Simetría en la estructura subyacente del nominal y el predicado en la construcción media inglesa: explorando la estructura de *Qualia* y la genericidad

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**Abstract:** The aim of this paper is to explore the symmetry in the underlying structure of the nominal and the predicate in the English middle construction, basing our analysis on Rijkhoff's (1991, 2002, 2005, 2008) analogy Clause-NP, and also by taking account of lexico-semantic and discourse-pragmatic aspects to examine how genericity (Carlson, 2011) and qualia structure (Pustejovsky, 1991; Yoshimura and Taylor, 2004) function in the process of semantic shift in compositional cospecification (Yoshimura, 1998). In this paper, we argue that middles, as generics, are indisputably non-eventive, even when they occur in other than the Present Simple tense (contra Fagan, 1992). However, it is necessary to analyse the semantic and discoursepragmatic boundaries between an individuative and a generic interpretation of those middles which incorporate what Rijkhoff (1991) calls  $\omega_3$  operators, and we also need to examine the ±experiencer role of the speaker in connection to the action denoted by the predicate.

**Keywords**: Genericity, *qualia* structure, compositional cospecification,  $\omega_3$  operators, experiencer

**Resumen:** El propósito de este artículo es explorar la simetría en la estructura subyacente del sintagma nominal y el predicado en la construcción media inglesa, basando nuestro análisis en la analogía Oración-Sintagma Nominal (Rijkhoff, 1991, 2002, 2005, 2008), atendiendo a aspectos léxico-semánticos y pragmático-discursivos para examinar cómo la genericidad (Carlson 2011) y la estructura de qualia (Pustejovsky, 1991; Yoshimura y Taylor, 2004) funcionan en el proceso de cambio semántico en la coespecificación composicional (Yoshimura, 1998). En este artículo, argumentamos que las oraciones medias, como las genéricas, son indiscutiblemente noeventivas, incluso cuando ocurren en otro tiempo distinto al Presente Simple (contra Fagan 1992), pero es necesario analizar los límites semánticos y pragmático-discursivos entre una interpretación individuativa y una genérica de aquellas expresiones medias que incorporan lo que Rijkhoff (1991) denomina operadores  $\omega_3$ , además de la necesidad de examinar el ±rol experimentador del hablante en conexión a la acción denotada por el predicado.

**Palabras clave:** Genericidad, estructura de *qualia*, co-especificación composicional, operadores ω<sub>3</sub>, experimentador

#### 1. Introduction

The core aspects traditionally associated with the middle construction in English include the following characteristics: (i) transitive verbal predicates used as one-argument intransitives (Fagan, 1992); (ii) implied and unexpressed non-agentive Subject referents fulfilling the role of Patient, which involve restricting the types of verbs accepted as middle-forming just to transitives with an affected object (Fagan, 1992; Levin, 1993); (iii) the need of an adjunct (Fagan, 1992); (iv) non-eventive situations which lack a specific time reference and which profile features of the Subject entity (see Ackema and Schoorlemmer, 1994: 71); and (v) certain facilitating and letting properties (Fagan, 1992; Levin, 1993; Kemmer, 1993). An example of a prototypical middle, according to these core aspects, is illustrated in *This book reads easily* (Fagan 1992: 9).

On the lexicalist approach advocated by authors like Levin (1993) and Fagan (1992), it is possible to identify a set of middle-forming verbs just because of their lexical and aspectual properties. However, according to Yoshimura (1998: 118), the semantics of the middle construction is found in the formula [X (by virtue of some property P) ENABLES ACT]. The author assumes that "the use of verbs is sanctioned only to the extent that they instantiate the semantics of the middle construction" (1998: 118). In this way, the schema of the middle construction would foreground certain semantic aspects of verbs which would contribute to the specification of particular features of the Subject referent. That is to say, the middle construction forces a specific reading of the verbs in terms of its own semantics.

In this paper, we explore the symmetry in the underlying structure of the noun phrase and the predicate in the English middle construction, basing our analysis on Rijkhoff's (1991, 2002, 2005, 2008) analogy between the Clause and the NP, and also by taking account of lexico-semantic and discourse-pragmatic aspects to examine how genericity (Carlson, 2011) and the process of compositional cospecification (Yoshimura, 1998) function in the middle expression. Generic statements, as analysed by Carlson (2011: 1153-1154), express generalizations or hypothetical regularities in potential behaviour, and are conceptually divergent from eventiveness. The middle construction seems to follow the semantics of the generic statements given that both possess a potentially iterative aspect and due to their non-eventive nature. On the other hand, the process of compositional cospecification, as understood by Yoshimura (1998), is defined as a process by which the semantics of the verb is specified in accordance with the most salient semantic feature(s) (known as quale/qualia roles) of the noun phrase. This process is particularly relevant in the middle structure because of the (lack of) shift in semantic importance due to the incorporation of the semantic charge of the middle adjunct. In other words, this research paper investigates how the NP qualia structure (Pustejovsky, 1991, 1995; Yoshimura and Taylor, 2004) is connected to the logical subject's responsibility (van Oosten, 1986), which provokes an ambiguous interpretation

between an individuative and a generic reading in the middle expression when analysed in terms of its compositional cospecification process.

This paper is organised as follows: section 2 refers to the concepts of Qualia structure (Pustejovsky, 1991, 1995; Yoshimura, 1998; Yoshimura and Taylor, 2004), and the notions of Compositional Cospecification and the process of semantic shift (Yoshimura, 1998); section 3 is devoted to Carlson's (2011) ideas about genericity, which we apply to the middle construction in subsections 3.1, 3.2, and 3.3; section 4 explores the symmetry in the underlying structure in the noun phrase and the predicate of the English middle construction, by basing such analysis on Rijkhoff's (1991, 2002, 2005, 2008) theory; and the last section offers some final remarks.

### 2. Qualia structure: Compositional Cospecification and semantic shift

Drawing upon Pustejovsky's (1991, 1995) ideas, Yoshimura and Taylor (2004) explore the specification of the role of the noun phrases appearing in the middle structure into four different qualia roles: Constitutive, Formal, Telic and Agentive. These qualia are idiosyncratic features that "structure our basic knowledge" (Pustejovsky, 1991: 427) about an entity and are characterized as follows:

- Constitutive qualia (Qc), according to Pustejovsky, refers to "the relation between an object and its constituents, or proper parts" (1991: 426). That is, they deal with the "internal constitution of an entity" or "what it is made of, what its various parts are, how they function, and how they are interrelated" (Yoshimura and Taylor, 2004: 306).
- Formal qualia (Qf) would refer to how an entity differentiates from others "within a larger domain" (Pustejovsky, 1991: 427), by analysing parameters such as "orientation, magnitude, shape, dimensionality, colour, position" (Pustejovsky, 1991: 427).
- Telic qualia (Qt), as Pustejovsky explains, refers to the "purpose and function of the object" (1991: 427); in other words, the usage or ultimate purpose of an entity and how an agent interacts with it.
- Agentive qualia (Qa) refers to the "factors involved in the origin or 'bringing about' of an object" (Pustejovsky, 1991: 427).

In the case of the middle construction, traditionally, the two most significant qualia roles analysed have been Qc and Qt. On the one hand, Qc involves a direct correlation between the subjacent letting modal value<sup>1</sup> of the middle construction and the inherent properties of the noun phrase, the

<sup>&</sup>lt;sup>1</sup> Drawing on Talmy's (2000) force-dynamics theory, Davidse and Heyvaert propose that middles denote "a subject-oriented type of letting modality in which the subject is the antagonist conducive (or not) to the carrying out of the action by the implied agentive antagonist" (2007: 70).

nominal's responsibility (van Oosten, 1986), which would allow the process denoted by the predicate to be carried out by any implicit Agent, independently from their skills. On the other hand, Qt has been conventionally associated with the purpose of most nominals appearing in middle structures, as Yoshimura explains, provided that artifact middle Subjects are considered "products created with a built-in aim or function, and are understood typically with respect to the activities of (and the benefits for) a human Agent" (1998: 123).

According to Yoshimura (1998), the semantic well-formedness and legitimation of a given middle expression depends on the intrinsic or inherent properties of the NP which are foregrounded in each case. As the author explains, there are basically three factors that contribute to the foregrounding of the *qualia* structure of the nominal appearing in the middle structure: (i) the process of Cospecification, (ii) the semantic charge of the adjunct, and (iii) discourse-referential information (Yoshimura, 1998).

Cospecification is understood as a process by which the semantics of the predicate is specified in accordance with the most salient *quale/qualia* roles of the nominal, its Qt², as Yoshimura (1998) points at. Semantically, the process of Cospecification, as the author clarifies, "stands for the converse relationship of Coercion" (1998: 116-117). As he puts it, "just *qualia* roles serve to specify an appropriate reading for a verb (Cospecification), so can verbs specify an appropriate meaning for a nominal (Coercion)" (1998: 117). This is just an evidence for the existence of the symmetry in the underlying structure of the nominal and the predicate in the middle construction which we explore in this paper.

However, in compositional analysis, the semantic charge of the middle adjunct, as Yoshimura (1998) explains, supposes a shift in semantic importance from Qt to Qc in the process of Cospecification, as represented by the pattern Qt→Qc. In other words, the semantic charge of the middle adjunct contributes to attributing responsibility to the Qc of the nominal, backgrounding its Qt (Yoshimura 1998: 124).

Yet, Qc and Qt are not the only *qualia* roles present in the middle expression whose nominal belongs to the class of inanimate entities (*contra* Yoshimura 1998). In fact, the different *qualia* possess a diverse status when embodying an entity, and some of them might be more intrinsic than others regarding the encyclopedic definition of the object and its relation with the rest of the elements of the construction in compositional analysis. Thus, here we instantiate some of the possible patterns of semantic shift in the process of compositional cospecification in the middle construction, including cases in

<sup>&</sup>lt;sup>2</sup> Yoshimura (1998) assumes that the most frequent nominals appearing in the middle expression belong to the class of what he catalogues as artifacts, which would involve Qt in cospecification with their predicates. In this paper, we will use the term 'inanimate entity' instead of 'artifact' in order to encompass a broader typology of entities, leaving aside human and natural kinds.

which such semantic shift does not occur. The patterns would be: (i)  $Qt \rightarrow Qc$ ; (ii)  $Qc \rightarrow Qc$ ; and (iii)  $Qa+Qc \rightarrow Qa+Qc$ :

- (i) The conventionally accepted pattern  $Qt \rightarrow Qc$ , as instantiated in examples (1) and (2):
  - (1) The car drives smoothly (Yoshimura and Taylor, 2004: 293).
  - (2) This joke tells well (Yoshimura, 1998: 128).

The fact that the *car* and the *joke* in question can be, respectively, driven and told, is because these nominals have been created with this purpose (their Qt). However, in compositional analysis, the incorporation of the adjuncts involve a semantic shift of importance from Qt to Qc, given that the nominals possess certain inherent properties (*i.e.* their Qc, for example, the engine in the case of the *car*) which allow the processes denoted by their corresponding predicates to be carried out by any Agent in the manner exposed (*smoothly* and *well*, respectively).

- (ii) The lack of shift in semantic importance formulated through the pattern  $Qc \rightarrow Qc$ , as represented in example (3):
  - (3) The dress buttons easily (Yoshimura, 1998: 121).

The fact that the *dress* in question can be buttoned is due to the nominal's Qc structure, its buttons. In addition, the incorporation of the semantic charge of the adjunct *easily* supposes no shift in semantic importance, given that the dress has been manufactured in a way (with its buttons) that the process denoted by the predicated is *easily* performed.

- (iii) The lack of shift in semantic importance formulated through the complex pattern Qa+Qc→Qa+Qc, as instantiated in examples (4) and (5):
  - (4) This book sells well (Yoshimura and Taylor, 2004: 298).
  - (5) The crime sells well (Yoshimura, 1998: 130).

The fact that the *book* and *the crime* (the latter used here as the metonymic extension of 'crime books' through the generic expression *the crime*) are *sold* is due to their Qa and Qc structure; that is, because of their author's reputation, the price, the quality of the text, the cover, etc. Thus, when the semantic charge of their adjuncts is added to the constructions, there is no shift in semantic importance, given that the processes are performed in the way indicated (*well*) because of these same features (Qa+Qc).

ISSN: 2340-9274

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# 3. Genericity: An ambiguous reading between the individuative and generic

The semantics of the middle construction seems to follow that of the generic/habitual statements analysed by Carlson (2011: 1153-1154), in the sense of being able to express generalizations or hypothetical regularities in potential behaviour, and also being conceptually divergent from eventiveness, provided that middles, on the one hand, possess a potentially iterative aspect, and on the other, because of their non-eventive nature. According to Keyser and Roeper, middles are "sometimes called generic sentences" given that they "state propositions that are held to be generally true" and they "do not describe particular events in time" (1984: 384). However, morphologically and grammatically speaking, middles do not necessarily take a generic noun phrase to possess a generic reading. In fact, it is frequent to find middles which apparently include nominals with an individuative type of reference but with a generic reading, often by using operators like the demonstrative this, the definite article the, and the indefinite article a/an. Such operators would belong to Rijkhoff's (1991, 2002, 2005, 2008) group of  $\omega_3$  operators (see Section 5 in this regard), and in this paper, we correlate them with their correspondent referencing parameters as found in Radden and Dirven's<sup>3</sup> (2007: 111) work.

As Carlson puts it, to catalogue an object as generic, "its reference with regard to the exemplars needs to be in some sense 'unbounded', in that it is also intended to include not only existent but also potential instances" (2011: 1167).

In Carlson's words, English noun phrases can possess a generic reading in two occasions: (i) when they use "the bare plural construction ('bears', etc.)", and (ii) when they appear with "the definite singular construction ('the lion')" (2011: 1171). In addition, as the author clarifies, this last reading is "systematically ambiguous between a generic and an individual" (2011: 1171) interpretation. In this sense, we could draw a parallelism with the semantics of NPs appearing in middles which are premodified by operators like the (in)definite article and demonstratives.

In the following subsections we argue that middles, as generics, are indisputably non-eventive, even when they occur in other than the Present Simple tense (*contra* Fagan 1992), but we need to analyse the semantic and

The authors (2007: 111) elaborate a typology of referential parameters divided into two main groups, each of them with a set of subtypes. The abbreviations of such grammatical labels, not present in Radden and Dirven (2007), are introduced in this paper in order to facilitate the reading of the text. On the one hand, the first group would be called 'Individuative reference', and the second one, 'Generic reference'. The first group, the 'Individuative' one, would split into 'Indefinite' (which in turn would be divided into 'Specific' [IIS] and 'Non-specific' [IIN] subtypes) and 'Definite' (which would differentiate among 'Deictic' [IDD], 'Anaphoric' [IDA], and 'Unique' [IDU] subtypes). On the other hand, the second main group, the 'Generic' one, would split into 'Indefinite' and 'Definite', and both in turn would be divided into 'Singular' [GIS/GDS] and 'Plural' [GIP/GDP] subtypes, respectively.

discourse-referential boundaries between the individuative and the generic interpretation of those nominals which denote a certain ambiguous reading because of the incorporation of what Rijkhoff (1991, 2002, 2005, 2008) calls  $\omega_3$  operators, and we need to explore the ±experiencer role of the speaker in connection to the action denoted by the predicate in each case.

### 3.1. Middles with the $\omega_3$ operator *this*: Demonstratives

Most middles nominals premodified by a demonstrative, frequently *this* in the case of the middle construction, convey the following underlying structure combining features of both individuative and generic referents<sup>4</sup>, contributing to the generation of an underlying metaphysical controversy:

On the one hand, this type of nominal can be recognised as a concrete entity, a singular object noun, for which the speaker is an experiencer really testing its properties, its *qualia* structure, as it is instantiated in examples (6) and (7) by meaning *this concrete car/book*, respectively:

- (6) This car drives well (Heyvaert, 2003: 135).
- (7) This book reads easily (Fagan, 1992: 9).

Hence, using Radden and Dirven's (2007: 111) terminology, this type of reference would be identified as Individuative-Definite-Deictic (IDD). However, the action denoted by the predicate is not eventive; in fact, the action is potentially iterative. It could not have occurred (yet), it might be happening in the moment of speaking (or it could have already happened), and it may potentially occur in the future too, regardless of the abilities of any agent.

On the other hand, the nominal might also refer to a potential set of objects which possess exactly the same features, the same *qualia* structure, provided that they are mass-production items, *i.e.* objects manufactured and produced in series, for example, for ad promotion and sales. In this case, metonymically speaking, *This* car/ *This book* would respectively refer to *This car brand and model*/ *This book edition*, so the speaker is not necessarily an experiencer here and we do not even know if the action has already happened (or if it will ever happen in the future) because the type of reference would be

<sup>&</sup>lt;sup>4</sup> However, there are some counterexamples to this due to certain features of elements of the sentence other than the nominal. For example, the semantic charge of the adjunct or the nature of the verb. Two instances that respectively reflect this issue are 'This tittle usually ships within 2-3 days' (Heyvaert, 2003: 133) and 'This book sells well' (Heyvaert, 2003: 135). Thus in the first sentence, the semantic charge of the frequency adverb 'usually' impedes the ambiguous interpretation of a generic-individuative type of reference. Instead of having an IDD→GDS pattern, here we just find the GDS type of reference. As for the second sentence, the semantic charge of the predicate 'sell' impedes the ambiguous interpretation of a generic-individuative type of reference. Instead of having an IDD→GDS pattern, here we just find the GDS type of reference.

Generic-Definite-Singular (GDS), according to Radden and Dirven's (2007: 111) terminology. In addition, Generic-Definite-Plural (GDP) reference is also possible in the middle construction, as instantiated in 'These cars drive well'. In both cases, the properties of the nominal (its Qc) will remain the same regardless of the abilities of the agent who performs the action denoted by the predicate (if it ever happens/has already happened).

In other words, in the case of the English middle construction, the referents of the structures which include the operator *this*, or any other demonstrative, denote an ambiguous reading between the individuative and the generic represented by the formula IDD→GDS/GDP. This paradigmatic combination of referential parameters is due to the responsibilities of the nominal, that is to say, the inherent properties or *qualia* structure, independently from the abilities of any potential agent who could perform the action denoted by the predicate.

#### 3.2. Middles with the $\omega_3$ operator the: The definite article

As well as middles with the operator *this* (or any other demonstrative), some middles with Individuative-Definite-Unique<sup>5</sup> (IDU) type of referencing can also convey a combined perspective between the individuative and the generic, as embodied by the formula  $IDU \rightarrow GDS/GDP$ . This is the case of structures such as (8), (9) and (10):

- (8) That is easily done because *the car* handles superbly (Heyvaert and Davidse, 2007: 68).
- (9) *The ultimate travel pillow*. Resteaz fixes to the headrest (Heyvaert, 2001: 293).
- (10) When no longer required, *the discs* remove easily (Heyvaert and Davidse, 2007: 39).

Middles whose nominal is a human with an IDU type of referencing, *i.e.* appearing with a personal pronoun, do not have an ambiguous reading because they are always Individuative. On the contrary, middles whose nominal is an inanimate entity with an IDU type of referencing do possess an ambiguous reading between the individuative and the generic. Compare 'She does not photograph well' (Heyvaert, 2001: 292) and 'The car drives smoothly' in example (1). In the first case, the pronoun *she* denotes a single and unique reference, a particular person. However, in the second sentence, the nominal *the car* might refer to the car that the speaker points at (individuative reading), but simultaneously, it might metonymically refer to all the potential cars that possess the same properties, *i.e.* qualia structure, because they have been manufactured in series, meaning *all* of the cars which belong to the same brand and model (generic reading).

In these cases, the nominals might refer to: (i) singular/plural objects being tested by their respective experiencer speakers (individuative reading), or (ii) products manufactured in series that could even be advertised for promotion's sake and which are metonymically referred to. In the last case, the speakers are not necessarily the experiencers of the action, and in fact, the action might even not have occurred (yet), nor necessarily does it need to happen in the future (generic reading).

### 3.3. Middles with the $\omega_3$ operator a/an: The indefinite articles

Finally we could also find an ambiguous reading between the individuative and the generic interpretation in the middle construction in cases in which the nominal appears with the indefinite article 'a/an', as in example (11) below:

(11) [about a cosy car seat protector] Quickly attaches/removes with elastic straps and velcro tabs (Heyvaert and Davidse, 2007: 68).

In this case, the nominal 'a cosy car seat protector' might refer to a particular object being pointed at by the experiencer speaker who is really testing/has already tested the object's qualities (individuative reading), but at the same time, it can also be metonymically understood as a mass-production item (*i.e.* the whole set of products manufactured with the same features), which might potentially be used by any agent, not necessarily the speaker, because we do not know if the action denoted by the predicate has already happened before and it may potentially occur in the future with any Agent (generic reading).

Using Radden and Dirven's (2007: 111) terminology, we could conclude that middles nominals premodified by the indefinite article 'a/an' also experiment an ambiguous reading between the individuative and the generic<sup>6</sup>, which we could schematise with the formula IIN→GIS, denoting, respectively, Individuative-Indefinite-Non-specific and Generic-Indefinite-Singular types of reference.

To sum up, we could conclude that English middles which include nominals introduced by what Rijkhoff (1991, 2002, 2005, 2008) would call  $\omega_3$  operators (such as the (in)definite article and demonstratives) might possess an ambiguous reading between the individuative and the generic interpretation.

Estudios interlingüísticos, 7 (2019), 170-185 ISSN: 2340-9274

ISSN: 2340-9274

<sup>6</sup> However, in cases of middles with a nominal introduced by the indefinite article 'a/an' as well as a predicate expressed in other than the Present Simple tense (as in '[about a piece of clothing] It washed well with little shrinkage and no puckering' (Heyvaert, 2001: 292)), there is not an ambiguous reading between the generic and the individuative and, consequently, those instances do not follow the pattern IIN→GIS, because in those cases, there is not a possible generic interpretation, just an individuative one, in spite of the non-eventive nature of the construction.

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The individuative type of reference denotes an experiencer speaker who really tests/has already tested the qualities of the nominal in order to be able to utter the value judgement in question; whereas the generic reference is connected to a potential Agent who is not necessarily the speaker and an activity which is potentially iterative, including the possibility of denoting an action that has never occurred before. Thus, in order to schematise the three basic cases in which the middle construction in English can be understood as possessing an ambiguous reading between the individuative and the generic perspective, in this table, we present the  $\omega_3$  operators above analysed, as well as some of Radden and Dirven's (2007: 111) types of referential parameters previously mentioned, including their abbreviated labels, and their exemplification through middle instances:

ω <sub>3</sub> OPERATOR	PATTERN	EXAMPLE
Indefinite article		[about a cosy car seat protector] Quickly
(a/an)	IIN→GIS	attaches/removes with elastic straps and
,		velcro tabs
	IDU→GDS	That is easily done because the car
Definite article		handles superbly
(the)	IDU→GDP	When no longer required, the discs
		remove easily
Demonstratives	IDD→GDS	This car drives well
	IDD→GDP	(These cars drive well)

Fig. 1:  $\omega_3$  operators and referential parameters that contribute to the ambiguous reading between the individuative and the generic in the English middle construction

# 4. Rijkhoff's symmetry in the underlying structure of the NP and the Clause: Analysing the middle construction

Rijkhoff (1991, 2002, 2005, 2008) elaborates a theory to study the symmetry in the underlying structure of the NP and the Clause to apply it cross-linguistically, as represented in Figure 2 below. In this section, we explore the symmetry in the underlying structure of the nominal and the predicate of the English middle construction.

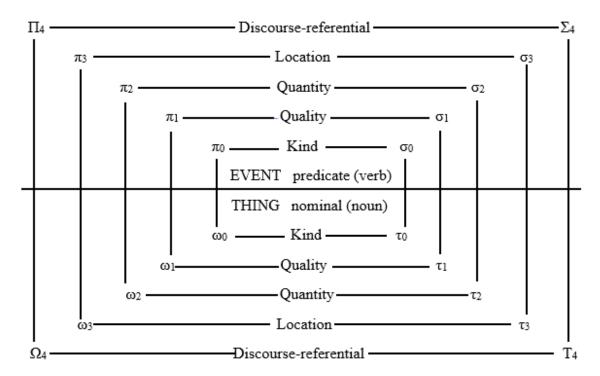


Fig. 2: Symmetry in the underlying structure of the NP and the Clause based on Rijkhoff's (1991, 2005, 2008) theory

According to Rijkhoff's (1991, 2002, 2005, 2008) theory,  $\pi$  verbal operators and  $\omega$  nominal operators possess a grammatical/inflectional nature; whereas  $\sigma$  verbal satellites and  $\tau$  nominal satellites belong to the class of lexical modifiers.

The most external layer, i.e. L4, refers to discourse-referential features like ±Realis and ±Actual in the case of predicates, and ±Definite and ±Specific in the case of nominals. The next layer, the Location layer or L3, involves grammatical verbal operators like tense and lexical verbal modifiers (basically, adverbs of time and place), as well as grammatical nominal operators like the ones referred to in previous sections (ω<sub>3</sub> operators like the (in)definite article, demonstratives, and pronouns), and also lexical nominal modifiers like relative clauses, possessor NPs and participle clauses. The subsequent layer, the Quantity layer or L2, deals with grammatical verbal operators involving semelfactive and iterative aspect, and also lexical verbal modifiers (mainly adverbs of frequency), as well as grammatical nominal operators referred to number/numeral distinctions, and also lexical nominal modifiers related to lexical numeral features. For its part, according to Rijkhoff (2002, 2005, 2008), the Quality layer or L1 does not contain operators, just satellites (particularly, verbal satellites like adverbs of manner and speed, and nominal satellites as qualifying adjectives). In spite of the fact that qualia structure is not clearly identifiable neither as a grammatical category nor as a lexical kind, in this paper, we propose to include the processes of Coercion and Cospecification as

symmetrical operations in the layers  $\pi_1$  and  $\omega_1$ , respectively, in order to study the *qualia* structure of middle predicates and nominals<sup>7</sup>. Finally, the innermost layer, the Kind layer or L0, includes grammatical verbal operators referred to Verbal Aspect according to  $\pm$ Ending and  $\pm$ Beginning features, and lexical verbal modifiers involving *Aktionsart*, as well as grammatical nominal operators referred to Nominal Aspect according to  $\pm$ Shape and  $\pm$ Homogeneity features (which are inflectional markers of *Seinsart*), and lexical nominal satellites involving classifying adjectives (Rijkhoff, 2002, 2005, 2008).

In this section, we basically focus on the connection among L4, L3 and L0 (as the three layers that generate an ambiguous reading between the individuative and the generic), and their relation with L1 and L2 (as the layers that do not undergo any semantic shift despite the ambiguity of the other layers) in order to study, respectively, the processes of genericity and *qualia* structure in the English middle construction. In other words, on the one hand, we analyse L4 and L0 according to the ambiguous reading between the individuative and the generic reference of the nominal due to the incorporation of certain  $\omega_3$  operators (in L3), and the  $\pm$ Actual nature of the middle predicate; and on the other hand, we explore the L1 as the cradle of both processes, Cospecification and Coercion, as semantically symmetrical operations in the study of the underlying structure of both the nominal and the predicate, respectively; as well as the constant  $\pi_2$  potentially iterative aspect of middles found in L2.

Using example (6) above mentioned, we elaborate a duplicated semantic analysis of this same instance by examining certain elements which influence on parameters like genericity, *qualia* structure and potentiality of occurrence of the action in the process of compositional cospecification:

(6) (a) <u>This car</u> <u>drives well</u> THING (NP) EVENT (Clause)

**THIS** [ $\omega$ 3 = demonst. – Ref. IDD]; **CAR** [n:  $\omega$ 0 = +Shape, -Homogeneity (sg obj n);  $\omega$ 1 = Cospecification n–v = Qt;  $\omega$ 2 = sg]; **DRIVES** [v:  $\sigma$ 0 = activity;  $\pi$ 0 = -Beginning, -Ending (= imperfective);  $\pi$ 1 = Coercion v–n = Qt;  $\pi$ 2 = potentially iterative aspect;  $\pi$ 3 = Present]; **WELL** [ $\sigma$ 1 = manner adv; ' $\pi$ 1' – Compositional Cospecification = Qt $\rightarrow$ Qc (Facility-oriented)]

[ $\Pi$  4 = +Realis, -Actual;  $\Omega$ 4 = +Definite, +Specific]

<sup>&</sup>lt;sup>7</sup> The status of *qualia* structure, nevertheless, requires some discussion. On the one hand, Pustejovsky's (1991, 1995) formalism does not confer a relevant role upon lexical categories. In fact, the author focuses more on semantic features in general. However, Rauh (2010) seems to refer to *qualia* structure in order to highlight the importance of lexical categories in constructing the logical structure of the sentence from the lexicon.

(6) (b) <u>This car</u> <u>drives well</u> THING (NP) EVENT (Clause)

**THIS** [ω3 = demonst. – Ref. GDS]; **CAR** [n: ω0 = +Shape, +Homogeneity (Metonymic reference for 'car brand and model'); ω1 = Cospecification n–v = Qt; ω2 = sg]; **DRIVES** [v:  $\sigma$ 0 = activity;  $\pi$ 0 = -Beginning, -Ending (= imperfective);  $\pi$ 1 = Coercion v–n = Qt;  $\pi$ 2 = potentially iterative aspect;  $\pi$ 3 = Present]; **WELL** [ $\sigma$ 1 = manner adv; ' $\pi$ 1' – Compositional Cospecification = Qt $\rightarrow$ Qc (Facility-oriented)] [Π 4 = -Realis, -Actual;  $\Omega$ 4 = +Definite, -Specific]

In the first case, (6a) refers to the individuative reading of the sentence in which the speaker is the experiencer of the event; whereas (6b) represents the generic interpretation of the same instance in which the speaker is not necessarily understood as the experiencer of the action. Thus, the main differences found when comparing both analyses are the following:

- (i) In (6a), the demonstrative (*i.e.* the  $\omega 3$  operator 'this') is understood as possessing an Individuative-Definite-Deictic (IDD) type of reference, pointing at a particular or concrete object; whereas in (6b), the  $\omega 3$  operator is interpreted as having a Generic-Definite-Singular (GDS) reference, involving all of the potential objects that share similar features with *this* particular object, provided that the *car* in question is a mass production item.
- those which can potentially be manufactured), as found in the formula [CAR FOR CAR BRAND AND MODEL], which in turn would derive from the metonymic principle [PART FOR WHOLE].
- (iii) When analysing L4, some changes occur in  $\Pi4$  and  $\Omega4$ . First, regarding  $\Pi4$ , in (6a), the grammatical category +Realis indicates that the event referred to by the experiencer speaker is grounded in the world of discourse; *i.e.* it has a location. On the other hand, in (6b), the feature –Realis indicates the opposite, given that the speaker is not necessarily the experiencer of the action, and in fact, the action might not have happened (yet). Secondly, concerning  $\Omega4$ , in (6a), the +Specific feature indicates that the entity, the *car* in question, is a particular or concrete thing in the real world; whereas in (6b), the –Specific feature indicates the contrary, provided that it refers to the whole set of potential cars belonging to the same brand and model. In addition, the potentially iterative aspect of the event keeps constant, as represented in the

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ISSN: 2340-9274

<sup>&</sup>lt;sup>8</sup> The spatial features ±Shape do not undergo any change due to the fact that the entity *car*, independently from an individuative or a generic reading, always possess a definite outline in the spatial dimension, *i.e.* it is always +Shape.

Quantity Layer or L2 by means of the  $\pi_2$  operator, independently from the interpretation given to the utterance, individuative or generic, and also independently from the fact of having an experiencer speaker (as in (6a)) or not (as in (6b)), due to the non-eventive nature of the middle expression in any case.

Despite the different nuances found in both interpretations of the same instance, both the individuative and the generic readings found in (6a) and (6b), respectively, share the same qualia structure, as represented in L1. In other words, the processes of Cospecification and Coercion, which analyse the semantic relation between the encyclopedic definition of the nominal and the meaning of the predicate, foreground the telic role of the car, its purpose or function, which is being driven, independently from the fact that the car in question is a particular one (as in (6a)) or the metonymic reference for all the members of the same category, the same car brand and model (as in (6b)). In addition, when adding the semantic charge of the adjunct well in compositional cospecification analysis, a shift of semantic importance occurs from Qt to Qc, provided that it is because of the inherent properties of the car (i.e. its Qc, like the features of the engine, the steering wheel, or the braking system, for example) that the action denoted by the predicate can be carried out by any Agent in the way expressed by the adjunct. And that would also be independent from the type of interpretation, individuative or generic, understood in each case.

#### 5. Final remarks

We could conclude that the ambiguous interpretation between an individuative and a generic reading of middles which include some of Rijkhoff's (1991, 2002, 2005, 2008)  $\omega_3$  operators (mainly, the (in)definite article and demonstratives) does not imply any change in the *qualia* structure of the nominal in any case in Compositional Cospecification analysis, given that the inherent properties of the nominal understood from the generic perspective are analysed as undergoing a metonymic process known as [*PART* FOR *WHOLE*], where *PART* corresponds to the individuative interpretation.

In addition, such absence of shift in *qualia* structure when comparing the analysis of the individuative and the generic interpretation of the same instances reflects the innermost relevant characteristic of the middle construction in English: its non-eventive nature. In other words, despite the fact that middles like the ones presented in this project possess a ambiguous and simultaneous reading between the individuative and the generic, denoting, respectively, an experiencer speaker and the lack of it, we conclude that the nominal's inherent properties keep constant and allow the process to be carried out by any Agent. That is, the nominal's *qualia* structure, including the semantic shift of importance in compositional analysis because of the semantic charge of the adjunct, is responsible for or "conducive to" (Davidse and Heyvaert, 2007: 170) the performance of the action denoted by the predicate due to the

nominal's responsibility (van Oosten 1986), independently from the skill of any particular Agent.

Thus the fact that nominals appearing in the middle structure premodified by certain  $\omega_3$  operators, on the one hand, imply an ambiguous reading between the individuative and the generic interpretation of the same referent; and on the other hand, do not trigger any shift in *qualia* structure, evidences the symmetry in the underlying structure of both the nominal and the predicate by revealing the potentially iterative aspect of the English middle construction.

### **Bibliography**

- ACKEMA, Peter and Maaike SCHOOLEMMER (1994): "The middle construction and the syntax-semantics interface". *Lingua*, 93 (1), 59-90.
- CARLSON, Gregory (2011): "Genericity", in Klaus von Heusinger, Claudia Maienborn and Paul Portner (eds.): *Semantics: An international handbook of Natural Language Meaning* (vol. 2). Berlin: Mouton de Gruyter, 1153-1185.
- DAVIDSE, Kristin and Liesbet HEYVAERT (2007): "On the middle voice: An interpersonal analysis of the English middle". *Linguistics*, 45 (1), 37-83.
- FAGAN, Sarah (1992): The syntax and semantics of middle constructions: A study with special reference to German. Cambridge: Cambridge University Press.
- HEYVAERT, Liesbet (2003): *A Cognitive-Functional approach to Nominalization in English*. Berlin: Mouton de Gruyter.
- HEYVAERT, Liesbet (2001): "Nominalization as an interpersonally-driven system". Functions of Language, 8 (2), 283-324.
- KEMMER, Suzanne (1993): The middle voice. Amsterdam: John Benjamin.
- KEYSER, Samuel Jay and Thomas ROEPER (1984): "On the middle and ergative constructions in English". *Linguistic Inquiry*, 15 (3), 381-416.
- LEVIN, Beth (1993): *English verb classes and alternations: A preliminary investigation*. Chicago: The University of Chicago Press.
- PUSTEJOVSKY, James (1995): The Generative Lexicon. Cambridge: The MIT Press.
- PUSTEJOVSKY, James (1991): "The Generative Lexicon". *Computational Linguistics*, 17 (4), 409-441.
- RADDEN, Günter and René DIRVEN (2007): Cognitive English Grammar (vol. 2). Amsterdam: John Benjamin.
- RAUH, Gisa (2010): Syntactic categories: Their identification and description in linguistic theories. Oxford: Oxford University Press.
- RIJKHOFF, Jan (2008): "Descriptive and discourse-referential modifiers in a layered model of the noun phrase". *Linguistics*, 46 (4), 789-829.
- RIJKHOFF, Jan (2002): "On the interaction of linguistic typology and Functional Grammar". Functions of Language, 9 (2), 209-237.
- RIJKHOFF, Jan (1991): "Nominal aspect". Journal of Semantics, 8 (4), 291-309.
- RIJKHOFF, Jan and Johanna SEIBT (2005): "Mood, definiteness and specificity: A linguistic and a philosophical account of their similarities and differences". *Tidsskrift for Sprogforskning*, 3 (2), 85-132.
- VAN OOSTEN, Jeanne (1986): *The Nature of Subjects, Topics and Agents: A Cognitive Explanation*. Bloomington: Indiana University Linguistics Club.
- YOSHIMURA, Kihimiro (1998): "Encyclopedic structure of nominals and middle expressions in English". *Kobe Paper in Linguistics*, 1, 112-140.
- YOSHIMURA, Kihimiro and John TAYLOR (2004): "What makes a good middle". English Language and Linguistics, 8 (2), 293-321.

Fecha de recepción: 14/04/2019 Fecha de aceptación: 25/07/2019