Stative verbs and French Verb-Noun compounds: a discreet preference

Florence Villoing

Stative verbs and French Verb-Noun compounds: a discreet preference[1]

Florence Villoing

Université Paris Nanterre & CNRS UMR 7114 MoDyCo

villoing@parisnanterre.fr

Abstract

This paper deals with French nominal Verb-Noun compounds formed on stative verb bases. We assume that word-formation schemas have access to the aspectual and argumental properties of the base verbs and impose fine-grained restrictions on their input. Contrary to what is usually claimed, the study argues that Verb-Noun compounding in French (and probably in other Romance languages) is compatible not only with dynamic verbs but also with stative ones that construct Verb-Noun compounds of high-frequency. These stative verbs are ambiguous between two readings, and verbs can have either a stative or a dynamic structure. Verb-Noun compounding generally prefers the stative verb that systematically corresponds to the class of "pure" stative (that is to say, Kimian-states). The study establishes a link between the aspectual values of the base-verb and the interpretation of VN compounds: VNs on stative base-verbs never form Agent and Instrument nominals but only Experiencer, Means or Location nominals. The inverse prediction also holds: VNs based on the dynamic agentive construction of ambiguous verbs can be interpreted as Agent or Instrument nominals but not as Experiencer or Means nominals.

Keywords: word formation, Verb-Noun compounds, Aspectual classes, stative verbs, argumental structure.

Résumé

Cet article étudie les noms composés Verbe-Nom du français construits sur des verbes statifs. Il s'inscrit dans l'hypothèse que les schémas morphologiques sont sensibles aux propriétés aspectuelles et argumentales des verbes de base et leur imposent des restrictions sélectionnelles. L'étude montre, que contrairement à ce qui a souvent été soutenu, la composition Verbe-Nom du français (et certainement d'autres langues romanes) ne sélectionne pas uniquement des verbes dynamiques, mais aussi des verbes statifs qui construisent des composés Verbe-Nom parmi les plus fréquents. Ces verbes statifs présentent la particularité d'être ambigus entre deux lectures qui correspondent soit à une struc-

---

ture stative du verbe soit à une structure dynamique. La structure stative est préférentiellement sélectionnée par la composition Verbe-Nom et correspond en outre systématiquement à une valeur purement stative du verbe (c'est-à-dire à un Kimian-State). Les propriétés aspectuelles et argumentales du verbe ont, en outre, une incidence directe sur l'interprétation du composé Verbe-Nom et permettent de prédire qu'un composé formé sur un verbe statif pourra s'interpréter comme un expérienceur, un moyen ou un lieu mais jamais comme un agent ou un instrument. À l'inverse, un composé formé sur une construction agentive ne permettra pas d'interprétation expérienceur ou moyen.

Mots-clefs : formation des mots, composés Verbe-Nom, aspect lexical, verbes statifs, structure argumentale.

1. Introduction

According to authors from various theoretical frameworks, word-formation schemas have access to the semantic and argumental properties of base lexemes and impose fine-grained restrictions on their input[2]. Verb-Noun compounding, like other word-formation schemas, is sensitive to the semantic properties of its bases: some scholars have shown that Verb-Noun compounds (henceforth VNs) select transitive action verbs (cf.1), rejecting pure stative verbs (cf. 2a, for hypothetical French examples and 2b, c, d for quotations from various scholars) (see for French, Villoing, 2009, 2012; Fradin, 2009; Namer & Villoing, 2007; and, for other Romance languages, Ricca, 2015; or Bernal, 2012).

(1)   ouvre-boîte 'can-opener' (lit. open-can)
         essuie-glace 'windscreen wiper' (lit. wipe-window)
         trouble-fête 'killjoy, spoilsport' (lit. disturb-party)
         perce-oreille 'earwig' (lit. drill-ear)
         lèche-vitrine 'window shopping' (lit. lick-window)
         baise-main 'kissing a woman's hand' (lit. kiss-hand)

(2)   a. *connaît-allemand (lit. know-German), *sait-mathématique (lit. know-mathematics), *aime-animal (lit. love-animals), *habite-ville (lit. live-city), *contient-vin (lit. contain-wine)
         b. "In a VN compound, the process type denoted by the verb is strongly constrained; according to Vendler's (1967) terminology, and that of his successors (among others, Dowty, 1979), it can only be **dynamic** […]. On the other hand, V process type is very unlikely to be **stative**." (Namer & Villoing, 2007, for French VNs)
         c. "Verbs, however, can only be [+ activity] with a subject (whether agent or instrument), and not a verb [+ state], which is why it is not possible to form compounds such as *estimagats (lit. to love + cats) or *temtempestes (lit. to fear + storms)." (Bernal, 2012, p. 19, for Catalan VNs)

---

[2]See, for French, in the framework of lexeme-based morphology, Dal, 1999; Fradin, 2003, 2005, 2011; Fradin & Kerleroux, 2003a, 2003b; Hathout, Plénat & Tanguy, 2003; Roché, 2003; Kerleroux, 2004; Corbin, 2004; Plénat, 2005; Namer & Villoing, 2008; Ferret & Villoing, 2015; Huyghes & Tribout, 2015; and in the framework of generative syntax, recent papers such as, for example, Roy & Soare, 2012, 2014, 2015; Fábregas & Marín, 2012; Soare, 2018; Knittel, 2016, 2017.

    d. "But the impossibility of formations like Sp. *tienefiebre* lit.'have-fever' (Varela, 1990, p. 70) or It. *pesachili* lit. 'weigh-kilos' seems to hold across all Romance languages." (Ricca, 2015, p. 698, for Romance VNs)

However, contrary to what is usually claimed, we argue that French VNs are compatible with stative verbs, as in (3) (see below for the source of the examples).

(3)   porte-bonheur 'lucky charm' (lit. bring good luck)
             cache-pot 'flower pot holder' (lit. hide-pot)
             couvre-lit 'bed-cover' (lit. cover-bed)
             pare-soleil 'sunshade' (lit. parry-sun)
             protège-cahier 'exercise-book cover' (lit. protect-exercise-book)

This hypothesis, although generally avoided or refuted in the literature, is strikingly supported by the data of our corpora based on dictionaries (see below for more details about the corpora), since the presence of stative verbs in VNs is not exceptional. For example, the five most frequent French VN compounds (according to the frequency per 15 million words) given by *Lexique 3* cf. New, Pallier, Ferrand & Matos (2001) include four VNs with a stative verb (in bold in Table 1).

VN compound	Frequency per 15 million words in movies	Frequency per 15 million words in books
portefeuille 'wallet' (lit. support-leaves)	17.91	21.15
passe-vues 'slide changer' (lit. appear-views)	25.55	10
soutien-gorge 'bra' (lit. support-bosom)	5.85	8.65
abat-jour 'lampshade' (lit. slays-day)	0.51	8.24
pare-brise 'windshield' (lit. protect-breeze)	4.12	7.16

Table 1. The 5 most frequent French VNs in books and movies

Although VNs containing stative verbs are common in French and probably in other Romance languages[3], stative verbs have seldom been studied in VN compounds. One reason is that stative verbs in VN compounds are not directly visible because they are not prototypical "pure" stative verbs but they can have either a stative or an eventive reading. The ambiguity of these verbs is nowadays relatively well identified in syntactic structures (Huyghe & Jugnet, 2010; Kratzer, 2000). This preliminary study aims to show how it is also revealed in word formation.

The study is also original because stative verbs are much less well studied and understood than dynamic verbs, particularly in word formation processes (compared with syntactic structures). The

---

[3]Another remarkable example is given by Italian VNs: there is evidence that some of the most productive verbs in Italian VN compounds are stative verbs (in bold, below):

"In fact, corpus-based and dictionary-based studies show that productive leading bases are mainly: **porta** 'bring', **salva** 'save', mangia 'eat', acchiappa 'take', ammazza 'kill', **copri**- 'cover', taglia 'cut', **para** 'block', spacca 'break' and trita 'grind' (Ricca, 2010, p. 247)" (Štichauer, 2015, p. 139)

only exception is the study of nominalization of stative predicates (mainly in the context of psycho-logical verbs)[4], but there are very few studies on French word formation schemas implying stative verbs as bases of derived object-denoting nominals (Fradin, 2012). Furthermore, stative verbs have not been studied as the verbal basis of VN compounding although VN compounding in Romance languages is a well-researched phenomenon.

More precisely, this paper addresses the following issues:

1) Since there are several classes of stative verbs, which are selected by French VN compounds?

2) Is there a link between the aspectual class of the verb and the VN output?

The study is mainly based on a lexicographic corpus of French VN compounds (Villoing, 2002) from several large French dictionaries (such as *Trésor de la Langue Française, Grand Robert de la Langue Française, Grand Larousse Universel, Dictionnaire de la langue française, Dictionnaire Général de la Langue Française*) and from web neologisms collected via a random or manual scan. It comprises 1473 French VN compounds from ordinary and specialised language.

The study was carried out within the theoretical framework of lexemic morphology (for example Matthews, 1991; Anderson, 1992; Aronoff, 1994; Fradin, 2003; Booij, 2010) and adheres to the fol-lowing principles:

− lexemes are the input and output of word formation schemas;

− the schemas of lexeme formation are seen as functions that apply to lexemes to produce more complex lexemes;

− morphological schemas apply simultaneously to all three dimensions that define lexemes, i.e. the phonological, syntactic and semantic dimensions, modifying each of them to produce the derived lexeme;

− compounding is considered a morphological rather than a syntactic process.

The outline of the paper will be as follows. Section 2 describes the morphological properties of French VN compounding. In section 3, the tests to recognize a stative verb are discussed and the criteria used in this paper are presented. Section 4 focuses on a descriptive presentation of the types of stative verbs that are used in French VN compounds. Then, section 5 gives the first results of an analysis concerning the link between the aspectual class of the verb and the VN interpretation.

---

[4] See Meinschaeffer, 2003; Beauseroy, 2009; Haas, 2009; Huyghe & Jugnet, 2010; Alexiadou, 2011; Fradin, 2011; Barque, Fábregas & Marín, 2012; see Knittel, 2015, for an overview.

2. VN compounds

Verb-Noun Compounding is a morphological schema of word formation[5] that produces nouns (that can also be used as adjectives) on the basis of the combination of a verb lexeme and a noun lexeme ($LeXeme1_V$ + $LeXeme2_N$ $\Rightarrow$ $LeXeme3_{A/N}$). VN compounding is productive in all Romance languages[6] as shown in (4), where the same compound in several Romance languages is presented (meaning lit. 'corkscrew', example from Gather (2001, p. 1), quoted by Ricca (2015, p. 689)).

(4)   Fr. tire-bouchon
        It. cavatappi
        Cat. llevataps
        Sp. sacacorchos
        Port. saca-rolhas

Following Bisetto & Scalise's (2005) and Scalise & Bisetto's (2009) classification, VN compounds are exocentric in that the compound does not include a head which transmits its semantic and syntactic properties to the whole compound. However, the two elements of the compound are in a hierarchical dependency since the verb behaves as an "internal head" in its relationship with the noun. The relationship is a governor-argument one: a governing verb and a governed noun (that frequently corresponds to an argument of the verb). These properties are captured by Scalise & Bisetto (2009) by assigning VN compounding to the "subordinate exocentric" type.

The verb is mostly transitive and the relation between the verb and the noun is generally of the predicate-patient type (see 5a). However, a small number of other VNs exhibit intransitive verbs (5b, 5c, 5d) and/or other relations such as predicate-location (5b), predicate-means (5c), predicate-temporal period (5d) and even predicate-agent (5e)

(5)   a. essuie-mains$_N$ 'hand towel' (lit. wipe-hands)
            coupe-gorge$_N$ 'cut-throat alley' (lit. cut-throat)
            lèche-vitrine$_N$ 'window-shopping' (lit. lick-window)
        b. traîne-buisson$_N$ 'bird that shuffles along under shrubs' (lit. shuffle-shrub)
        c. cuit-vapeur$_N$ 'steam cooker' (lit. cook-steam)
        d. réveille-matin$_N$ 'alarm clock' (lit. wake-morning)
        e. croque-monsieur$_N$ 'toasted cheese sandwich with ham' (lit. crunch-sir)

---

[5] For a discussion about compounding viewed as a morphological process rather than as a syntactic one, see Scalise, 1984, 1992; Matthews, 1991; Anderson, 1992; Aronoff, 1994; Corbin, 1992, 1997; Bisetto & Scalise, 1999; Fradin, 2003, 2009.

[6] See for French: Zwanenburg, 1992; Corbin, 1992; Villoing, 2009, 2012; Fradin, 2009; for Italian: Scalise, 1992; Radimsky, 2006; Ricca, 2010, Masini & Scalise 2012; for Catalan: Bernal, 2012; for Spanish: Varela, 1990; Rainer & Varela, 1992; Guevara, 2012; for Portuguese: Villalva, 1992; Rio-Torto & Ribeiro, 2012; for Romanian: Schapira, 1985; Grossman, 2012.

The relative diversity of the semantic relations between the verb and the noun argues against syntactic analyses posed in terms of direct complementhood of the verb.

From the semantic point of view, VN compounding constructs event-denoting nominals (6) (quite rare) or object-denoting nominals (7). For the latter, VN compounding denotes an entity that is semantically related to the event described by the verbal base, either a semantic argument of the verb (agent, instrument, patient…), or a causer of the event, or even a place where the event takes place (see Fradin, 2005; Villoing, 2009). So, a VN compound noun prototypically denotes an instrument (7a), or an agent (7b); very rarely, a patient (7c), and, in a few cases, a cause (7d), or a location (7e).

(6)   lèche-vitrine 'window shopping' (lit. lick-window)
         remue-ménage 'commotion' (lit. move-household)

(7)   a. ouvre-boîte 'can-opener' (lit. open-can)
           presse-fruits 'juicer' (lit. press-fruits)
       b. gratte-papier 'paper pusher' (lit. scratch-paper)
           garde-côte 'coastguard' (lit. watch-coast)
       c. gobe-mouton 'kind of poisonous plant that sheep swallow' (lit. swallow-sheep)
           broute-biquet 'honeysuckle' (lit. graze-kid (young goat))
       d. coule-sang 'plant which causes blood to flow' (lit. flow-blood)
           pisse-chien 'plant which makes dogs pee' (lit. pee-dog)
       e. coupe-gorge 'cut-throat alley' (lit. cut throat)
           marchepied 'footboard, running board' (lit. walk-feet)

3. Criteria to recognize stative verbs

A long linguistic tradition starting with Vendler (1967) has established the distinction between different lexical aspectual classes ("Aksionsart"). A first classification, following initial studies in the Vendler-Dowty tradition, distinguishes between States and Events. However, it leads to some difficulties that are partly related to the heterogeneity of the stative class. A second classification, particularly developed in the Davidsonian framework (following Maienborn, 2005, 2008), distinguishes between states, i.e., "pure" statives and "event" statives, which alternate with other aspectual values. We will seek, in the research presented here, to exploit the results of this work.

3.1. Test distinguishing stative and event verbs

Stative verbs are commonly defined as events that do not change over time, contrary to dynamic verbs (for example, Croft, 2012, p. 30). As Aksionsart properties are reflected in linguistic structure, many discriminating linguistic tests have been proposed to identify the class of statives (see, for example, Vendler, 1967; Kenny, 1963; Lakoff, 1966; Comrie, 1979; Dowty, 1979; Martin, 2008; Marín, 2013). This is not the place to give a comprehensive overview of them; only some of the most popular and

the most controversial ones will be presented here to give an idea of the questions that are raised in this debate, and which lead us to adopt the distinction between two classes of statives.

The major tests proposed to recognize a stative verb are based on their incompatibility with some forms or interpretations.

For example, stative verbs are viewed as not compatible with

(i)   **the progressive form** (French progressive: *en train de*, lit. 'be in the midst of')

     (8)   a.   *Je suis en train de connaître la réponse

          'I am knowing the answer'[7]

        b.   Je suis en train de courir

          'I am running'

(ii) **the habitual interpretation in the simple present tense**

     (9)   a.   Je connais la réponse → refers to the present with statives

          'I know the answer'

        b.   Je cours → habitual interpretation with non-statives

          'I run'

(iii) **the imperative form** (because stative verbs are not strictly under human control).

     (10) a.   *Connais la réponse!

          *Know the answer!

        b.   Cours!

          'Run!'

(iv) **adverbs of intentionality** that are selected for subjects (e.g. French *délibérement* 'deliberately', *volontairement* 'deliberately', *intentionnellement* 'intentionally')

     (11) a.   *Elle connait la réponse intentionnellement

          'She knows the answer intentionally'

        b.   Elle écrit intentionnellement en majuscules

          'She intentionally writes in uppercase'

However, some of these tests have to be reappraised because they cause several problems. To quote some examples:

(i)   The progressive test and the habitual interpretation of the simple present tense

−   Some stative verbs take the progressive with relative ease, such as so-called verbs of position or body posture such as *sit, stand* and *lie* (see Croft, 2012, for a brief overview of the important debate about their aspectual status, starting with Dowty, 1979) or some psychological verbs such as *suffer* or *hope* (Levin & Rappaport, 1995; Martin, 2009; Dal & Namer, 2010).

−   These diagnostics may actually confuse lexical stativity, rooted in the lexicon ("Aktionsart" in the sense of Vendler, 1967) and grammatical stativity (morphology marked): thus, according to

---

[7] Examples are from Levin (2007).

Bertinetto (1994, p. 391), "the notion of 'stative' belongs to the subdomain of actionality, while 'progressive' and 'habitual' belong to the subdomain of aspect". Consequently, stative verbs may take on any aspectual value, both progressive and habitual.

(ii) The imperative form and subject oriented adverbs

− The imperative form can be used with many stative verbs (for example *stand to attention, sit down, go to sleep*), and conversely, there are also many non-stative verbs that are odd in the imperative (*digest*, for example).

− Tests using adverbials can lead to confusion between stativity and agentivity. These adverbial tests, like several stativity tests, are actually agentivity tests (Verkuyl, 1989, p. 49; Bertinetto, 1994, pp. 383-394; Levin & Rappaport, 2005, pp. 13, 89; Huyghe & Jugnet, 2010, for French).

Given these difficulties, we turned to the literature that specifically concerns static predicates.

3.2. Test distinguishing between "pure stative" and "eventive stative"

Although stative verbs have been relatively neglected by scholars (with the exception of psychology verbs), it has long been observed that not all verbs classified as statives behave alike. In particular, after Vendler's observations (1967, pp. 113-119) that certain stative predicates can be unexpectedly used in the progressive form, there has been a certain consensus since Dowty (1979) that at least two types of stative verbs should be distinguished: stative verbs that are compatible with the progressive construction (displaying a systematic stative/eventive ambiguity) and those that are not and that allow for a stative reading only. For example, Dowty (1979, p. 184) distinguished between *interval states* and *momentary states*, and Bach (1986, p. 6) between *dynamic states* and *static states*. Maienborn (2005, 2008) theorized this distinction in the Davidsonian framework under the terms of *Kimian-states* (henceforth *K-states*) that correspond more or less to the class of "pure" statives in the Vendler-Dowty tradition (as pointed out by Marín, 2013, p. 49) and *Davidsonian states* (henceforth*, D-states*), a new aspectual class which combines properties generally associated to events with prototypical state characteristics.

Without taking a position in the discussion between the proponents of a Davidsonian and neo-Davidsonian perspective, we adopt here the diagnostics to identify the aspectual behavior of processes presented by Fábregas & Marín (2013, § 2.3.) (taken mainly from the seminal work of Dowty, 1979; Maienborn, 2005; Rothmayr, 2009) who propose a relevant synthesis of the criteria that distinguish States from Events, comparing them with the tests that distinguish between states, the Kimian and Davidsonian states (see Table 2). Initially designed for German, English, or Spanish, the tests are, for this occasion, specially adapted to French.

	Process	D-state	K-state
1. subinterval property	-	+	+
2. anaphoric reference of *cela s'est passé* 'this happened'	+	-	-
3. complement of *arrêter* 'to stop'	+	-	-
4. compatibility with *lentement* 'slowly' or *peu à peu* 'gradually'	+	-	-
5. habitual reading in present tense	+	-	-
6. infinitival complements of perception verbs	+	+	-
7. event-related manner adverbial	+	+	-
8. event-related locative adverbial	+	+	-
9. time-span reading with *un petit peu* 'a little'	+	+	-

Table 2. Comparison of the aspectual behavior of processes, D-states and K-states

3.2.1. Diagnostics shared by K-States and D-States

Scholars have shown that both Kimian and Davidsonian statives share some diagnostics of pure stativity; see the first five in Table 2. The first two were put forward by Maienborn (2005, 2008), followed by Rothmayr (2009) and Fábregas & Marín (2013) who completed the list with the next three (numbers 3 to 5).

- Subinterval property

The first diagnostic proposed by Maienborn (2005) to distinguish statives follows Dowty's (1979) and Krifka's (1989) proposals that states are homogeneous predicates which meet the subinterval property (Fábregas & Marín, 2012). As clearly explained in her 2005 paper:

> while processes involve a lower bound on the size of subintervals that are of the same type, states have no such lower bound. […] If for a certain time interval I it is true that, for example, Eva is standing at the window, sleeping, or the like, this is also true for every subinterval of I. (Maienborn, 2005, p. 285).

Hence, stative verbs do not involve any change at all, "so that any subinterval of the predicate, no matter how short, will still represent the same predicate. In contrast, an activity involves some change […]." (Fábregas & Marín, 2013, p. 2)

- Anaphoric reference of *cela s'est passé* 'this happened'

Secondly, K-Statives and D-Statives cannot be continued with *cela s'est passé* 'this happened' (*geschehen*, in Maienborn, 2005; see (12) and (13)): this anaphoric reference can only be used to refer to dynamic predicates, as in (14).

(12)   Kimian States:
         a. Eva besaβ ein Haus. *Das geschah während …
            Eva possédait une maison. *Cela s'est passé pendant que …
            'Eva owned a house. This happened while ...'

b. Eva kannte die Adresse. *Das geschah während …

Eva connaissait l'adresse. *Cela s'est passé pendant que …

'Eva knew the address. This happened while ...'

(Maienborn, 2005, ex. 13)

(13) Davidsonian States:

a. Eva stand am Fenster. *Das geschah während …

Eva était debout à la fenêtre. *Cela s'est passé pendant que …

'Eva stood at the window. This happened while ...'

b. Die Schuhe glänzten. *Das geschah während …

Les chaussures brillaient. *Cela s'est passé pendant que …

'The shoes gleamed. This happened while ...'

(Maienborn, 2005, ex. 12)

(14) Process verbs:

a. Eva spielte Klavier. Das geschah während …

Eva a joué du piano. Cela s'est passé pendant que …

'Eva played the piano. This happened while …'

b. Die Wäsche flatterte im Wind. Das geschah während …

Les vêtements claquaient dans le vent. Cela s'est passé pendant que …

'The clothes flapped in the wind. This happened while …'

(Maienborn, 2005, ex. 11)

Fábregas & Marín (2013) added other tests to those provided by Maienborn (2005), still showing the non-dynamicity of D-States.

- Complement of *arrêter* 'to stop'

The first test added by Fábregas & Marín (2013) is borrowed from Dowty (1979): K-Statives and D-States are not compatible with the verb *arrêter de* 'to stop' (15), contrary to activities (16).

(15) a. *La lámpara ha parado de brillar

*La lampe a arrêté de briller

'The lamp has stopped shining'

b. *Esteban ha parado de esperar

*Esteban a arrêté d'attendre

'Esteban has stopped waiting'

(16) Esteban ha parado de correr

Esteban a arrêté de courir

'Esteban has stopped running'

(Fábregas & Marín, 2013, ex. 5, 6)

- Compatibility with *lentement* 'slowly' ou *peu à peu* 'gradually'

Second, K-Statives and D-States do not combine with *lentement* 'slowly' or *peu à peu* 'gradually' (17), unlike dynamic verbs (18).

    (17)   a.   *La lámpara brilla despacio

                  *La lampe brille lentement

                  'the lamp shines slowly'

           b.   *Esteban espera poco a poco

                  *Esteban attend peu à peu

                  'Esteban waits gradually'

                  (Fábregas & Marín, 2013, ex. 7)

    (18)   Esteban pasea lentamente

                  Esteban se promène lentement

                  'Esteban walks slowly'

                  (Fábregas & Marín, 2013, ex. 8)

- Habitual reading in present tense

Third, K-Statives and D-States (19), unlike dynamic verbs (20), do not receive a habitual reading in the present tense (Dowty, 1979).

    (19)   a.   La lámpara brilla

                  La lampe brille (= brille maintenant)

                  'the lamp is shining' (=is shining now)

           b.   Juan espera en el pasillo

                  Jean attend dans le couloir (=attend maintenant)

                  'Juan is waiting in the corridor' (=is waiting now)

                  (Fábregas & Marín, 2013, ex. 9)

    (20)   Esteban {escribe/fuma}

                  Esteban {écrit/fume} (= habituellement)

                  'Esteban {writes/smokes}' (= habitually)

                  (Fábregas & Marín, 2013, ex. 10)

3.2.2. Distinct diagnostics for K-States and D-States

Although the results of these tests indicate that these verbs should be classified as states, some of them have not a typical state behavior. Hence, Maienborn (2005) proposed to split the class of stative expressions into Kimian-states, corresponding to prototypical states, and Davidsonian-states, those that are non-prototypical. She listed a series of diagnostics to distinguish the behavior of these two classes.

Maienborn defined K-states as not bound to time and space, contrary to D-states that are "spatio-temporal entities with functionally integrated participants" (2005, ex. 1, p. 279). In that sense, "D-state verbs differ from statives with respect to all of the relevant eventuality diagnostics, patterning in this respect with process and event verbs" (Maienborn, 2005, p. 286). Eventualities are defined by three ontological properties: eventualities (i) are perceptible; (ii) can be located in space and time, and (iii) can vary in the way that they are realized. Several tests tend to capture these properties linguistically

and determine the class of the verbs under consideration: D-states pass all the tests while K-states do not pass any of them.

(21) Linguistic diagnostics for eventualities (i.e. for D-state verbs)

    a. Eventuality expressions can serve as infinitival complements of perception verbs.

    b. Eventuality expressions combine with locative [especially eventuality-related locative modifiers, i.e. those that specify the location where the event takes place but not frame-setting adverbials] and temporal modifiers.

    c. Eventuality expressions combine with manner adverbials, instrumentals, comitatives, etc. (Maienborn, 2005, ex. 3)

Maienborn (2005, p. 297) introduced a new eventuality diagnostic based on the modifier *ein bisschen* 'a little bit'.

With the diagnostics listed in (21), the four diagnostics from Table 2 distinguishing K-states and D-states are recorded. The following examples in (22-25) illustrate these tests in German and their French equivalents, showing that French D-states in (a) and K-states in (b) behave similarly.

- Infinitival complements of perception verbs

    (22) a. Ich sah Carol warten/schlafen

          J'ai vu Carol attendre/dormir

          'I saw Carol waiting/sleeping'

        b. *Ich sah die Tomaten 1 Kg wiegen

          *J'ai vu les tomates peser 1 kg

          'I saw the tomatoes weighing 1 kg'

          (Maienborn, 2005, ex. 10b, 9a)

- Locative modifiers

    (23) a. Paul schläft (gerade) im Auto

          Paul dort (maintenant) dans la voiture

          'Paul is sleeping (at the moment) in the car'

        b. *Die Tomaten wiegen neben den Zwiebeln 1 Kg

          *Les tomates pèsent à côté des oignons 1 kg

          'The tomatoes weigh besides the onions 1 kg'

          (Maienborn, 2005, ex. 26a, 27a)

- Manner modification

    (24) a. Carol saß reglos/kerzengerade am Tisch

          Carole était assise immobile/droite comme un cierge à la table

          'Carol sat as motionless/straight as a die at the table'

        b. *Paul besitzt sparsam/spendabel viel Geld

          *Paul possède parcimonieusement/généreusement beaucoup d'argent

          'Paul possesses thriftily/generously a lot of money'

          (Maienborn, 2005, ex. 31b, 30b)

Fábregas & Marín (2012a, p. 45) noted that the manner modifiers test has to be used carefully because it presupposes that there must be an agent able to control the manner, but they confirm that the test works pretty well.

>(25)   Comitatives
>
>   a. Paul schläft friedlich/mit seinem Teddy/ohne Schnuller
>
>   Paul dort paisiblement/avec sa peluche/sans tétine
>
>   'Paul sleeps calmly/with his teddy/without a dummy'
>
>   b. *Maria ähnelt mit ihrer Tochter Romy Schneider
>
>   *Maria, avec sa fille, ressemble à Romy Schneider
>
>   'Maria resembles with her daughter Romy Schneider'
>
>   (Maienborn, 2005, ex. 31a, 30a)

- Time-span reading with *un petit peu* 'a little'

The modifier *un petit peu* 'a little bit' (*ein bisschen*, in German), which can be used for gradable predicates, is ambiguous between a time-span reading (i.e. modifying the temporal extension of an event) and a reading as a degree modifier. Time-span reading is only available for Davidsonian-state verbs (26a) and is excluded for Kimian-state verbs (26b), which allow only the degree reading (26c):

>(26)   a. Paul hat ein bisschen im Garten gesessen
>
>   Paul s'est un petit peu assis dans le jardin
>
>   'Paul sat in the garden a little while'
>
>   (Maienborn, 2005, ex. 37b)
>
>   b. *Nach ihrer 5. Heirat hieß Liz ein bisschen Burton
>
>   Après son 5ème mariage, Liz a été appelée un petit peu Burton
>
>   'After her 5th marriage, Liz was-named Burton a little bit'
>
>   c. Carol ähnelte ein bisschen ihrer Großmutter
>
>   Carole ressemblait un petit peu à sa grand-mère
>
>   'Carol resembled her grandmother a little bit'
>
>   (Maienborn, 2005, ex. 39a-c)

For the study of verbs in French VN compounds, I will use these tests to identify the type of stative verb that this morphological process selects.

4. Type of stative verbs selected by French VN compounds

This section aims at showing how VN compounds clearly select certain specific types of stative verbs.

The aspectual value of a VN's base-verb is related both to the relation between the verb and the noun, and to the denotation of the compound itself. This is particularly noticeable for ambiguous verbs. Thus, a base-verb of VN compounding may have a different aspectual value depending on the N to which it is associated and to the denotation of the compound. For example, the verb *cacher* 'hide' in *cache-tampon* 'hide the thimble' (lit. hide-pad) corresponds to the dynamic and agentive construction of the verb, in connection with the event interpretation of the compound that denotes a game where

someone hides a pad. However, the verb *cacher* 'hide' in *cache-cœur* 'wrap-over top' (lit. hide-heart) corresponds to the stative construction of the verb, in that the compound denotes an object that cannot dynamically hide a heart.

4.1. Result 1: The scarcity of unambiguous stative verbs

As a first result of the study, we can argue that VN compounding rarely selects unambiguous stative verbs, that is to say, stative verbs which express a stative reading only.

So, subject-experiencer verbs (as, for example, those in (27)) that are typically classified as pure stative verbs (see Grimshaw, 1990; Pustejovsky, 1991; Tenny, 1994; Rothmayr, 2009; Barque et al., 2012; but not Huyghe & Junet, 2010, § 2, who showed that some of them are ambiguous in French) are not selected by French VN compounding.

> (27) admirer 'admire', adorer 'adore', appréhender 'dread', connaître 'know', craindre 'to be afraid of, fear', croire 'believe', comprendre 'comprehend', désirer 'desire', detester 'hate', envier 'envy', espérer 'hope', haïr 'hate', mépriser 'despise', posséder 'own', regretter 'regret', respecter 'respect', savoir 'know'
> (Rothmayr, 2009, p. 109; Huyghe & Junet, 2010, § 2; Barque et al., 2012, p. 23)

In the corpus, only one VN compound based on subject experiencer verb (see 28) was found, but this verb, *souffrir* 'suffer' is not productive in VN compounding and has not given rise to other VNs.

> (28) souffre-douleur 'whipping boy' (lit. suffer-pain)

The same is observed with object-experiencer verbs, also good candidates for the class of pure statives, but poor candidates for VN compounds, which are not formed on these bases (29).

> (29) attirer 'appeal to', décourager 'discourage', déranger 'bother', effrayer 'frighten', dérouter 'puzzle', inquiéter 'worry', intéresser 'interest', obséder 'obsess', puer 'stink', tenter 'tempt'
> (Rothmayr, 2009, p. 124; Barque et al., 2012, p. 23)

Here again, the corpus contains a VN compound based on stative object-experiencer verb, *amuser* 'amuse' (30):

> (30) amuse-gueule 'appetizer' (lit. amuse-mouth)

However, not only is it not productive (only one VN formed), but this psychological verb, is also, after all, not an unambiguous stative verb and can have either an eventive construction, which is agentive (31a), or a causative construction which is generally classified as stative aspectually (31b) (see, for French: Gross, 1975, p. 31; Huyghe & Jugnet, 2010, § 2.3; Barque et al., 2012, p. 24; and for other languages: Alexiadou, 2011; and Anagnostopoulou, 1999, for Greek; Arad, 2002 and Pylkkänen, 2000 for English).

(31)   a. Agentive construction

       Ce que fait Sophie, c'est amuser les enfants

       'What Sophie does is to amuse the children'

    b. Stative construction

       Cette situation amuse Marion

       'This situation amuses Marion'

       (Huyghe & Jugnet, 2010, § 2.3)

The VN, *amuse-gueule* 'appetizer' (lit. amuse-mouth), selects the stative construction, which corresponds to a Kimian-State (32):

(32)   L'amuse-gueule au saumon a beaucoup amusé notre invité. = subinterval property

       'The appetizer with salmon amused a lot our guest'

       *L'amuse-gueule au saumon amusait beaucoup notre invité et cela s'est passé pendant…

       'The appetizer with salmon amused a lot our guest and it happened during…'

       *L'amuse-gueule au saumon a arrêté d'amuser notre invité.

       'The appetizer with salmon stopped amusing our guest'

       *L'amuse-gueule au saumon amuse lentement/peu à peu/notre invité.

       'The appetizer with salmon slowly amuses/little by little/our guest'

       *J'ai vu l'amuse-gueule au saumon amuser notre invité.

       'I saw the appetizer with salmon amusing our guest'

       *L'amuse-gueule au saumon amuse tranquillement notre invité.

       'The appetizer with salmon quietly amuses our guest'

       *L'amuse-gueule au saumon amuse notre invité dans le salon.

       'The appetizer with salmon amuses our guests in the living room'

       L'amuse-gueule au saumon amuse un petit peu notre invité. = degree reading but *time span reading

       'The appetizer with salmon amuses our guest a bit'

The scarcity of strictly stative verbs in VN compounds is not confined to subject-experiencer or object-experiencer verbs, but also affects other types of verbs that are traditionally viewed as pure statives. For example, measure verbs (33a) that express the degree of a certain property such as length or duration, or verbs of existence, of presence and absence (34a) seldom appear in French VN compounds:

(33)   a. contenir 'contain', consister en 'consist of', coûter/valoir 'cost', durer 'last', mesurer
       'measure', peser 'weigh' (Rothmayr, 2009, p. 131; Alexiadou, 2011, § 2.3)

    b. Le livre coûte 5 euros 'the book costs 5 euros'

    c. *coûte-5euros 'cost-5euros'

(34)   a. apparaître 'appear', exister 'exist', prospérer 'flourish', rester 'remain', 'live', suffire
       'suffice ' (Levin, 1993, p. 249; Rothmayr, 2009, p. 147; Alexiadou, 2011, § 2.3)

    b. Les ressources existent 'resources exist'

    c. *existe-ressource 'exist-resource'

Indeed, if any of them appears, it is the dynamic construction that is selected by the VN compound. This is what happens, for example, with the measure verb *peser* 'weigh' that appears productively in French VNs: *pèse-bébé* (lit. weigh-baby 'baby-scale'), *pèse-personne* (lit. weigh-person 'bathroom scales'), *pèse-lettres* (lit. weigh-letter 'postal scale'). But here the agentive and transitive dynamic verb is selected (as in *Jean pèse les tomates* 'Jean weighs the tomatoes') and not the stative verb that imposes a complement of measure (as in *Les tomates pèsent 4 kg* 'The tomatoes weigh 4 kg').

To conclude, unambiguous stative verbs are not productive in VN compounds. Nevertheless, the preference for Kimian-state verbs is confirmed by the study of ambiguous stative verbs.

4.2. Result 2: VN compounding prefers ambiguous verbs.

As the examples of the verbs *amuser* 'amuse' and *peser* 'weigh' have already shown, a second type of verbs has been identified, those that are ambiguous and display a stative construction as well as an eventive one (which is dynamic). The formation of each VN implies that the morphological schema (VN compounding) selects one or both constructions (see, for example, Fábregas & Marín, 2012, for the same proposal concerning State Nominalizations). That is to say, for alternating base-verbs that can have either a dynamic or a stative construction, several situations can occur: either VN compounding selects the dynamic and the stative bases to form different VNs, or VN compounding selects only the dynamic one or the stative one. As will be shown below, both situations are possible in French VN compounds, depending on the base-verbs. Hence, VN compounding, like other morphological processes on verbal bases (see, for example, Fábregas & Marín, 2012, § 4.3), spells out the two aspectual values of the verb that it combines with. In the framework of Lexemic Morphology these two readings of a verb are viewed as two different constructions. As a syntactic construction is part of the identity of a lexeme (together with phonological and semantic properties), a lexeme cannot have both a Stative and a Dynamic construction. This means that, since an alternating verb has the same inflection forms but behaves differently with respect to syntax-semantics, it corresponds in fact to two homonymous lexemes (Fradin & Kerleroux, 2003a, 2003b).

The most productive stative base-verbs in French VN compounds are alternating verbs. However, the group of ambiguous verbs is not uniform and, as shown by several scholars (Rothmayr, 2009; Alexiadou, 2011; among others), it must be divided into several subclasses. A first account of VN compounds shows that the two most productive base-verbs are "Obstruct verbs" such as *abattre* 'slay', *cacher* 'hide', *couvrir* 'cover', *garder* 'protect', *parer* 'ward off', *protéger* 'protect' (35), "Support" verbs such as *soutenir* 'support' (36) and "Holding verbs" such as *porter* 'support, wear', *serrer* 'grip' (37), followed by "Dispositional" verbs such as *aider* 'help' (38).

(35)   abat-jour 'lampshade' (lit. slays-day)
          cache-pot 'flower-pot cover' (lit. hide-pot)
          couvre-lit 'bed-cover' (lit. cover-bed)
          garde-boue 'mudguard' (lit. protect from mud)
          pare-brise 'windshield' (lit. protect-breeze)
          protège-cahier 'exercise-book cover' (lit. protect-exercise-book)

(36)   soutien-gorge 'bra' (lit. support-bosom)
          soutien-pieds 'footrest' (lit. support-feet)

(37)   a. *porter* = 'support'
           porte-bagages 'luggage rack' (lit. support-luggage)
           porte-feuille 'wallet' (lit. support-leaves)
       b. *porter* = 'wear'
           porte-flingue 'hatchet man' (lit. wear-gun)
           porte-guenille 'scarecrow' (lit. wear-rag)
       c. *serrer* = 'grip'
           serre-tête 'headband' (lit. grip-head)
           serre-livres 'bookend' (lit. grip-books)

(38)   aide-mémoire 'reminder' (lit. help-memory)

4.2.1.   Obstruct verbs

Obstruct verbs are known to be ambiguous, allowing either an agentive construction or a stative construction (see Kratzer, 2000, for English; Rothmayr, 2009, for German; or Alexiadou, 2011, for Greek). In fact, they belong to the class of verbs that undergo so-called "instrument alternation" (Kratzer, 2000; Rothmayr, 2009), that is to say, verbs that either have an agent in the subject position together with a possible "instrument" phrase expressed by a PP (39a) or verbs where there is only the "instrument" present, this time in the subject position (39b).

(39)   a. Sue is obstructing the traffic with her car
           Irmy is filling the vase with water
       b. The tissue obstructed the blood vessel
           Water is filling the vase

The agentive construction is eventive, "the agent is engaged in some kind of action causing some kind of effect" while the so-called "instrumental" construction is stative, "involving neither an action of an agent nor an increasing development of the resultant state" (Rothmayr, 2009, pp. 38, 45).

Obstruct verbs selected by VN compounding undergo this "instrument" alternation that corresponds more to a "means alternation" in Fradin's terms (2012) (see below, § 5.2.2.).

VN compounding may select both or only one of these two constructions. For example, the verb *protéger* 'protect' corresponds to two lexemes (distinguished by the two argumental constructions) exemplified in 40a and 40b, but VN compounds select only the stative one (cf. 41).

(40) a. Agentive construction of *protéger*
          Jean protège son cahier avec un protège-cahier.
          'Jean protects his notebook with an exercise-book cover'
      b. Stative construction of *protéger*
          Le plastique protège le cahier.
          'The plastic protects the notebook'

(41)   protège-bas 'ankle sock' (lit. protect-stockings)
          protège-cahier 'exercise-book cover' (lit. protect-exercise-book)
          protège-dents 'gum-shield' (lit. protect-teeth)

We observe the same selection for other ambiguous verbs such as *couvrir* 'cover' (42).

(42) a. Agentive construction of *couvrir*
          Jean couvre son lit d'une couverture.
          'Jean covers his bed with a blanket'
      b. Stative construction of *couvrir*
          La couverture couvre le lit.
          'The blanket covers the bed'

VN compounding selects only the stative construction of the verb (43).

(43)   couvre-chef 'hat, headgear' (lit. cover-head)
          couvre-lit 'bedspread' (lit. cover-bed)
          couvre-joint 'cover strip' (lit. cover-seal)
          couvre-pieds 'quilt' (lit. cover-feet)

However, VN compounding may select the two constructions, stative and agentive, in different compounds. This is the case for the verb *cacher* 'hide' (44) or *garder* 'guard' 'protect' (45).

(44) a. Agentive construction of *cacher*
          Jean cache son pot à l'aide d'un papier doré.
          'Jean hides his pot with golden paper'
      b. Stative construction of *cacher*
          Un papier doré cache le pot.
          'Golden paper hides the pot'

(45) a. Agentive construction of *garder*
          'guard' 'look after'
          Jean garde l'entrée de l'immeuble
          'John guards the entrance of the building'

   b. Stative construction of *garder*
       'protect'
       Ce pantalon me garde de la boue
       'These pants protect me from mud'
       'keep'
       Jean garde ses bouteilles à la cave
       'John keeps his wine in the cellar'

VN compounds preferentially select the stative construction (cf. 46a) but also the eventive/agentive construction (46b):

   (46) a. cache-cœur 'wrap-over top' (lit. hide-heart)
             cache-misère 'wrap or coat worn to hide old or dirty clothes' (lit. hide-poverty)
             cache-radiateur 'radiator cover' (lit. hide-radiator)
             garder = 'protect'
             garde-boue 'mudguard, fender' (lit. protect from mud)
             garde-fou 'railing, parapet, safeguard' (lit. protect madman)
             garde-rats 'rat guard' (protective device to stop rats from boarding the ship) (lit. protect from rats)
             garder = 'keep'
             garde-manger 'pantry' (lit. keep-food)
             garde-meuble 'storehouse' (lit. keep-furniture)
             garde-robe 'wardrobe' (lit. keep-dress)

   b. cache-douille 'Thief who conceals a coin in an account' (lit. hide-money)
       cache-tampon 'hide the thimble' (lit. hide-pad)
       garde-barrière 'level-crossing keeper' (lit. guard-gate)
       garde-voie 'line guard' (lit. guard-rails)
       garde-chasse 'game keeper' (lit. guard-hunt)

4.2.2. Support and holding verbs

Support and holding verbs also alternate between a stative and agentive construction. They are represented in VN compounds by the verb *soutenir* 'support' (cf. 47) which is not very productive, and *porter* 'support, carry' (cf. 48) and *serrer* 'grip' (49) which are.

   (47) a. Agentive construction of *soutenir*
             Jean soutient Marie pour l'aider à marcher
             'John supports Mary to help her walk'
         b. Stative construction of *soutenir*
             Le mur soutient le toit et l'empêche de tomber
             'The wall supports the roof and prevents it from falling'

(48)   a. Agentive construction of *porter*
        'carry, bring'
        Jean porte les bagages et son bébé
        'Jean carries the luggage and his baby'
    b. Stative construction of *porter*
        'bear, support':
        Les colonnes portent le toit
        'The columns carry the roof'
        'wear'
        Jean porte une bague en argent
        'Jean wears a silver ring'

(49)   a. Agentive construction of *serrer*
        'tighten'
        Je serre fort la vis pour maintenir la planche
        'I am tightening the screw well to hold the plank in place'
        'hold'
        La maman serre son bébé très fort dans ses bras
        'The mother is holding her baby tightly in her arms'
    b. Stative construction of *serrer*
        'grip' 'squeeze'
        Les corsets serraient la taille
        Corsets squeezed the waist
        'lock'
        Elle a serré ses bijoux dans un écrin
        'She locked her jewellery in a case'

While VN compounding selects only the stative construction of *soutenir* (50), it selects both constructions of the verbs *porter* and *serrer* agentive (51) and stative (52a, 52b).

(50)   soutien-gorge 'bra' (lit. support-bosom)
        soutien-pieds 'footrest' (lit. support-feet)

(51)   a. porte-aigle 'person who carries the standard/eagle' (lit. carry-eagle)
        porte-croix 'cross bearer' (lit. carry-cross)
        porte-drapeau 'standard bearer' (lit. carry-standard)
    b. serre-frein 'brake-man, railway employee in charge of braking' (lit. tighten-brake)
        serre-noeud 'tonsillectomy snare' (lit. hold-knot)
        serre-patin 'third hand brake tool' (lit. hold-brake-shoe)

(52)   a. porte-bagages 'luggage rack' (lit. support-luggage)
        porte-bébé 'babysling' (lit. carry-baby)
        porte-plume 'penholder' (lit. hold-feather)
    b. serre-tête 'headband' (lit. grip-head)
        serre-livres 'bookend' (lit. grip-books)
        serre-bijoux 'jewel case' (lit. lock-jewel)

4.2.3. Verbs of position

Verbs of position that express the localization of an object alternate in French between a stative and an agentive construction. Although the majority of them, such as those in (53), are not possible in French VNs, two of them, *appuyer* ('rest')/*s'appuyer sur* 'support') and *reposer sur* ('rest' 'lie') are productive in VNs.

(53)   a.   border 'border', dominer 'tower', incliner 'tilt', pendouiller 'dangle', planer 'hover', pendre 'hang', ressortir 'protrude', s'adosser *à* 'stand against', s'étaler 'lie'
             (Levin, 1993, p. 255; Rothmayr, 2009, pp. 147-153; Alexiadou, 2011, § 2.3)
       b.   La haie borde la route 'The hedge borders the road'
       c.   *borde-route (lit. border-road)

Indeed, verbs of position can have different constructions in French, a static construction and an agentive construction. For example, the verb *reposer sur* 'to rest, lie' corresponds to two verbs according to its aspectual value (54).

(54)   a.   Agentive construction of *reposer sur*
             Une petite fille repose sa tête sur les genoux de sa mère
             'A little girl rests her head on her mother's lap'
       b.   Stative construction of *reposer sur*
             Sa main repose sur la couverture
             'His hand rests on the blanket'
             Son écharpe et son chapeau reposaient sur un fauteuil
             'His scarf and hat lay on a chair'

In the case of the verb *appuyer*, the two verbs are distinguished by the fact that one is pronominal and the other not, representing different meanings (55):

(55)   a.   Agentive construction of *appuyer* 'rest'
             Il appuya sa tête contre la vitre
             'He rested his head against the window'
       b.   Stative construction of *s'appuyer sur* 'Support something by giving support'
             Chaque étagère s'appuie sur l'étagère voisine et soutient l'étagère suivante
             'Each shelf rests on the neighboring shelf and supports the next shelf'
             Le pot s'appuie sur l'écrou par l'intermédiaire du filetage
             'The pot leans on the nut through the thread'

VN compounding selects both the dynamic verb (56) and the stative verb (57)

(56)   a.   appuie-bras 'armrests' (lit. rest-arm), appuie-coude 'elbow restraints' (lit. rest-albow), appuie-main 'handrest' (lit. rest-hand), appuie-nuque 'neckrest' (lit. rest-neck), appuie-tête 'headrest' (lit. rest-head)
       b.   repose-bras 'armrests' (lit. rest-arm), repose-pieds 'footrest' (lit. rest-foot), repose-tête 'headrest' (lit. rest-head)

(57) a. appuie-livres 'bookend' (lit. support-books), appuie-pot (lit. support-pot)

  b. repose-plat 'tablemat' (lit. rest-plate), repose-fer 'iron-rest' (lit. rest-iron), repose-canne 'pole roost' (lit. rest-pole), repose-cuillère 'spoon-rest' (lit. rest-spoon)

Note that although Maienborn (2003) argues that these verbs of position belong to the class of Davidsonian statives, we will distinguish two classes of verbs: first, following Maienborn (2003), we will classify as a Davidsonian verb *reposer* 'rest' that accepts the tests of infinitival complements of perception verbs, event-related manner/locative adverbial and time-span reading with *un peu* 'a little' (see 58a); and second, following here the analysis of Rothmayr (2009, p. 147), we will classify the verb *s'appuyer sur* 'lean' (58b) as a Kimian-state verb.

(58) a. Mon pied repose sur le repose-pied (= subinterval property)
      'My foot is resting on the footrest'
      *Le pied reposait sur le repose-pied et cela s'est passé pendant…
      'The foot rested on the footrest and this happened during'
      *Le pied a arrêté de reposer sur le repose-pied
      'The foot has stopped resting on the footrest'
      *Le pied repose lentement/peu à peu/sur le repose-pied
      'The foot is slowly/gradually/resting on the footrest
      J'ai vu le pied reposer sur le repose-pied
      'I saw the foot rest on the footrest'
      Le pied repose tranquillement/dans le salon/ sur le repose-pied
      'The foot rests quietly/in the living room/on the footrest'
      Le pied repose un petit peu sur le repose-pied (ambiguity = degree reading or time span reading)
      'The foot rests a little on the footrest'

  b. Le livre s'appuie sur l'appuie-livre (= subinterval property)
      *Le livre s'appuyait sur l'appuie-livre et cela s'est passé pendant…
      'The book leaned on the bookend and this happened during…'
      *Le livre a arrêté de s'appuyer sur l'appuie-livre
      'The book stopped leaning on the bookend'
      *Le livre s'est appuyé lentement/peu à peu/dans le salon sur l'appuie-livre
      'The book leaned slowly/gradually/in the living room on the bookend'
      *J'ai vu le livre s'appuyer sur l'appuie-livre
      'I saw the book lean on the bookend'
      Le livre s'appuie un petit peu sur l'appuie-livre (= degree reading)
      'The book leans a little on the bookend'

4.2.4. Dispositional verbs

Dispositional verbs are represented in French VNs by a single verb, *aider* 'help', that forms compounds in (59a) and (59b).

(59) a. aide-mémoire 'reminder' (lit. help-memory); aide-ouïe (lit. help-hearing)

b. aide-cuisinier 'kitchen assistant' (lit. help-chef); aide-éducateur 'teaching assistant' (lit. help-educator); aide-bibliothécaire 'library assistant' (lit. help-librarian); aide-chimiste 'assistant chemist' (lit. help-chemist); aide-jardinier 'assistant gardener' (lit. help-gardener)

"Help" verbs are well known to be ambiguous with respect to their event structure, and may have an eventive construction due to some helping-activity done by an agent (60a)[8], and also a stative construction (60b):

(60)   a. Agentive construction of *aider*
           Rebecca a aidé Jamaal dans la cuisine 'Rebecca helped Jamaal in the kitchen'
        b. Stative construction of *aider*
           Le fait que Rebecca ait réparé sa moto a beaucoup aidé Jamaal
           'The fact that Rebecca had fixed his motorbike helped Jamaal a lot'

Although the stative status of "help" verbs is not always clear (the application of tests is a sensitive topic of debate (see Rothmayr, 2009, pp. 80-100; after Engleberg, 2005)), our analysis tends to support the presumption in favour of a stative construction of the Verb-Noun predicates in (59a). They pass the majority of Kimian stative tests (61).

(61)   Cet aide-mémoire m'a beaucoup aidé pour l'examen final. (= subinterval property) 'This aide-mémoire helped me a lot for the final exam'
        *Cet aide-mémoire m'a beaucoup aidé et cela s'est passé pendant… 'This aide-mémoire helped me a lot and it happened during…'
        *Cet aide-mémoire a arrêté de m'aider 'This aide-mémoire stopped helping me'
        *Cet aide-mémoire m'aide lentement 'This aide-mémoire slowly helps me'
        *J'ai vu cet aide-mémoire m'aider 'I saw this aide-mémoire help me'
        *Cet aide-mémoire m'aide dans la cuisine 'This aide-mémoire helps me in the kitchen'
        Cet aide-mémoire m'a un petit peu aidé (= degree reading) 'This aide-mémoire helped me a little bit'

The stative construction of the verb *aider* 'help' is only valid for the two VNs in (59a), but not the others in (59b) that are very productive in forming agentive compounds (54 examples in the corpus). Indeed, as for every agentive VN, the base-verb has to be dynamic as shown by the positive tests in (62):

(62)   L'aide-cuisinier a (peu à peu) aidé le cuisinier (hier) (dans le cellier), et cela s'est passé pendant l'après-midi
        'The kitchen assistant (gradually) helped the cook (yesterday) (in the cellar), and this happened during the afternoon'

---

[8] Examples (60) are adapted from Engelberg 2005.

4.2.5. Overview and frequency

Table 3 below gives a synthetic view of the possible constructions of ambiguous verbs. As shown, the stative construction is exclusive in one third of the cases (grey cells). Furthermore, all the stative verbal constructions share the same property: they are Kimian-States. So, taking also into account the unambiguous stative verbs, it can be argued that there is a link between all stative verbs in VNs: VN compounding, when selecting a stative base-verb, preferentially selects Kimian states.

Verbs		Frequency per million words of VNs according to the construction of the verb.		
		Stative construction		Dynamic construction
		Kimian-State	Davidsonian-State	
Obstruct verbs	*abattre* 'slay'	5 (1880-1899)	-	0 (2 occurrences: 1840-1849)
	cacher 'hide'	4 (1910-1919)	-	0 (4 occurrences : 1980-1989)
	couvrir 'cover	2 (1980-1989)	-	-
	garder 'protect'	4 (2010-2019)	-	3 (1896-1869)
	parer 'ward off'	12 (2010-2012)	-	-
	protéger 'protect	0 (4 occurrences : 1970-1979)	-	-
Support verbs	*soutenir* 'support'	4 (2000-2009)	-	-
Holding verbs	*porter* 'support, carry, wear'	21 (1880-1979)	-	4 (1990-1999)
	serrer 'grip'	1 (1930-1939)	-	0 (6 occurrences : 2000-2009)
- Verb of position	*appuyer* 'lean, rest'/ *s'appuyer* 'support'	0 (1 occurrence: 2010-2019)	-	0 (6 occurrences 2000-2009)
	reposer 'rest'	0 (0 occurrence)	-	0 (4 occurrences : 1990-1999)
Dispositional verbs	*aider* 'help'	1 (1990-1999)	-	0 (14 occurrences: 1930-1939)

Table 3. Selection of ambiguous verb constructions in French VN compounds and frequencies of VNs

In addition, this table shows that the frequencies (per million words) of the stative verbs in VN compounds are, on average, much higher than those of the dynamic verbs (the frequencies shown in Table 3 are those corresponding to the period in which they are the highest). These quantitative data are taken from the Frantext database (https://www.frantext.fr/) from which the TLFi dictionary entries are taken (recall that the corpus on which this study of VNs was conducted is largely derived from the TLFi). Frantext is a 251-million-word database with 5350 references (including French literary and philosophical texts, but also some scientific and technical texts). The Frantext database was used to calculate the frequency of a list of words in the corpus. Thus, for the same verb, the database was queried with a list of VNs formed on the stative construction of the verb and that on the dynamic construction. In order to illustrate this search, we can take the example of the VNs formed on the basis of the verb *abattre* 'slay' which has few VNs. The result is shown in Table 4.

VNs formed on the base-verb *abattre* 'slay'	Stative construction of *abattre*	Frequency per million words in Frantext	
	abat-jour	1880-1899	5
	abat-son	1860-1879	4
	abat-vent	1980-1999	4
	abat-voix	1960-1979	4
		1900-1919	4
		1920-1939	3
	Dynamic construction of *abattre*		
	abat-feuille	1840-1849	0
	abat-flanc		
	abat-foin	1910-1919	0

Table 4. Comparison of the frequencies per million words of the VNs according to the aspectual properties of the verbal base.

It shows that VNs formed on the stative base-verb are much more abundant than those formed on the dynamic base verb. The same method was followed for VNs constructed on other verbal bases and the results are similar.

5. Relation between the aspectual class of the verb and the VN output

The next analysis consisted in checking whether there is a link between the aspectual class of the verb and the VN semantic output. Cross-linking these properties shows that constraints do exist.

5.1. VN outputs with non-ambiguous stative base-verb

The only VN compound with a subject experiencer stative verb (*souffre-douleur* 'whipping boy' (lit. suffer-pain)) constructs a human output, denoting the person who has the psychological experience described by the verb (the experiencer). Agent or Instrument outputs are impossible, as evidenced by the fact that they are incompatible with agent (63a) and instrument (63b) noun detection tests (see below Section 5.2.1. for the description of these tests):

(63)   a.   *Mon **souffre-douleur** souffre <u>volontairement</u> de douleur
              'My whipping boy is voluntarily suffering from pain'
       b.   *Il souffre de douleur <u>avec/au moyen d'/à l'aide</u> d'un **souffre-douleur**
              'He suffers from pain with/by means of/with the help of a whipping boy'

Similarly, the compound with an object-experiencer stative verb (*amuse-gueule* 'appetizer' (lit. amuse-mouth)) only constructs a Means output (64), denoting the object (see § 5.2.2. for the presentation of the tests).

(64)   L'amuse-gueule amuse sa gueule.
              'The appetizer amuses his mouth.'

5.2. VN outputs with ambiguous verb-bases

VN compounds with ambiguous verbs (stative and eventive/agentive) construct different outputs depending on the type of base-verb.

When the agentive construction of the verb is selected, VN readings are Agents (65a) or Instruments (65b).

(65)   a.   garde-barrière 'level-crossing keeper' (lit. guard-gate)
              garde-chasse 'game keeper' (lit. guard-hunt)
              porte-drapeau 'standard bearer' (lit. carry-standard)
       b.   garde-temps 'timepiece' (lit. guard-time)
              abat-feuille 'drop finger' (lit. drop-sheet)
              porte-brancard 'stretcher carrier' (lit. carry-stretcher)

When the stative construction of the verb is selected, VNs denote objects that are Means (66) or objects that are Locations (67).

(66)   abat-jour 'lampshade' (lit. slays-day)
              protège-bas 'ankle sock' (lit. protect-stockings)
              porte-accessoires 'accessory holder' (lit. support-accessory)

(67)   cache-aiguilles 'needle case' (lit. hide-needle)
            garde-robe 'wardrobe'(lit. keep-dress)
            porte-bouteille 'bottle carrier' (lit. bear-bottle)
            ramasse-couverts 'cutlery tray' (lit. collect-cutlery)

Section 5.2.1. will present the criteria for recognizing Agentive and Instrumental readings of VNs, section 5.2.2. for Means readings, and section 5.2.3. for Locative readings.

5.2.1. Agentive and Instrumental interpretations of ambiguous verbs

The prototypical semantic readings of VNs based on dynamic transitive verbs are Agent (an animated entity that intentionally realizes the action described by the base-verb) and Instrument (an artefact prototypically used to perform the action described by the base-verb and that needs to be permanently controlled by an Agent) (see, for French, Huyghe & Tribout, 2015; Fradin 2012), as shown by Agent and Instrument noun detection tests:

(i)   Agent Nominals can co-occur with adverbials expressing volition (68) (Dowty, 1979; Verkuyl, 1989).

       (68)   Ce *gratte-papier* gratte <u>inconsciemment</u> du papier toute la journée
                   'This paper pusher scribbles away obliviously all day long'
                   Le *garde-côte* garde <u>consciencieusement</u> les côtes bretonnes du soir au matin
                   'The coastguard conscientiously guards the Breton coast from evening to morning'

(ii)   Instrument Nominals can occur in a prepositional phrase, depending on their base-verb, introduced by *avec* 'with', *au moyen de* 'by means of', *à l'aide de* 'with the help of' (69) (see, Koenig et al., 2007; and, for French, Namer & Villoing, 2008).

       (69)   X Base-Verb Y → X Base-Verb Y *avec* 'with', *au moyen de* 'by means of', *à l'aide de*
                   'with the help of' Y
                a. Il ouvre la boîte <u>avec</u>/<u>au moyen d'</u>/<u>à l'aide d'</u>un *ouvre-boîte*
                   'He opens the can with/by means of/with the help of a can opener'
                b. Il lave le linge <u>avec</u>/ <u>au moyen d'</u>/<u>à l'aide d'</u>un *lave-linge*
                   'He washes the laundry with/by means of/with the help of a washing machine

Furthermore, the Instrument interpretation of a base-verb nominal implies the obligatory presence of an instrument in the meaning of the verb, as shown by Ferret & Villoing (2015, p. 484) who proposed a test (70b), following an idea of Koenig et al. (2007, p. 182) (see 70a).

       (70)   a. "if 'somebody beheads somebody' is true, 'she beheads him with something' and 'she uses
                   something to behead him' are also true"
                b. x has VP-*ed* ↠ x used an object to VP (true) such as a N-Inst for example (true)
                c. 'Jean shaved Paul's head → Jean used an object to shave Paul's head (True), such as a
                   razor, for example (true)'
                   'Jean murdered his wife ↠ Jean used an object to murder his wife (False)'

5.2.2. Means interpretation

The Means reading of VN compounds is built on a stative construction of an ambiguous base-verb. It has not been observed before and deserves further analysis. Although Means nominalizations are quite common in many languages (see Gaeta, 2002; Fradin, 2011; Melloni, 2011; Bauer et al., 2013, p. 241), they have seldom been dealt with in work on nominalization, no doubt because this interpretation is never specific of one affix only. Furthermore, very few authors make the distinction between an Instrument and a Means reading. Here, we follow the distinction proposed by Fradin (2011) for French.

The ontological distinction between Instruments and Means reading is quite tricky and linked to the property of an instrument of being an artefact used as a tool that still requires the constant manipulation of an agent to function (e.g. *ouvre-boîte* 'can opener') (including automatic instruments that also require an agent to activate them, and that once in motion, can operate autonomously; e.g. *lave-linge* 'washing machine') (Croft, 1991; Van Valin & LaPolla, 1997, p. 84; Fradin, 2012, § 2). On the other hand, means are objects that also have a useful purpose but do not require the constant manipulation of a human to "do" something; once in place, they operate autonomously (ex: *couvre-lit* 'bedspread') (Fradin, 2012).

Following Fradin (2011, pp. 6-7), deverbal nouns with a Means interpretation are incompatible with the Agent tests: contrary to Agent nominals (71a), they cannot co-occur with adverbials expressing volitionality and the control of the referent (71b). VN compounds with the Means reading are also incompatible with these adverbs (71c).

(71)   a.   Le *ramoneur* ramone <u>consciencieusement</u> le conduit
            'The chimney sweeper <u>carefully</u> sweeps the flue'
            Ces *pêcheurs* ont pêché <u>involontairement</u> une espèce de poisson protégé
            'These fishermen have <u>unintentionally</u> caught a species of protected fish'

       b.   **L'éclairage* éclaire <u>consciencieusement</u> le bureau
            'The lighting conscientiously illuminates the office'
            *Un *barrage* de vieux pneus barre <u>involontairement</u> l'avenue
            'A barrage of old tires unintentionally bars the avenue'

       c.   *Un *abat-jour* abat <u>consciencieusement</u>/involontairement/le jour
            'A lampshade conscientiously/involuntarily/hides the day'
            *Un *protège-dents* protège <u>volontairement</u> les dents
            'A mouth piece voluntarily protects the teeth'

Likewise, Means nominals have some difficulty appearing as the head of a prepositional phrase introduced by *avec* 'with' (72a), contrary to Instruments (72b) (the examples are from Fradin, 2011):

(72)   a.   *Luc a renseigné l'agent double <u>avec</u> un *renseignement* pourri
            'Luke gave information to the double agent <u>with</u> an unreliable *piece of information*'
       b.   Carole a écrit la lettre <u>avec</u> un *stylo-plume*
            'Carole wrote the letter <u>with</u> a *fountain-pen*'

Means VN compounds can share the same properties (73):

(73)   *Jean abat le jour <u>avec</u> un *abat-jour*
         'Jean breaks the day with a lampshade'
         *Marie porte ses bagages <u>avec</u> un *porte-bagage*
         'Marie carries her luggage with a luggage rack'
         *Le livre s'appuie <u>avec</u> un *appuie-livre*
         'The book leans with a bookend'

However, this test is not completely reliable and works pretty well with many VNs whose reading is on the borderline between Instrument and Means (see (74)).

(74)   Il couvre son lit <u>avec</u> un *couvre-lit*
         'He covers his bed with a bedspread'
         Il cache son cœur <u>avec</u> un *cache-cœur*
         'He hides his heart with a wrap-over top'
         Il protège son cahier <u>avec</u> un *protège-cahier*
         'He protects his notebook with an exercise book cover'
         Il chauffe son bain <u>avec</u> un *chauffe-bain*
         'He warms his bath with a hot-water tank'

That is why it is advisable to apply several tests and compare them with one another. The test of the subject position appears to be more relevant for standard instruments (and not automatic instruments): Means nominalizations have the capacity to head an NP occurring as the subject of their verbal base (75a), contrary to prototypical instruments (75b), because an instrument needs an agent to work. VNs with the 'means' reading share this property (75c).

(75)   a. Une *couverture* d'ardoise en mauvais état *couvre* la grange
           'A slate roof in bad condition covers the barn'
           Le *divertissement* qu'il avait inventé nous a bien *divertis*
           'The entertainment he had invented amused us'
       b. *Le *stylo* a écrit la lettre
           'The fountain pen wrote the letter'
           *Le *rabot* a aplani le plancher
           'The plane has levelled the floor'
       c. Le *garde-fou* l'a protégé de la chute
           'The safeguard protected him from the fall'
           Le *couvre-pieds* me réchauffe suffisamment
           'The quilt warms me up enough'

5.2.3. Locative interpretation

Another interpretation that occurs much more rarely is the locative interpretation. This is found not only with verbs of position (76a), as expected, but also with other ambiguous verbs whose stative construction is selected to form an object nominal serving as a storage location for other objects (76b):

(76) a. appuie-livres 'bookend' (lit. lean-books), repose-plat 'tablemat' (lit. rest-plate)

     b. cache-aiguille (lit. hide-needle), porte-bouteille 'bottle rack' (lit. bear-bottle)

Indeed, VNs formed on base-verbs of spatial configuration denote objects that are neither Instruments nor Means, but objects or surfaces (the "site") described by the VN predicate to which the displaced entities will move (the "target"), that is to say the N.

Thus, *appuie-livres* ('bookend') refers to an object on which the books rest, just as *repose-pieds* ('footrest') denotes an object on which the feet rest (see Fradin, 2012 for an analysis of locative nouns suffixed in -*oir* in the framework of Kracht, 2002).

These VNs do not respond correctly to the Instrument nominal detection tests (77a) since the VNs do not denote instruments used to perform an action. As shown by the false result of the implication test (77b), it is possible for a book to lean on something without requiring the use of an instrument or for a foot to lean somewhere without resorting to an object such as a footrest. However, you cannot cut paper or weigh a baby without using an instrument (77c, d) (see below, 5.2.1. for the presentation of these tests).

(77) a. # Mon livre s'appuie <u>avec/au moyen d'/à l'aide d'</u>un *appuie-livre*

        'My book leans on with/by means of/with the help of bookend'

        # Ma tête repose <u>avec/au moyen d'/à l'aide d'</u>un *repose-tête*

        'My head rests with/by means of/with the help of a headrest'

     b. Le livre s'appuie sur quelque chose → Le livre a utilisé un instrument/objet pour s'appuyer (Faux)

        'The book leans on something → The book used an instrument/object to lean (False)'

        Son pied repose sur quelque chose → Son pied a utilisé un instrument/objet pour reposer (Faux)

        'His foot rests on something → His foot used an instrument/object to rest (False)'

     c. Jean coupe du papier → Jean a utilisé un instrument/objet pour couper du papier (Vrai)

        'Jean cut paper → Jean used an instrument/object to cut paper (True)'

     d. Jean pèse un bébé → Jean a utilisé un instrument/objet pour peser un bébé (Vrai)

        'Jean weighs a baby → Jean used an instrument/object to weigh a baby (True)'

Moreover, these VNs do not respond correctly to the identification test of a Means (78a) unlike prototypical Means (78b):

(78) a. *Un appuie-tête appuie/s'appuie la tête

        'A headrest leans the head'

        *Un repose-pied repose les pieds

        'A footrest rests the feet'

    b. Un couvre-lit couvre le lit
       'A bedspread covers the bed'
       Un chauffe-eau chauffe l'eau
       'A water heater heats the water'
       Un protège-cahier protège le cahier
       'A notebook cover protects the notebook'

On the other hand, these VNs respond well to the localization test by means of the spatial preposition *sur* 'on' (79a) in the same way as the suffixed nouns in *-oir* (Namer & Villoing, 2008) (79b):

(79) a. Le livre s'appuie sur un appuie-livre
       'The book leans on a bookend'
       Mes pieds reposent sur un repose-pieds
       'My feet rest on a footrest'
    b. J'ai écrit (une lettre) sur l'écritoire
       'I wrote (a letter) on the clipboard'
       Je me suis accoudé sur un accoudoir
       'I leaned on an armrest'
       J'ai patiné sur une patinoire
       'I skated on an ice rink'

5.3. Predictability of the VN interpretation relative to the base-verb.

The study of the relations between the semantics of the base-verbs and VN interpretations shows systematic links. Table 5 summarizes these relations. It clearly reveals that VNs on stative base-verbs never form Agent and Instrument nominals but only Experiencer, Means or Location nominals. Conversely, VNs based on the dynamic agentive construction of ambiguous verbs can be interpreted as Agent or Instrument nominals and not Experiencer or Means nominals.

		VN Interpretation				
	Base-verb	Agent	Instrument	Experiencer	Means	Location
Dynamic Agentive construction of ambiguous verbs	– Obstruct verbs	+ cache-douille	+ abat-feuille	-	-	-
	– Holding verbs	+ porte-aigle	+ porte-brancard	-	-	-
	– Dispositional verbs	+ aide-cuisinier	-			
	– Verbs of position	-	-	-	-	+ repose-pieds
Stative Verbs	– Subject experiencer verbs	-	-	+ souffre-douleur	-	-
	– Object experiencer verbs	-	-		+ amuse-gueule	-
	– Obstruct verbs	-	-	-	+ couvre-lit	+ cache-aiguille
	– Support verbs	-	-	-	+ soutien-gorge	+ porte-bouteille
	– Holding verbs	-	-	-	+ porte-bagages	-
	– Dispositional verbs	-	-	-	+ aide-mémoire	-
	– Verb of position					+ appuie-livre

Table 5. Relations between the base-verb and the VN interpretation.

These systematic regularities are consistent with the VN compounding semantic schema. Indeed, the semantic interpretation of VNs is predictable from the semantics of the base-predicate. As shown in Section 2, VN compounding denotes an entity which is semantically related to the event described by the verbal base, either a semantic argument of the verb (agent, instrument, patient…), or a causer of the event, or even a place where the event takes place (see Fradin, 2005; Villoing, 2009). Thus, to form a VN denoting an object, the VN compounding semantic schema mostly nominalizes the first argument of the verb, the external argument. This argument is an agent or an instrument in the case of the dynamic agentive construction of the verb, or an experiencer or a means in the case of the stative construction of the verb. This explains why VNs denoting agents or instruments are based on agentive verbs and VNs denoting experiencers or means are based on stative verbs.

The study of VNs also provided an additional illustration of Fradin's (2011) previous results on the link and the predictability between Means interpretation of deverbals and stative base-verbs. Based on French suffixed nominals, Fradin (2011, p. 5) showed first that Means nominals are always based on the stative value of verbs whose nominalized argument never presents the property of an agent or an

instrument. The study of VNs tends to confirm that the Means interpretation is strictly correlated with the stative aspectual property of the base-verb.

All that remains for us now is the relation between VNs denoting location and the various aspectual properties of the base-verbs: this interpretation is associated with a stative verb (as expected with verbs of spatial relations) as well as with a dynamic one.

6. Conclusion

This paper has presented the first results of a study examining the place of stative verbs in French Verb-Noun compounding. It shows firstly that, by contrast with what is commonly claimed, VN compounding does not only select dynamic verbs but also stative verbs. Second, it also reveals that stative verbs compatible with VN compounds represent only a subclass of stative verbs, namely ambiguous verbs allowing either an agentive or a stative reading. However, non-ambiguous stative verbs are very rare and unproductive in VN compounds. Nevertheless, whether ambiguous or not, the stative verbs present in VN compounds all share the property of satisfying the criteria of Kimian states.

Finally, the study has established a link between the aspectual values of the base-verb and the interpretation of VN compounds, in accordance with the semantic principles of nominalization of the semantic arguments of verbs: the stative reading of the VN's verb-base embodies either a Means interpretation of the VN or a locative/spatial interpretation.

However, the study remains unfinished and several lines of research remain to be pursued. In particular, an in-depth analysis needs to be carried out in order to:

(i)   explain why VN compounding preferentially selects ambiguous verbs;

(ii)   give a formal representation of the semantic schema of VN compounding including a semantic decomposition of base-verbs.

Moreover, the productivity of these stative verbs needs to be verified in a contemporary VN corpus, for example by conducting the same study on a large corpus or Web data (as proposed by Ricca, 2010, for Italian VN compounds).

Furthermore, it could be interesting to extend the analysis to other word formation schemas that build, like VN compounds, agents and instruments but can also select stative verbs, such as the *–eur* '-er' suffixation (80), which has not yet given rise to studies despite the existence of an extensive literature (see for the English *-er* suffix, Rappaport & Levin, 1992; Alexiadou & Schäffer, 2010; and for French, Fradin & Kerleroux, 2003b; Fradin, 2005; Roy & Soare, 2012; Huyghe & Tribout, 2015).

(80)   admirateur 'admirer', amateur 'amateur', connaisseur 'expert', penseur 'thinker', pueur 'person who stinks ', possesseur 'possessor'.

It would also be fruitful to extend the analysis to other Romance Languages. At first glance, VN compounds built on a non-prototypical stative verbal base are also found in some other Romance languages, such as Italian (see below the examples of Italian VN compounds based on very productive stative verbs such as *coprire* 'cover' in (81a.), *portare* 'carry' (in 81b.), *guardare* 'protect, keep' in (81c), *règgere* 'hold' in (81d), *salvare* 'protect, save' in (81e))[9].

> (81) a. copricostume 'beach robe' (lit. cover-swimsuit)
>   copridivano 'loose cover' (lit. cover-sofa)
>   copriocchiaie 'concealer' (lit. cover-shadow)
>   b. portatovagliolo 'napkin ring' (lit. support-towel)
>   portauovo 'egg-cup' (lit. carry-egg)
>   portaspazzolino 'toothbrush holder' (lit. carry-toothbrush)
>   c. guardafréni 'brake protection' (lit. protect-brake)
>   guardaroba 'wardrobe' (lit. keep-dress)
>   d. reggipénne 'penholder' (lit. hold-feather)
>   reggipètto 'bra' (lit. support-bosom)
>   e. salvagente 'life belt' (lit. save-people)
>   salvatàcco (lit. protect-heel)

This would enable a closer investigation of the following remarks made in passing by Ricca (2015), whose intuition points in the same direction as our analysis.

> "Another unprototypical instrument subclass is given by items in which the V is [−dynamic], like Cat. *cobrellit* = Fr. couvre-lit = It. *copriletto* = Sp. *cubrecama* cover-bed 'bedcover'." (Ricca, 2015, p. 691)

> "…[−dynamic] verbs occur as long as they may allow − in a different context − for a controlling first argument, i.e. they are not stative proper. This is the case for many verbal bases like It. *porta-* 'carry', *reggi-* 'hold', *copri-* 'cover', which are in fact among the most productive of all and give rise to a host of names for containers, holders, covers. But the impossibility of formations like Sp. **tienefiebre* lit.'have-fever' (Varela, 1990, p. 70) or It. **pesachili* lit. 'weigh-kilos' seems to hold across all Romance languages." (Ricca, 2015, p. 697)

The study of verbal stativity still has a bright future ahead of it, and that of morphological constructs on stative base-verbs could enlighten it advantageously.

7. References

Dictionaries

Dictionnaire Général de la Langue Française, du commencement du XVIIè siècle à nos jours, A. Hatzfeld & A. Darmesteter, 1890-1900. Paris : Librairie Ch. Delagrave.

---

[9] Many thanks to Fabio Montermini, Fiammetta Namer, Davide Ricca and Jan Radimsky for their assistance with Italian VN compounds

Dictionnaire de la langue française, É. Littré, 1863-1872. Paris : Hachette.

Grand Larousse Universel de la langue française (7 vol., 1971-1986). Paris : Larousse.

Grand Robert de la Langue Française, Dictionnaire alphabétique et analogique de la langue française, (1951-1966 [1ère édition], 9 vol.), Paris : P. Robert, Dictionnaires LE ROBERT.

Alexiadou, A. (2011). Statives and nominalization. *Recherches Linguistiques de Vincennes*, *40*, 25-52.

Alexiadou, A. & Schäfer, F. (2010). On the syntax of episodical vs. dispositional *-er* nominals. In A. Alexiadou & M. Rathert (Eds), *The Syntax of Nominalizations across Languages and Frameworks* (pp. 9-30). Berlin: Mouton de Gruyter.

Anderson, S. R. (1992). *A-Morphous Morphology*. Cambridge: Cambridge University Press.

Anagnostopoulou, E. (1999). On experiencers. In A. Alexiadou, G. Horrocks & M. Stavroun (Eds), *Studies in Greek Syntax* (pp. 67-93). Dordrecht: Kluwer.

Arad, M. (2002). Universal features and language-particular morphemes. In A. Alexiadou (Ed.), *Theoretical approaches to universals* (pp. 15-40). Amsterdam: John Benjamins.

Aronoff, M. (1994). *Morphology by itself*. Cambridge: MIT Press.

Bach, E. (1986). The Algebra of Events. *Linguistics and Philosophy, 9*, 5-16.

Barque, L., Fábregas, A. & Marín, R. (2012). Les noms d'état psychologique et leurs "objets" : étude d'une alternance sémantique. *Lexique*, *20*, 21-41.

Bauer, L., Lieber, R. & Plag, I. (2013). *The Oxford reference guide to English morphology*. Oxford: Oxford University Press.

Beauseroy, D. (2009). *Syntaxe et sémantique des noms abstraits statifs : des propriétés verbales ou adjectivales aux propriétés nominales*, Thèse de Doctorat, Université de Nancy II, Nancy.

Bernal, E. (2012). Catalan compounds. *Probus, International Journal of Latin and Romance Linguistics, 24*(1), 5-27.

Bertinetto, P. M. (1994). Statives, progressives and habituals: analogies and differences. *Linguistics, 32*, 391-423.

Bisetto, A. & Scalise, S. (1999). Compounding: morphology and/or syntax?. In L. Mereu (Ed.), *The Boundaries of Morphology and Syntax* (pp. 31-48). Amsterdam: Benjamins.

Bisetto, A. & Scalise, S. (2005). Classification of compounds. *Lingue e linguaggio, 2*, 319-330.

Booij, G. (2010). *Construction Morphology*. Oxford: Oxford University Press.

Comrie, B. (1979). Definite and animate objects: a natural class. *Linguistica Silesiana, 3*, 13-21.

Copley, B. & Roy, I. (2015). Deriving the readings of French "*être en train de*". *Romance Languages and Linguistic Theory*. Selected proceedings of *Going Romance 2013, 27th Symposium on Romance Linguistics* (pp. 103-118). Amsterdam: University of Amsterdam.

Corbin, D. (1992). Hypothèses sur les frontières de la composition nominale. *Cahiers de grammaire*, *17*, 26-55.

Corbin, D. (1997). Locutions, composés, unités polylexématiques : lexicalisation et mode de construction. In M. Martins-Baltar (dir.), *La locution, entre langue et usages* (p. 55-102). Fontenay-St-Cloud: ENS Editions.

Corbin, D. (2004). French (Indo European: Romance). In G. Booij, C. Lehmann & J. Mugdan (Eds), *Morphology. An International Handbook on Inflection and Word Formation 1* (ch. 121, pp. 1285-1299). Berlin/New York: Walter de Gruyter.

Croft, W. (1991). *Syntactic categories and grammatical relations: The cognitive organization of information*. Chicago: University of Chicago Press.

Croft, W. (2012). *Verbs: Aspect and Causal Structure*. Oxford, UK: Oxford University Press.

Dal, G. (1999). Suffixation par -*et(te)* et bases verbales. In D. Corbin, G. Dal, B. Fradin, B. Habert, F. Kerleroux, M. Plénat & M. Roché (dir.), *La morphologie des dérivés évaluatifs, Forum de morphologie (2ᵉᵐᵉˢ rencontres), Silexicales 2* (p. 37-47). Villeneuve d'Ascq/Toulouse : CNRS & Université Lille 3.

Dal, G. & Namer, F. (2010). Les noms en -*ance/-ence* du français : quel(s) patron(s) constructionnel(s)?. In F. Neveu, V. Muni Toke, J. Durand, T. Klingler, L. Mondada & S. Prévot (dir.), *Actes du 2ème Congrès Mondial de Linguistique Française 2010* (p. 893-907), Paris : Institut de Linguistique Française, EDP Sciences.

Dowty, D. (1979). *Word Meaning and Montague grammar.* Dordrecht: Reidel.

Engelberg, S. (2005). Kimian states and the grammar of predicative adjectives. *Theoretical Linguistics, 31*, 331-347.

Fábregas, A. & Marín, R. (2012). State nouns are Kimian states. In I. Franco, S. Lusini & A. Saab (Eds), *Romance Languages and Linguistic Theory: Selected papers from 'Going Romance' Leiden 2010* (pp. 41-64). Amsterdam: John Benjamins.

Fábregas, A. & Marín, R. (2013). Differentiating eventivity from dynamicity: the Aktionsart of Davidsonian state verbs. Ms. *Linguistic Symposium on Romance Languages (LSRL) 42*. Cedar City, UT: Southern Utah University (20-22 April 2012).

Ferret, K. & Villoing, F. (2015). French derived instrumentals N-*age*: semantic properties of the base verb. In I. Plag & S. Lapp (Eds), *Morphology* (pp. 473-496). Netherlands: Springer.

Fradin, B. (2003). *Nouvelles approches en morphologie.* Paris : PUF.

Fradin, B. (2005). On a semantically grounded difference between derivation and compounding. In W. U. Dressler, D. Katovsky & F. Rainer (Eds), *Morphology and its Demarcations* (pp. 161-182). Amsterdam/Philadelphia: John Benjamins.

Fradin, B. (2009). Compounding in French. In R. Lieber & P. Štekauer (Eds), *Oxford Handbook on Compounding* (pp. 417-435). Oxford: Oxford University Press.

Fradin, B. (2011). Remarks on State-denoting nominalizations. *Recherches linguistiques de Vincennes*, 40, 73-99.

Fradin, B. (2012). Les nominalisations et la lecture 'moyen'. *Lexique*, *20*, 125-152.

Fradin, B. & Kerleroux, F. (2003a). Quelles bases pour les procédés de la morphologie constructionnelle?. In B. Fradin, G. Dal, N. Hathout, M. Plénat, & M. Roché (dir.), *Les unités morphologiques, Silexicales*, *3* (p. 76–84). Villeneuve d'Ascq : SILEX: CNRS & Université Lille 3.

Fradin, B. & Kerleroux, F. (2003b). Troubles with lexemes. In G. Booij, J. de Cesaris, S. Scalise & A. Ralli (dir.), *Topics in Morphology. Selected papers from the Third Mediterranean Morphology Meeting 2001* (pp. 177-196). Barcelona: IULA-Universitat Pompeu Fabra.

Gaeta, L. (2002), *Quando i verbi compaiono come nomi. Un saggio di Morfologia Naturale*. Milano: FrancoAngeli.

Gather, A. (2001). *Romanische Verb-Nomen Komposita: Wortbildung zwischen Lexikon, Morphologie und Syntax*. Tübingen: Narr.

Gross, M. (1975). *Méthodes en syntaxe. Régime des constructions complétives*. Paris : Hermann.

Grossmann, M. (2012). Romanian Compounds. *Probus, International Journal of Latin and Romance Linguistics, 24*(1), 147-173.

Guevara, E. R. (2012). Spanish Compounds. *Probus, International Journal of Latin and Romance Linguistics, 24*(1), 175-195.

Grimshaw, J. (1990). *Argument structure*. Cambridge, MA: MIT Press.

Haas, P. (2009). *Comment l'aspect vient aux noms. Les propriétés aspectuelles des noms à l'épreuve des restrictions de sélection imposées par certaines prépositions*, Thèse de doctorat, Université de Lille 3, Lille.

Hathout, N., Plénat, M. & Tanguy, L. (2003). Enquête sur les dérivés en *-able*. In N. Hathout & M. Roché (dir.), *Les Cahiers de Grammaire*, *28*, 49-90.

Huyghe, R. & Jugnet, A. (2010). Nominalisations statives et transfert aspectuel : quel héritage sémantique ?. In F. Neveu, V. Muni Toke, T. Klingler, J. Durand, L. Mondada & S. Prévost (dir.), *Congrès Mondial de Linguistique Française 2010* (p. 1713-1726). Paris : Institut de Linguistique Française, EDP Sciences.

Huyghe, R. & Tribout, D. (2015). Noms d'agents et noms d'instruments : le cas des déverbaux en *-eur*, *Langue française*, *185*(1), 99-112.

Kelling, C. (2003). French psych verbs and derived nouns. In M. Butt & T. H. King (Eds), *Nominals. Inside and out* (pp. 151-179). Standford: CSLI Publications.

Kenny, A. (1963). *Action, Emotion, and Will*. London: Routledge & Kegan Paul.

Kerleroux, F. (2004). Sur quels objets portent les opérations morphologiques de construction ?. *Lexique*, *16*, 85-123.

Knittel, M. L. (2015). Les nominalisations : un état des lieux. [numéro spécial]. *Le Français Moderne*, *1*, 3-17.

Knittel, M. L. (2016). Les noms en -*ance* : un panorama. In F. Neveu, G. Bergounioux, M.-H. Côté, J.-M. Fournier, L. Hriba & S. Prevost (dir.), *Actes du 5ᵉ Congrès Mondial de Linguistique Français 2016*, (vol. 27). (https://doi.org/10.1051/shsconf/20162712011).

Knittel, M. L. (2017, december). French deverbal nominals in -ant: semantic properties. Communication présentée à l'*International Symposium of Morphology* (ISMo), Université de Lille, France.

Koenig, J. P., Mauner, G., Bienvenue, B. & Conklin, K. (2007). What with? The anatomy of a (Proto)-Role. *Journal of Semantics, 25*, 175-220.

Kracht, M. (2002). On the Semantics of Locatives. *Linguistics and Philosophy, 25*, 157-232.

Krifka, M. (1989). Nominal reference, temporal constitution and quantification in event semantics. In R. Bartsch, J. van Benthem & P. von Emde Boas (Eds), *Semantics and contextual expression* (pp. 75-115). Dordrecht: Foris.

Kratzer, A. (2000). Building statives. In L. J. Conathan, J. Good, D. Kavitskaya, A. B. Wulf & A. C. L. Yu (Eds), *Proceedings of the Twenty-sixth Annual Meeting of the Berkeley Linguistics Society* (pp. 385-399). Berkeley: University of California, Berkeley Linguistics Society.

Lakoff, G. (1966). Stative Adjectives and Verbs in English. In A. G. Oettinger (Ed.), *Mathematical Linguistics and Automatic Translation*, (*Report NSF-17*(1), pp. 1-16). Cambridge, MA: The Computation Laboratory, Harvard University.

Levin, B. (1993). *English Verb Classes and Alternations: A Preliminary Investigation*. Chicago, IL: University of Chicago Press.

Levin, B. (2007). The Lexical Semantics of Verbs II: Aspectual Approaches to Lexical Semantic Representation. *Course LSA*. Stanford University, 1-3 July.

Levin, B. & Rappaport M. (1995). *Unaccusativity: At the Syntax-Lexical Semantics Interface*. Cambridge: MIT Press.

Levin, B. & Rappaport, M. (2005). *Argument Realization*. Cambridge, UK: Cambridge University Press.

Maienborn, C. (2003). *Die logische Form von Kopula-Satzen*. Berlin: Akademie-Verlag.

Maienborn, C. (2005). On the limits of the Davidsonian approach: The case of copula sentences. *Theoretical Linguistics, 31*(3), 275-316.

Maienborn, C. (2008). On Davidsonian and Kimian states. In I. Comorowsky & K. von Heusinger (Eds), *Existence: Semantics and Syntax* (pp. 107-130). Dordrecht: Springer.

Marín, R. (2013). *La stativité dans tous ses états*. Mémoire d'habilitation, Université Paris 8.

Martin, F. (2008). *Les prédicats statifs : étude sémantique et pragmatique*. Paris/Bruxelles : De Boeck Supérieur.

Martin F. (2009). The Semantics of Eventive Suffixes in French. In F. Schäfer (Ed.) *'SinSpec', Working Papers of the SFB 732* (pp. 109-140). Stuttgart: University of Stuttgart.

Masini F. & Scalise S. (2012), Italian compounds. *Probus*, *24*(1), 61-91.

Matthews, P. (1991). *Morphology*. Cambridge: Cambridge University Press.

Melloni, C. (2011). *Event and result nominals: A morpho-semantic approach*. Bern: Peter Lang.

Meinschäfer, J. (2003). Nominalizations of French psychological verbs. In J. Quer, J. Schroten, M. Scorretti, P. Sleeman & E. Verheugt (Eds), *Selected Papers from Going Romance* (pp. 231-246). Amsterdam: John Benjamins.

Meinschaefer J. (2006). The argument structure of French psychological nominalizations. In P. C. Steiner, H. C. Boas & S. J. Schierholz (Eds), *Contrastive Studies and Valency/Kontrastive Studien und Valenz. Studies in honor of Hans Ulrich Boas/Festschrift für Hans Ulrich Boas* (pp. 25-38). Bern: Peter Lang.

Namer F. & Villoing F. (2007). Have cutthroats anything to do with tracheotomes? Distinctive properties of VN vs. NV compounds in French. In G. Booij, L. Ducceschi, B. Fradin, E. Guevara, A. Ralli & S. Scalise (Eds), *Proceedings of the Fifth Mediterranean Morphology Meeting (MMM5) 2005* (pp. 105-124). (http://mmm.lis.upatras.gr/index.php/mmm/article/view/2385/2644).

Namer, F. & Villoing, F. (2008). Interpréter les noms déverbaux : quelle relation avec la structure argumentale du verbe de base ? Le cas des noms en -*oir(e)* du français. In J. Durand, B. Habert & B. Laks (dir.), *Actes du 1er Congrès Mondial de Linguistique Française (CMLF) 2008* (p. 1551-1569). Paris : Institut de Linguistique Française, EDP Sciences.

New, B., Pallier, C., Ferrand, L. & Matos, R. (2001). Une base de données lexicales du français contemporain sur internet : LEXIQUE. *L'Année Psychologique*, *101*, 447-462.

Plénat, M. (2005). *Rosinette, cousinette, starlinette, chipinette*. Décalage, infixation et épenthèse devant -ette. In I. Choï-Jonin, M. Bras, A. Dagnac & M. Rouquier (dir.), *Questions de classification en linguistique : méthodes et descriptions, Mélanges offerts au Professeur Christian Molinier* (p. 275-298). Berne : Peter Lang.

Pustejovsky, J. (1991). The syntax of event structure. *Cognition, 21*, 47-81.

Pylkkänen, L. (2000). On Stativity and Causation. In C. Tenny & J. Pustejovsky (Eds), *Events as Grammatical Objects* (pp. 417-442). Stanford: CSLI Publications.

Radimsky, J. (2006). *Les composés italiens actuels*. Paris : Cellule de Recherche en Linguistique.

Rainer, F. & Varela, S. (1992). Compounding in Spanish, *Rivista di linguistica, 4*(1), 117-142.

Rappaport Hovav, M. & Levin B. (1992). -*er* Nominals: Implications for a Theory of Argument Structure'. In T. Stowell & E. Wehrli (Eds), *Syntax and Semantics 26: Syntax and the Lexicon* (pp. 127-153). New York: Academic Press.

Ricca, D. (2010). Corpus data and theoretical implications: With special reference to Italian V-N compounds. In S. Scalise & I. Vogel (Eds), *Cross-disciplinary Issues in Compounding* (pp. 237-254). Amsterdam/Philadelphia: John Benjamins.

Ricca, D. (2015). Verb-noun compounds in Romance. In P. O. Müller, I. Ohnheiser, S. Olsen & F. Rainer (Eds), *Word-Formation: An International Handbook of the Languages of Europe* (pp. 688-707). Berlin: Mouton de Gruyter.

Rio Torto, G. & Ribeiro, S. (2012). Portuguese compounds. *Probus, International Journal of Latin and Romance Linguistics, 24*(1), 119-145.

Roché, M. (2003). L'interfixe est-il une unité morphologique ?. In B. Fradin, G. Dal, N. Hathout, F. Kerleroux, M. Plénat & M. Roché (dir.), *Actes du 3e Forum International de Morphologie 2002, Les unités morphologiques. Silexicales 3* (p. 169-178). Lille : Université Lille 3, SILEX.

Rothmayr, A. (2009). *The structure of stative verbs.* Amsterdam: John Benjamins.

Roy, I. & Soare, E. (2012). L'enquêteur, le surveillant et le détenu : les noms déverbaux de participants aux événements, lectures événementielles et structure argumentale. *Lexique, 20*, 207-231.

Roy, I. & Soare, E. (2014a). On the internal event properties of -*er* nominals. *Lingua, 141*, 139-156.

Roy, I. & Soare, E. (2014b). Les noms d'humains dérivés de participes : nominalisations en -*ant* et -*é/i/u*. In *Actes du 4e Congrès Mondial de Linguistique Française (CMLF),* SHS Web of Conferences, (vol. 8, p. 3197-3208). Paris : Institut de Linguistique Française, EDP Sciences.

Roy, I. & Soare, E. (2015). Nominalisations de participes : propriétés verbales et syntaxe interne. *Le français moderne, 1*, 54-71.

Scalise, S. (1984). *Generative Morphology*. Dordrecht-Holland: Foris publications.

Scalise, S. (1992). Compounding in Italian, *Rivista di linguistica, 4*(1), 175-200.

Scalise, S. & Bisetto, A. (2009). The classification of compounds. In R. Lieber & P. Štekauer (Eds), *The Oxford Handbook of Compounding* (pp. 34-53). Oxford: Oxford University Press.

Schapira, C. (1985). Les composes roumains à thème verbal et leur place dans l'ensemble des langues romanes. *Revue de Linguistique Romane, 49*, 15-26.

Soare, E. (2018). Patrons de nominalisation et aspect grammatical. In N. Flaux, P. Haas, V. Mostrov, K. Paykin & F. Tayalati (dir.), *De la passion du sens en linguistique: hommages à Danièle Van de Velde* (p. 345-370). Valenciennes : Presses Universitaires de Valenciennes.

Štichauer, P. (2015). The meaning of Italian VN compounds in a diachronic perspective: the development of a word-formation rule and its semantic instruction. In J. Audring, N. Koutsoukos, F. Masini & I. Raffaelli (Eds), *Morphology and Semantics. On-line Proceedings of the 9th Mediterranean*

Morphology   Meeting   (pp.   138-142).   (http://mmm.lis.upatras.gr/index.php/mmm/article/view/2275/2448).

Tenny, C. (1992). The Aspectual Interface Hypothesis. In I. Sag & A. Szabolcsi (Eds), *Lexical Matters* (pp. 1-28). Stanford: CSLI Lecture Notes.

Tenny, C. L. (1994). *Aspectual roles and the syntax-semantics interface*. Dordrecht: Kluwer.

Trésor de la Langue Française, Dictionnaire de la langue du XIXe et du XXe siècle 1789-1960 (16 vol., 1971-1994). Paris : CNRS, Gallimard.

Villalva, A. (1992). Compounding in Portuguese. *Rivista di linguistica, 4*(1), 201-220.

Van Valin, R. D. Jr. & LaPolla, R. J. (1997). *Syntax: structure, meaning and function*. Cambridge: Cambridge University Press.

Varela, S. (1990). Composición nominal y estructura tematica. *Revista española de linguistica, 1*, 56-81.

Vendler, Z. (1967). *Linguistics in Philosophy*. Ithaca: Cornell University Press.

Verkuyl, H. (1989). Aspectual classes and aspectual distinctions. *Linguistics and Philosophy, 12*, 39-94.

Verkuyl, H. (1993). *A Theory of Aspect.* Cambridge: Cambridge University Press.

Villoing, F. (2002). *Les mots composés [VN]$_{N/A}$ du français : réflexions épistémologiques et propositions d'analyse*, mémoire de Thèse de doctorat, Université Paris X, Nanterre.

Villoing, F. (2009). Les mots composés VN. In B. Fradin, F. Kerleroux & M. Plénat (dir), *Aperçus de morphologie du français* (p. 175-198). Saint-Denis : Presses Universitaires de Vincennes.

Villoing, F. (2012). French compounds. *Probus, International Journal of Latin and Romance Linguistics, 24*(1), 29-60.

Zwanenburg, W. (1992). Compounding in French. *Rivista di Linguistica, 4*(1), 221-240.