

Competing affixes as aspectual morphemes: The case of deadjectival nominalizations

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1. Introduction

The phenomenon of deriving sets of two or more (near) synonymous words from the same stem with different affixes is rather common crosslinguistically (Booij 1977, Scalise 1984). The relation between rival morphological processes can be complex and very diverse (see e.g. van Marle 1985, 1986) and raises the following concern. Given the Blocking Effect (Aronoff 1976) and that competing affixes regularly differ regarding their productivity and distribution (Corbin 1984, van Marle 1985), the occurrence of doublets or triplets of this type is in principle predicted to be marginal. This paper focuses on one counter-example to this prediction, namely deadjectival nominalizations in French. Our main hypothesis is that the most productive deadjectival suffixes in French, namely *-ité*, *-tude*, *-erie* and *-isme*, functionally differ from each other in terms of their respective aspectual values: they play with respect to the adjectival stem a role similar to inflectional aspectual morphemes.

We will focus on the distribution of suffixes among *dispositional nouns* derived from evaluative adjectives like *stupide* 'stupid', and compare the aspectual readings of the adjectival stem with those of the derived noun.¹ Doublets or triplets derived from the same stem with different suffixes will be the object of particular attention, since the suffix should be the only element responsible of potential switchings in the interpretation. We choose to focus on dispositional nouns because their adjectival counterparts display a rich aspectual polysemy (cf. Fernald 1999, Geuder 2000, Martin 2008) – and thus allow to test the aforementioned hypothesis – and because doublets and triplets are quite frequent in this lexical domain. However, despite of this specific focus, we will take into account nouns from other lexical domains for the generalisations proposed.

If productive deadjectival suffixes differ from each other by their aspectual value, we can better explain the existence of dictionary²doublets or triplets derived from the same stem, cf. (1).

- (1) a. coquetterie/ coquettisme (>coquet 'coquettish')
b. drôlerie/ drôlisme (>drôle 'funny')
c. fanfaronnerie/ fanfaronisme (>fanfaron 'swanky')
d. crapulerie/crapulisme (>crapule 'scoundrel')
e. crétinerie/ crétinisme (>crétin 'moron')
f. importunité/ importunisme (>importun 'out of place')

The same hypothesis also explains the high number of neologisms in the field of dispositional nouns. Incompetence cannot explain it alone, because neologisms are often used in the neighbourhood of the competing dictionary variant. If deadjectival suffixes

¹ We will call nouns derived from evaluative adjectives *dispositional nouns* rather than *quality nouns*, because "quality" has a larger extension than "disposition" (there are qualities, like e.g. colors, that are not dispositions).

² We will call *dictionary words* words which are recorded in dictionaries.

differ by their aspectual value, it is easier to account for the creation of new forms and to explain which suffix is selected for which needs.

That competing suffixes functionally differ by their aspectual profile has already been argued for other kinds of nominalisations, cf. e.g. Alexiadou (2001) about *-ing* nominalisations in English and their counterparts in Greek, Dubois (1962), Martin (2010) or Uth (2011) about *-age*, *-ment* and *-ion* in French, as well as Ferret, Soare and Villoing (2011) about *-ée* and *-age* in French. In the field of deadjectival nouns, the fine grained descriptive study of Daude (2002) of Latin *nomina qualitatis* already suggests that the Latin ancestors of the French suffixes at study also compete by their aspectual value, and it will be shown in Section 3 that French reflects some aspects of the interplay between Latin competing suffixes.

The present study makes use of two types of data. Firstly, the different readings of 170 deadjectival dispositional nouns have been manually identified and classified on the basis of several tests presented in Section 2. Secondly, the productivity of the suffixes we are interested in was roughly appreciated through the use on neologisms. Dispositional nouns presented on the Internet but not stored in dictionaries were automatically collected by L. Tanguy at the ERSS Laboratory of the University of Toulouse. For each item of a list of 1000 evaluative adjectives, a list of nine possible nouns combining the adjectival stem and one of the suffixes at study was automatically generated following Hathout's technique (Tanguy & Hathout 2007). From the generated forms were automatically discarded all nouns present in le *Lexique des formes fléchies du français* or le *Trésor de la langue française*. The remaining forms which occur 1 to 200 times on the Internet (in presence of the adjectival stem) were collected with the help of Webbafix (Hathout and Tanguy 2002). A part of the output list has been cleaned manually. We discarded non French words (or produced by speakers which are not native speakers of French), non nominal forms, mispelled words, typos, hapax as well as words judged unacceptable by three native speakers to which I submitted a pre-cleaned list. For 110 dictionary words analysed for the study, 159 neologisms were identified. The table below summarises the distribution of suffixes among them. It shows that 34,3% of the neologisms are built with *-itude*, 25,6% with *-ité*, 18,1% with *-isme* and 13,7% with *-erie*. The other suffixes are hardly used to create new words.³ Although these data remain to be confirmed by a research on a larger scale, we provisionally conclude that *-itude*, *-ité*, *-isme* and *-erie* are the main productive deadjectival suffixes in French. All dictionary words and neologisms used in this study are given in the Appendix.

Suffixes	<i>itude</i>	<i>ité</i>	--	<i>erie</i>	<i>isme</i>	<i>eur</i>	<i>ion</i>	<i>ance</i>	<i>ie</i>	<i>ise</i>	<i>esse</i>	<i>ice</i>
Dictionary words (total:110)	0	32	19	15	10	7	7	6	6	4	3	1
	0%	29%	17,2%	13,6%	9%	6,3%	6,3%	5,4%	5,4%	3,6%	2,7%	0,9%
Neologisms (total:159)	55	29	--	22	41	0	0	6	1	3	2	0
	34,3%	18,2%	--	13,7%	25,6%	0%	0%	3,7%	0,6%	1,8%	1,2%	0%

The paper is structured as follows. Section 2 focuses on the aspectual value of the suffixes *-isme*, *-erie*, *-itude* and *-ité*. Section 3 addresses their morpho-syntactic properties. It presents data that suggest that these four suffixes differ from the other non-productive suffixes by their level of attachment (Kiparsky 1982, Marantz 2001) and show how the differences in their morpho-syntactic composition can account for the differences in their interpretation.

2. The aspectual value of deadjectival suffixes

³ *-ance* might be an exception, see Dal & Namer (2010).

As already mentioned in the introduction, the hypothesis we argue for is that the most productive deadjectival suffixes have each a specific aspectual value by which they functionally differ from each other and by which they contribute to the aspectual interpretation of the nouns containing them. Before presenting data in favour of this claim, we briefly delineate the different readings exhibited by dispositional nouns (see Martin 2012 for details).

A noun like *stupidité* can denote eventualities, dispositions or entities (i.e. a stupid book). When used as eventuality-denoting predicate, it can have individual-level (permanent) or stage-level (transient) readings. In the former case, it denotes dispositions, habits or stable tendencies. In the latter, it describes either an event (a stupid act) or a transient state (the state the individual is in when acting stupidly).

The range of readings a dispositional noun can have significantly varies with the suffix chosen. Among the 170 DNs analysed manually, all have an individual level reading. With respect to the stage level readings (stative or eventive), all *-erie* DNs have it, while 68% of *-ité* DNs get it, and 20% of *-isme* DNs. Among these stage-level DNs, 100% of *-erie* DNs have the eventive reading, while only 20,7% of *-ité* DNs get it, and none of the *-isme* DNs. Of course, all nouns which have the eventive reading have a temporary (stage-level) reading, but the reverse is not true; some nouns have a temporary reading, but no eventive one.

Tests used for the classification were, for the eventive reading, (i) the compatibility with *faire* 'do' or *commettre* 'commit' or (ii) the compatibility with *avoir lieu/ prendre place* 'take place' + spatial PP. For the temporary readings in general (stative or eventive), the tests used were (i) the embeddability in episodic perception reports, (ii) the availability of the iterative interpretation and (iii) the possibility to denote eventualities whose temporal trace equals the one of an event (see Martin 2012 for details).

We take these data to go against the claim that DNs are all aspectually underspecified at the lexical level (as e.g. by Beauseroy 2009:129 for French), since the suffix plays a role in the range of aspectual values a QN can have.

The next subsections are devoted to the aspectual value of each of the most productive deadjectival suffixes, namely *-isme*, *-erie*, *-itude* and *-ité*.

2.1. *-isme*

As a rule, DNs built with the suffix *-isme* exclusively denote dispositions, habits or tendencies and thus only get individual-level readings.⁴ They therefore have a strong bias towards permanency, since properties of this kind are by default conceived as permanent. If they can nevertheless get an episodic interpretation, they still have to denote a (transient) disposition, see Martin 2012 for details.

A first piece of evidence for this claim is that in general, *-isme* DNs cannot get an iterative interpretation: firstly, virtually no *-isme* DN can be pluralized, cf. (2a); secondly, only few of them (e.g. *optimisme*, *angélisme*, or *héroïsme*) can be modified by *récidivé*, cf. (2b) vs (2c):

- (2) (a) * Les despotismes/ infantilismes/ frénétismes/ érotismes/ égoïsmes/
diabolismes/ cynismes/ drôlismes/ crétinismes/ crapulismes/
coquettismes/ arrivismes/ optimismes/ héroïsmes/ angélismes...de Pierre.
'The despotisms/ childishesnesses/ freneticisms/ erotisms/ égoïsms/ diabolisms/
cynisms/ funny-isms/ cretinisms/ scoundrel-isms/ coquettish-isms/
carrierisms/ optimisms/ héroïsms/ angelisms... of Pierre.'

⁴ According to Rita Manzini (p.c.), what we claim for French *-isme* DNs seems to be true for Italian *-ismo* DNs.

(b) ??Son despotisme / infantilisme/ frénétisme/ érotisme/ égoïsme/ drôlisme/ diabolisme/ cynisme/ crétinisme/ crapulisme/ coquettisme/ arrivisme ... répété.

'His repeated despotism, ...'

(c) votre optimisme répété concernant les recettes prévisionnelles (Internet)
'your repeated optimism with regard to the projected takings'

The rule of suffixation must be responsible of this constraint, since often, competing DNs derived from the same adjectival stems but with another suffix accept the iterative interpretation. For instance, DNs built with the suffixes *-erie* or *-age* in (3) can be pluralized and modified by *récupéré*.

- (3) (a) Ses crétineries/ coquetteries/ drôleries/ enfantillages
'Her scoundrel-**eries**/ coquettish-**eries**/ funny-**eries**/ childish- **eries**'
(b) Sa crétinerie/ coquetterie/ drôlerie/ son enfantillage répété(e)
'Her repeated scoundrel-**erie**/ coquettish-**erie**/ funny-**erie**/ childish- **erie**'

A second piece of evidence for the claim that *-isme* DNs are always individual-level and thus cannot denote transient states is that they are strange in episodic perception reports, cf. (4b) vs (4a).

- (4) (a) Ce matin, j'ai assisté à sa crétinerie/ coquetterie/ drôlerie/ son enfantillage.
'This morning, I witnessed her scoundrel-**erie**/ coquettish-**erie**/ funny-**erie**/ childish-**erie**'
(b) ??Ce matin, j'ai assisté à son crétinisme/ coquettisme/ drôlisme/ infantilisme.
'This morning, I witnessed her scoundrel-**isme**/ coquettish-**isme**/ funny-**isme**/ childish-**isme**'

Thirdly, when attached to adjectival stems which preferentially have a temporary reading like *nu* 'naked', *-isme* makes the individual-level reading of the derived noun compulsory. For instance, *nudisme* 'nudism' has to refer to a disposition rather than to a particular state, which is well rendered by its German translation *Nacktkultur*.

In conclusion, *-isme* tends to univocally attribute the individual-level reading to the deadjectival noun, including with adjectival stems which could in principle be attributed other readings, or preferentially have a stage-level reading. If *-isme* DNs nevertheless get transient interpretations, they still have to denote dispositions, habits or stable tendencies.

The exact scope of the claim remains to be evaluated though. We already pointed out that DNs like *optimisme* falsify what seems to us to be the general rule (they *can* be used to denote transient states). A more systematic analysis of *-isme* DNs remains to be done to evaluate how exceptional are these nouns.

2.2. **-erie**

As a rule, dispositional nouns composed with the 'abstract' *-erie* suffix (as opposed to the locative one found e.g. in *brasserie* 'brassery') have an eventive reading.⁵ This suffix can not only attach to adjectival stems, but also to nominal ones as in *ânerie* 'stupidity/rubbish', derived from *âne* 'donkey'. The eventive reading is also the only reading that any *-erie* noun can have, included neologisms. We take this as an indication of the fact that this reading is the basic one.

⁵ There might be some exceptions to this, as e.g. *glotonnerie* 'gluttony'.

Given that most stems of *-erie* nouns do not have an eventive reading by themselves – evaluative adjectives do not have it, cf. Martin 2008, and nouns like *âne* certainly do not either – the rule of suffixation in *-erie* must be the element that introduces the event argument.

Interestingly, the stem cannot systematically predicate an event, cf. (5).

- (5) (a) Son acte/ ce qu'il a fait est ??gredin (OK est une gredinerie)
'His act/ what he did is mischievous (is a mischievous-erie).'
(b) Son acte/ ce qu'il a fait est ??fainéant (OK est une fainéanterie)
'His act/ what he did is lazy (is a lazy-erie).'

This suggests that *-erie* nouns on the eventive reading cannot be paraphrased by the string "the event which is P", P being the stem (this is one of the possible meanings discussed by Drapeau and Boulanger 1982). A more appropriate paraphrase is something like 'the event involving an entity x which is P'.

That *-erie* works as an "eventizer" is perhaps related to the presence of the infinitival morpheme *-er* in its composition. In fact, according to some authors, *-ie* is post-verbal, and *-er* is etymologically present in *-erie* (cf. Moldenhauer 1934, Bécherel 1981), but this incorrectly predicts that there is a verbal form for each *-erie* noun. However, whatever its etymology is, it might be that *-er* is reanalysed as the infinitival morpheme in the suffix by speakers of French.⁶

Nouns in *-erie* also have an individual-level reading that we assume to be derived from the basic eventive reading by a mechanism like coercion. That the permanent reading is not basic is confirmed by the fact that the eventivity of *-erie* still surfaces when it is selected. Indeed, when *-erie* Ns are used to describe a permanent property, there is a tendency to assume that this property is actualised through concrete events. In other words, under their individual-level reading, *-erie* Ns are rather interpreted as habit-denoting than disposition-denoting nouns. This is not the case of the permanent reading expressed by *-ité* or *-isme* nouns. This intuition is difficult to illustrate, but the contrasts in (6) and (7) serve as an attempt: (6a) and (7a) are not contradictory because they denote 'classical' dispositions, that individuals can have without instantiating them in concrete manifestations, while (6b) and (7b) are.

- (6) (a) Sa sensibilité n'a jamais vraiment l'occasion de se manifester.
'His sensible-ité never really has the opportunity to manifest itself.'
(b) ??Sa sensible**erie** n'a jamais vraiment l'occasion de se manifester.
'His sensible-erie never really has the opportunity to manifest itself.'
- (7) (a) Heureusement, sa tendance maniaque n'a jamais l'occasion de se manifester.
'Fortunately, his maniac tendency never has the opportunity to manifest itself.'
(b) ??Heureusement, sa maniaquer**erie** n'a jamais l'occasion de se manifester.
'Fortunately, his maniac-erie tendency never has the opportunity to manifest itself.'

Interestingly, Daude (2002) already contrasts the Latin suffixes *-ia* from which *-erie* is derived and *-tas* (the ancestor of *-ité*) in a similar way. He claims that *-ia* dispositional nouns "are not completely abstract" because they "summarise a set of manifestations" of the quality, and are typically attributed to the individual on the basis of these concrete instantiations. This is how the habitual reading is distinguished from the dispositional one: it is an inductive generalisation inferred from observed behaviors.

2.3. **-itude**

⁶ On the history of *-erie*, see e.g. the in-depth study of Hüning (1999).

According to our searches in corpora, *-itude* is one of the most productive deadjectival suffixes, which suggests that Bécherel (1981)'s claim that this suffix is unproductive is not correct or at least no longer valid.⁷ The idea that *-itude* enjoys a revival is also argued by Koehl (2012a, 2012b), on the basis of much larger corpora than ours.

A specificity of *-itude* DNs is that they must denote a property of animates (as opposed to objects or events). This has already been observed by Rainer (1989:312) for the Italian suffix *-itudine*, cf. his examples (8).

- (8) (a) **La gratitudine** di Paolo verso Paola/??della tua visita.
 La **gratitude** de Paolo envers Paola/??de ta visite.
 'The grateful-*itude* of Paolo towards Paola/of your visit.'
- (b) **La rettitudina** di Paolo/ ??della tua pronuncia.
 La **rectitude** de Paolo/ ??de ta pronunciation.
 'The straight-*itude* of Paolo/ of your pronunciation.'

Besides, like *-isme* Ns, *-itude* ones do not easily get stage-level readings (eventive or stative), cf. (9)-(10). Observe that this is not always true of the corresponding adjectival stem (for instance, *être con* 'to be stupid' certainly has a stage-level reading).

- (9) (a) Sa **connitude** est sans bornes. (Internet)
 'His stupid-*itude* is infinite.'
- (b) J'ai vu/ assisté à sa **connerie**/# **connitude**.
 'I saw/ witnessed his stupid -erie/ stupid -itude.'
- (c) Il a fait une **connerie**/ # une **connitude**.
 'He made a stupid -erie/ a stupid -itude.'
- (10) (a) Notre potentiel d'**inhumanitude** me dégoûte. (Internet)
 'Our potential of inhuman-*itude* disgusts me.'
- (b) Il a commis une **inhumanité** (#**inhumanitude**) et une injustice plus grande que celle du précédent. (Internet)
 'He committed a inhuman-*ité* (inhuman-*itude*) and an injustice greater than the former.'

On the individual-level reading, *-itude* DNs have a particular flavour which distinguishes them from *-ité* or *-erie* Ns on the same reading. This specificity of *-itude* nouns has been observed at several places. Bécherel (1981) claims that *-itude* Ns are more 'concrete' than corresponding *-ité* ones; the same intuition is reflected in Senghor's words about Césaire's use of *négritude*, which he finds 'more concrete' than *négrité* (Senghor 1977). For Latin, Daude (2002) claims that *-tudo* (from which *-itude* is derived) actualises more than *-tas* (which is more abstract), and suggests an exercise, a putting into a practice: "*nomina qualitatis* in *-tudo* tend to express traits of character or dispositions *determining a behaviour*" (italics and translation mines). Daude's claim about Latin is echoed in the Wikipedia entry devoted to the French suffix: '-*itude* serves to form words implying the idea of an attitude, a pose explicitly adopted, in opposition to the intrinsic [...] quality designated by the noun or adjectival stem' (translation mine).

⁷ We discarded from the counting neologisms in *-itude* like *intelligentitude*, *constantitude* or *incongritude*, rejected by my informants, and exclusively used as a parody of the politician Ségolène Royal in her use of *bravitude* instead of *bravoure* in 2007 and at the source of a big media buzz (one million hits on Google, cf. http://en.wikinews.org/wiki/Bravitude_climbing_fast_on_Google). One could argue that Royal's neologism emulates the use of this suffix, but the fact she produced it could also be seen as the reflection of the productivity of *-itude* at that time.

We claim that this value of *-itude* comes from the fact that the semantics of the words *habitude* and *attitude* is transferred to the *-itude* suffixation process, so that these Ns end up with denoting habits/ ways of being/ regular behaviours, that is more concrete entities than dispositions. In other words, the idea is that we deal here with an instance of what Rainer (2005) calls *irradiation* after Bréal (1892:20), that is a transfer of a semantic feature from a word meaning to a word formation meaning.⁸ A first indication of this is that users of neologisms in *-itude* sometimes overtly link their lexical creation to the words of *attitude* or *habitude*, cf. e.g. (11):

- (11) “L'**humanitude**”, une attitude partagée, comme une nouvelle façon de vivre ensemble. (Internet)
“The human-*itude*”, a shared attitude, like a new way to live together.

Moreover, *-itude* DNs are more appropriate than *-ité* ones to univocally denote behaviours or habits. For instance, *belgitude* translates the concept of *Belgisch Sein* – Belgian ways of being, of behaving, Belgian habits, etc. – much better than *belgicité*, which can also simply describe the property of having the Belgian nationality. This second reading is not available to *belgitude*. For instance, *belgitude* cannot be attributed to somebody who has the Belgian nationality but never lived in Belgium and doesn't know anything about Belgian habits and culture.

To summarise, *-itude* DNs denote habits and attitudes. This explains why they are [+ANIM] (inanimates do not have habits or attitudes). It also explains why these DNs are preferably interpreted as individual-level predicates – habits and attitudes are properties rather than instantiations of properties.

2.4. *-ité*

Although *-ité* is less used than *-itude* among neologisms, it is the most frequent one if one considers dictionary words and neologisms altogether, (with a total of 22,5% of all Ns examined). This confirms Koehl's (2009) study on the distribution of deadjectival suffixes. It is also the most underspecified suffix, since *-ité* nouns can in principle have any of the readings delineated in the previous section. What is specific to *-ité* compared to the three other productive suffixes analysed above is that it does not seem to contribute by itself to the aspectual value of the created noun. The aspectual readings of the derived noun is much more dependent from the readings displayed by the adjectival base. The permanent reading of dispositional nouns is always salient because the adjectival stem from which they derive systematically have a dispositional reading. For instance, *un homme loyal* 'a loyal man' preferably denotes a man which has the disposition to be loyal. And *loyauté* 'loyalty' unsurprisingly has a preference for the dispositional reading. For instance, *la loyauté de cet homme m'a surpris* 'the loyalty of this man surprised me' is by default understood as the expression of surprise about an individual-level property. But facts differ if we take an adjectival root that preferably selects the stage-level reading. For instance, *un homme nu* 'a naked man' preferably describes a man which is temporarily naked. And *la nudité de cet homme m'a surpris* 'the nakedness of this man surprised me' is by default understood as the expression of surprise about a stage-level property. (That *nudité* has difficulties to get the individual

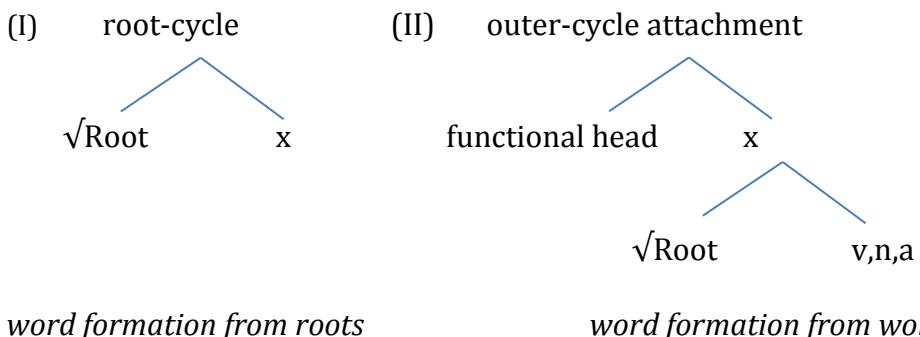
⁸ Rainer (2005) also claims that *-itude* nouns are an example of irradiation. But according to him, the 'irradiating' words are not *habitude* and *attitude*, but rather *nègre* 'neger' and *servitude*, whose semantics 'contaminates' the *-itude* word process formation through the word *négritude*, so that *-itude* Ns ended up designating oppressed social groups and their emancipatory aspirations. However, although this semantic path might be correct for a subset of *-itude* nouns directly created on Césaire's model, it does not capture the differences between ethnic nouns like *belgitude*/ *belgicité*, nor between Ns like *humanitude* and *humanité*.

level reading is also confirmed by the oddity of *une manifestation de nudité* 'a manifestation of nakedness'.) In other words, *-ité* does not seem to carry its own aspectual feature. It is the unmarked form chosen for unmarked situations, while *-itude*, *-erie* and *-isme* are marked forms for marked situations – an example of a more general tendency that Horn (1984) calls “division of pragmatic labour”.

3. Morpho-syntactical decomposition

3.1. Root-attached vs. word-attached suffixes

Standardly, whenever two kinds of suffixes attach to the same root to derive a new word of the same category, they are taken to be distinguished according to the cycle of word-formation they take place in (Kiparsky 1982, Marantz 2001). From the perspective of Distributed Morphology (Marantz 2001, Embick 2010), suffixes that merge with roots are (i) idiosyncratic (no clear transparency in the composition of meaning), (ii) structure-changing (phonological changes are induced) and (iii) less productive. These morphemes attach within the root-cycle of word formation, and will be called 'root-attached' morphemes. On the other hand, suffixes that merge above functional heads are (i) semantically transparent (the compositional meaning can be predicted from the meaning of the parts), (ii) less structure changing and (iii) productive. These attach in the outer-cycle, and will be called 'word- attached suffixes', following Arad (2003).



Some suffixes always attach within the same cycle, cf. e.g. *-less*, *-ship*, *-ness*, *-hood*, which are univocally word-attached (Kiparsky 1982, Marantz 2001). Other suffixes can enter both cycles, cf. e.g. *-able* as analysed by Aronoff 1976, but see Kiparsky 1982 about *-ability*. As a rule, a root-attached suffix cannot be attached to a stem containing a word-attached suffix (see e.g. Kiparsky's example **mongolismize*). But the reverse is possible (cf. *mongolianize*).

The fact that *-erie*, *-ité*, *-itude* and *-isme* are more productive and semantically transparent than the other deadjectival suffixes suggests that they are word-attached suffixes. Pseudo-words combining root-attached and word-attached suffixes point to the same conclusion. Indeed, pseudo-nominalizations built with one of these suffixes and one of the non-productive ones are judged more French when the non-productive suffix is attached first, cf. (12). Words built with suffixes attached in the reverse order sound less acceptable, cf. (13).

- | | | | |
|-----------------------------|-------------------------------|---------------------------|----------------------------|
| [°] bénévolancerie | [°] bouffonnessitude | [°] agilancitude | [°] fêtardisitude |
| [°] bénévoleriance | [°] bouffonitudesse | [°] agilitudance | [°] fêtarditudise |

Note that if indeed *-ité* is word-attached in French, it is different from *-ity* in English, which has been argued to be root-attached by Kiparsky (1982) and Embick & Marantz (2008).⁹ But this could be due to a difference in productivity between *-ité* and *-ity*: the former is the most used deadjectival suffix in French (Koehl 2009), while *-ity* is less productive than *-ness* in English (Bauer 2001).

3.2. Pluralization and episodic interpretation

The discussion in the previous sections can be summarised as follows. Dispositional nouns and the adjectival stems from which they derive do not have exactly the same aspectual readings. The affix is partly responsible for this semantic switch. The differences in the denotation between the four types of nouns can be summarised as follows. The suffix *-ité* is the unmarked productive suffix and can form Ns with any kind of aspectual interpretation. The suffix *-isme* tends to force the deadjectival noun to have a dispositional reading (but it remains to be evaluated how frequent are the exceptions to this rule). The suffix *-erie* imposes a preference for the eventive reading, but is compatible with any other readings, although, under the permanent reading, *-erie* nouns tend to denote habits rather than dispositions. The suffix *-itude* forces the noun to denote habits or attitudes and thereby imposes the feature of animacy and the individual-level reading.

In this section, we turn our attention to the availability of pluralization and iterative interpretation with deadjectival nominalizations. As mentioned, *-isme* DNs like *infantilisme* 'childishness' can be pluralized cf. (2). This is also generally true for *-itude* DNS (*habitude*, *attitude* and *aptitude* are among the few exceptions). On the other hand, DNs built with the suffix *-erie* can be pluralized, cf. (3). The empirical picture is more complicated with *-ité* DNS, and will not be investigated in detail here. In addition, we noted that in general, those nouns that can pluralize can have an event reading, while those that cannot are interpreted as individual level. The most prominent exceptions to this rule are nouns like *habitude* 'habit', *aptitude* 'aptitude', *capacité* 'ability'. These nouns exceptionally allow pluralization under the individual-level reading because the same individual can be ascribed several of the properties they denote (one can have several habits, but one normally does not have several dispositions to be childish).

Since pluralization is a nominal property, it will have to apply after the nominalization of the adjective has taken place. Still, however, we noted that pluralization is sensitive to the interpretation of the nominal, ±eventive. Following some of the recent literature (Borer 2005, Alexiadou, Iordăchioia & Soare 2010, Alexiadou, Iordăchioia & Schäfer 2011, Alexiadou 2011, Arche & Marín 2012), we take these differences to follow from the different morpho-syntactic structures associated with the various DNs. First, we take the ability of DNs to pluralize as evidence of the presence of a classifier projection (ClassP) within the nominal structure. From the perspective of Borer (2005), ClassP divides "stuff", and is the equivalent of Quantity projections in the verbal domain that make events heterogenous. ClassP is the input to NumberP. This projection introduces elements that count and can be seen as corresponding to the functional projection of Aspect (outer-Aspect) in the verbal domain, Alexiadou (2001), Arche & Marin (2012).

Building on Arche & Marín (2012) and Alexiadou (2011), we would like to propose that what is taken as the complement of a classifier is a structure that involves by default episodic eventualities (events or transient states) so that the classifier can denote different instantiations of eventualities. The fact that *-isme* or *-itude* DNs that are

⁹In English, German or Dutch, words in *-ity*, *-iteit* and *-ität* have been firstly borrowed from French and then went their own ways; now, these languages have a number of nouns built with these suffixes which do not have a French counterpart (cf. e.g. Booij 2009).

individual level do not pluralize suggests that when there is no transient eventuality, division introduced by the classifier is also *prima facie* not possible. The only way out is to pluralize a permanent property, which generally generates a pragmatic problem, except for nouns general enough like *habitude*. However, whenever there is an event or a transient state, the classifier projection can then introduce different instantiations of this eventuality.

The question that arises is what is the source of the transient reading. More particularly, one would like to know why the event reading is systematically available with *-erie* DNs. On the one hand, one could claim, following Ippolito's (1999) analysis of *-ata* nominalizations in Italian, that the morphological similarity between the infinitive and the *-erie* nominalization (highlighted by the presence of *-er* in both the verbal and the nominal environment) is due to the presence of the same syntactic structure. From this perspective, whenever an event reading is available, this makes reference to the presence of a verbal stem in the morphological structure. The logic here would be that in view of the fact that the roots themselves do not have an event implication, this must be introduced by verbalizing the roots. The problem, though, is that without further refinements, this analysis predicts that there is a verbal form for every *-erie* noun, contrary to fact.

On the other hand, one could argue that the systematic availability of the transient reading with *-erie* DNs is due to the collective or frequentative value of this suffix, observed a.o Spitzer 1931:30 (cf. also the entry devoted to *-erie* in the *TLF*). Indeed, if *-erie* encodes a plural operator, it brings about on its own the interpretation which can fit this operator in the domain of eventualities, namely the transient reading. However, while this account explains why *-erie* DNs systematically have a *transient* reading, it doesn't explain why the *event* reading is also systematically available.

In favour of the idea that *-erie* DNs involves a kind of plural operator, we observe that they often can be used to denote a plurality of events with the singular.¹⁰ For instance, the singular noun *fanfaronnerie* (from *fanfaron* 'boastful') can be used to describe several acts performed in a boastfulway.¹¹ On the other hand, our claim that plurality helps to bring about the transient interpretation is supported by the fact that the plural morphology is sometimes required for the transient interpretation of DNs. This is for instance the case of *finesse*, *familiarité* or *impudent*.

Finally, we observe that although *-isme* nouns cannot be pluralized, they are sometimes OK with the adjective *constant*, but not with *frequent*:

- (14) Son infantilisme/cynisme constant les exaspère.
His constant childness/cynism get on their nerves.
- (15) ??Son infantilisme/cynisme fréquent les exaspère.
His frequent childness/cynism get on their nerves.

If the latter adjective is sensitive to the presence of a ClassP in the structure of the noun, while the former signals the presence of NumberP, the above contrast suggests that these nouns, like mass nouns, can appear together with adjectives that do not require different types of eventualities.

¹⁰ That *-erie* DNs prefer the habitual reading when used to denote permanent properties can also be seen as a reflection of this plural operator.

¹¹ See also the deverbal noun *tuerie* 'killings (pl.)'. *-ade* nouns derived from evaluative adjectives also systematically have an eventive reading. But they do not have the iterative value of *-erie*, and thus must be pluralised in order to denote a series of acts. We would say that a *fanfaronnerie* is made of several *fanfaronnades* rather than the reverse.

References

- Alexiadou, A. 2001. *Functional structures in nominals: nominalization and ergativity*. Amsterdam: Benjamins.
- Alexiadou, A. 2011. "The Aspectual Properties of Nominalizations Structures", in *Morphology and its interfaces*, A. Galani et al. (ed.), Amsterdam: John Benjamins.
- Alexiadou, A., G. Iordăchioaia & F. Schäfer, 2011, "Scaling the Variation in Romance and Germanic Nominalizations", in H. Perridon & P. Sleeman (eds.), *Variation and Change in the Romance and Germanic Noun Phrase*. John Benjamins, 25-40.
- Alexiadou, A., G. Iordăchioaia & E. Soare 2010. „Number/Aspect interactions in the syntax of nominalizations: a distributed Morphology approach. *Journal of Linguistics* 46: 537-574.
- Arche, M. and R. Marín, 2012, "Evaluative Adjectives at the Light of their Nominalizations", talk presented at the *Linguistic Symposium on Romance Languages*, University of Southern, April 20-22.
- Arad, M., 2003. Locality constraints in the interpretation of roots. *Natural language and linguistic theory*, 21: 737-778.
- Aronoff, M. 1976. *Word formation in generative grammar*. Cambridge, Mass: MIT Press.
- Bauer, L. 2001. *Morphological productivity*. Cambridge: Cambridge University Press.
- Borer, H., 2005. *Structuring Sense*. Oxford: Oxford University Press.
- Beauseroy, D. 2009. *Syntaxe et sémantique des noms abstraits statifs : des propriétés verbales ou adjectivales aux propriétés nominales*. PhD thesis, Université de Nancy.
- Booij, G., 1977. *Dutch Morphology. A Study of Word Formation in Generative Grammar*, Dordrecht: Foris.
- Booij, G., 2009. "Morphological analysis", in Heine, B. and H. Narrog (eds), *The Oxford Handbook of Grammatical Analysis*, Oxford, Oxford University Press, 563-589.
- Bréal, M. 1892. "De l'irradiation grammaticale". *Mémoires de la Société de linguistique de Paris*, 7:20-23.
- Bécherel, D. 1981. "Différenciation morpho-sémantique des suffixes nominalisateurs de l'adjectif". *Cahiers de lexicologie*, 38:45-59.
- Corbin, D., 1984, «La forme et le sens: discussion », *Quaderni di Semantica*, 5, 288-302.
- Dal, G. & F. Namer. 2010. "Les noms en -ance/-ence du français: quel(s) patron(s) constructionnel(s)? ", in Neveu, F. et al. (eds), *Actes en ligne du 2ème Congrès Mondial de Linguistique Française*, 893-907.
- Daude, J. 2002. "Les substantifs abstraits de qualité", in Kircher-Durand, C. (ed), *Grammaire fondamentale du latin, t. IX. La création lexicale : la formation des noms par dérivation suffixale*, Pleuven/Paris: Peeters, 225-305.
- Dubois, J. 1962. *Etude sur la dérivation suffixale en français moderne*. Paris: Nathan.
- Drapeau, L. & A. Boulanger, 1982. "Les suffixes -erie en français populaire". *Revue québécoise de linguistique*, 11(2):73-91.
- Embick, D. 2010. *Localism versus Globalism in Morphology and Phonology*, MIT Press.
- Embick, D. & A. Marantz. 2008. "Architecture and Blocking". *Linguistic Inquiry*, 39/1:1-53.
- Ferret, K., E. Soare & F. Villoing. 2011. "Rivalry between French -age and -ée: the role of grammatical aspect in nominalization", in Aloni, M., H. Bastiaanse, T. de Jager, K. Schulz, K. (eds), *Logic, language and meaning*, Amsterdam/New-York: Springer, 284-294.
- Fernald, T. 1999. "Evidential coercion: Using individual-level predicates in stage-level environments". *Studies in the Linguistic Sciences*, 29/1:43-63.
- Geuder, W. 2000. *Oriented adverbs*. PhD thesis, Universität Tuebingen.
- Hathout, N. & L. Tanguy. 2002. "Webaffix: un outil d'acquisition morphologique dérivationnelle à partir du web", in *Proceedings of Taln 2002*, Nancy, 24-27 June 2002.
- Horn, L. 1984. "Toward a new taxonomy for pragmatic inference: Q-based and R-based implicatures", in Schiffрин (ed), *Meaning, form and use in context*, Washington: Georgetown University Press, 11-42.
- Hüning, M. 1999. *Woordensmederij*. De geschiedenis van het suffix -erij. PhD Thesis, Universiteit Leiden.
- Ippolito, M. 1999. On the Past Participle Morphology in Italian. In: MIT Working Papers in Linguistics 33, 111-137.

- Koehl, A. 2009. "Are French *-ité* suffixed nouns property nouns? ", in Montermini, F., G. Boyé & J. Tseng (eds), *Selected Proceedings of the 6th Décembrettes: Morphology in Bordeaux*. Somerville: Cascadilla Proceedings Project; 95-110.
- Koehl, A. 2012a. "The second life of French *-itude* suffixation", talk presented to the 15th International Morphology Meeting (IMM15), Vienna.
- Koehl, A. 2012b. "Altitude, négritude, bravitude ou la résurgence d'une suffixation", in *Actes du Congrès Mondial de Linguistique Française* (CMLF2012).
- Kiparsky, P. 1982, "Lexical Morphology and Phonology", in Yang, I. (ed), *Linguistics in the morning calm*, Seoul: Hanshin, 3-91.
- Krifka, M, F. Pelletier, G. Carlson, A. ter Meulen, G. Chierchia, and G. Link. 1995. "Introduction", in Carlson, G. & G. Pelletier (eds), *The Generic Book*. Chicago: Chicago University Press, 1-24.
- Marantz, A. 2001. Words and Things. Handout, MIT.
- Martin, F. 2008. *Les prédictats statifs. Etude sémantique et pragmatique*. Bruxelles: Duculot/de Boeck.
- Martin, F. 2010. "The Semantics of Eventive Suffixes in French", in Rathert, M. & A. Alexiadou (eds), *The Semantics of Nominalizations across Languages and Frameworks*, Berlin, Mouton de Gruyter, 109-141.
- Martin F. 2012. "Stage-level vs individual-level readings of dispositional nouns", in Hathout, N., F. Montermini & J. Tseng (eds), *Selected Proceedings of the 7th Décembrettes*, Munich: Lincom Europa
- Moldenhauer, G. 1934. "Suffixstudien". *Z. fr. Spr.*, 58:296-306.
- Meunier, A. 1981. *Nominalisations d'adjectifs par verbes supports*. PhD Thesis, Univ. Paris 7.
- Rainer, F. 1988. "Towards a theory of blocking: the case of Italian and German quality nouns" in van Maarle, J. G. Booij (eds), *Yearbook of Morphology*. Dordrecht: Foris Publications
- Rainer, F. 1989. *I nomi di qualità nell'italiano contemporaneo*. Vienna: Braumüller.
- Rainer, F. 2005. "Semantic change in word formation". *Linguistics*, 43/2:415–441.
- Scalise, S. 1984, *Generative Morphology*, Dordrecht: Foris.
- Spitzer, L. 1931. "Warum ersetzt frz. *-erie* (dtsch *-erei*) das alte *-ie* (-ei)", *Zeitschrift für romanische Philologie*, 51, 70-75.
- Tanguy, L., N. Hathout. 2007. *Perl pour les linguistes. Programmes en Perl pour exploiter les données langagières*, Paris/Londres: Hermès Lavoisier.
- Uth, M. 2011. *Abstrakte Bedeutung und regelhafte Wortbildung. Französische Ereignisnominalisierungen auf -age und -ment*. Berlin/New-York: Mouton de Gruyter.
- van Marle, J. 1985. *On the paradigmatic Dimension of Morphological Creativity*, PLS 18, Dordrecht: Foris.
- van Marle, J. 1986. "The domain hypothesis: the study of rival morphological processes", *Linguistics*, 24, 601-627.

Appendix

Below are listed all dictionary words (DWs) and neologisms (Ns) taken into account for the study.
-erie DWs: *balourderie, bizarerie, bouderie, bouffonnerie, brusquerie, chicanerie, cocasserie, connerie, coquetterie, coquinerie, crânerie, crapulerie, crétinerie, dégueulasserie, drôlerie, effronterie, espièglerie, faroucherie, finauderie, flagornerie, flatterie, folâtrerie, fourberie, gaminerie, grognonerie, hautainnerie, ignarerie, imbécilerie*

-erie Ns: *bestialerie, bonhommerie, candiderie, cinglerie, cuculerie, cupiderie, férocerie, fouinerie, fragilerie, génialerie, grand-guignolerie, grandioserie, honnêterie, honterie, ignoblerie, immonderie, indignerie, infamerie, innocenterie, insolenterie, ironerie, jovialerie*

-isme DWs: *angélisme, arrivisme, artisme, barbarisme, coquettisme, crétinisme, cynisme, despotisme, diabolisme, égoïsme, érotisme, extatisme, frénétisme, hirsutisme, humanisme, idiotisme, immoralisme, infantilisme, intégrisme, ironisme*

-isme Ns: *amicalisme, asocialisme, attentivisme, avarisme, balourdisme, bestialisme, bizarrisme, bonhommisme, bouffonisme, candi(dis)me, colérisme, coquettisme, coquinisme, crapulisme, cuculisme, drôlisme, fanfaronisme, farouchisme, faussisme, fébrilisme, férocisme, fidélisme, fragilisme, grand-guignolisme, grognonisme, honnêtisme, hontisme, horribilisme, hostilisme, ignarisme, imbécilisme, immondisme, impatientisme, impudisme, impulsivisme, incongruisme, indignisme, inhumanisme, innocentisme, insolentisme, intelligentisme, jovialisme*

-ité DWs: *acerbité, affabilité, agilité, amabilité, amicalité, anxiété, asocialité, atrocité, avidité, banalité, bestialité, bonté, brutalité, causticité, convivialité, cordialité, coriacité, cruauté, crédulité, crudité, culpabilité, cupidité, curiosité, déloyauté, docilité, dureté, émotivité, étrangeté, excentricité, explosivité, expressivité, exquisité, fausseté, fébrilité, férocité, fidélité, fierté, fragilité, frivolité, grandiosité, honnêteté, hostilité, humanité, ignobilité, immoralité, impériosité, impétuosité, importunité, impulsivité, incapacité, incongruité, incrédulité, indignité, indocilité, inexorabilité, infidélité, inflexibilité, ingéniosité, ingénuité, inhumanité, insensibilité, intégrité, intensité, intrépidité, invincibilité, invulnérabilité, irascibilité, irrationalité, irritabilité, jovialité*

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-ité Ns: *angélicité, astuciosité, attentivité, avarité, bizarrité, candidité, capriciosité, costaudité, cocassité, comicité, conscienciosité, coquinité, craintivité, crétinité, déliciosité, désagrément, fantasticité, fêtardité, formidabilité, froidité, furiosité, gaminité, génialité, grognonité, hidosité, horribilité, ignarité, immondité, infamité,*

-itude DWs: *certitude, habitude, incertitude, ingratitudo, rectitude*

-itude Ns: *abjectitude, acariâtritude, acerbitude, artistitude, asocialitude, atrocitude, banalitude, bestialitude, bêtitude, bouffonitude, cocassitude, comicitude, coquinitude, coriacitude, cruelitude, cuculitude, cupiditude, faiblitude, fainéantitude, farouchitude, faussitude, férocitude, fidélitude, fiertitude, formidabilitude, fragilitude, froiditude, génialitude, grandiositude, granditude, hautainitude, hilaritude, hirsutitude, horribilitude, humanitude, humilitude, fidiotitude, ignarditude, ignobilitude, imbécilitude, immoralitude, incongruitude, indignitude, infamitude, inhumanitude, intégritude, ironitude, jovialitude*

other Ns: *abominance, admirance, affirmation, hésitance, fascinance, agilance, furibardise, fêtardise, froussardise*

-ance DWs: *ambivalence, bienveillance, clairvoyance, clémence, complaisance, condescendance, confiance, constance, déliquescence, désobligance, diligence, distance, effervescence, élégance, extravagance, exubérance, impertinence, impuissance, inclémence, incohérence, incompétence, inconscience, inconstance, inconvenance, indécence, indépendance, indifférence, indolence, inélégance, innocence, intelligence, intempérance, intolérance, malveillance, pertinence, puissance*

-esse DWs: *grandesse, humblesse, faiblesse, indélicatesse, politesse, impolitesse, finesse, faiblesse, délicatesse, allégresse, adresse*

-eur DWs: *impudeur, candeur, froideur, fureur, hideur, laideur; impudeur, ferveur, douceur, chaleur, candeur*

-ice/-ise DWs: *avarice, fainéantise, bêtise, justice, franchise, faiblardise, couardise*

-ie DWs: *ironie, barbarie, idiotie, infâmie, bonhommie, jalousie, folie, félonie, euphorie, discourtoisie, courtoisie*

-ion DWs: *attention, abjection, introversion, indécision, précision, imprécision, indiscretion, discréption, dévotion, correction, confusion, compréhension, circonspection, ambition, affection.*