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# ON THE ASPECT OF DEVERBAL NOMINALS : A CORPUS STUDY OF PERCEPTION NOMINALIZATIONS IN SPANISH

### Elisa BEKAERT

Renata ENGHELS Ghent University

## RÉSUMÉ

Les nominalisations ont essentiellement été analysées d'un point de vue théorique, de sorte que des études de corpus élaborées sont difficiles à trouver. En outre, à l'exception d'un intérêt récent pour les substantifs psychologiques, la littérature s'est généralement concentrée sur les cas prototypiques, à savoir les nominalisations déverbales dérivées de verbes ayant un sujet agentif (comme construction, traduction). Cet article comble ces lacunes en étudiant le comportement aspectuel d'une catégorie négligée, les nominalisations de perception en espagnol (p. ex. vista, mirada, escucha). Afin de montrer que la complexité aspectuelle de ces nominalisations est comparable à l'hétérogénéité de la catégorie apparentée des verbes de perception, des données de corpus de nature différente seront utilisées.

#### ABSTRACT

Nominalizations have mainly been studied from a theoretical point of view and consequently, elaborate corpus studies on this category are hard to find. Moreover, apart from some recent interest in psychological nouns, literature has generally focused on prototypical instances, i.e. deverbal nominalizations derived from verbs with an agentive subject (e.g. construction, translation). This paper fills up these gaps by examining the aspectual behaviour of a fairly neglected class, namely perception nominals in Spanish (e.g. vista, mirada, escucha). Corpus data of different nature are used to show that the aspectual complexity of these nominals is comparable to the heterogeneity of the related class of perception verbs.

### **1. INTRODUCTION**

Deverbal nominalizations have been defined as reclassifications of the corresponding clauses, and it has been argued that there exists a systematic correlation between nominalizations and their arguments, on the one hand,

and between clauses and their verbal heads on the other hand (Hopper, Thompson 1985, Heyvaert 2003, Melloni 2007). This inheritance of the argument structure traditionally led to a strict dichotomy between event and result nominals (Grimshaw 1990, Picallo 1999). The noun *construction* for instance can refer to both the process of building or to its outcome. However, recently, several authors have proposed more balanced descriptions, by refining the category of result nominals (Osswald 2005, Melloni 2007, Scott 2010), and by adding a third group of nominals, namely state nominalizations (Fradin 2011, Fábregas, Marín 2012a), denoting non-dynamic situations such as in *preoccupation*.

Moreover, apart from some recent interest in psychological nouns (Fábregas, Marín, McNally 2012), the literature does not tend to apply these general assumptions to particular nominal classes. Hence, the objective of this paper is to examine the aspect of one specific group of nominals, namely nominalizations of perception (PNs). While many authors have sought to describe the aspect of perception verbs (PVs) (e.g. De Miguel 1999, Fernández Lagunilla 2003), surprisingly their derived nominalizations have not yet been analysed in depth. For that reason the first objective of this article is to examine to what extent the cognitive-semantic oppositions of PVs - voluntary vs. involuntary perception and visual vs. auditory perception - are meaningful for the field of PNs, and how the polysemy of these nominals reflects on their aspectual behaviour. The group of PNs under scrutiny in this article comprises the most frequently used cases, derived from visual perception verbs : visión 'vision', vista 'sight', and mirada 'look'. For auditory perception, the following cases are relevant : audición 'hearing, audition', oido 'ear, hearing' and, escucha 'listening, eavesdropping'. In order to study their aspectual behaviour, this paper adopts Vendler's (1967) theoretical model which differentiates between states, activities, accomplishments and achievements.

This objective is pursued by means of empirical data. Indeed, as most authors concentrate on theoretical assumptions on the process of nominalization, elaborate corpus studies of this grammatical category are hard to find. However, it is only by applying a thorough quantitative and qualitative corpus study that the aspectual complexity of PNs can be explained, as will be demonstrated below. Therefore, in this study, the tests of eventivity and stativity encountered in the existing literature (Fábregas, Marín 2012a among others) will be empirically verified in three kinds of corpora : namely a manually annotated base corpus, the CREA database (*Corpus de Referencia del Español Actual*, see Section 3) and the Web. It will be shown that each of these databases presents some advantages and disadvantages when it comes to defining the aspect of nominals.

In other words, this paper aims to answer the following two research questions : (1) to what extent do PNs show the same aspectual complexity as their verbal bases? (2) how can a corpus analysis of this lexical group

contribute to a better understanding and delimitation of linguistic tests which categorize nominalization types ?

The outline of this paper is as follows. First, we zoom in on the aspectual classification of the two main components of the perception nominalizations, namely the base verb and the added suffixes (Section 2.). Section 3. largely comments on the selection of the analysed data and further clarifies the methodology as well as the advantages and disadvantages of the different types of corpora that are used. Section 4. constitutes the core of the analysis, in which several tests pointing towards different traits of aspectuality are investigated. It will be shown that PNs present a compositional aspect, just like the verbs they derive from, although individual nominals present some clear preferences.

# 2. FROM PERCEPTION VERBS TO PERCEPTION NOMINALS

#### 2.1. The aspectual variety of perception verbs

The semantic nature of perception and perception verbs (PVs) varies according to two parameters, namely the sense of perception and the agentivity of the perceiver. As to the former, the semantics of each verb changes according to the modality of perception : visual, auditory, gustatory, tactile or olfactory. As to the latter parameter, involuntary PVs (ver 'see', oir 'hear') differ from voluntary PVs (mirar 'look', escuchar 'listen') in that voluntary PVs are characterized by a perceiver who actively searches for information, whereas the subject of involuntary PVs assimilates the perception process that catches him by surprise (Kirsner, Thompson 1976 among others). Further, the degree of agentivity of the perceiver - which has been defined in terms of 'control', 'volition' or 'intentionality' – also juxtaposes the two verbal categories (see e.g. Enghels 2007b, Enghels 2013). Specifically, the subject of voluntary PVs has been said to be close to a prototypical agent, whereas involuntary PVs are assumed to be conducted by an 'experiencer' subject (Gisborne 1993, Taylor 1995). This semantic distinction has been shown to have a clear impact on the lexical aspect of the corresponding verbs.

That being said, the aspectual classification of PVs can be regarded as 'mind-bending' (see e.g. Fernández Lagunilla 2003), just like many other properties and phenomena related to this verbal category. This is attested to by the various, often conflicting, aspectual classifications of the PVs, and of the involuntary ones in particular. Indeed, the sources we consulted all agree on classifying verbs like *mirar* and *escuchar* as activities. The aspectual classification of *ver* and *oir* appears to be more controversial : they have been defined as states and achievements, and less frequently as activities and accomplishments.

A first group of authors (Rogers 1974, Vendler 1976, Dowty 1979, Van Valin 1990, Van Valin, Lapolla 1997) argue that, since perception events are

durative and non-dynamic, verbs expressing seeing or hearing must be analysed as passive states. However, one of these authors, Vendler (1967) also refers to the 'spotting sense' of seeing, which already points to its possible classification as achievement verb. This analysis is continued by Van Voorst (1988) and Montserrat Sanz (2000) who refer to the punctual character of perception : seeing a stimulus necessarily implies that you saw it. This idea is repeated in the analysis of Franckel and Lebaud (1990), who confer an inchoative aspect to involuntary PVs. Bromberg *et al.* (1998) define both voluntary and involuntary PVs as activities, which can only be distinguished by the intentional or unintentional character of their subjects.

Interestingly, various authors have referred to the 'multi-aspectual' nature of PVs. Mourelatos (1978 : 423) for instance, classifies the verbs in (1a) as activities and the ones in (1b) as accomplishments, thus implying telicity of the perception process :

a. I'm seeing a bright light; I'm hearing buzzing sounds.b. I saw him cross the street; I heard him sing a serenade.

Willems (1983 : 147) also recognizes the hybrid aspectual classification of *voir* 'see' in French (2a : state ; 2b : activity; 2c : achievement; 2d : accomplishment) :

- (2) a. Je vois mal. 'I see poorly.'
  - b. Je vois une forte lumière. 'I see a bright light.'
  - c. Je l'ai entrevu dans un éclair. 'I saw him very briefly.'
  - d. Je l'ai vu traverser la rue. 'I saw him cross the street.'

De Miguel (1999) contends that the heterogeneous classification of PVs is to be explained by their complex nature : they imply an initial punctual phase and a posterior durative phase.

However, what is important is that (involuntary) PVs do not seem to lend themselves to rigorous classification. Their aspect is strongly influenced by contextual elements and by the polysemy they convey. To give an example, in (2a) cited above, the suppression of the direct object (DO) annuls the dynamic reading of the verb. This state interpretation coincides with the 'faculty'-meaning. Moreover, when *ver* acquires the meaning of 'to visit' (3a), it behaves more like an activity verb, allowing collocates referring to a high degree of agentivity :

(3) a. El paciente ve al médico (voluntariamente) cada día para que este le controle la presión arterial.

'The patient goes to see his doctor everyday so that he can check his blood pressure.'

Interestingly, visual and auditory PVs do not always occur in the same aspectual context. In (4a) the adverbial phrase *poco a poco* 'bit by bit' confers telicity and durativity to the visual process, which can thus be defined as an accomplishment. Comparable contexts with *oir* are hard to find (4b), which suggests that auditory PVs are harder to conceive as telic processes :

(4) a. En la tenue luz que ofrecía la luna poco a poco veía partes de una silueta.

'In the weak light offered by the moon, bit by bit he saw parts of a silhouette.'

(http://www.waece.org/catedra/webcuentos/elgatoblanquinegro.htm, 21/03/2013<sup>1</sup>)

b. ? Poco a poco oía la voz, la canción, the car,...
? Bit by bit he heard a voice, a song, a car,...'

This difference has been explained by the more spatial or 'object' character of visual perception, as opposed to the temporal or 'event' nature of auditory perception (Enghels 2007a). In other words, a stimulus of visual perception can be seen gradually, repeatedly or continuously because of its three-dimensional nature, whereas auditory perception is more temporary and punctual because of the fleeting character of sounds<sup>2</sup>.

In conclusion, the aspectual nature of PVs seems to be largely determined by the basic meaning of the verbs – contrasting not only voluntary to involuntary but also auditory to visual perception –, contextual elements, and their respective polysemy. However, the (compositional) aspect of deverbal nominalizations could be even more complex than that of the corresponding verbs, given the possible impact of the suffixes added to the verbal bases (Díaz Hormiga 2005, Amador Rodríguez 2009).

<sup>&</sup>lt;sup>1</sup> The annexed date is the date the website was last consulted.

<sup>&</sup>lt;sup>2</sup> This has already been stated by Miller and Johnson-Laird (1976:42) :« An observer stands watching a scene. He sees a man and hears the man call to a friend. At that point the observer turns away momentarily. When he turns back, he sees the man again, and again hears the man call to a friend. The observer believes that he saw the same man both times, but he does not believe that he heard the same call both times. The man is perceived as an object persisting through time, but the call is perceived as an event that occurs and is gone. ».

### 2.2. The aspectual import of suffixation

Following the principle of iconicity, an extra formal marking implies an additional semantic value (Haiman 1980). Therefore, all suffixes can be assumed to add a certain semantic content to their base, albeit a weak one (Melloni 2007 : 74). Indeed, the morphemes *-ión*, *-do/-da/-ta* as well as zero affixation add their own semantic and aspectual values when involved in the process of nominalizing perception verbs.

The suffix *-ión* has been defined as a transpositional suffix, principally acting as a category changer (Bisetto, Melloni 2005, Fábregas 2010). It has been shown to constitute a very flexible suffix, which can add polysemy to nominals. For instance, it can convey concrete meanings to the nominal, often through metonymical transpositions (e.g. *construction*, as an event or the result of an event) (Pharies 2002, Melloni 2007, Amador Rodríguez 2009). However, Fábregas and Marín (2012a) argue that this suffix does not contain any inherent aspectual information and hence does not change the aspect of *visión* and *audición* exclusively depends on their verbal base and other elements within the phrase.

Next, the suffixes -do/-da and their allomorphs (e.g. -ta) have been shown to display clear Aktionsart properties (Melloni 2007 : 108)<sup>3</sup>. Given that they derive from the past participle, they are assumed to be strongly related to the perfective value of this verbal form (Amador Rodríguez 2009). More particularly, these suffixes are said to trigger the referential reading. Furthermore, the suffix -(a)da has been associated with a path interpretation, which explains why it is often agglutinated to verbs of inherent direction to form both event and referential nominals (e.g. *llegada* 'arrival', *salida* 'exit') (Melloni 2007, Fábregas 2010, Fábregas, Marín, McNally 2012). Within the scope of this hypothesis, the aspect of *mirada*, which combines a verbal base that has often been described in terms of expressing 'a perceptual path' (Hanegreefs 2008, among others) with the suffix -(a)da, will be investigated.

Finally, zero suffixation or conversion implies that the derivation is not realized through the addition of a suffix, but through a categorical change of the base (e.g. *escuchar* > *la escucha*) (Amador Rodríguez 2009). Consistent with the iconicity principle, it can be presumed that zero suffixation does not add any additional aspectual information to the verbal base.

### **3.** CORPUS AND METHOD

While most studies on nominalizations tend to formulate theoretical assumptions based on laboratory or isolated examples (*cf.* Grimshaw 1990, Picallo 1999, Alexiadou 2001, Meinschaefer 2005, Fábregas, Marín 2012a,

<sup>&</sup>lt;sup>3</sup> The allomorphs arise as a consequence of the existence of irregular participles in Spanish (e.g. *dicho, escrito, respuesta, vista*).

among others), this investigation is corpus-based and aims to provide both a quantitative and a qualitative analysis of the aspect of PNs. Moreover, this paper examines whether the linguistic tests proposed to ascertain the aspectual classification of nominals can be retrieved in a corpus (Huyghe, Marín 2007, Barque *et al.* 2009, Fábregas, Marín 2012a, Fábregas, Marín, McNally 2012). Our corpus study consists of three phases, in which different subcorpora are analysed, each one presenting benefits and disadvantages compared to the other two types.

**3.1.** In a first phase, an extensive corpus of 1200 attested examples (200 contextualized instances per PN) was extracted from the Corpus de Referencia del Español Actual (CREA)<sup>4</sup>. After eliminating idiomatic expressions<sup>5</sup>, these examples were manually annotated by means of a number of parameters which provide detailed quantitative and qualitative information on the distributional properties of the PNs at different levels : the morphology of the token itself (e.g. suffixation, number); the behaviour of the PN at the nominal phrase level (e.g. determination, modification, argumentation) but also at sentence (e.g. main verb, function) and discourse (corpus nature) level. Nevertheless, this base corpus does not easily allow for verifying different tests of aspectuality, because of its limited size. In fact, as multiword searches naturally restrict the number of instances (Bergh, Zanchetta 2008, Lew 2009), it often appears difficult to retrieve collocations in closed corpora. For instance, one of the tests cited in the literature (see Section 4.3.) to determine the durative character of a nominal is its ability to be introduced by a lo largo de ('throughout'). However, the corpus does not provide any sequences of the type a lo largo de + PN.

**3.2.** In a second phase, the base corpus was broadened to all the peninsular data included in CREA (85.563.661 words). This database allows searching for specific collocations which can be informative on the aspectual nature of the PNs. Specific queries within the corpus are conducted through the distance operator of CREA (dist/), which makes it possible to search for spread collocations<sup>6</sup>. This corpus could not be annotated for the extensive

<sup>&</sup>lt;sup>4</sup> Real Academia Española : Online CREA database : Corpus de referencia del español actual (http://www.rae.es). For each example, detailed references will be added, so that the context can easily be retrieved. Half of the examples have been drawn from literary sources, half from press texts.

<sup>&</sup>lt;sup>5</sup> Idiomatic expressions (as they have been defined by the Real Academia Española (2009 : 53-54) and Piera and Varela (1999 : 4403)) had to be eliminated from the corpus since they could distort our results. This explains why the final number of annotated examples was less than 1200.

<sup>&</sup>lt;sup>6</sup> For instance, in order to retrieve the collocation *durante* + PN, and thus to determine the dynamicity and durativity of PNs, the following queries were conducted in CREA : escucha\* dist/5 durante; audición dist/5 durante; audiciones dist/5 durante; oído\* dist/5 durante; mirada\* dist/5 durante; visión dist/5 durante; visiones dist/5 durante; vista\* dist/5

range of parameters, but - as opposed to the third corpus type which is commented on below - has the advantage of overtly indicating the source of the respective instances.

**3.3.** As CREA does not allow testing all the different collocations either (in the end it is also a 'closed' corpus, albeit an extensive one), the Web was introduced as a complementary data source in a third phase (Kilgarriff, Grefenstette 2003, Sharoff 2006, Fletcher 2012). More concretely, the most common search engine, Google, was used to search for specific combinations which allow one to define the nominal aspect<sup>7</sup>. It will be shown that the patterns used as linguistic tests are hard to retrieve in closed corpora, but do appear on the Web, the two data sources thus becoming complementary resources. The Internet has the advantage of being an infinite database, which makes it possible to discover patterns of natural language. Moreover, the use of the Web as a corpus partially solves the problem of negative evidence. It is well known in fact, that the absence of a certain collocation in a corpus does not mean that the phrase does not exist. Yet, the larger the data set, the stronger the evidence of non-existence (Lew 2009). On the other hand, as the origin of the amount of data collected on the Web remains largely unknown, the Internet still does not lend itself to any quantitative conclusions.

In what follows, the aspectual classification of PNs will be examined through the application of the tests for nominal aspectuality encountered in the existent literature. After having restricted the data set to the non-referential uses of PNs (4.1.), we will first examine their eventive or stative nature (4.2.). Once the eventive uses of PNs have been defined, their temporal extension (4.3.) as well as their telicity (4.4.) will be examined.

durante. In these queries, the asterisk replaces an undefined number of characters, allowing the inclusion of the plural form, in some cases.

The following illustration will give an idea of how we proceeded. To examine whether the PNs combine with temporal expressions, and thus whether they are durative, the following queries were conducted in Google :

allintext:	"escucha audición oído mirada visión vista	de	dos 2 tres 3 cuatro 4 vari(o/a):	horas" días semanas	site :.es
	vista		vari(o/a) 24 horas	S	

The "allintext"-operator allows the elimination of the mainly unusable instances where the PNs appear in a title. At the same time, the addition of the specification "site :.es" to each query reduces the number of inaccurate instances, as it limits the search to peninsular Spanish websites.

### 4. PERCEPTION NOMINALIZATIONS AND ASPECTUALITY

#### 4.1. Testing aspectuality of nominals

Before moving on to the aspectual classification of PNs, their referential uses must be set aside. Indeed, referential nominals behave like object nouns and thus lack any aspectual content. As is well-known, deverbal nominalizations are divided into event and result nominals (Grimshaw 1990, Alexiadou 2001, Melloni 2007 among others) : the former are said to preserve both the morphosyntactic and the aspectual properties of their corresponding verbs, while the latter refer to the outcome of the event and thus display a purely nominal character. More recently, the narrow interpretation of the result type has been redefined and the following subsets have been added to the category of 'referential nominals' (Melloni 2007 : 11) : product / result (*construction*), means (*connection*), psychological stimulus (*attraction*), path (*prolongation*), agentive-collective (*administration*), and locative (*entry*).

In order to identify these referential nominal readings in the corpus, a number of tests will be applied. The first test involves the possibility of a nominal to pluralize. Plurality has traditionally been associated with referential nominals, as they behave like common nouns (Grimshaw 1990, Alexiadou 2001). Although many authors have recently emphasized the possibility of the plural form occurring with bounded events (see Section 4.2.3.) (Picallo 1999, Bisetto, Melloni 2005, Knittel 2011), pluralization can be considered as a strong indicator of referential use<sup>8</sup>. A second test involves the possibility to explicitly mention an agent. Referential nominals reject the presence of an agent introduced by por (parte de) 'by' and only admit arguments to be introduced by the preposition de 'of' (Grimshaw 1990, Picallo 1999, Huyghe, Marín 2007). A last test implies the presence of time expressions. As opposed to both events and states, referential nouns are not situated in time; consequently they reject time expressions and do not trigger a temporal reading of adjectives such as corto 'short', largo 'large', infinito 'infinite', etc. (Melloni 2007, Fábregas, Marín 2012a/b, Marín, Villoing 2012).

Although these tests will not be elaborated on here, they do allow discriminating between the referential uses of PNs. In fact, an application of these tests to the base corpus reveals that mainly *oido* and *vista* present referential uses. This can easily be explained by the input of the past participial suffix *-do/-ta*, related to the perfective value of the verbal form (see Section 2.2.). *Oido* is strongly lexicalized in its referential reading when it refers to the 'ear' (5), whereas *vista* can refer to a panorama (6a) or a picture (6b), both clear instances of referential uses :

<sup>&</sup>lt;sup>8</sup> However, this is not an exclusive criterion, as will be shown in Section 4.4.

- (5) La otitis es un proceso inflamatorio común que afecta al oído [...].
   'Otitis is a common inflammatory process that affects the ear [...]. ' (CREA : Francisco Javier Lavilla Royo, Familia y salud)
- (6) a. La Acedía ofrece unas vistas magníficas de Sierra Bermeja.
   'La Acedía offers some magnificent views of Sierra Bermeja.'
   (CREA : Diario Málaga-Costa del Sol, 22/01/2004)
  - b. Si a ello se añade la subjetividad de la fotografía actual [...]. Aquí sobresalen las vistas de las instalaciones de Gerardo Suter [...].
    'Taking into account the subjectivity of the actual photography [...]. Here the images of the installations of Gerardo Suter excel [...].' (CREA : El Cultural, 21/11/2003)

These referential uses will not be taken into account in this study, since they lack any aspectual content.

In the remainder of this article, a number of linguistic tests proposed in recent literature will be applied to the corpus data, in order to determine the aspectual classification of the nominals of perception. First, the analysis of the feature [ $\pm$  dynamicity] will distinguish between stative and eventive readings. States constitute non-dynamic eventualities which occupy a certain time span (Fábregas, Marín 2012a) (Section 4.2.). Next, the features [ $\pm$  duration] (Section 4.3.) and [ $\pm$  telicity] (Section 4.4.) will be applied to the purely eventive uses, which will differentiate between activities [+ duration] [- telicity], accomplishments [+ duration] [+ telicity] and achievements [- duration] [+ telicity] (Vendler 1967).

### 4.2. The stative vs. eventive nature of PNs

Recently, several authors (Huyghe, Marín 2007, Melloni 2007, Barque *et al.* 2009, Fábregas, Marín 2012a) have pointed out the need to distinguish between event nominals and state nominals. In fact, a vast range of tests have been developed – based mainly on laboratory or isolated examples – in order to recognize the state reading. These will be verified in the corpus in order to examine to what degree stativity applies to PNs.

**4.2.1.** To begin with, as opposed to events, states denote non-dynamic eventualities. Therefore, they cannot be the subject of verbs that describe dynamic situations, such as *tener lugar* 'take place' or *producirse* 'occur' (7)<sup>9</sup> (Godard, Jayez 1994, Fradin 2011, Fábregas, Marín 2012a, Fábregas, Marín, McNally 2012, Marín, Villoing 2012) :

\*Su aburrimiento / obsesión tuvo lugar en Barcelona.
 'His boredom / obsession took place in Barcelona.'

As has been mentioned before, specific instances of these tests are hard to find in a traditional closed – albeit large – corpus such as CREA. However,

<sup>&</sup>lt;sup>9</sup> Examples (7) and (12) are based on Fábregas, Marín and McNally (2012).

when we look for these collocations on the Web, it turns out that all PNs can be combined with 'dynamic' verbs, except for *oido* :

- (8) a. [...] sin saber nunca si las visiones eran o no reales ni si tenían lugar en la antigüedad clásica o en la actualidad.
   `[...] without ever knowing whether the visions were real or not, nor whether they took place in Classical antiquity or in the present.'
   (CREA: La Vanguardia, 21/07/1994)
  - b. [...] cómo se han producido las escuchas [...].
    `[...] how the acts of eavesdropping took place [...].
    (CREA: El Mundo, 15/06/1995)

A closer look at the non-referential uses of *oido* indicates that they always refer to the ability to perceive sound, or more generally to the sense of hearing (9).

(9) Estas personas, en muchos casos, [...] notan una pérdida de agudeza visual, de memoria y de oído [...].
'Those persons, in many cases, [...] notice a loss of visual sharpness, of memory and of hearing [...].'
(CREA : Ana María Lajusticia Bergasa : Colesterol, triglicéridos y su control, 2002)

It can therefore provisionally be concluded that *oido* denotes a state when referring to the perception ability. Moreover, when isolating the ability meaning of the other PNs in the base corpus, *audición*, *visión* and *vista*, it appears that they do not combine with dynamic verbs either, such as *tener lugar* or *producirse* (compare 10a with 10b). *Mirada* and *escucha*, on the other hand, do not present the ability use and are easily combined with dynamic verbs in their different meanings (11). This first test thus suggests that PNs constitute states when they denote the ability of perception.

(10) a. La audición, por su parte, tiene también función orientadora en el medio en que nos desenvolvemos y [[\*/?]tiene lugar [...]].

'The sense of hearing, on the other hand, also has an orientating function in the environment in which we live and [[\*/?]] takes place [...]].'

(CREA : I. Araujo; I. Jiménez; J.R. Garitaonanindía : Proyecto y vivienda. El diseño de los espacios para el hombre, 1996)

b. Aquellas primeras audiciones junto al piano debieron tener lugar en las semanas de la sarna [...].
'Those first auditions next to the piano must have taken place in the

weeks of scabies [...].'

(CREA : Juan García Hortelano : Mucho cuento, 1987)

(11) [...] la noticia de que se han producido escuchas o grabaciones [...].
 '[...] the news that acts of eavesdropping or recordings took place.'
 (CREA : La Vanguardia, 02/07/1995)

Moreover, states cannot be the object of a light verb construction such as *realizar* 'realize' or *llevar a cabo* 'carry out' either, since these also imply the dynamicity of their internal argument (12a) (Huyghe, Marín 2007, Barque *et al.* 2009). Finally, they cannot appear with time expressions such as N en curso / en curso de N, i.e. 'in progress', or antes de N 'before N', después de N 'after N' or durante N 'during N' (12b) (Barque *et al.* 2009, Fradin 2011, Fábregas, Marín, McNally 2012, Marín, Villoing 2012).

- (12) a. \*Realizar / Llevar a cabo una preocupación / un arrepentimiento \*To realize / carry out a preoccupation / repentance'
  - b. \*Antes de / Después de / Durante / En curso de su desesperación, no hagan ruido.
    \*Before / After / During / In course of his desperation, don't make noise.'

Indeed, both *oido* and the ability meanings of the PNs *audición*, *visión* and *vista* do not appear in these constructions in the corpus, whereas they do occur with the different meanings of *mirada* and *escucha* (13).

- (13) a. Tras haber realizado unas irónicas miradas sobre las monarquías [...].
   'After having realized some ironical views on the monarchies [...].'
   (CREA : El País, 22/03/2003)
  - b. [...] no debe confundirse con los momentos esporádicos de atención que se producen durante una escucha pasiva.

'[...] must not be confused with sporadic attentive moments that take place during the act of overhearing.'

(CREA : José Javier Muñoz, César Gil : La Radio : Teoría y Práctica, 1994)

**4.2.2.** In their non-dynamic character, state nouns pattern with referential nominals. However, like most event nominals (see Section 4.3.), states do occupy time spans and can be modified by a time expression such as *de X semanas* 'of X weeks' or *de varios meses* 'of several months' (Fradin 2011, Fábregas, Marín 2012a). Yet, what distinguishes states from both event and referential nominals is that they obey the subinterval property (Fábregas, Marín 2012b, Fábregas, Marín, McNally 2012), as is shown from a comparison of the examples (14a-14b).

- (14) a. Una preocupación de varios meses 'A preoccupation of several months'
  - b. La traducción de la Eneida de varios meses 'The translation of the Aeneid (which took) several months'

The former implies that at all moments during those months, the preoccupation affects the experiencer, while this does not apply to the event nominal in (14b), where the translator has not been translating the Aeneid continuously. However, the subinterval property is a criterion which is hard

to verify through corpus data. Moreover, the ability senses – defined as stative – do not combine with these time expressions in the corpus.

**4.2.3.** Next, unlike referential nominals and most events, states reject pluralization. Traditionally, plurality has been associated with the referential interpretation, but recent literature has clearly demonstrated that bounded events also accept plural formation. Plurality is then used to refer to repeated instances of these bounded events (Picallo 1999, Bisetto, Melloni 2005, Knittel 2011).

To put it differently, only nominals derived from verbs that denote events with an inherent *télos* can adopt this reading since they can be recategorized as count nouns (e.g. *invasiones* 'invasions'). Both activities and states, which are characterized as unbounded and homogeneous, behave like mass nouns and therefore rule out pluralization (e.g. *\*jardinerías* 'gardenings', *\*aburrimientos* 'boredoms') (Bisetto, Melloni 2005, Melloni 2007, Fábregas, Marín 2012a). In fact, the plural forms of the PNs in the base corpus never refer to the ability meaning<sup>10</sup>.

**4.2.4.** Finally, several studies have established a relationship between agentivity and dynamicity (Huyghe, Marín 2007, Barque *et al.* 2009, Fradin 2011, Fábregas, Marín 2012a)<sup>11</sup>. Given that agentivity implies dynamicity, states systematically reject the explicit mention of an agent, introduced in Spanish by *por (parte de)* 'by' (15).

(15) \*El aburrimiento por (parte de) Juan 'The boredom of Juan'

Indeed, the ability meanings do not allow for the introduction of the First Argument (referring to the perceiver)<sup>12</sup> by *por (parte de)* in any of the three databases that have been examined. This assumption must, however, be tempered since aside from the ability meanings, the expression of agentivity by *por* is very rare with PNs (Bekaert, Enghels, 2014). Nevertheless, it is interesting to note that the preposition does occur with *escucha*.

(16) [...] para impedir cualquier escucha por parte de personas no autorizadas.
 'to avoid any eavesdropping by non-authorized persons'
 (CREA : E. García de Enterría, A. Tizzano, R. Alonso García: Código de la Unión Europea, 1996)

<sup>&</sup>lt;sup>10</sup> In Section 4.4., the pluralization of the different eventive uses will be further analyzed, as it allows us to determine their telicity to some extent.

<sup>&</sup>lt;sup>11</sup> As has been argued by Enghels (2009), the notions of agentivity and dynamicity are related but not synonymous. Agentivity implies conscious control of a change of state, whereas dynamicity merely refers to a change of state, which can be physical or mental, intentional or not.

<sup>&</sup>lt;sup>12</sup> In the perception process, the perceiver is called First Argument (FA), while the term Second Argument (SA) refers to the stimulus of perception.

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**4.2.5.** In summary, the application of a stativity test to both the CREA corpus and the Web clearly emphasizes the stative nature of the ability uses of PNs. Table 1 visualizes the frequency distribution of the different uses of the PNs in the base corpus :

	Audición		Escucha		Oído		Visión		Mirada		Vista	
	#	%	#	%	#	%	#	%	#	%	#	%
Referential	-	-	-	-	122	78,21	-	-	-	-	26	66,67
Stative	41	30,60	-	-	34	21,79	6	3,41	-	-	12	30,77
Eventive	93	69,40	158	100	-	-	170	96,59	172	100	1	2,56
Total	134	100	158	100	156	100	176	100	172	100	39 <sup>13</sup>	100

Table	1 -	Uses	of PNs
1 auto	1.	0303	011113

It is particularly interesting to observe that the nominals derived from involuntary PVs, *audición, visión* and *vista*, present stative uses, as opposed to nouns derived from voluntary PVs, *mirada* and *escucha*. This recalls the aspectual classification of their corresponding verbs (see Section 2.1.). Moreover, this partial classification as states implies that the PNs must be eventive in other uses and thus that the class of PNs seems to be as heterogeneous as their corresponding verbs, displaying a 'multi-aspectual' and compositional profile. This profile will be further elaborated by examining the durative or punctual character (4.3.), as well as the (a)telic nature (4.4.) of the PNs<sup>14</sup>.

## 4.3. Temporal extension of eventive PNs

According to the traditional aspectual classification proposed by Vendler (1967), activity verbs (*dance, work*) and accomplishment verbs (*write a letter*) are [+ durative], whereas achievements (*recognize*) are [+ punctual]. It has already been shown that voluntary PVs, such as *mirar* and *escuchar*, represent durative activity events, whereas the classification of involuntary PVs *ver* and *oir* is less clear-cut. As a consequence, it would be interesting to investigate how the PNs under scrutiny bear the durativity tests.

It must be said that it appears difficult to encounter tests of nominal durativity in the existing literature. However, Barque *et al.* (2009) refer to whether or not nominals are able to combine with durative complements such as *de X semanas* 'of X weeks' or *de varios meses* 'of several months'.

<sup>&</sup>lt;sup>13</sup> The low number of instances with vista can be explained by the frequency of idiomatic expressions, and in particular the expression *punto de vista* 'point of view'.

<sup>&</sup>lt;sup>14</sup> Note, however, that in what follows *oldo* will be set aside because of its partially referential, partially stative meaning.

The Web analysis shows that PNs do accept these time expressions :

- (17) a. [...] respondió a las preguntas de los eurodiputados de tres comisiones parlamentarias en una audición de tres horas de duración.
  `[...] answered the questions of the MEPs of three parliamentary commissions in an interrogation lasting three hours.'
  (http://www.flashesdelaiglesia.es/index.php?option=com\_content&vie w=article&id=2636:el-parlamento-europeo-da-el-visto- bueno-a-tonio -borg-como-comisario-de-salud-y-consumo&catid=15&Itemid=56, 22/02/2013)
  - b. 1 hora de carga permite una escucha de 6 horas.
    'One hour of charge allows 6 hours of listening.'
    (http://www.dcqoutlet.es/index.php/multimedia-electronicaaudioaccesorios/audio-hifi-microcadena, 19/02/2013)
  - c. [...] el entretenimiento que supone la visión de dos horas largas de una película llena de movimientos, acción, intriga y magia, [...].
    `[...] the entertainment entailed by watching two long hours of a movie full of movements, action, plot and magic, [...].'
    (http://www.ciao.es/Harry\_Potter\_y\_la\_Camara\_Secreta\_Opinio n\_635243, 22/02/2013)
  - d. Una mirada de 24 horas sobre la plaza descubre locales con solera [...].

'A gaze of 24 hours onto the place reveals traditional spots [...].' (http://www.ccoomadrid.es/comunes/recursos/14/doc23914\_Resumen \_de\_prensa\_del\_lunes,\_23\_de\_agosto\_de\_2010.pdf, 22/02/2013)

e. [...] han sido acusados oficialmente en una vista de dos horas de proveer de material a Al Qaeda.
`[...] were officially accused in a two-hour long hearing of providing material to Al Qaeda.'

(http://www.elmundo.es/elmundo/2002/09/16/internacional/10321798 92.html, 22/02/2013)

These observations lead to the interim conclusion that PNs frequently present durative uses, except for *mirada*, which only presents one such collocation. Moreover, once again it appears that the PNs constitute an extremely heterogeneous class given that the acceptability of these time expressions largely depends on the semantics of the PN, as will be shown below. In order to refine these results, more tests must be invoked, such as the durativity tests which have been applied in the verbal domain. Durative verbs are, for instance, said to accept duration adverbs, such as *a lo largo de* X 'throughout' (Vanhoe 2004, Enghels 2007a). This prepositional phrase frequently co-occurs with PNs, with the exception of *mirada* :

- (18) a. A lo largo de la audición, Xavi valorará su talento [...].
   'During the audition, Xavi will evaluate their talent [...].' (http://www.rtve.es/television/20090821/coro-carcel-vuelve-1/289680.shtml, 8/03/2013)
  - b. [...] que se sacrifiquen los resultados de las investigaciones anteriores, constatadas a lo largo de las escuchas [...].
    `[...] that the results of earlier investigations gained by eavesdropping be sacrificed [...].'
    (http://www.poderjudicial.es/search/documento/TS/5591162/robo/20100520, 8/03/2013)
  - c. A lo largo de la visión histórica occidental, el denominador común para referirse al otro ha sido el término de 'salvaje' [...].
    'During/through the Western historical vision, the common denominator when referring to the Other was the term 'savage' [...].' (http://cvc.cervantes.es/ensenanza/biblioteca\_ele/inmigracion/didacti ca\_inmigrantes/rios01.htm, 8/03/2013)
  - d. [...] a lo largo de la vista oral no se había podido demostrar que formaran parte de Bateragune.
    `[...] during the hearing it could not be demonstrated that they were part of Bateragune.'
    (http://www.elmundo.es/elmundo/2011/09/16/espana/1316151810. html, 13/03/2013)

These data point towards some preliminary conclusions. First, when *vista* is not referential or stative, it overtly appears in durative contexts, referring to a legal hearing (17e, 18d). Secondly, both *audición* and *escucha* meet the duration threshold in several uses. The examples (17a) and (18a) indicate that *audición* denotes a durative event when it refers to an interrogation or an audition. Moreover, example (19) suggests that, when *audición* merely refers to the process of auditory perception, it is also durative. Similarly, *escucha* is durative when it denotes a process of listening (17b) as well as an act of eavesdropping (18b).

(19) Efectivamente a lo largo de la audición de las piezas musicales que proponemos vamos a asistir a un completo recorrido musical [...].
'In fact, while hearing the musical pieces that we propose, we will make a complete musical journey [...].'
(http://pendientedemigracion.ucm.es/info/cv/artes/musica\_esp\_guitarra. pdf, 8/03/2013)

However, the classification of both *mirada* and *visión* needs some additional clarifications. First, the above-mentioned tests suggest that *mirada* is non-durative. However, this is not confirmed when we look at the nature of the adjectives this PN combines with. If durative verbs combine with duration adverbs, and punctual verbs only appear with punctual adverbs (Pustejovsky 1991, Enghels 2007a), it can be assumed that nominals dis-

playing the trait [+ durative] will appear with adjectives expressing duration, such as *prolongado/a* 'prolonged, lengthy'. Similarly, punctual nominals will only combine with punctual adjectives, such as *fugaz* 'fleeting'<sup>15</sup>. However, *mirada* permits both adjectives, both in its perceptual (20a, 20b) as in its more cognitive meaning (20c, 20d) :

(20) a. Clodetta lanzó una mirada fugaz al otro extremo de la mesa, hacia su marido.

'Clodetta shot a fleeting look at the other end of the table, towards her husband.'

(http://www.elcultural.es/version\_papel/LETRAS/27420/La\_nieve \_que\_arrastra\_el\_viento, 14/03/2013)

- b. Sin embargo, en ciertas situaciones la mirada prolongada y demasiado próxima puede provocar irritación o malestar.
  'However, in certain situations, a prolonged and up-close look can provoke irritation and discomfort.'
  (http://eprints.ucm.es/1714/1/AH1004801.pdf, 15/03/2013)
- c. [...] huyendo del destello propio de la mirada fugaz [...].
  `[...] escaping from the typical fleetingness of the quick look [...].' (http://www.elcultural.es/version\_papel/ARTE/1422/Marine\_Hugonnier, 14/03/2013)
- d. [...] el autor va a dedicar en adelante el grueso de su obra con una mirada prolongada y minuciosa a los aspectos demográficos [...].
  `[...] from now on, the author is going to dedicate a major part of his book to a prolonged and meticulous look at the demographic aspects [...].'

(http://ifc.dpz.es/recursos/publicaciones/27/25/22.Salas\_Ausens.pdf, 15/03/2013)

The same holds for *visión* in most of its meanings. Consider the following examples, where (21a) and (21b) denote a process of visual perception, while (21c) and (21d) present a more cognitive meaning.

(21) a. La visión fugaz desde el AVE de los hermosos paisajes del Tajo [...].
 'The fleeting view from the AVE of the beautiful landscapes of the Tagus [...].

(http://www.uam.es/departamentos/filoyletras/geografia/descargas/ IN%20MEMORIAM. pdf, 15/03/2013)

<sup>&</sup>lt;sup>15</sup> Other adjectives that point towards the punctual character of a nominal are, for example, *instantáneo/a* 'instantaneous' and *puntual* 'punctual', while an adjective such as *largo/a* 'long' makes it possible to define the durative character of a noun.

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b. La visión prolongada de la televisión (TV) es una de las conductas sedentarias más frecuentes y generalizadas en los países industrializados [...].

'Watching television for a long time (TV) is one of the most frequent and generalized sedentary behaviours in the industrialized countries [...].'

(http://www.elsevier.es/sites/default/files/elsevier/eop/S1889-1837%2811%2900131-0.pdf, 18/03/2013)

c. [...] todos ellos con una visión fugaz de la existencia, y con grandes ansias de gozar de los placeres de la vida.

'[...] all of them with a fleeting view of existence, and with a strong desire to enjoy the pleasures of life.'

(http://dialnet.unirioja.es/servlet/libro?codigo=316695, 15/03/2013)

 d. El futuro –en la visión prolongada de un socialismo globalizado – es, para los pueblos de esta región, como para los demás, democracia y secularismo.

'The future – in a long view of a globalized socialism – is, for the villages of this region, as for the others, democracy and secularism.' (http://www.tercerainformacion.es/spip.php?article22530, 18/03/2013)

Two other uses of *visión*, referring to a general overview (22a, 22b) or to a divine vision (22c, 22d), seem purely durative :

- (22) a. [...] no es lo suficientemente amplio como para ofrecer una visión prolongada de la aplicación y resultados de la normativa.
  `[...] it does not suffice to offer a prolonged overview of the application and results of the regulations.'
  (http://www.ugt.es/inmigracion/memoriaactividades2003.pdf, 18/03/2013)
  - b. El Día Mundial Contra la Piratería proporciona una visión de 24 horas de la gama de iniciativas de formación y acciones legales que se desarrollan [...].

'The World Day Against Piracy provides a 24-hour long overview of the range of formation initiatives and legal actions that are being developed [...].'

(http://www.europapress.es/economia/noticia-comunicadomicrosoft-anuncia-dia-mundial-contra-pirateria-20081021172115.html, 22/02/2013)

c. Lo que Pablo experimentó en una visión real y de éxtasis, Rafael lo vivirá en una visión prolongada de fe, convencido [...] de que era el mismo Dios lleno de amor, el protagonista de su drama.
'What Pablo experienced in a real and ecstatic vision, Rafael will experience in a prolonged vision of faith, convinced [...] that it is God himself full of love, the protagonist of his drama.'

(http://www.abadiasanisidro.es/rafael2/boletines/boletin169.pdf, 18/03/2013)

d. El relato de una visión de dos horas fue publicado en la última parte del verano bajo el título de 'El gran conflicto entre Cristo y sus ángeles y Satanás y sus ángeles'.
'The story of a two-hour long vision was published in the last part

of the summer under the title of 'The big conflict between Christ and his angels and Satan and his angels'.'

(http://www.mashpedia.es/Ellen\_G.\_White, 22/02/2013)

These data clearly show that the durative or punctual character of *visión* and *mirada* largely depends on their meaning and, consequently, the context in which they occur. In other words, as has been observed for the involuntary PVs, the aspectual classification of the derived PNs is mainly compositional. Moreover, since a clear distinction could be made between *audición* and *escucha* on the one hand – being evidently durative – and *mirada* and *visión* on the other hand – displaying a more versatile nature – it seems that the opposition between visual and auditory perception is also decisive for the aspectual nature of the PNs, next to the dichotomy between voluntary and involuntary perception. This seems especially the case for the [+/- durativity] trait and goes against the aspectual classification of PVs, in which the opposition between voluntary and involuntary perception is clearly the dominant one.

# 4.4. Telicity and boundedness of eventive PNs

It is well known that accomplishment (*write a letter*) and achievement verbs (*recognize*) are telic, while activity verbs (*work, dance*) are atelic. The only test proposed by Barque *et al.* (2009) to distinguish between telic and atelic nominals is the 'imperfective paradox' (based on Dowty 1979). Whereas the combination of the telic nominal *mending* with the verb *inter-rupt* does not entail that the roof was finally mended (23a), the use of the atelic nominal *demonstration* in the same construction implies that a demonstration actually took place  $(23b)^{16}$ :

- $(23) \quad a. \ \ The mending of the roof was interrupted.$ 
  - b. The demonstration was interrupted.

However, this criterion is hard to verify in a large corpus, and needs to be complemented by other tests, such as the abovementioned pluralization test. Given that atelic nouns refer to unbounded and homogeneous events, they behave like mass nouns which rarely pluralize (see Section 4.2.3.; Bisetto, Melloni 2005, Melloni 2007). Thus, by counting the occurrence of plural

<sup>&</sup>lt;sup>16</sup> Examples (23) are based on Barque *et al.* (2009 : 171).

	Audiciones		Escuchas		Visiones		Miradas		Vistas	
	#	%	#	%	#	%	#	%	#	%
physical perception event	1/60	1,67%	3/61 4,92%		0/19	0%	_		_	-
audition	10/ 22	45,45%	-		_		_		_	
interrogation	8/12	69,23%		_		_	_		-	
eavesdropping	_		90/97	92,78%		_	-		-	
cognitive perception event		_	_		3/116	2,59%	3/58	5,17%	-	_
overview		_	_		0/25	0%	_		-	
divine vision		_	-		4/10	40%	_		-	
look, gaze		_	_			_	11/114	9,65%	-	-
lawsuit		_	-		_		_		0/1	0%

forms of PNs in our base corpus, we get a clearer view on their telicity, while also taking into account their polysemy.

Table 2. - Distribution of the plural form with PNs

It appears that PNs rarely appear in plural when referring to a direct perception event. This is particularly striking for both *audición* and *escucha*, which scarcely pluralize in their direct perception meaning, but frequently appear in the plural form in their other uses :

- (24) a. Para el estreno de En cadena, se convocaron audiciones entre los distintos grupos de teatro universitarios.
  'For the premiere of En cadena, auditions were held among the different university theatre groups.'
  (CREA : El Mundo, 20/11/1996)
  - b. Al comienzo de las audiciones, el senador Thompson identificó la mano del Gobierno chino, como reconocieron también varios de los miembros demócratas del comité [...].
    'At the beginning of the hearings, senator Thompson identified the influence of the Chinese government, as several democratic members of the committee also acknowledged [...].' (CREA : ABC Electrónico, 15/11/1997)
  - c. El apoyo de la oposición permite al Gobierno alemán legalizar las escuchas.
     'The support of the opposition allows the German government to

legalize acts of eavesdropping.' (CREA : El País, 30/08/1997)

In fact, an audition (24a) as well as an interrogation (24b) or an act of eavesdropping (24c) are clearly bounded events, which mostly imply an

inherent culmination point, whereas an auditory physical perception event is not inherently telic. Similarly, *visión* does not pluralize when it refers to a mere perception event, which contrasts particularly with its divine perception meaning, naturally delimited and culminating :

(25) Por lo que dice Velasco, Francisco tuvo experiencias místicas de varios tipos, visiones de ángeles que cantaban poemas [...].
'According to Velasco, Francisco had mystical experiences of several types, visions of angels who sang poems [...].'
(CREA: San Juan de la Cruz, 01-02/2003)

The PN *mirada* pluralizes in both of its meanings – although plurality is infrequent – referring to repeated acts of looking (26a) or different points of view (26b) :

(26) a. Actitudes de la víctima: temor, nerviosismo, ausencia de contacto visual, inquietud, sobresalto al menor ruido, miradas inquietas a la puerta [...].
 'Attitudes of the victim : fear, nervousness, absence of visual contact,

anxiety, shock reaction at each noise, worried glances at the door [...].

(CREA : VV.AA.: Violencia doméstica, 2003)

b. Hasta ahora se han filmado sus miradas sobre Ed Wood [...], Larry Flint [...] y Andy Kaufmann [...].
'Up until now, his views on Ed Wood [...], Larry Flint [...] and Andy Kaufmann [...] have been turned into films.' (CREA : El País, 24/04/2004)

Secondly, although a legal hearing can logically be considered bounded and culminating, this meaning of *vista* does not appear in the plural form in our narrow base corpus. While plural forms can be encountered on the Web, they are uncommon :

(27) Una jueza acude a las vistas con su gato.
'A judge turns up at the trials with her cat.'
(http://www.elcorreogallego.es/santiago/ecg/jueza-acude-vistas-su-gato/idEdicion-2012-09-18/idNoticia-766630/, 28/03/2013)

Thus, the inherent telic nature of PNs does not always formalize in a high frequency of plural forms. In fact, plurality primarily constitutes an indicator of boundedness (Bisetto, Melloni 2005, Melloni 2007, Barque *et al.* 2009). However, the consulted literature does not provide additional tests for nominal telicity, which urges the need to turn towards tests applied in the verbal domain. It has been shown that accomplishment verbs, i.e. durative culminating events, accept adverbs that indicate their progression towards a culminating point, such as *gradualmente* 'gradually' (De Miguel 1999, Vanhoe 2004, Enghels 2007a). In the Web corpus, the PNs have been examined for their compatibility with cognate adjectives, such as *gradual* 

'gradual' or *progresivo/a* 'progressive' (Martin 2008), which leads towards a number of interesting conclusions.

Both *audición* and *escucha* collocate with these adjectives in their direct perception sense, but only in a very specific context, namely when referring to a learning process (which is telic in nature) by which the subject matter is learned through auditory perception :

(28) a. Audición gradual de conversaciones en inglés, programas de televisión y radio, fragmentos de películas, etc. con el fin de captar el significado general.

'Hearing English conversations, television and radio programs, movie fragments, etc. gradually in order to understand the general meaning.' (http://sid.usal.es/idocs/F3/LYN14667/3-14667.pdf, 7/03/2013)

b. Escucha progresiva en su complejidad de textos orales, procedentes de fuentes variadas [...].

'Listening to oral texts of progressive complexity, from varied sources [...].' (https://www.murciaeduca.es/cpsantoangel/sitio/upload/Progra macion\_docente\_PRIMARIA\_2110.pdf, 7/03/2013)

Neither of these adjectives occurs with other meanings of these PNs, which could suggest that, although *audición* and *escucha* are bounded, they are inherently atelic.

Once again, the nominals of visual perception offer a more complex picture. First, *visión* combines with both *gradual* and *progresiva* in all of its meanings, except when referring to a divine vision, which was the only use that was easily pluralized. Still, these adjectives are rare in the direct perception meaning (29a) as well as in its sense of a general overview (29b). The above-mentioned lack of plural forms with these uses (*cf.* Table 2) as well as the scarcity of progression modifiers suggests that they rarely imply telicity. Yet, in its cognitive meaning, *visión* frequently combines with *gradual* and *progresiva* – in fact, they can even appear together (29c) – which points towards telicity.

- (29) a. Visión progresiva del trabajo de soldadura sin interferencias debidas al oscurecimiento del "Shutter" óptico del microscopio.
  'A progressive view of the welding without interferences due to the darkening of the optical "Shutter" of the microscope.'
  (http://www.waxco.es/es/productos/soldadura2/soldador-laser/132-soldador-waxcolaser-xxs-evo-30-60-100-125, 7/03/2013)
  - b. Navarro quiso que nos lleváramos una visión gradual y cronológica de lo que ha sido el arte desde los años 70 hasta día de hoy [...].
    'Navarro wanted us to get a gradual and chronological overview of art from the seventies until the present [...].'
    (http://www.uemcom.es/mariano-navarro-de-nadie-se-aprende-mas-de-arte-que-de-los-artistas, 7/03/2013)

c. [...] adoptan la estrategia Construyendo Paso a Paso, que plantea el avance hacia el desarrollo de servicios apropiados para satisfacer las necesidades de atención en VIH y SIDA con una visión gradual y progresiva.

"[...] they adopt the Building Step-by-Step strategy, which suggests progress towards the development of appropriate services to satisfy the care needs associated with HIV and AIDS with a gradual and progressive view."

(http://eprints.ucm.es/16113/1/T33904.pdf, 7/03/2013)

*Mirada*, on the other hand, does not combine with *gradual*, but does occur in some rare collocations with *progresiva* :

(30) Una mirada progresiva a la pintura textual que el poeta ha compuesto a través de los trazos metafóricos, puede ayudarnos a descubrir otras valoraciones y construcciones en torno a la patria.

'A progressive look at the textual picture that the poet has composed through metaphorical strokes can help us discover other assessments and constructions about the fatherland.'

(http://pendientedemigracion.ucm.es/info/especulo/bibl\_esp/panama.pdf, 7/03/2013)

This telic variant of the cognitive meaning reflects the behaviour of *visión*. Finally, *vista* does not occur with the progression adjectives *gradual* and *progresiva*, although a lawsuit can logically be considered telic.

In conclusion, the direct perception meaning of *audición*, *escucha* and *visión* is basically unbounded and atelic, although specific contextual telic readings are not excluded. In their other uses, *audición* and *escucha* are clearly bounded, but seem to reject the progression adjectives, which means that they must be classified as mainly atelic<sup>17</sup>. The visual PNs present an even more complicated picture. Firstly, *vista* seems to reject the plural form and does not appear with *gradual* or *progresiva*, from which follows that its lawsuit meaning would be classified as unbounded and atelic, which contrasts with the natural interpretation of this meaning. Secondly, both *mirada* and *visión* present telic and atelic variants. As both nominals rarely pluralize, it can be concluded that they are atelic in their unmarked use, but that telic uses can occur in specific contexts.

# **5.** CONCLUSIONS

To sum up, this study on the aspect of perception nominalizations has several merits situated at different levels. First and foremost, it was shown that the analysis of corpus data does in fact constitute an added value to the

<sup>&</sup>lt;sup>17</sup> Note, however, that the use of a Web corpus considerably minimizes the problem of negative evidence, without solving it completely. That is to say, it is not impossible that these PNs would also occur in telic contexts.

description of derived nominals. In fact, the application of recently proposed tests of aspectuality to a large sample of corpus data has suggested some clear tendencies and has particularly emphasized the impact of contextual elements on the aspect of PNs. The quantitative and qualitative analyses have clearly underlined the validity of some tests, whereas the liability of some others could not be confirmed. For instance, the subinterval property of states or the imperfective paradox are difficult to verify through corpusbased data.

However, corpus data of a different nature have also proven to present their own limitations. On the one hand, the traditional, closed CREA database – and especially the manually annotated base corpus – did not allow us to encounter the specific collocations pointing to different traits of aspectuality. Therefore, the database had to be expanded with data collected on the Web. Although the implication of these data proved to be valuable, opensource corpora could not entirely eliminate the problem of negative evidence.

Moreover, this corpus-based study has substantially provided further insight into the aspectual complexity of perception nominals, which would have been hard to accomplish without systematically analyzing empirical data. Just like the verbs they are derived from, the different PNs cannot form a single unified class since they vary considerably in their semantic and aspectual behaviour. To recap, the ability sense of *audición*, *oido*, *visión* and *vista* was shown to be clearly stative, while their remaining uses are clearly dynamic. In order to determine the exact aspectual classification of these eventive uses, a number of durativity and telicity tests were applied to the PNs. Table 3. summarizes the results :

		D	urativi	ty	Punctuality		dedness elicity	
		time expression	a lo largo de N	prolongada	fugaz	plural	gradual/ progresiva	
	physical perception	+	+	+	+/- [1 occ.]	1,67%	+	
Audición	audition	+	+	-	-	45,45%	-	
	interrogation	+	-	-	-	69,23%	-	
Escucha	physical perception	+	+	+	-	5,00%	+	
Escucia	eavesdropping	_	+	-	-	92,78%	-	
	physical perception	+	+	+	+	0%	+	
Visión	point of view	-	+	+	+	2,59%	+	
v ision	overview	+	-	+	-	0%	+	
	divine vision	+	I	+	-	40%	-	
Mirada	look, gaze	+/- [1 occ.]	-	+	+	9,73%	-	
	point of view	_	-	+	+	5,17%	+	
Vista	legal hearing	+	+	_	_	0%	_	

Table 3. – Aspectual tests with PNs

Thus, this paper has clearly demonstrated that the aspectual complexity of PNs is comparable to the heterogeneity of the related class of PVs, although, in the nominal domain, the opposition between voluntary and involuntary perception turned out to be less decisive than the distinction between visual and auditory perception. Whereas the auditory PNs *audición* and *escucha* clearly behave as activities, i.e. durative atelic events, the aspectual classification of visual PNs is less straightforward. Indeed, *visión* and *mirada* present a compositional aspect, highly dependent on their context. This distinction could be associated with the semantics of the PNs, as only visual perception extends towards the cognitive domain. In fact, both *visión* and *mirada* seem to present a 'base-aspect' in their different meanings, namely activity in the case of *visión*, and achievement in the case of *mirada*.

Finally, the results of our empirical analysis suggest that the aspectual value of the verbal base is at least as important as the aspectual input of the suffixes. This point can be illustrated for instance by *oido* and *vista* (not for *mirada*), both strongly lexicalized and frequently appearing in referential readings, which can be explained by the presence of the past participial suffix.

### REFERENCES

- ALEXIADOU A. (2001). Functional Structure in Nominals : Nominalization and Ergativity. *Linguistik Aktuell / Linguistics Today 42*. Amsterdam : Benjamins.
- AMADOR RODRÍGUEZ L.A. (2009). La derivación nominal en español : nombres de agente, instrumento, lugar y acción. Frankfurt am Main : Lang.
- BARQUE L., HUYGHE R., JUGNET A., MARÍN R. (2009). Two types of deverbal activity nouns in French. In: 5th International Conference on Generative Approaches to the Lexicon. Pisa : Instituto di Linguistica Computazionale, 169-175.
- BEKAERT E., ENGHELS R. (2014). Nominalizations of Spanish perception verbs at the syntax-semantics interface. In : O. Spevak (ed.), *Noun Valency*. Amsterdam : Benjamins, 61-87.
- BERGH G., ZANCHETTA E. (2008). Web linguistics. In : A. Lüdeling, M. Kytö (eds), Corpus linguistics. An international handbook I. Berlin : De Gruyter, 309-327.
- BISETTO A., MELLONI C. (2005). Result Nominals : A Lexical-Semantic Investigation. In : G. Booij et al. (eds), On-line Proceedings of the Fifth Mediterranean Morphology Meeting (MMM5), <a href="http://mmm.lingue.unibo.it/mmm-proc/MMM">http://mmm.lingue.unibo.it/mmm-proc/MMM</a> 5/MMM5-Proceedings\_full.pdf> (September 2013), 393-412.
- BROMBERG M., KEKENBOSCH C., FRIEMEL E. (1998). La catégorisation des prédications : traits sémantiques et perspectives socio-cognitives, *Langages* 132, 9-27.

- DE MIGUEL APARICIO E. (1999). El aspecto léxico. In : I. Bosque, V. Demonte (eds), *Gramática descriptiva de la lengua española, vol. 3*. Madrid : Espasa-Calpe, 2977-3060.
- DÍAZ HORMIGA M.T. (2005). Entre el léxico y la sintaxis : a propósito de la denominada sintaxis interna de las formaciones derivadas. In : J. Cuartero Otal, G. Wotjak (eds), Algunos problemas específicos de la descripción sintáctico-semántica. Berlin : Frank / Timme.
- DOWTY D. (1979). Word meaning and Montague grammar: the semantics of verbs and time in generative semantics and in Montague's PTQ. Dordrecht: Reidel.
- ENGHELS R. (2007a). L'aspect lexical des verbes de perception visuelle et auditive : différences conceptuelles et conséquences syntaxiques. In : D. Trotter (éd.), Actes du XXIV<sup>e</sup> Congrès de Linguistique et de Philologie Romanes. Tübingen : Niemeyer, 77-90.
- ENGHELS R. (2007b). Les modalités de perception visuelle et auditive : différences conceptuelles et répercussions sémantico-syntaxiques en espagnol et en français. *Beihefte zur Zeitschrift für romanische Philologie*. Tübingen : Niemeyer.
- ENGHELS R. (2009). The syntactic position of the perceived participant as indicator of the internal structure of the Spanish and French infinitival complement. *Linguistics* 47/3, 759-791.
- ENGHELS R. (2013). The transitivity of perception verbs : a gradual category ? *Borealis* 2/1, 35-56.
- FÁBREGAS A. (2010). A syntactic account of affix rivalry in Spanish nominalizations. In : A. Alexiadou, M. Rathert (eds), *The Syntax of Nominalizations Across Languages and Frameworks*. Berlin : De Gruyter, 67-92.
- FÁBREGAS A., MARÍN R. (2012a). The role of Aktionsart in deverbal nouns : State nominalizations across languages. *Journal of Linguistics* 48, 35-70.
- FÁBREGAS A., MARÍN R. (2012b). State nouns are Kimian states. In : I. Franco, S. Luisini, A. Saab (eds), Romance languages and linguistic theory 2010 : Selected papers from 'Going Romance' Leiden 2010, 41-64.
- FÁBREGAS A., MARÍN R., MCNALLY L. (2012). From Psych Verbs to Nouns. In : V. Demonte, L. McNally (eds), *Telicity, Change and State : A Cross-categorical View of Event Structure*. Oxford : Oxford University Press, 162-185.
- FERNÁNDEZ LAGUNILLA M. (2003). Aproximación aspectual a la gramática de ver, In : J.L. Girón Alconchel, F.J. Herrero Ruiz de Loizaga, S. Iglesias Recuero, A. Narbona Jiménez (eds), *Estudios ofrecidos al profesor José Jesús de Bustos Tovar*. Madrid : Editorial Complutense.
- FLETCHER W.H. (2012). Corpus analysis of the World Wide Web. In : C.A. Chapelle (ed.), *Encyclopedia of applied linguistics*. Wiley-Blackwell.
- FRADIN B. (2011). Remarks on State denoting nominalizations. Recherches linguistiques de Vincennes 40, 73-99.
- FRANCKEL J., LEBAUD D. (1990). Les figures du sujet : à propos des verbes de perception, sentiment, connaissance. Paris : Ophrys.
- GISBORNE N. (1993). Nominalizations of perception verbs. UCL Working Papers

in Linguistics 5, 23-44.

- GODARD D., JAYEZ J. (1994). Types nominaux et anaphores : le cas des objets et des événements. *Cahiers Chronos* 1, 41-58.
- GRIMSHAW J. (1990). Argument Structure. Cambridge : MIT Press.
- HAIMAN J. (1980). The iconicity of grammar : isomorphism and motivation. Language 56, 515-540.
- HANEGREEFS H. (2008). Los verbos de percepción visual : Un análisis de corpus en un marco cognitivo. Non-published PhD, KULeuven.
- HOPPER P.J., THOMPSON S.A. (1985). The iconicity of the universal categories 'noun' and 'verb'. In : J. Haiman (ed.), *Iconicity in syntax*. Amsterdam : Benjamins, 151-183.
- HEYVAERT L. (2003). A cognitive-functional approach to nominalization in English. Berlin/New York : De Gruyter.
- HUYGHE R., MARÍN R. (2007). L'héritage aspectuel des noms déverbaux en français et en espagnol. *Faits de Langues* 30, 265-274.
- KILGARRIFF A., GREFENSTETTE G. (2003). Introduction to the special issue on the web as corpus. *Computational Linguistics* 29/3, 333-47.
- KIRSNER R.S., THOMPSON S. A. (1976). The role of pragmatic inference in semantics : a study of sensory verb complements in English. *Glossa* 10/2, 200-240.
- KNITTEL M.L. (2011). French event nominals and number inflection. *Recherches linguistiques de Vincennes* 40, 127-148.
- LEW R. (2009). The web as corpus versus traditional corpora : Their relative utility for linguists and language learners. In : P. Baker (ed.), *Contemporary corpus linguistics*. London/New York : Continuum.
- MARÍN R., VILLOING F. (2012). Nominalisations : nouveaux aspects. In : R. Marín, F. Villoing (eds), *Nominalisations : nouveaux aspects*. Villeneuve d'Ascq : Presses du Septentrion, 7-19.
- MARTIN F. (2010). The semantics of eventive suffixes in French. In : M. Rathert, A. Alexiadou (eds), *The semantics of nominalizations across languages and frameworks*. Berlin : De Gruyter.
- MEINSCHAEFER J. (2005). Event-oriented adjectives and the semantics of deverbal nouns in Germanic and Romance. The role of boundedness and the mass/count distinction. In : A. Thornton, M. Grossmann (eds), *La formazione delle parole*. Rome : Bulzoni, 355-368.
- MELLONI C. (2007). Polysemy in Word Formation : The Case of Deverbal Nominals. PhD dissertation, University of Verona.
- MILLER G.A., JOHNSON-LAIRD P.N. (1976). Language and perception. Cambridge : Cambridge University Press.
- MONTSERRAT S. (1999). Aktionsart and transitive phrases. In : E. Treviño, J. Lema (eds), *Semantic Issues in Romance syntax*. Amsterdam / Philadelphia : Benjamins.
- MOURELATOS A.P.D. (1978). Events, processes and states. *Linguistics and Philosophy* 2, 415-434.

- OSSWALD R. (2005). On Result Nominalization in German. In : E. Maier, C. Bary, J. Huitink (eds), *Proceedings of Sinn und Bedeutung 9*, <a href="http://pi7.fernuni-hagen.de/osswald/papers/sub04.pdf">http://pi7.fernuni-hagen.de/osswald/papers/sub04.pdf</a> (September 2013), 256-270.
- PHARIES D.A. (2002). Diccionario etimológico de los sufijos españoles y de otros elementos finales. Madrid : Gredos.
- PICALLO M.C. (1999). La estructura del sintagma nominal : las nominalizaciones y otros sustantivos con complementos argumentales. In : I. Bosque, V. Demonte (eds), Gramática Descriptiva de la Lengua Española. Madrid : Espasa, 363-393.
- PIERA C., VARELA S. (1999). Relaciones entre morfología y sintaxis. In : I. Bosque, V. Demonte (eds), *Gramática descriptiva de la lengua española*. Madrid : Espasa Calpe, 4367-4422.
- PUSTEJOVSKY J. (1991). The syntax of event structure. Cognition 41, 47-81.
- REAL ACADEMIA ESPAÑOLA. (2009). *Nueva gramática de la lengua española*. Madrid : Espasa Libros.
- REAL ACADEMIA ESPAÑOLA. Online database CREA. Corpus de referencia del español actual <a href="http://corpus.rae.es/creanet.html">http://corpus.rae.es/creanet.html</a>> (September 2013).
- ROGERS A. (1974). *Physical perception verbs in English : a study in lexical relatedness*. London : University Microfilms international.
- SCOTT A.K. (2010). Accounting for the semantic extension of derived action nouns. *Journal of Linguistics* 46, 711-734.
- SHAROFF S. 2006. Open-source corpora : using the net to fish for linguistic data. *International Journal of Corpus Linguistics* 11/4, 435-62.
- SLEEMAN P., BRITO A. (2010). Nominalization, event, aspect and argument structure : a syntactic approach. In : M. Duguine, S. Huidobro, N. Madariaga (eds), Argument Structure from a Crosslinguistic Perspective. Amsterdam : Benjamins, 113-129.
- TAYLOR J. (1995). *Linguistic categorization. Prototypes in linguistic theory*. Oxford : Clarendon Press.
- VANHOE H. (2004). Aspectos de la sintaxis de los verbos psicológicos en español : Un análisis léxico funcional. Frankfurt am Main : Lang.
- VAN VALIN R.D. Jr. (1990). Semantic parameters of split intransitivity. *Language* 66/2, 221-260.
- VAN VALIN R.D. Jr., LAPOLLA R.J. (1997). Syntax : structure, meaning and function. Cambridge : Cambridge University Press.
- VAN VOORST J. (1988). Event structure. Amsterdam / Philadelphia : Benjamins.
- VENDLER Z. (1967). *Linguistics in Philosophy*. Ithaca (N.Y.) : Cornell University Press.
- WILLEMS D. (1983). « Regarde voir » : les verbes de perception visuelle et la complémentation verbale. In : E. Roegiest, L. Tasmowski (eds), Verbe et phrase dans les langues romanes : mélanges offerts à Louis Mourin, Romanica Gandensia 20. Gent : Romanica Gandensia, 147-158.