Are French *-ité* Suffixed Nouns Property Nouns?

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1. Introduction[1]

The present paper is about French *-ité* nouns formation. More specifically, we are dealing with their interpretations. A deadjectival noun is a complex noun morphologically coined on an adjectival base. French deadjectival nouns formation (noted A > N) includes at least eight suffixes, as reported in Table 1. Actually, *-ité* is the most represented suffix in the biggest multivolume French dictionary of general language, i.e. the *Trésor de la Langue Française* (henceforth TLF). To give an example, the TLF includes 715 deadjectival nouns ending in *-ité* (noted $A\textit{ité}_N$[2]) against 237 deadjectival nouns ending in *-erie* and only 64 nouns in *-eur*, 54 nouns in *-itude* or 40 nouns in *-esse*.

Exponent	Base Adjective	*Gloss*	Noun	*Gloss*
$A>A\textit{ité}_N$	$BANAL_A$	'banal'	$BANALITÉ_N$	'banality'
$A>A\textit{erie}_N$	$COCHON_A$	'dirty'	$COCHONNERIE_N$	'dirtiness'
$A>A\textit{eur}_N$	$GRAND_A$	'great'	$GRANDEUR_N$	'greatness'
$A>A\textit{itude}_N$	$EXACT_A$	'exact'	$EXACTITUDE_N$	'exactness'
$A>A\textit{esse}_N$	$TRISTE_A$	'sad'	$TRISTESSE_N$	'sadness'
$A>A\textit{ise}_N$	$VANTARD_A$	'boastful'	$VANTARDISE_N$	'boastfulness'
$A>A\textit{isme}_N$	$PROFESSIONNEL_A$	'professional'	$PROFESSIONNALISME_N$[3]	'professionalism'
$A>A\textit{ion}_N$	$DISCRET_A$	'discreet'	$DISCRETION_N$[4]	'discretion'

Table 1. The most frequent suffixes used in A > N constructions in French.

The aim of this paper is to analyse how $A\textit{ité}_N$ are formed (henceforth $A\textit{ité}_N$ will be construed as a plural). An analysis of the bases selected by the *-ité* word formation rule (WFR), namely the semantic properties of these bases, will be presented here. More specifically, we will pay particular attention to nouns ending with the formal sequences /alite/ or /aʁite/ which are two of the most frequent phonological sequences in TLF *-ité* ending nouns, according to Dal & Namer (2008). The TLF includes 278 /alite/ nouns and 82 /aʁite/ nouns.

Our study is in line with the Word-Based Morphology theoretical framework, following Matthews (1974), Anderson (1992), Aronoff (1994) and Fradin (2003). The paper will proceed as follows. Section 2 addresses the issue of how French nouns ending in *-ité* are interpreted. A large amount of data, collected from dictionaries, newspapers and Internet documents is introduced. We will show that not all French *-ité* suffixed nouns are property nouns. Finally, some syntactic and semantic tests will be proposed in order to rank these data according to their two possible readings, which are both available. Namely, we will see how 'property' nouns can be contrasted with 'relationship' nouns in section 3.

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[1] We would like to thank Fiammetta Namer, Stéphanie Lignon, Michel Roché and Richard Duda for their helpful comments during the preparation of this paper.

[2] In this paper, a set of complex words is represented by its base category noted in capitals (i.e. A for an adjective, N for a noun), the rule exponent and its own category noted in subscript. As an example, $A\textit{ité}_N$ represents complex nouns formed on an adjective A and ending in *-ité*.

[3] Cf. Roché (2007).

[4] Cf. Kerleroux (2008).

2. Are all French *-ité* suffixed nouns property nouns?
2.1. Characterizing -ité nouns and their bases

According to French A > A*ité*$_N$ word formation rule, the rule input is usually a predicative adjective and the output is the corresponding property noun. French *-ité* suffixed nouns are regularly coined on adjectives and denote qualities, states or objective properties (cf. Dal & Namer 2000, Corbin to appear, Roché 2009). Examples as (1-2) are instances of this general WFR.

(1) BANAL$_A$ >   BANALITÉ$_N$
          'the quality or state of being banal' (Merriam-Webster)

(2) BRUTAL$_A$ >   BRUTALITÉ$_N$
          'the quality or state of being brutal' (Merriam-Webster)

Nevertheless, A*ité*$_N$ do not exclusively express adjectival properties. In contrast to BANALITÉ and BRUTALITÉ in (1) and (2), the noun in *-ité* in (3) cannot be analysed as a property noun. This noun illustrates a general behaviour exhibited by a large set of nouns (see below): none of them share the 'property' reading provided in examples (1-2). The '#' symbol stands for a wrong semantic interpretation.

(3) a. La mortalité infantile est en baisse.
          'Infant mortality rate is decreasing'
          Here, # 'the quality or state of being mortal' but 'the death rate of the population'
     b. MORTEL$_A$ >   MORTALITÉ$_N$
          'mortal'   'mortality'

In the context (3a), MORTALITÉ$_N$ cannot be analysed as denoting the property of 'being mortal'. Rather, it is understood as a death rate. The question that arises from this observation is related to the way nouns like (3) are formed. In fact, /alite/ and /aʁite/ nouns can be ranked within three subclasses, according to their base type. In French, suffixes /al/ and /ɛʁ/ are considered as allomorphs (for an historical explanation of this allomorphy, see Cser 2008), and they are both used to form qualifying and relational adjectives. Consequently, we will call "/aLite/" the string that refers to both formal sequences /alite/ and /aʁite/. Of course, in what follows, only morphological complex /aLite/ nouns are accounted for. Among /aLite/ noun bases, three major adjectival semantic types have been distinguished. All of these adjectives are derived from nouns; see Roché (2006), Fradin (2008):

- **Ethnic property adjectives** (e.g. ORIENTAL$_A$ 'Oriental') have been studied by Dal & Namer (2005, 2008). For this reason, we will not deal with this issue in this paper.
- **Qualifying adjectives** (i.e. adjectives that describe properties, e.g. BRUTAL$_A$ 'brutal'), are henceforth noted QualAdj. These adjectives refer to the characteristic properties of the noun N they derive from (BRUTAL$_A$: 'typical of a BRUTE$_N$ = bully').
- **Potential relational adjectives** (i.e. adjectives that may have a relational reading, e.g. MORTEL$_A$ = 'related to MORT$_N$ = death'), are noted RelAdj from now on.

/aLite/ ending nouns (henceforth N*aLite*$_N$) split into two groups. At first sight, each noun set seems to be correlated with either the 'QualAdj' adjective class or the 'RelAdj' one:

- **Property Nouns** (e.g. BRUTALITÉ$_N$) are noted PropN. They are derived from QualAdj adjectives.
- **Relationship Nouns** (e.g. MORTALITÉ$_N$) are noted RelN. Unlike the former, these nouns never refer to adjectival properties. They are semantically related to the nominal base N of the adjective they derive from. This semantic relation is instantiated in a phrasal context between N and another noun N1. N1 can be realised in French as the N*aLite*$_N$ prepositional

complement. For instance, in (4), *cellularité de l'échantillon* expresses the rate relation between N= cell and N1= sample.

(4) L'analyse nous apprend que *la cellularité de l'échantillon* est insuffisante.
     'The analysis indicates that the cell rate of the sample is insufficient.'
     N=cellule (cell)   N1= échantillon (sample)

Assigning the RelN or PropN tag to N*aLite*$_N$ is not a trivial task, because base adjectives often present two interpretations: QualAdj or RelAdj, depending on the context (cf. Mélis-Puchulu, 1991; Fradin, 2007). Therefore, our aim is to determine to what extent RelN nouns can be distinguished from PropN. In other words, we will define a series of tests in order to decide whether a given N*aLite*$_N$ is semantically related to its (qualifying) adjective base N*aL*$_A$ (Fig. 1i), or whether the N*aLite*$_N$ meaning is directly derived from the nominal base N in that case the relational adjective N*aL*$_A$ derives from N but is not semantically related to N*aLite*$_N$ (Fig. 1ii).
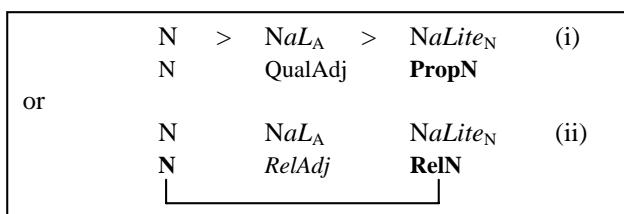
$$
\begin{array}{lllllll}
 & \text{N} & > & \text{N}aL_A & > & \text{N}aLite_N & \text{(i)} \\
 & \text{N} & & \text{QualAdj} & & \textbf{PropN} & \\
\text{or} & & & & & & \\
 & \text{N} & & \text{N}aL_A & & \text{N}aLite_N & \text{(ii)} \\
 & \textbf{N} & & \textit{RelAdj} & & \textbf{RelN} & \\
\end{array}
$$

Figure 1. Two ways of forming N*aLite*$_N$.

2.2. Data

Our corpus of N*aLite*$_N$ consists of 499 *-ité* nouns coined on denominal adjectives. This study was carried out on three databases. Among the 499 nouns, a list of 192 nouns was extracted from the TLF. A list of 26 nouns was established via the machine readable newspaper corpus of *Le Monde* (years 1987, 1991, 1995, 1999). Moreover, a program has been used to automatically build a list of candidate nouns resulting from the concatenation of the *-ité* sequence on each /aL/ suffixed adjective. These generated forms were used as Yahoo™ queries by means of the WaliM robot (Namer 2003). A massive set of nouns (i.e. 301) and their contexts were compiled from the Internet in April 2008. All contexts in (3) to (35) have been found on the Internet. Using data from Internet as a corpus required a careful processing, insofar as its content is extremely various and changing all the time; new pages appear while existing pages disappear. Moreover it is often impossible to settle the style of a web page[5]. For these reasons and more, data from the Internet has been used with caution. The corpus resulting from the Yahoo queries is called "WaliM results" in Table 2 (§2.2.1).

2.2.1. PropN and RelN

Table 2 gives a general overview of occurrences of /aLite/ nouns we have carefully quantified from three different corpora. We formed a subset of *-ité* nouns from the TLF and *Le Monde* (column 1) according to their ending value: /alite/ (column 2) or /aʁite/ (column 3)[6]. Within these subclasses, a further sorting was carried out in order to identify respectively /alite/ and /aʁite/ ending nouns with a morphologically complex base (respectively column 4 and column 5). Column 6 shows that the amount of available data we are dealing with is no way trivial. Moreover, Table 2 splits our *-ité* nouns corpus into three sub-corpora. Their size is represented in lines (1-3).

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[5] For a discussion about problems posed by the use of Internet data cf. Kilgarriff & Grefenstette (2003), Hathout *et al.* (2009).
[6] Boxes crossing Col. (1, 2, 3), lines (3, 4) are empty because WaliM queries were centred only on N*aLite*$_N$.

		1	2	3	4	5	6
		/ite/	/alite/	/aʁite/	N*alite*$_N$	N*aʁite*$_N$	Total
1	TLF	715[7]	278	82	159	33	192
2	Le Monde	119	30	6	22	4	26
3	WaliM results	-			220	81	301
4	TOTAL	-					**499[8]**

Table 2. Corpus data.

2.2.2. Formation Hypotheses: from N to RelN

This subsection is devoted to the case presented under (ii), Figure 1. What is the morphological structure of such N*aLite*$_N$? In order to answer this question, we will examine several representative instances. Examples (5-9) show a two steps formation process. Each step corresponds to the formal and categorical aspects of a WFR: N $>_{-aL}$ A, then A $>_{-ité}$ N. Semantically, N*aLite*$_N$ in sentences (a) are not related to adjective N*aL*$_A$ but to noun N. For instance, the semantics of MORTALITÉ, NUPTIALITÉ, DIVORCIALITÉ and SUICIDALITÉ are not linked to adjectival properties. In fact, these N*aLite*$_N$ denote a rate relationship as it is shown by contexts (a). PARENTALITÉ is not interpreted as denoting a relationship but the fact of being parent. From a morphological standpoint, these cases seem to be inconsistent with the compositionality principle.

(5) a. Les hommes représentent 73% de la mortalité routière.
        'Men represent 73% of road mortality'
    b. MORT$_N$ >   MORTEL$_A$ >   MORTALITÉ$_N$
        'death'   'mortal'   'mortality'

(6) a. La baisse de la nuptialité inquiète les démographes.
        'Demographers worry about the wedding rate decline'
    b. MARIAGE$_N$ >   NUPTIAL$_A$ >   NUPTIALITÉ$_N$
        'wedding'   'nuptial'   'wedding rate'

(7) a. Sur la période de 1960 à 2000, la divorcialité n'a cessé d'augmenter.
        'Divorciality during 1960-2000 was continuously increasing.'
    b. DIVORCE$_N$ >   °DIVORCIAL$_A$ >   DIVORCIALITÉ$_N$
        'divorce'   'divorcial'   'divorciality'

(8) a. On note une importante suicidalité dans chacun de ces groupes.
        'An important suicidality is noted for each of these groups.'
    b. SUICIDE$_N$ >   °SUICIDAL$_A$ >   SUICIDALITÉ$_N$
        'suicide'   'suicidal'   'suicidality'

(9) a. Le passage à la parentalité est souvent difficile.
        'Becoming parent is often difficult'
    b. PARENT$_N$ >   PARENTAL$_A$ >   PARENTALITÉ$_N$
        'parent'   'parental'   'parentality'

How are the N*aLite*$_N$ (5-9) formed? Examples (b) above illustrate the different stages in (relational) N*aLite*$_N$ formation. Each WFR application is represented by means of the > symbol. An intermediate adjectival form is sometimes attested (5, 6, 9) or not (7, 8). In the latter cases, the ° symbol marks the subsequent form as unattested, be it in dictionaries or on the Internet. The question that arises is the

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[7] This amount does not include /ibilite/ ending nouns (cf. Dal & Namer 2008).
[8] 20 N*aLite*$_N$ appear twice; in *Le Monde* and in the Yahoo™ queries.

following: why is such an intermediate adjectival form involved in these formations, as it is inconsistent with the compositionality principle? This section provides several formation hypotheses which might shed light on this issue.

Some important observations can be noted from the examples given in (5-9) and from the two ways N$aLite_N$ are formed, reported in Figure 1. Let us observe the formal aspect of N$aLite_N$ formation. The question that arises from Figure 1 can be formulated as follows: how can we explain that relational nouns N$aLite_N$ are formally built on an adjectival base (NaL_A) and not on a nominal one (N) whereas they semantically refer to a relationship with the noun N? May we provide three explanations that are not necessarily contradictory (Booij 1997, Dal 2003, Bonami & Boyé 2003, Corbett 2007):

1) The first hypothesis calls upon the notion of **syncretism**. The WFR constructing -ité nouns does naturally select adjectival bases. Since N$aLite_N$ look like being semantically coined from the noun N, then suffix /aL/ loses the function associated to the rule that forms qualifying adjectives (5-6).
2) An additional explanation is available for constructions like DIVORCIALITÉ (7) and SUICIDALITÉ (8) for which the correlated formal bases °DIVORCIAL and °SUICIDAL are not attested in French. The underlying account is that these lexemes SUICIDALITÉ and DIVORCIALITÉ are constructed by **analogy** with existing lexemes just like NUPTIALITÉ (6) or MORTALITÉ (5).
3) Thirdly, the corpus observation tallies a phenomenon named **lexical pressure** because of the high representation of /alite/ and /aʁite/ in the French lexicon, as remarked in (Dal & Namer, 2008).

> This term describes the effect the attested lexicon can exert on the possible lexicon. Our claim is that, when he/she coins a new -ité ending noun, the speaker can be influenced by his/her knowledge of actual French -ité ending nouns, stored in his mental lexicon, which we assume to be reflected by dictionaries.

When a French speaker wants to form a RelN ending in -ité, he/she preferentially selects the NaL_A form. Example (9) can thus be analysed as a case of lexical pressure because PARENT = 'parent' refers to a property. Note that lexical pressure and analogy are both causes of /aL/ syncretic use. In both cases, /aL/ loses its adjectival function. In the case of PARENTALITÉ (9)[9] we can postulate a dissimilation constraint besides lexical pressure. Interleaving the /al/ segment between /paʁɑ̃t/ and /ite/ prevents the /ɑ̃tite/ sequence (thus °PARENTITÉ) to be coined with two successive onsets with /t/. Notice that example (9) is quite different from the others (5-8) because it does not imply a relationship interpretation but a quality one. This issue leads to a larger question which will not be address here: that of property nouns directly derived from nouns (e.g. PARENTÉ$_N$ < PARENT$_N$).
4) Besides, we can formulate the hypothesis of **borrowing** from English (english SUICIDAL is attested on Merriam-Webster and SUICIDALITY on the Internet).

So far we have looked at the data collected from three databases, we have seen that there are two different ways to build a new N$aLite_N$, and we have proposed several formation hypotheses such as syncretism, lexical pressure or analogy. With this in mind, we will take a look at the different readings that have been mentioned in the sections above, but which have not been solved in a principled manner. By the way, this study of N$aLite_N$ is in line with the larger issue of formal gathering French A$ité_N$ coined on ethnic adjectives (Dal & Namer, 2008) and French deadjectival A$ment_{Adv}$ where adjectives A are coined on patronyms (Amiot & Flaux, 2005).

3. Analysis

The scope of this section is to account for the interpretation of N$aLite_N$, i.e. to determine under which conditions N$aLite_N$ can be said bearing a 'quality' or a 'relationship' reading. We will first examine the N$aLite_N$ syntactic properties by means of a set of tests (§3.1). Syntactically, the main characteristics of qualifying adjectives have to do with predicative use and gradation. These tests results

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[9] Thanks to the reviewers who suggested this point to me.

will tend to prove syntactic criteria to be insufficient. For this reason, it will be necessary to follow up concentrating our study on the semantic differences between different N$aLite_N$ interpretations (§3.2).

3.1. Syntactic Analysis

Our goal is to identify the semantic aspects of a given N$aLite_N$, that is to decide whether this N$aLite_N$ is semantically built from a QualAdj adjective (i.e. N$aLite_N$ refers to an adjectival property) (§3.1.1), or whether N$aLite_N$ is built from a RelAdj (i.e. N$aLite_N$ refers to a relationship involving N) (§3.1.2). Finally, we will see that there is a high number of N$aLite_N$ which can be understood either as a PropN or as a RelN (§ 3.1.3). We will submit our data to three tests, making use of transformational and distributional properties of nominal phrases (NP) (Gross 1975). More specifically, the tests illustrated below instanciate one of the following patterns: A↔B (equivalence) or A→B (implication). A includes N$aLite_N$ and is a nominal phrase from our corpus. B is its corresponding paraphrase and contains either NaL_A (§3.1.1) or N (§3.1.2), cf. Dell (1979: 209), Mélis-Puchulu (1991), Temple (1996: 116-117), Fradin & Kerleroux (2003), Fradin (2007).

3.1.1. Property interpretation

N$aLite_N$ expressing adjectival properties derive from NaL_A either used as predicates behind the copula *être* (Tests 1-2) or modified by a gradation adverb (Test 3).

TEST 1:	A ↔ B	Det N$aLite_N$ de NP ↔	DET NP est NaL_A		**PRED**
		Det N$aLite_N$ of NP	Det NP is NaL		
		"NP' N$aLite_N$ "			

(10) a. l'artisanalité de la fabrication ↔ b. La fabrication est artisanale
        'the hand-crafted property of production'   'This production is hand-crafted'

The predicative use of ARTISANAL in (10b) leads us to consider this adjective as referring to a quality (i.e. the property of 'being home-made') and consequently ARTISANALITÉ in (10a) as a PropN. Thus, the 'property' reading of ARTISANALITÉ in (10a) is verified by the predicative use of ARTISANAL in (10b). Test 2 is another way of expressing test 1. It puts into play a structure different from that in test 1. Indeed, it consists in an implication whereby the truth value of proposition B relies on A's truth value (A → B). The sentence in (11a) entails the one in (11b). Similarly to ARTISANALITÉ in example (10), CONSENSUALITÉ in (11a) is correlated to the adjective CONSENSUEL in a predicative use in (11b), what provides CONSENSUALITÉ 'property' reading in (11).

TEST 2:	A → B	Det N d' une N$aLite_N$ A →	Dét N être NaL_A		**PRED**
		Det N of a N$aLite_N$ A	Det NP is NaL		
		"NP' N$aLite_N$ "			

(11) a. des constats d'une consensualité affligeante → b. Ces constats sont consensuels.
        'very disappointing compliant observations'   'These observations are compliant'

While tests (1-2) involve a PropN predicative property, test (3) checks their gradable property. This test is close to what is proposed in Flaux & Van de Velde (2000). According to these authors, "beaucoup de N" can be use to identify qualifying nouns because "beaucoup de N" has only an intensive meaning. Thus, "beaucoup de N$aLite_N$" phrases deal here with NaL_A gradable properties. The transformation test 3 defines triggers modification by adverb *très* ('very') to reword a partitive determiner tagging intensity. The NP [beaucoup de brutalité] involved in example (12a) is equivalent to sentence (12b) where the noun BRUTALITÉ 'brutality' corresponds to BRUTAL$_A$ 'brutal' and the value of partitive determiner *tant* 'so many' shifts into adverb *très* 'very' modifying BRUTAL$_A$.

TEST 3:	tant de | beaucoup de N$aLite_N$	↔	Ceci est très NaL_A	**GRAD**
	so much | many N$aLite_N$		this is very NaL_A	
	'So much N$aLite$'		'This is really NaL.'	

(12) a.   [Il montre] beaucoup de brutalité   b.   [Il] est très brutal.

     'He shows a lot of brutality'   'He is really brutal'

All in all, these three tests allow us to determine the 'property' interpretation of N$aLite_N$ heading NPs in instances (10-12). This reading is determined only on the basis of properties of qualifying adjectives; they can occur in a predicative position (tests 1-2) and they are gradable (test 3).

3.1.2. Relationship interpretation

Some N$aLite_N$ such as in (13-14) fail tests (1-3). On the contrary, they are sensitive to other tests (called RelTests; e.g. tests 4-5) that lead to new paraphrases, and thus to new interpretations for N$aLite_N$. These N$aLite_N$ cannot be understood as PropN but are necessarily interpreted as RelN. Each test we will present now characterises a relationship we call $\Re$. Furthermore, each test applies to a structure the general form of which is "det N$aLite_N$ de NP$_1$". Relationships $\Re$ link together the noun N appearing in N$aLite_N$, we will call 'root noun', and NP$_1$ as follows: "N $\Re$ NP$_1$".

The $\Re$ value is contextually determined according to the information supplied by NP$_1$ and the noun N N$alite_N$ is correlated to. The possible $\Re$ values are given in Figure 2. Among the tests we have applied to identify $\Re$, only two of them are introduced here (tests 4-5), that correspond the most frequently observed ones in our corpus.

Test 4 is an equivalence test (A↔B). In B, relationship $\Re$ is instantiated with a measure meaning. As an illustration, consider example (13). The root noun N ANGLE = 'angle' in (13b) substitutes for ANGULARITÉ in (13a). ANGULARITÉ and the NP$_{NUM}$ "30,67 degrees" are linked with the **measure** relationship R. We can notice that ANGULARITÉ cannot be reworded by the adjective ANGULAIRE= 'angular'. RelN nouns fail tests (1-3) because they cannot occur in a predicative position and they are non-gradable (13c).

Test 4:	Det N$aLite_N$ de NP$_{NUM}$	↔	N $\Re$ NP$_{NUM}$	$\Re$ = **MEASURE**
	Det NaLite$_N$ of NP$_{NUM}$		*N measures NP$_{NUM}$*	

(13) a.   une angularité   de 30,67 degrés ↔ b.   l'angle mesure   30,67 degrés   [Test 4]

       an   angle measure of 30,67 degrees   'the angle measures 30,67 degrees'

                               ≠   c.   [subject?] est (très) angulaire   [Tests 1-3]

                                      '[subject?] is (very) angular'

Test 5 looks like test 4 but here, the relationship $\Re$ involved in the A↔B equivalence structure right part NP1 $\Re$ N is instantiated with a quantification meaning. As an illustration, consider example (14). The noun BANQUE = 'bank' in (14b) and the quantifier *plusieurs* 'several' substitutes for MULTIBANCARITÉ in (14a). MULTIBANCARITÉ and NP1 are linked with a **quantification** relationship morphologically realized by prefixation (*uni-*, *mono-*, *bi-*, *tri-*, *poly-*, *pluri-*, *multi-*, etc.).

Test 5:	Det Num N$aLite_N$ de NP1	↔	NP1 $\Re$ N	$\Re$ = **QUANT**
	Det Num NaLite$_N$ of NP1		*NP1 $\Re$ N*	

(14) a.   la multibancarité des ménages   ↔ b.   Les ménages ont plusieurs banques.

      'the multiple banking of households'   'Households are dealing with multiple banks'

The values taken by $\Re$ can be grouped into seven types, emerging from our analysis. Figure (2) gives a synopsis of the main cases we can come across. RelN verifying relationships (1-5) share similar semantic behaviours, as we will see thereafter (§3). Moreover, 65% of the RelN set satisfy relationships

ℜ1 to ℜ5. These relationships build the most significant semantic sets in our corpus. Relationships (6-7) are left aside here: indeed, their analysis requires further research.

1. **Measure** : CIRCULARITÉ, ANGULARITÉ	6. **Social rel.** : COUSINALITÉ
2. **Rate** : NATALITÉ, MORTALITÉ, DIVORCIALITÉ	7. **Spatial rel.** : INTERRÉGIONALITÉ
3. **Quantification** : BICULTURALITÉ, MULTIPOLARITÉ	
4. **Set** : GESTUALITÉ, RITUALITÉ	
5. **Meronymy** : NASALITÉ, CÉRÉBRALITÉ, CAPILLARITÉ	

Figure 2. Seven ℜ types.

Subsection (3.1.2) shows that some N*aLite*$_N$ bear exclusively a relational reading. At least seven relationship kinds can be highlighted via specific tests. All these nouns have in common to fail tests (1-3). However, our corpus includes many N*aLite*$_N$ that behave both like propery nouns and like relation nouns.

3.1.3. Ambiguous NaLite$_N$ nouns

Some N*aLite*$_N$ pass both 'property' and 'relationship' tests according to the context in which they are found (15-16). This observation gives prominence to the data from Internet and text corpora as *Le Monde électronique*. Let us go back to tests (1-5). We can notice that CÉRÉBRALITÉ in (15a) refers to an adjectival property denoted by CÉRÉBRAL while CÉRÉBRALITÉ in (16) is understood as 'having a brain', with ℜ = meronymy (cf. Figure 2).

(15) a. la cérébralité de cette peinture   [CÉRÉBRALITÉ$_1$]
          'the cerebrality of this painting'
     b. Cette peinture est très cérébrale.
          'This painting is very cerebral'

(16) a. la cérébralité de la pieuvre   [CÉRÉBRALITÉ$_2$]
          'the cerebrality of the octopus'
     b. # La pieuvre est (très) cérébrale.
           'The octopus is (very) cerebral'
     c. La pieuvre possède un cerveau.
          'The octopus has a brain'   CÉRÉBRALITÉ$_1$ ≠ CÉRÉBRALITÉ$_2$

Instances (15-16) comply with Fradin & Kerleroux's (2003) hypothesis. In their paper, these authors analyse CÉRÉBRAL$_1$ (predicative) and CÉRÉBRAL$_2$ (relational) as distinct lexemes. They consider CÉRÉBRAL$_1$ to be the only one possible adjective selected to coin the PropN CÉRÉBRALITÉ$_1$. We will assume that CÉRÉBRALITÉ$_1$ and CÉRÉBRALITÉ$_2$ are distinct lexemes because they carry different meanings. Moreover these nouns are in turn clearly coined from two different lexemes, CÉRÉBRAL$_1$ 'related to the mind, to the intelligence' and CÉRÉBRAL$_2$ 'related to the brain' respectively.

3.1.4. Provisional conclusions

In the early stages of this paper, we have introduced a subset of N*aLite*$_N$ as being undoubtedly PropN, passing tests (1-3). Then we have shown that many RelN N*aLite*$_N$ fail tests (1-3) but pass tests (4-5) (among other RelTests). In most cases, syntactic criteria lead to sufficiently clear results. Thus, at first sight, we could think that syntax is sufficient to decide between RelN and PropN N*aLite*$_N$. Unfortunately, and in accordance with what was previously pointed in introduction (§3), this hypothesis can no longer be retained as it is illustrated in (17-18). In these examples, BICULTURALITÉ and CELLULARITÉ cannot be understood but as relational nouns. Yet, at the same time they show a descriptive behaviour (PRED; GRAD).

(17) a.　la biculturalité de la Bretagne　　　　　[$\mathfrak{R}$ = QUANT]
　　　　　'Brittany's property of belonging to two cultures'
　　b.　La Bretagne est biculturelle.
　　　　　'Brittany is bicultural.'

(18) a.　La cellularité de cet échantillon　　　　　[$\mathfrak{R}$ = RATE]
　　　　　'The cell rate of this sample'
　　b.　Cet échantillon est très cellulaire.
　　　　　'This sample is very cellular.'

As a first conclusion, we can say that the role of syntax is insufficient here. Consequently, the identification of N*aLite*$_N$ interpretation must be a matter of semantics. In the analysis below, we will focus on the discussion of such problematic cases. In section 3.2, we will thus examine data which show further criteria that help *-ité* property nouns to be distinguished from relational nouns, when formal criteria (Tests 1-5) fail to do so.

3.2. Semantic Analysis

In this section, we will focus on two criteria used by semanticists in order to describe gradable predicates. These criteria correspond to the following distinctions; discrete vs. continuous values (§3.2.1) and open vs. closed scales (§ 3.2.2). After reviewing these two general properties of scalar adjectives, we will see to what extent they are relevant for the nouns we are dealing with, that is, we will examine how these criteria allow us to discriminate the two interpretations of N*aLite*$_N$. More specifically, we will make minimal assumptions about the scalar properties of the N*aLite*$_N$ adjectival bases, largely following the explorations of McNally and Kennedy and colleagues.

3.2.1. Discrete vs. Continuous Values

Two measure types are to be distinguished. In brief, a discrete value Vi varies from another value Vj only by whole, countable units of the set of relative integers. This set consists of numbers, including their negatives and zero (19). Unlike discrete values, continuous values are used to measure a value on the set of real numbers (20).

(19)　　DIVORCIALITÉ　　'the number of divorces in relation to the size of the population'

(20)　　ANGULARITÉ　　'angularity measure'

DIVORCIALITÉ in (19) is glossed by 'number of divorces'. This number belongs to the set of integers insofar as a semi-divorce cannot legally exist, whereas the number corresponding to an angle measure belongs to the set of real numbers. N*aLite*$_N$ in (19-20) are neither attested in French dictionaries nor in English ones, but we find them on the Internet. We propose test 6 to decide whether a measure is discrete (success) or continuous (failure).

Test 6:　la faible / la grande N*aLite*$_N$	$\leftrightarrow$	peu de N /beaucoup de N, de nombreux N	**DISCRETE**
low / large NaLite$_N$	$\leftrightarrow$	*few N / many N*	

A noun phrase including an N*aLite*$_N$ referring to a discrete value can be paraphrased with an equivalent structure, as illustrated in example (21). This structure includes N*aLite*$_N$ related N noun quantified by *de nombreux* ('many') or *peu de* ('few').

(21)   l'importante cellularité   ↔   de nombreuses cellules
        'High cellularity'[10]   'many cells'

Example (21) indicates that CELLULARITÉ refers here to a number of cells. Lexemes like NATALITÉ 'birth rate', MORTALITÉ 'death rate', CRIMINALITÉ 'crime rate', DIVORCIALITÉ 'divorce rate', NUPTIALITÉ 'wedding rate', etc. stand for rates, namely the number of x in relation to the size of the population with x = birth, death, crime, etc. (cf. examples 5-8). Consequently, we can enumerate births, crimes, divorces, etc. On the contrary, noun phrases including a N*aLite*$_N$ linked to a continuous value do not pass test 6 (22).

(22) a.   la grande circularité   ≠   beaucoup de cercles
           'high circularity'   'many circles'
     b.   La mesure de circularité de cette figure est proche de 1.
           'The circularity measure of this figure is close to 1'

When measuring angles, this measure cannot be performed within the set of integers, since angles can only be measured either in degrees (between 0° and 360°) or in radians. When measuring circularity or linearity, the calculated values correspond to numbers between 0 and 1.

3.2.2. Open vs. closed scale

Gradable adjectives are distinguished from non-gradable adjectives in that they denote properties that permit gradation. In this subsection we will only report some basic assumptions about scalar adjectives. McNally & Kennedy (2002) have developed a semantic typology of gradable predicates. A common way of analysing gradable predicates is in terms of a scale. A property scale is seen as a set of points totally ordered along some dimension corresponding to a given property (e.g. *tallness*, *coolness*, etc.). Degrees are described as positive or negative intervals in a scale (see Kennedy 1999a). Then, gradable adjectives are characterised as functions from objects to degrees. McNally & Kennedy (2002) propose a typology of degree modifiers. They demonstrate that the distribution and interpretation of degree modifiers is sensitive to two major classificatory parameters: (a) whether a gradable predicate is associated with what we call an **open** or **closed scale** and (b) whether the standard of comparison for the applicability of the predicate is **absolute** or **relative to a context**. We will have a look only at criterion (a) because (b) is not relevant in the case of our study.

Adjectives denote object properties that can be measured with degrees on a scale. In McNally & Kennedy (2002), a scale is introduced as an abstract representation of a set of ordered points. Each point represents a different measure of a single gradable property. According to the structure of the scale that a gradable property uses as a basis for ordering the objects, four scale types can be drawn. We adopt the typology of scale structures argued for in Kennedy & McNally (2002):

(i)	]----[	fully open scale, i.e. unbounded scale with no minimal nor maximal elements
		(e.g. TALL, FAST, LONG)
(ii)	]----]	upper closed scale
		(e.g. STRAIGHT, FLAT)
(iii)	[----[	lower closed scale
		(e.g. QUIET)
(iv)	[----]	fully closed scale, i.e. bounded scale with a minimal and a maximal element
		(e.g. FULL, EMPTY, OPEN, CLOSED)

Figure 3. Open vs. closed scale.

The scale is either fully open (i), i.e. has neither minimum nor maximum value, or partly closed (has only a maximum (ii) or minimum value (iii), but not both), or fully closed (iv), i.e. has a minimum and

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[10] http://ukpmc.ac.uk/articlerender.cgi?artid=1260039.

a maximum value. A particular class of (iv) are called bipolar adjectives. Actually, bipolar adjectives are gradable adjectives usually coming in pairs consisting of a positive and a negative member (e.g. full/empty). Some examples given in Figure 3 will be explained in (23-24).

Notions of measure (discrete vs continuous) and scale (open vs closed) can be crossed. These two parameters do not cover each other. Gradable adjectives denote a continuous measure (TALL, ANGULAR) or a discrete measure (CELLULAR), related to an open as well as a closed scale.

As noticed by Hay (1998), two types of gradable adjectives can be partitioned according to the modifying (gradation) adverb value. For example, English fully bounded adjectives, i.e. belonging to class (iv), are likely to be modified by adverbs *completely* or *absolutely*. In like manner, French bounded adjectives with a maximal element, i.e. belonging to classes (ii) and (iv), can be modified by *complètement* (23) whereas unbounded adjectives without maximal element, i.e. belonging to classes (i) and (iii), are rather modified by *très* 'very' (24). (23-24) illustrate prototypic adjectives, relatively to the scale they are associated with (see Figure 3 above) and the continuity factor (test 6):

(23) La boîte est *très/complètement pleine.   [Fig.3 (iv)]   [continuous]
     'The box is *very/completely full'

(24) Tom est très/*complètement grand.   [Fig.3 (i)]   [continuous]
     'Tom is very/*completely tall'

3.2.3. Scalarity and NaLite_N

In this section, criteria such as continuity seen in §3.2.1 (Test 6) and scale type seen in 3.2.2 (Figure 3) will be applied to N*aL*_A in order to decide whether an N*aLite*_N carries a 'property' or a 'relationship' interpretation when syntactic tests (1-5) lead to either ambiguous or contradictory results. Example (25) illustrates PropN interpretation of CAPITALITÉ. It succeeds test 1 (25b) but not test 3 (25c). Thus, we have submitted CAPITALITÉ to test 6 and determined its scalar type (25d), in order to solve this contradiction: CAPITALITÉ is a property noun, related to an upper closed scale.

Another role that scalar feature can play is that of identifying relationships $\Re$. Examples (26-27) illustrate RelN interpretations of N*aLite*_N CELLULARITÉ 'cell rate' and ANGULARITÉ 'angle measure'. Although utterances like "très angulaire" (13c) or "très cellulaire" sound strange (and maybe are unacceptable) when ANGULAIRE_A = 'related to angle' and CELLULAIRE_A = 'consisting of cells' have a relational meaning, we still have found circumstances where these gradations are interpretable. In (26) and (27) "très" can be understood as a quantifier marker and not as an intensifier one (see § 3.2.4). As for (26), the cells contained in a sample can be counted on the set of integers. Therefore, a cell measure can be said to be discrete. On the contrary, the measure of what is referred to by ANGULARITÉ (27) is continuous. Furthermore, we are dealing with different scale types. The cellular measure in a sample (e.g.) ranks between zero (i.e. no cell in the sample) and an infinity (of cells in the sample). For this reason, we will associate CELLULAIRE in (26) to scale (iii), where the minimal value is zero.

(25) a. La capitalité de cette information réside dans l'identité du témoin
         'This information's property of being capital lies in the witness identity.'
↔   b. Cette information est capitale au vu de l'identité du témoin.   [T1]
         'This information is capital considering the witness identity'
     c. *une information très capitale   [T3]
         'a very capital information'
     d. une information absolument capitale   [scale (ii)]   [continuous]
         'an absolutely capital information'

(26) une grande cellularité ↔   très cellulaire   [scale (iii)]   [discrete]
     'a large cellularity'   'very cellular'

(27) une grande angularité ↔   très angulaire   [scale (iv)]   [continuous]
    'a large angularity'   'very angular'

Among the entire set of RelN N*a*Lite$_N$, the most represented scales are those given in Figure 3 (iii), i.e. correlated to rates (discrete measure from zero to infinity, e.g. (28)) and those given in Figure 3 (iv), i.e. linked to measures (continuous measure between two endpoints, e.g. (29)). In (28), ACCIDENTALITÉ suggests a number of accidents among young people. This number is countable, i.e. with a minimal value (zero) but no maximal value. When N*a*Lite$_N$ is a rate noun (26, 28), it is always associated with a partly closed scale, i.e. with a minimal value (cf. Figure 3 (iii)). As far as (29) can be interpreted, the visual field angle measure is stated in degrees. The minimal value of a visual field corresponds to zero degree and its maximal value is 360 degrees. ANGULARITÉ in (29) is thus associated with a fully closed scale (cf. Figure 3 (iv)).

(28) diminuer l'**accidentalité** des jeunes   [discrete measure]   [0-∞[scale (iii)
    'to decrease young people accidentality'

(29) une plus grande **angularité** du champ visuel [continuous measure] [0°-360°]   scale (iv)
    'a bigger visual field angularity'

3.2.4. Scalarity and interpretation

Equipped with this background information on semantic properties of scalar adjectives, we are now in a position to examine in which manner N*a*Lite$_N$ adjectival bases differ between each other and thus what distinguishes PropN from RelN. Results of criteria seen in § 3.2.1 (i.e. test 6) and § 3.2.2 (i.e. Figure 3) are summarized in Table 3. The N*a*Lite$_N$ scalar behaviour description can highlight two gradation types, i.e. gradation on property vs. gradation on entity. Property gradation is assigned to N*a*Lite$_N$, understood as PropN (25). Entity gradation concerns with N*a*Lite$_N$ referring to a rate (28), a set of entities (30), a quantity; in that case N*a*Lite$_N$ is prefixed by *uni-*, *mono-*, *bi-*, *multi-*, *poly-*, *inter-*, etc. (31). Moreover, thanks to this semantic analysis, we can define two kinds of RelN depending on whether their scalarity measure is discrete or continuous. In the latter case, gradation involves an entity (e.g. an angle) measured in a continuous way. This accounts for the possible modification of a relational adjective by gradation adverb *très*.

Gradation Type	Gradation on entity		Gradation on property
N*a*Lite$_N$ reading	**RelN**		**PropN** CAPITALITÉ (25)
Relation ℜ	**Rate** ACCIDENTALITÉ (28) **Quantification** BICULTURALITÉ (31) **Set** GESTUALITÉ (30)	**Measure** ANGULARITÉ (29)	
Measure	Discrete	Continuous	Continuous
Scale	(iii)	(i) (iv)	(i) (ii) (iii) (iv)

Table 3. N*a*Lite$_N$ and scalarity.

(30) La *gestualité* se définit comme l'ensemble des gestes, conçu comme système de communication.
    '*Gestuality* might be defined as the set of movements and expressions, thought as a communication system'

Let us consider (31), which might supply evidence of the gradation on entities we have proposed. As shown in Internet documents, French speakers may accept sentence (31b). In this case, we have to note

that it is not the property 'being bicultural' that is graded, but the amount of young people who have two cultures.

(31) a. l'importante biculturalité des jeunes   ↔   b. ? Les jeunes sont très biculturels.
    'the great biculturality of young people'   'Young people are very bicultural'
        c. ?De nombreux jeunes sont biculturels.
         'Many young people are bicultural'

We can conclude this section by giving some predictions for the /aLite/ nouns interpretation. Our study gives indications in order to identify the characteristics of /aLite/ nouns. In a given phrase context, N*aLite*$_N$ is successively submitted to tests (1-3), to tests like (4-5), to test (6). This process can be schematically represented as in Figure 4. Figure 4 is a decision tree, which helps to decide whether a N*aLite*$_N$ is interpreted as a PropN or as a RelN. For instance, a given N*aLite*$_N$ is submitted to tests 1 and 3. If it succeeds, the noun is a PropN, else N*aLite*$_N$ is a RelN. As a further step, in the case of a RelN, the relationship $\Re$ is determined according to Figure 3.
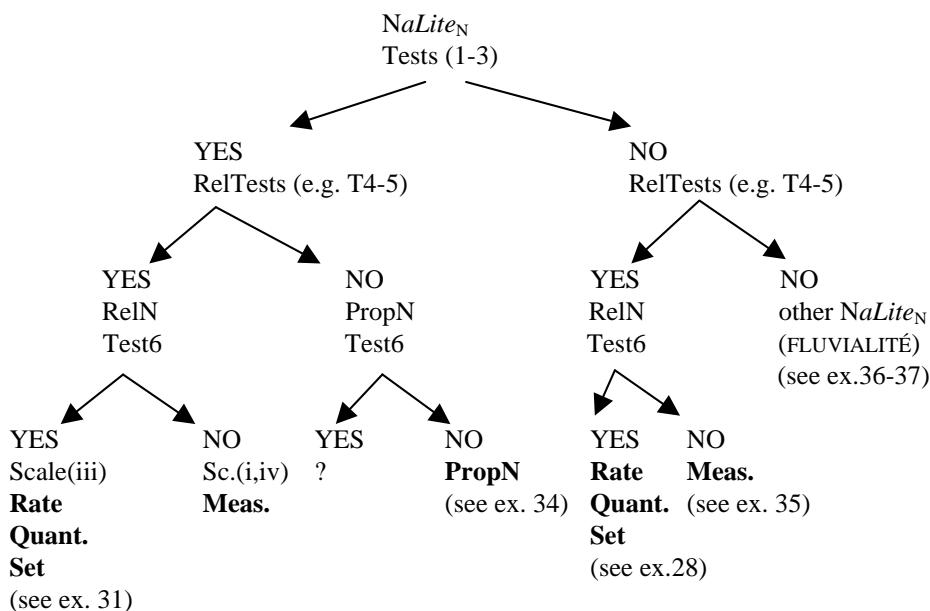

Figure 4. N*aLite*$_N$ interpretation: Decision tree.

Consider examples (32-35) to illustrate Figure 4:

(32)   Après avoir constaté la **circularité du salon**, l'architecte a proposé le mobilier.
         'After he had noticed the living-room circularity the architect proposed the furniture'
(33)   La **circularité de cette ellipse** est de 0,990.
         'This ellipsis circularity measure is 0,990'

Following the decision tree (Fig. 4), we can consider that CIRCULARITÉ$_1$ in (32) is to be interpreted as a PropN (34) whereas CIRCULARITÉ$_2$ in (33) is to be interpreted as a RelN (35).

(34) a.   La circularité du salon
       'the living-room circularity'
   b.   Le salon est circulaire.   [Test 1: YES]
       'The living-room is circular'
   c.   Le salon est tout à fait circulaire   [Test 3: YES]
       'The living room is really circular'

d.   # La mesure de circularité du salon est élevée   [RelTests: NO]
       #'the circularity measure of the living-room is high'
e.   ≠beaucoup de cercles   [Test 6: NO]
       ≠'many circles'

=> CIRCULARITÉ$_1$ is interpreted as a PropN

In (34), CIRCULAIRE = 'circular' has the meaning of 'property of being circular'.

(35) a.   la circularité de la figure
           'the figure circularity'
b.   #la figure est circulaire   [Test 1: NO]
       #'the figure is circular'
c.   #la figure est très circulaire   [Test 3: NO]
       #'the figure is very circular'
d.   La circularité de la figure est proche de 1. [RelTests: YES]
       'the circularity measure of the figure is close to 1.'
e.   # beaucoup de cercles   [Test 6: NO]
       'many circles'

=> CIRCULARITÉ$_2$ is interpreted as a RelN, with $\Re$ = MEASURE

In (35), CIRCULARITÉ refers no longer to a property, but to the circle measure, i.e. to a measure between 0 and 1.

Having applied the decision tree tests (Fig.4) on our corpus data, we have obtained the following results (Table 4) that complete those of Table 2 (cf. 2.2.1). Columns (7-9) account for PropN/RelN ratios. Contexts have been found on line, which can make some results disputable. But we will admit these figures as first, rough results that deserve refinement. This refinement will be the object of further research. For these columns, each box provides both the N*aLite*$_N$ frequence and its proportion, with respect to the overall corpus they have been extracted from. Figures depend on the semantic distinction between PropN and RelN, following criteria that are the very subject of this paper.

		6	7	8	9
		Total N*aLite*$_N$	PropN	RelN	PropN & RelN
1	TLF	192	90 **46,87%**	65 **38,86%**	37 **19,27%**
2	Le Monde	26	9 **34,62%**	6 **23,08%**	11 **42,3%**
3	WaliM Results	301	98 **32,56%**	150 **49,98%**	53 **17,61%**
4	TOTAL	**499**	190 **38,08%**	216 **43,28%**	93 **18,64%**

Table 4. PropN/RelN

PropN/RelN ratios are calculated for each corpus. Let us have a look at line 3 of Table 4. It is noticeable that contrary to what is generally assumed in the literature (see section 2) and to the TLF attested N*aLite*$_N$, a greater part of new coined N*aLite*$_N$ carries relational reading in context rather than property reading.

4. Conclusions

-ité suffixed nouns are generally assumed to be 'property nouns'. However we have seen in this paper that this is far from being true for all of them. On the contrary, the study of about 500 nouns ending in *-ité* has shown that there are two distinct sets: 283 PropN and 309 RelN. At least seven

relationship types were found among the set of RelN. 93 N$aLite_N$ carry both interpretations, according to the context (cf. Tables 2, 4). A large set of RelN denote a rate, a measure, a quantity or a set (cf. Figure 2).

Our attempt has thus been to determine the (possible) reading(s) of each N$aLite_N$. First, we have applied a set of three syntactic tests in order to determine whether a given N$aLite_N$ has a property reading. Syntactic criteria were insufficient here to discriminate the two interpretations. Actually, a high number of N$aLite_N$ are clearly RelN and yet pass tests (1-3). That is why a further analysis is required, based on semantic criteria. We have had a look at the scalar properties of adjective bases, which led us to underline two kinds of scalarity; property gradation and entity gradation because of the peculiar semantic properties they manifest.

Before checking the problematic cases we have to deal with in further research, we can already say that all the N$aLite_N$ we have examined in this paper have one common feature, despite their differences: they are all gradation nouns. The major distinction between them is that PropN measure degrees on properties whereas RelN measure degrees on entities. The latter measure varies according to the entity type and to what they are compared to (Table 3).

To conclude, this paper might have shed new light on the *-ité* nouns coined from a denominal adjective base. However, the field of *-ité* nouns seems far from a complete description. On the periphery of this analysis, we found *-ité* nouns (for which no precise amount can be given yet) failing all of our tests and which seem to denote activities (36-37).

(36) […] la **balnéarité** a continué à se développer. Le développement du temps libre et du loisir, ainsi que l'apparition des congés payés furent accompagnés par la mise en place de cabanons sur la plage […][11]
'Balnear activities were developed. Free time and leisure development as well as annual holiday apparition came with huts planting on the beach'
(37) l'accès des personnes handicapées **à la fluvialité** sera favorisé par un bateau adapté[12]
'fluviality access for disabled persons will be enabled by an adapted ship'

In addition, we should notice that BALNÉARITÉ and FLUVIALITÉ are not gradation nouns. The analysis of these data justifies the need for further research.

References

Amiot, Dany and Nelly Flaux. 2005. Les adverbes en *-ment* dérivés des noms propres de personnes. In J. Goes, ed. *L'adverbe : un pervers polymorphe*. Arras: Artois presses université. 69-87.

Anderson, Stephen R. 1992. *A-Morphous Morphology*. Cambridge: Cambridge University Press.

Aronoff, Mark. 1994. *Morphology by Itself*. Cambridge, MA: MIT Press.

Bonami, Olivier and Gilles Boyé. 2003. La nature morphologique des allomorphies conditionnées : les formes de liaison des adjectifs en français. In B. Fradin, G. Dal, N. Hathout, F. Kerleroux, M. Plénat and M. Roché, eds. *Les unités morphologiques, Silexicales* 3. Villeneuve d'Ascq: Université de Lille 3. 39-48.

Booij, Geert. 1997. Autonomous morphology and paradigmatic relations. In G. Booij and J. van Marle, eds. *Yearbook of Morphology 1996*. Dordrecht: Kluwer. 35-53.

Corbett, Greville. 2007. Canonical typology, suppletion, and possible words. *Language* 83: 8-42.

Corbin, Danielle. To appear. *Le lexique construit*. Paris: Armand Colin.

Cser, András. 2008. The Latin *-alis/-aris* allomorphy revisited. Talk presented at the 13th International Morphology Meeting. Vienna, Austria. February 3-6, 2008.

Dal, Georgette. 2003. Analogie et lexique construit : quelles preuves ?. *Cahiers de Grammaire* 28: 9-30.

Dal, Georgette and Fiammetta Namer. 2000. Génération et analyse automatiques de ressources lexicales construites utilisables en recherche d'informations. *TAL* 41.2: 423-446.

Dal, Georgette and Fiammetta Namer. 2005. L'exception infirme-t-elle la règle ? Ou le lexique construit et la théorie de l'optimalité. *Faits de langue* 25: 123-130.

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[11] http://lejuriste62.blog.nordjob.com/index.php/post/2008/08/04/Un-jour-un-article-34.

[12] http://www.ancrebleue.be/3pagesProjet.pdf.

Dal, Georgette and Fiammetta Namer. 2008. French property nouns from toponyms or ethnic adjectives: A case of base variation. Talk presented at the 13th International Morphology Meeting. Vienna, Austria. February 3-6, 2008.

Dell, François. 1979. La morphologie dérivationnelle du français et l'organisation de la composante lexicale en grammaire générative. *Revue Romane* 14.2: 185-216.

Flaux, Nelly and Danièle Van de Velde. 2000. *Les noms en français : esquisse de classement*. Paris – Gap: Ophrys.

Fradin, Bernard. 2003. *Nouvelles approches en morphologie*. Paris: PUF.

Fradin, Bernard. 2007. On the semantics of denominal adjectives. Paper presented at the 6th Mediterranean Morphology Meeting. Ithaca, Greece. September 27-29, 2007.

Fradin, Bernard. 2008. Les adjectifs relationnels et la morphologie. In B. Fradin, ed. *La raison morphologique. Hommage à la mémoire de Danielle Corbin*. Amsterdam / Philadelphia: John Benjamins. 69-92.

Fradin, Bernard and Françoise Kerleroux. 2003. Troubles with lexemes. In G. Booij, J. DeCesaris, S. Scalise and A. Ralli, eds. *Proceedings of the 3rd Mediterranean Morphology Meeting*. Barcelona: IULA-Universitat Pompeu Fabra. 177-196.

Gross, Maurice. 1975. *Méthodes en syntaxe*. Paris: Hermann.

Hathout, Nabil, Fiammetta Namer, Marc Plénat and Ludovic Tanguy. 2009. La collecte et l'utilisation des données en morphologie. In B. Fradin, F. Kerleroux et M. Plénat eds. *Aperçus de morphologie du français*. Saint Denis: Presses Universitaires de Vincennes. 267-287.

Hay, Jennifer. 1998. The non-uniformity of degree achievements. Paper presented at the Linguistic Society of America Annual Meeting. New York. January 1998.

Kennedy, Christopher. 1999a. Gradable adjectives denote measure functions, not partial functions. *Studies in the Linguistic Sciences* 29.1: 65-80.

Kennedy, Christopher. 1999b. *Projecting the Adjective: The Syntax and Semantics of Gradability and Comparison*. New York: Garland.

Kennedy, Christopher. 2001. Polar opposition and the ontology of 'degrees'. *Linguistics and Philosophy* 24: 33-70.

Kennedy, Christopher and Beth Levin. 2007. Measure of change: The adjectival core of degree achievements. In L. McNally and C. Kennedy, eds. *Adjectives and Adverbs: Syntax, Semantics and Discourse*. Oxford University Press. 156-182.

Kennedy, Christopher and Louise McNally. 1999. Deriving the scalar structure of deverbal adjectives. *Catalan Working Papers in Linguistics* 7: 125-139.

Kennedy, Christopher and Louise McNally. 2002. Scale structure and the semantic typology of gradable predicates. Unpublished manuscript (http://www.semanticsarchive.net/Archive/zU5MjNiN/km-scales.pdf).

Kennedy, Christopher and Louise McNally. 2005. Scale structure, degree modification, and the semantics of gradable predicates". *Language* 81: 345-381.

Kerleroux, Françoise. 2008. Des noms indistincts. In B. Fradin, ed. *La raison morphologique. Hommage à la mémoire de Danielle Corbin*. Amsterdam / Philadelphia: John Benjamins. 113-132.

Kilgarriff, Adam and Gregory Grefenstette. 2003. Introduction to the special issue on the Web as a corpus. *Computational Linguistics* 29.3: 333-347.

Matthews, Peter H. 1974. *Morphology*, 2nd edition, 1991, Cambridge: Cambridge University Press.

McNally, Louise. 2007. Classification strategies and the semantics of gradable adjectives. Talk given at the 17th Amsterdam Colloquium.

McNally, Louise and Gemma Boleda. 2004. Relational adjectives as properties of kinds. In O. Bonami and P. Cabredo-Hofherr, eds. *Empirical Issues in Formal Syntax and Semantics* 5. 179-196.

Mélis-Puchulu, Agnès. 1991. Les adjectifs dénominaux : des adjectifs de 'relation'. *Lexique* 10: 33-60.

Merriam Webster = *Merriam-Webster Online*. http://www.merriam-webster.com/.

Namer, Fiammetta. 2003. WaliM : valider les unités morphologiquement complexes par le Web. In B. Fradin, G. Dal, N. Hathout, F. Kerleroux, M. Plénat and M. Roché, eds. *Les unités morphologiques, Silexicales* 3. Villeneuve d'Ascq: Université de Lille 3. 142-150.

Roché, Michel. 2006. Comment les adjectifs sont sémantiquement construits. *Cahiers de Grammaire* 30: 373-387.

Roché, Michel. 2007. Logique lexicale et morphologie : la dérivation en *-isme*. In F. Montermini, G. Boyé and N. Hathout, eds. *Selected Proceedings of the 5th Décembrettes. Morphology in Toulouse.* Somerville: Cascadilla Press. 45-58.

Roché, Michel. 2009. Un ou deux suffixes ? Une ou deux suffixations ?. In B. Fradin, F. Kerleroux and M. Plénat, eds. *Aperçus de morphologie du français.* Saint-Denis: Presses Universitaires de Vincennes.

Temple, Martine. 1996. *Pour une sémantique des mots construits*. Villeneuve d'Ascq: Presses Universitaires du Septentrion.

TLF = *Trésor de la Langue Française informatisé*. http://atilf.atilf.fr/tlf.htm/.

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