

Adjectival bases of French *-aliser* and *-ariser* verbs: syncretism or under-specification?

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Issue: This paper follows a previous study, proposed in (Namer, 2009), and is about the constructed meaning of 227 deadjectival verbs ending with *-aliser* or *-ariser* (hereafter *-aRiser*). Although the verb base is always an adjective, the verb itself seems to instantiate three constructional patterns: some are genuinely deadjectival (1), others have a denominal interpretation (2), and in other cases the adjectival base bears an anaphoric function, namely it refers to a « Noun Adj » phrase, in which Adj matches the verb base (3). According to the context, a single verb form may have more than one reading (4). The examined 227 verbs come either from the TLF or from online documents¹. The investigation aims at determine the conditions in which these various verb meanings are observed. It leads us to questioning the nature of the morphological processes that form *-aRiser* verbs. Our assumption is that the verb is formed on a semantically underspecified base; the verb's interpretation pattern, involving a noun, an adjective or a noun phrase, is revealed only in context.

- (1) UNIVERSALISER : rendre UNIVERSEL - *Que faire pour **universaliser** l'accès à l'eau*
[UNIVERSAL-IZE: make [sth] become UNIVERSAL: What to do to **universalize** access to water]
- (2) LOCALISER : déterminer le LIEU - *On a **localisé** le naufragé*
[LOCAL-IZE: determine [sth's] PLACE: we have **localized** the shipwreck survivor]
- (3) MURALISER : faire une [fresque] MURALE - *Lorsque l'on évoque le sujet des fresques murales, Serge Berkowicz se met tout de suite à en parler avec passion. Ce sentiment de "créer" de laisser une "trace" visible, sont autant d'éléments qui le motive à **muraliser***
[MURAL-IZE: make a MURAL [fresco] - When mural fresco matter is advocated, SB starts immediately to talk about it with passion. This impression of « creating » of letting a visible « trace », are as many elements that motivate him to **muralize**]
- (4) AMICALISER : rendre AMICAL - *Les cadeaux ne servent qu'à "**amicaliser**" les tribus non-amicales, dans le but de faire des alliances*
AMICALISER : ajouter à sa liste d'AMIS - ***Amicalise**-moi sur Facebook*
[FRIENDLY-IZE : make [sb] become FRIENDLY: Gifts just help friendly-ize unfriendly tribes, with the intention of forming alliances
FRIENDLY-IZE : add [sb] to a FRIENDS list (=to friend): **Friendly-ize** me on Facebook]

Preliminaries : French *-iser* suffix is generally known as a verbalizer, i.e. verb forming suffix selecting a noun or an adjective as a base. When they are noun based, verbs derivatives express a whole range of concepts, since the verbal predicate can be causative, resultative, locative, inchoative, performative, etc.: many authors agree to assign several interpretative patterns to the *-iser* suffixed verbs (as well as to the corresponding suffixed verbs in other languages, e.g. the English *-ize*). Following Lieber and Plag terminology, respectively in (Lieber, 2004 :71-89) and (Plag, 2003 :118), *-ize* is polysemous ; In Plag opinion, cf. (Plag, 1999 :121-194), *-ize* (or *-iser*) derivational pattern verbal outputs are semantically underspecified. Moreover, still according to (Plag, 1999), the expected meaning of a new coined *-ize* suffixed verb results from many interactions, among which the base semantic features, pragmatic factors, and the weight of the attested lexicon. The French *-iser*

¹ Google and Yahoo searches have been performed through the WaliM robot (Namer 2003), between February and April 2010. Native spelling and spelling errors have been left untouched in utterances given as examples.

suffixation rule alternates with other derivation rules, such as *-ifier*, *en-*, *a-*. Mechanisms that rule this competition are examined from a semantic viewpoint in (Roger, 2003). The morphophonological perspective is accounted for English in (Plag, 1999), and for French in (Lignon, 2010).

A fact seems to emerge from the various studies: when the base is an adjective, the *-iser* suffixed verb is either causative or unaccusative, and it expresses change-of-state affecting the patient, whose final state is characterized by the property described by the adjective base. In other words, this adjective, which refers to a property, has to be a predicate (cf. (Wisniewski and Love, 1998) for more details).

Syncretism: In this talk we are disputing this claim. Actually, TLF records 904 *-iser* suffixed verbs. The base of a hundred of them is a denominal adjective suffixed with *-al*, *-el* or *-aire*. More than 50 of these adjectives, corresponding to 5,5% of the 904 *-iser* verbs set, bear a strictly relational meaning (Fradin, 2008) (5). Correspondingly, the meaning of the derived verb directly depends from that of the noun the base adjective is derived from (6):

- (5) SCOLARISER < SCOLAIRE = relatif à l'école
 [SCHOOL-AR-IZE < SCHOOL-AR (academic, educational) = relating to school]
 INSTRUMENTALISER < INSTRUMENTAL = relatif à un instrument
 [INSTRUMENTAL-IZE < INSTRUMENTAL = relating to an instrument]
- (6) SCOLARISER = mettre dans une école (*rendre scolaire)
 [SCHOOL-AR-IZE = Send [sb] to SCHOOL (*make sth/sb become academic, educational)]
 INSTRUMENTALISER = transformer en instrument (*rendre instrumental)
 [INSTRUMENTAL-IZE = turn [sth] into an INSTRUMENT (*make sth/sb become instrumental)]

The so-called authentic corpora (newspapers, articles, forums, blogs, etc.) gather *-aRiser* verbs absent from the TLF and having similar characteristics:

- (7) CATÉGORIALISER = faire des CATÉGORIES - *Il faut une faculté capable de procéder à un tri, de sélectionner, de catégorialiser.*
 [CATEGORICAL-IZE = make CATEGORIES: A faculty is needed, capable of sorting, selecting, **categorical-ize**] (see also (Sablayrolles, 2007))

The first, spontaneous explanation to the discrepancy between form and meaning observed with verbs such as in (5)-(7) is that they define cases of syncretism, following the same line of argument as the one (Koehl, 2009) or (Dal and Namer, 2010) hold to account for the *-ité* nouns formation. A. Koehl (2009) remarks that, although *-ité* suffixed nouns are usually property adjectives, some of these nouns are denominal, and the *-ité* derived noun refers to a measure: the base noun surfaces as the adjective forms it is morphologically related to. For instance, the semantic base of MORTALITÉ (MORTALITY) is the noun MORT (DEATH) under the form /mɔʁtal/ borrowed from the adjective MORTEL (MORTAL). In (Dal and Namer, 2010) the reasoning is quite similar: for ethnic property nouns, the default base is an adjective, e.g. ITALIEN > ITALIANITÉ (ITALIAN > ITALIAN-ITY). However, in given circumstances, the stem of the morphologically related toponym replaces the adjective. So, PORTUGUAIS > PORTUGALITÉ (PORTUGUESE > PORTUGAL-ITY) instead of the unattested *PORTUGUAISITÉ (PORTUGUESE-ITY). For (Koehl, 2009) and (Dal and Namer, 2010), substitution is purely formal: the base word diverts to its own profit the default stem of another word belonging to its morphological family (a similar approach is used in (Booij, 1997) for the analysis of Dutch toponym/ethnonym/adjective triplets).

All in all, adopting the syncretism solution turns to assume that, for instance, INSTRUMENTALISER is based on the noun INSTRUMENT, surfacing as the suppletive stem /ẽstɤymãtal/ borrowed from the related adjective INSTRUMENTAL.

At first sight this solution is seducing, because she solves the semantic mismatch issue between the verb and its apparent base. So, it accounts for the fact that SCOLARISER does not mean *makes sth become academic/educational*, and that the online attested DÉMONIALISER (DEAMON-AL-IZE) can only be defined from the noun DÉMON (DEMON):

- (8) « *Comment ne pas **démonialiser** des gens qui prescrivent des amphétamines aux petits enfants* »
[How not to **demon-al-ize** people who prescribe amphetamine to little children]

At the same time, this hypothesis offers additional evidence about the syncretic nature of *-al/-el* and *-aire*. The near-complete lack of *Xiser* forms competing with *XaRiser* in TLF also argue in favour of the syncretism solution. The form taken by the nominal base X of a verb *XaRiser* systematically matches the stem of the corresponding *Xal*, *Xel* or *Xaire* denominal adjective, from the moment that this adjective exists.

Polysemy : However, this solution is insufficient. In fact, it does not explain why, for a large number of TLF *XaRiser* verbs, the same verb form may have either a denominal meaning or a deadjectival one, depending on the context in which it occurs:

	VERB	Verb meaning according to its BASE	EXAMPLE
a	PROVINCIALISER (PROVINCIAL-IZE)	Assign sth to the PROVINCE _N	<i>Ne faudrait-il pas plutôt provincialiser ces compétences ?</i> Should not we rather provincial-ize these jurisdictions?
b		(Make sth) Become PROVINCIAL _A	<i>La langue des écrivains s'est créolisée, provincialisée, barbarisée</i> Writers language creolized, provincial-ized , barbarized
c	ARTÉRIALISER (ARTERIAL-IZE)	turn sth (= a blood vessel) into ARTÈRE _N (ARTERY)	<i>Il est préférable d'artérialiser la veine radiale</i> It is better to arterial-ize the radial vein
d		(Make sth) Become ARTÉRIEL _A (ARTERIAL)	<i>Artérialiser le sang veineux, c'est en modifier l'oxygénation</i> To arterial-ize venous blood means to modify its oxygenation

Table1: *XaRiser* denominal and deadjectival readings

We could put forth the hypothesis that there are two lexemes PROVINCIALISER (Table 1, a,b). The former would be defined with respect to the noun PROVINCE, which refers to the final destination of the verb patient referent. The latter would be adjective-based and describe the transition leading the patient to the property of 'being PROVINCIAL'. The same line of argument would also apply to ARTÉRIALISER (Table1, c,d). One of the verb readings describes

a process consisting in “turn a blood vessel into an artery” (c). The other one refers to the fact of “providing sth with arterial features” (d).

However, assuming homomorphic *XaRiser* verb pairs is not a satisfying solution: in fact, for all *XaRiser*, it presumes two identical verb forms being systematically constructed from two different bases, this device being implemented despite the fact that other better suited morphological means are available to avoid polysemy. For instance, instead of ARTÉRIALISER in (c), the non-existing ARTÉRIFIER (ARTERIFY) could have been coined, following the model of the attested MOMIFIER (MUMMIFY): “turn sth into a MOMIE (MUMMY)”.

Our analysis: Our assumption is that the meaning of these particular verb forms is decided within speech utterances, and that the adjective category, which is always the selected base, is semantically underspecified. This hypothesis, close to that what is proposed in (Roché, 2008), and going against the conclusions stated in (Fradin and Kerleroux, 2003), has been tested with a set of deadjectival *-aRiser* verbs with a denominal base: 95 TLF-attested verbs, and 132 other ones searched from the Internet have been examined in detail. The results we came across are the following:

- In most cases, the verb unique interpretation is either denominal (9), or deadjectival (10). The verb meaning reflects the adjective nature, which is either strictly predicative (HORIZONTAL) or relational (FLUVIAL).

- (9) FLUVIALISER < FLUVIAL=FLEUVE - *Entrepôts estimés intéressants car susceptibles de **fluvialiser** leur flux.*

[fluvial-ize < fluvial=river: Warehouses considered interesting because likely to **fluvial-ize** their flow]

- (10) HORIZONTALISER < HORIZONTAL ≠ HORIZON - *En augmentant sa vitesse de nage le nageur va s'**horizontaliser** grâce à l'accroissement de la force de portance*

[HORIZONTAL-IZE < HORIZONTAL ≠ HORIZON: By raising its swimming speed, the swimmer is going to **horizontal-ize** itself by increasing lift strength]

- Just like what Table1 shows, two readings are sometimes possible for a given verb; the detection of each reading is context depending. The verb polysemy reveals the twofold nature (predicative/relational) of its base adjective:

- (11) COLONIALISER < COLONIAL = qui rappelle les colonies - *Besoin d'idées pour "**colonialiser**" mon vieux buffet*

[COLONIAL-IZE < COLONIAL = that reminds colonies: Need ideas to '**colonial-ize**' my old sideboard]

COLONIALISER < COLONIAL = COLONIE - *Ba tu les defendrais moins si ils venaient **colonialiser** la France*

[COLONIAL-IZE < COLONIAL = COLONY: Well you would'nt defend them this way if they came to **colonial-ize** France]

- Moreover, the inspection of the Web data reveals another trend: the verb adjectival base corresponds to the adjectival modifier occurring in a Noun-Adjective collocation, which is sometimes found in the speech occurring before the *-aRiser* verb. For instance, in (12), the adjectival base TERRITORIAL of TERRITORIALISER (TERRITORIAL-IZE) does not refer to TERRITOIRE (TERRITORY) but to *collectivité territoriale* (*territorial collectivity* = region with a measure of autonomy). In (13), the BANCARISER (BANK-AIRE-IZE) base is the adjective BANCAIRE (BANK/BANKING), referring to the phrase *compte bancaire* (*bank account*): indeed

BANCARISER's meaning is neither "put sth in a bank" nor "make sth become bank-related", but "provide sb with a bank account". In example (12) (resp. (13)), the *-aRiser* verb adjectival base plays in a way an anaphoric role, since it is co-referential with the nominal phrase *collectivité territoriale* (resp. *compte bancaire*), occurring in the previous sentence.

- (12) *méconnue et peu utilisée surtout en collectivité territoriale. elle **territorialise** la plupart de ses services, crée des équipes*
 [neglected and not much used, especially in a territorial collectivity ... it **territorializes** most of its departments, creates teams]
- (13) *Le produit est un compte bancaire « light » et accessible à tous et qui contribuera à « **bancariser** » les tunisiens*
 [The product is a "light" bank account, affordable to anyone and that will help to "bank-aire-ize" Tunisian citizens]

- Finally, the anaphoric interpretation is for some verbs one of the two possible readings: for instance the meaning of RELATIONNALISER (RELATIONAL-IZE) in (14) is "having relationships", whereas in (15) the adjectival base RELATIONNEL (RELATIONAL) refers to the phrase *trouble relationnel* (*relational trouble*). Consequently, the verb paraphrase in (15) is "become a relational trouble":

- (14) *Sur Second Life c'est pareil. Et même pire. Je **relationnalise** aisément, mais ça s'arrête souvent là.*
 [On Second Life it is the same. Even worse. I **relational-ize** easily, but it is often the end of the matter]
- (15) *... ni celle du graphologue : un trouble instrumental peut se « **relationnaliser** », une difficulté relationnelle peut s'« instrumentaliser »*
 [... nor that of the graphologist: an instrumental trouble may "relational-ize" itself, a relational issue may "instrumental-ize" itself]

Questions: The following questions arise from the data analysis, and (part of) them will be given a tentative answer during the talk.

- Is it possible to predict the possible *XaRiser* interpretation(s)? At a first sight, the denominal or deadjectival verb reading depends on the predicative/relational adjective nature
- Are the verb denominal readings correlated to a restricted number of interpretative schemata, or do these nouns play any of the semantic roles generally observed with genuine denominal *-iser* verbs (e.g. locatum, instrument, result, process, etc.)?
- What is the exact nature of the base unit in *-aRiser* verbs? First, this unit is probably not a semantically specified lexeme, because of the nominal/adjectival reading ambiguity we have illustrated in (9-11). Moreover, it may be the case that it is even not a lexeme, as shown in (12-15). Thus, could it be that the base under-specification is not only semantic, but even categorial, for *-aRiser* verbs?

Another interesting issue requires further investigation to be answered: is the verb behaviour consistent with that of its morphological family (*XaRiser*, *déXaRiser*, *reXaRiser*), e.g. (INSTRUMENTALISER [INTRUMENTAL-IZE], DÉINSTRUMENTALISER [UN-INSTRUMENTAL-IZE], RÉINSTRUMENTALISER [RE-INSTRUMENTAL-IZE])? In other words, does the same interpretation variation occur for *XaRiser* and for its related prefixed verbs? If we were able to give a positive answer to this question, this would provide a further confirmation to the impact of paradigm in morphology, as claimed in (Hathout, à paraître).

Bibliography

- Booij, Geert. 1997. Autonomous morphology and paradigmatic relations. *Yearbook of Morphology* 1996:35-53.
- Dal, Georgette, and Namer, Fiammetta. 2010. French property nouns based on toponyms or ethnic adjectives: A case of base variation. In *Variation and Change in Morphology*, eds. Franz Rainer, Wolfgang U. Dressler and Hans Christian Luschützky. Amsterdam: John Benjamins:53-74.
- Fradin, Bernard, and Kerleroux, Françoise. 2003. Quelles bases pour les procédés de la morphologie constructionnelle ? In *Silexicales 3 : les unités morphologiques*, eds. Bernard Fradin et al. Villeneuve d'Ascq: Presses Universitaires du Septentrion:76-84.
- Fradin, Bernard. 2008. On the semantics of Denominal Adjectives. Online Proceedings of the *6th Mediterranean Morphology Meeting (MMM6)*, Ithaca, Greece.
- Hathout, Nabil. à paraître. Une analyse unifiée de la préfixation en anti-. In *Des Unités Morphologiques au Lexique*, ed. Michel Roché. Paris: Hermès.
- Koehl, Aurore. 2009. Are French /ite/ suffixed nouns property nouns? In *Morphology in Bordeaux - Selected Proceedings of Decembrettes 6*, eds. Fabio Montermini and Gilles Boyé. Somerville, MA: Cascadilla Proceedings Project: 95-110.
- Lieber, Rochelle. 2004. *Morphology and Lexical Semantics*. Cambridge: Cambridge University Press.
- Lignon, Stéphanie. 2010. Les suffixations en -iser et en -ifier : vérifier les données pour vérifier les hypothèses ? In: *Décembrettes 7*. Toulouse.
- Namer, Fiammetta. 2003. WaliM : valider les unités morphologiquement complexes par le Web (3ème Forum de Morphologie, 20-21 septembre 2002, Lille). In *Silexicales 3 : les unités morphologiques*, eds. Bernard Fradin et al. Villeneuve d'Ascq: Presses Universitaires du Septentrion:142-150.
- Namer, Fiammetta. 2009. *Morphologie, Lexique et TAL : l'analyseur DériF*: TIC et Sciences cognitives. London: Hermes Sciences Publishing.
- Plag, Ingo. 1999. *Morphological productivity. Structural constraints in English derivation*. Berlin/New York: Mouton de Gruyter.
- Plag, Ingo. 2003. *Word-formation in English*. Cambridge: Cambridge University Press.
- Roché, Michel. 2008. Structuration du lexique et principe d'économie: le cas des ethniques. *1er Congrès Mondial de Linguistique Française*, Paris:1559-1573.
- Roger, Coralie. 2003. De la pertinence de la notion de paradigme pour les procédés de construction des verbes de changement d'état (3ème Forum de Morphologie, 20-21 septembre 2002, Lille) In *Silexicales 3 : les unités morphologiques*, eds. Bernard Fradin et al. Villeneuve d'Ascq: Presses Universitaires du Septentrion:179-187.
- Sablayrolles, Jean-François. 2007. A propos de quelques métanonymes. *Cahier du CIEL* 2007-2008:105-115.
- Wisniewski, Edward J., and Love, Bradley C. 1998. Relation vs properties. *Journal of Memory and Language* 38:177-202.