [3]			68.75% [11]	6.25% [1]	6.25% [1]
8	6.25% [1]	56.25% [9]	6.25% [1]	12.50% [2]	6.25% [1]	12.50% [2]
9	6.25% [1]	81.25% [13]				12.50% [2]
10	6.25% [1]	12.50% [2]			56.25% [9]	25% [4]
11	18.75% [3]	12.50% [2]		6.25% [1]	37.50% [6]	25% [4]
12	56.25% [9]	6.25% [1]	6.25% [1]	25% [4]		6.25% [1]
13		6.25% [1]	81.25% [13]	6.25% [1]		6.25% [1]
14	25% [4]			6.25% [1]	43.75% [7]	25% [4]
15	25% [4]	12.50% [2]	25% [4]		18.75% [3]	18.75% [3]
16	6.25% [1]	6.25% [1]		12.50% [2]	68.75% [11]	6.25% [1]
17	12.50% [2]	18.75% [3]		62.50% [10]	6.25% [1]	
18	12.50% [2]	18.75% [3]	56.25% [9]			12.50% [2]
19	56.25% [9]	6.25% [1]	12.50% [2]	6.25% [1]	6.25% [1]	12.50% [2]
20			62.50% [10]		25% [4]	12.50% [2]
21	18.75% [3]			18.75% [3]	37.50% [6]	25% [4]
22	50% [8]		12.50% [2]			37.50% [6]
23	6.25% [1]	75% [12]		12.50% [2]		6.25% [1]
24	56.25% [9]		37.50% [6]			6.25% [1]
25	56.25% [9]		12.50% [2]	6.25% [1]	18.75% [3]	6.25% [1]
TOTAL	**27.25% [109]**	**16% [64]**	**14% [56]**	**14.5% [58]**	**16% [64]**	**12.25% [49]**

Table 11. *Interpretation results by the instructed group*

INTERPRETATIONS (NON-INSTRUCTED GROUP)						
	SIMILAR	**BE**	**MADE FROM**	**X SERVES AS Y**	**HAVE**	**OTHER**
1	93.75% [15]				6.25% [1]	
2		62.50% [10]		6.25% [1]	6.25% [1]	25% [4]
3	43.75% [7]	18.75% [3]		12.50% [2]		25% [4]
4	75% [12]	6.25% [1]	6.25% [1]	6.25% [1]		6.25% [1]
5		25% [4]		31.25% [5]	18.75% [3]	25% [4]
6		6.25% [1]		75% [12]		18.75% [3]
7	18.75% [3]	18.75% [3]		43.75% [7]	18.75% [3]	
8	12.50% [2]	50% [8]		6.25% [1]	25% [4]	6.25% [1]
9		81.25% [13]			6.25% [1]	12.50% [2]
10	6.25% [1]	31.25% [5]		6.25% [1]	37.50% [6]	18.75% [3]
11	25% [4]	31.25% [5]			25% [4]	18.75% [3]
12	68.75% [11]	6.25% [1]		6.25% [1]	6.25% [1]	12.50% [2]
13	6.25% [1]	12.50% [2]	68.75% [11]			12.50% [2]
14	18.75% [3]	12.50% [2]			43.75% [7]	25% [4]
15	31.25% [5]	37.50% [6]	6.25% [1]		12.50% [2]	12.50% [2]
16	31.25% [5]			18.75% [3]	43.75% [7]	6.25% [1]
17	6.25% [1]	12.50% [2]		50% [8]	12.50% [2]	18.75% [3]
18		37.50% [6]	43.75% [7]			18.75% [3]
19	81.25% [13]	12.50% [2]				6.25% [1]
20		6.25% [1]	18.75% [3]	6.25% [1]	50% [8]	18.75% [3]
21	18.75% [3]	6.25% [1]		37.50% [6]	31.25% [5]	6.25% [1]
22	31.25% [5]		37.50% [6]			31.25% [5]
23	18.75% [3]	25% [4]		50% [8]		6.25% [1]
24	56.25% [9]	6.25% [1]	25% [4]			12.50% [2]
25	43.75% [7]	6.25% [1]	18.75% [3]		6.25% [1]	25% [4]
TOTAL	**27.5% [110]**	**20.5% [82]**	**9% [36]**	**14.25% [57]**	**14% [56]**	**14.75% [59]**

Table 12. *Interpretation results by the non-instructed group*