

**Pieces of meaning in unexpected places:**  
***Wug-ir* and *wug-er* nonce verbs receive a different default semantics in French**  
Itamar Kastner and Fabienne Martin (HU Berlin)

“Non”, dit Antonin. “Maintenant ils vont rapetissir.” “Rapetisser. Premier groupe.” “Hein? Ah oui. Rapetisser.”  
Yak Rivais, *T’occupe*.

**Introduction.** According to traditional grammars, there are two main conjugation classes in French. The first group is composed of *-er* verbs, e.g. *aimer* (around 6.000 items in *Le Petit Robert*), and is the most productive group. *-Ir* verbs compose the second conjugation class (between 300 and 400 verbs), and count very few recent dictionarized creations. The third class lumps together classes of small type frequency (less than 400 verbs). Most of *-ir* verbs are deadjectival (*maigr-ir* ‘become thin(ner)’ < *maigre* ‘thin’) or in fewer cases denominal (*at-terr-ir* ‘land’ < *terre* ‘earth’). Deadjectival *-ir* verbs typically have an inchoative (change-of-state, henceforth CoS) meaning, related to the inchoative meaning of its Latin ancestor *-sc-* (Allen 1995, Da Tos 2012; see e.g. *rubesco* ‘grow red’ < *ruber* ‘red’, cp. *rubeo* ‘be red’). However, other *-ir* verbs, e.g. *bondir* ‘bounce’, which are rather few but for some of them of very frequent use, have no CoS semantics. Thus French encodes no learnable deterministic rule associating *-ir* with a CoS meaning, but an open question is whether naïve speakers nevertheless associate such a meaning to the *-ir* class. Another difference between *-ir* and *-er* concerns prefixation. Prefixes have been reported to often act as transitivizers in French (Junker 1988, Boons 1991, Labelle 2001). As a result, the reflexive *se* is often needed to obtain the intransitive/anticausative use of a prefixed verb (Labelle 1992), for the external argument projected by the prefixed verb needs to be absorbed by *se* (Reinhart & Siloni 2005, Schäfer 2008); e.g. *a-moch-er* ‘cause to get ugly’ is transitive only, while *s’amocher* ‘get ugly’ may have an anticausative use. It has been noted, however, that *-ir* verbs are in this respect particular in that they may keep an anticausative use even when they are prefixed without a reflexive (Thorn 1907); e.g. *a-moch-ir* ‘get ugly’.

**Hypotheses.** Our main goal is to test the hypothesis that the morpheme *-ir* is not semantically inert and associated with a default CoS meaning, especially in deadjectival formations (HYP. 1). An additional hypothesis is that non-reflexively marked prefixed *-ir* verbs may be used in intransitive (anticausative) frames more easily than non-reflexively marked prefixed *-er* ones (HYP. 2).

**Study.** In our pilot study, Experiment 1 (N=28) used *a/en-* prefixed verbs and Experiment 2 (N=16) used unprefixed verbs. Since the strongest indicator of productivity in linguistics is the wug test (Berko 1958), participants were given nonce words with a clear adjectival syntax (e.g. *baigle/blatoche*) and contexts designed to elicit activity/unergative or CoS/anticausative readings in an intransitive frame of a nonce verb derived from the nonce adjective. Nonce verbs were always unmarked/bare intransitives (never used with a reflexive) and appear with the morphology of their conjugation class (e.g. *-i/iss-* depending on the tense used for *-ir* verbs) For space reason, only the translations are provided here, see (1)-(2); indicators of the activity or CoS readings are underlined. Note that differently from English, French regularly forms unergative/activity verbs from adjectives, see e.g. *bêtifier* ‘act in a stupid way’ (< *bête* ‘stupid’).

- (1) The world changes at a crazy speed and becomes more and more *baigle*. For the sociologist Michel Pernu, it is because of globalization that disrupts everything and builds new frameworks for organizing human societies that the world *en-baigle/en-baiglit* at full speed.
- (2) Everyone has already noticed, the new colleague is very *blatoche*: super nice, attentive, professional, etc. The other day, as he *a-blatochait/a-blatochissait* as usual with a customer, I saw the manager going to him.

Participants were asked to choose which of two forms fit the context better, a nonce *-ir* form or a nonce *-er* form, on a 7-point scale. Order of presentation and order of items were randomized.

**Results.** Responses were z-transformed such that a score of 1.0 indicates the strongest consistent preference for the *-ir* form and likewise -1.0 for the *-er* form. The plot summarizes the responses by participant and condition within each experiment. We expected to find positive scores for the CoS condition (preference for *-ir*) and negative scores for the Activity condition (preference for *-er*). This is indeed the finding, regardless of whether the verbs were prefixed or not, supporting HYP. 1. Moreover, the preference for *-ir* in the CoS condition was stronger when the verb was prefixed. We take this to support HYP.2: in reflexively unmarked intransitive CoS contexts, prefixed *-ir* verbs were more strongly preferred to prefixed *-er* ones.

The mean normalized scores per condition were  $-0.25 \pm 0.86$  (Activity) and  $0.19 \pm 0.89$  (CoS),  $t(438.1) = 30.182$ ,  $p < 0.001$ . A mixed effects regression with Condition and Prefix as predictors confirmed the significance of Condition ( $p = 0.007$ ), with no effect of Prefix or interaction.

Adding Task as an additional predictor (whether participants were rating a novel singular, plural or infinitive form) revealed a three-way interaction in which Condition ( $p = 0.001$ ), Task ( $p = 0.005$ ) and a three-way interaction ( $p < 0.0001$ ) were significant, alongside a marginal interaction of Condition with Prefix ( $p = 0.064$ ). In sum, the Activity/CoS distinction was a strong predictor of participants' choice, as hypothesized.

**Semantic analysis.** The infinitival morphemes *-ir* and *-er* participate differently to the semantics of the deadjectival predicate. The morpheme *-er* carries no meaning and may combine with virtually any overt verbalizers (e.g., *-ifi/-is-* to form *-ifier/-iser* verbs), or with any covert verbal head used in the formation of French verbal predicates. As a result, *-er* verbs can be of virtually any semantic type. In contrast, *-ir* is non-atomic and composed of the infinitival marker *-r* and the infix *-i/iss-* endowed with a CoS meaning; more precisely, *-i/iss-* spells out the Cause head (3) forming causative and anticausative predicates (Kratzer 2004, Alexiadou et al. 2006, 2015). Applying to a stative nonce/existing adjective *P*, *-i/iss-* adds an event causing a state of type *P* (but crucially no other agent/causer argument, introduced by Voice). As a result, *-i/iss-* cannot be used to form predicates with unergative meanings.

- (3) a.  $-i/iss- \rightsquigarrow \lambda P \lambda y \lambda e. \exists s (\text{cause}(e, s) \wedge P(s) \wedge \text{theme}(s, y))$   
 b.  $\textit{blatoch-i-r} \rightsquigarrow \lambda e \lambda y. \exists s (\text{cause}(e, s) \wedge \textit{blatoche}(s) \wedge \text{theme}(s, y))$  (anticausative)

We propose to account for this difference of *-er* vs. *-ir* verbs with regard to prefixation as follows. Prefixes tend to spell out a Voice head introducing an external argument; thus prefixed verbs are generally transitive. But prefixes may form together with the *-i/iss-* infix a (discontinuous) circumfix, carrying the same meaning as *-i/iss-* (see the recurrent hypothesis among Romance philologists that prefixed *-ir* verbs are parasynthetic formations, cf. e.g. Maurer 1961). This accounts for why *-ir* verbs may stay intransitive although prefixed (for the prefix does not act as a transitivizer when part of the circumfix).

