

## Parametrizing verbal polysemy: The case of *bake* revisited

The general goal of our paper is to provide a l(exical)-syntactic explanation of why the ‘elasticity of verb meaning’ (Rappaport Hovav & Levin 1998) is quite “reduced” in Romance languages when compared to that of Germanic languages. In so doing, we will show that a l-syntactic approach (Hale & Keyser 2002) to verbal polysemy is more explanatory than Levin & Rapoport's (1988) lexical semantic one.

**I.** As pointed out by Atkins, Kegl, and Levin (1988), the verb *bake* has two meanings, a *change of state* sense (*John baked a potato*) and a *creation* sense (*John baked a cake*), the second one being absent from the Romance lexicon (cf. their relevant quote in p. 103: “French is a language where the cooking verbs are simply change of state verbs and do not allow a creation sense. This proposal is consistent with other properties that set French apart from English discussed in Talmy (1985) and Green (1973)”). These properties alluded to by Atkins et al. can be exemplified with Levin & Rapoport's (1988: 280) examples in (1): e.g., note that in English the creation sense can be associated to the verb *burn* in (1a) and the verb *smile* in (1d). Levin & Rapoport argue that the process which derives all of those English constructions in (1) is a *lexical subordination* operation at the LCS level: these constructions “involve taking the entire clause of the original LCS and subordinating it as a *means/manner* clause under the *result* clause” (p. 283): cf. (2).

**II.** Despite the descriptive merits of Levin & Rapoport's LCS analysis, note that the crosslinguistic variation exemplified in (1) has not been adequately dealt with: Indeed, what could it mean to say that a LCS rule cannot apply in Romance? As forcefully argued by Mateu & Rigau (2002), the parametric variation involved in (1) should not be explained in purely LCS terms. Accordingly, we argue that the linguistic operation of lexical subordination is not a conceptual one, but rather a l-syntactic one (cf. Hale & Keyser (2002) for the claim that l(exical)-syntax is the locus of parameterization of morphosyntactic facts affecting argument structure).

Assuming Hale & Keyser's (2002) theory of basic argument structure types (cf. 3), we claim that the l-syntactic structure of the *causative verb of change of state* in (4) involves merging the unaccusative structure in (3c) into the structure of (3a), the latter headed by a causative verb: cf. (4). On the other hand, the *creation* sense of the verbs *bake* or *smile* involves the syntactic composition of *two* different l-syntactic structures, those in (5a,b). Following Mateu & Rigau's (2002) analysis of ‘conflated’ structures like *Sue danced into the room* (i.e., ‘Sue went into the room dancing’), we posit that the conflation of the subordinate activity verb in (5b) into the main creation verb in (5a) can be argued to be carried out via a ‘generalized transformation’ (cf. Chomsky 1995): The verbal head of (5b) is merged into the null verb in (5a), the former providing the latter with phonological content: cf. (6).

Quite importantly, we argue that Talmy's (1985, 1991, 2000) typological distinction between ‘satellite-framed languages’ (e.g., English) and ‘verb-framed languages’ (e.g., French) is crucially involved in the explanation of the parametrization issue involved in (1): in particular, we argue that the I-linguistic variation involved in (1) is to be explained in morphosyntactic terms, rather than in purely semantico-conceptual terms (cf. Snyder 2001 for a similar view). Accordingly, we argue that Talmy's distinction must be translated into l-syntactic terms (Mateu & Rigau 2002): The fact that only *non-verb-framed* languages like English allow constructions involving a conflation process like that depicted in (6) is related to the fact that only these languages (i.e. the ‘satellite-framed’ ones) allow a null *main* verb to be merged with a full *subordinate* verb from an independent l-syntactic structure. Hence the Romance lexicon (‘constructicon’: cf. Goldberg 1995) lacks (i) manner of motion verbs in telic path of motion constructions (*Sue danced into the room*) or (ii) complex resultative constructions (*The dog barked the chickens awake*).

- (1) a. Stephanie a fait un trou à son manteau avec une cigarette. (French)  
 (lit.: Stephanie made a hole in her coat with a cigarette)  
 “Stephanie burned a hole in her coat with a cigarette.”  
 b. Elle a soigneusement essuyé la vaisselle.  
 (lit: She carefully wiped the dishes)  
 “She wiped the dishes dry.”  
 c. I a rit comme un bossu/une baleine.  
 (lit: He laughed like a hunchback/a whale)  
 “He laughed himself sick.”  
 d. Pauline l’a remercié d’un sourire.  
 (lit. Pauline thanked him with a smile)  
 “Pauline smiled her thanks.” Levin & Rapoport (1988: 280)
- (2) a. Pauline smiled. smile: [x DO ‘smile’]  
 b. Pauline smiled her thanks. smile: [x EXPRESS y BY [x DO ‘smile’]]  
 Levin & Rapoport (1988: 283)

- (3) a. [x X Y]    b. [x Z [x X Y]]    c. [<sub>α</sub> Z [<sub>α</sub> α X]]    d. X

- (4) John baked a potato.

[<sub>v1</sub> [<sub>v1</sub> Ø] [<sub>v2</sub> DP [<sub>v2</sub> [<sub>v2</sub> Ø] X]]]  
 [ CAUSE [ a potato [ [BECOME BAKED]]]]

*Nota bene:* See Hale & Keyser (2002) for the claim that the external argument is truly external to l(exical)-syntax, this being introduced in s(entential)-syntax.

- (5) John baked a cake (cf. Pauline smiled her thanks)

a. [<sub>v1</sub> [<sub>v1</sub> Ø] DP]                      b. [<sub>v2</sub> [<sub>v2</sub> Ø] X]  
 [ MAKE a cake]                              [ DO BAKING]  
 [ MAKE her thanks]                            [ DO SMILING]

- (6) [<sub>v1</sub> [<sub>v2</sub> X-V<sub>2</sub>] -V<sub>1</sub>] DP ]]  
 [ [ BAKING-DO]-MAKE ] a cake] (i.e., (John) made a cake baking (it))  
 [ [ SMILING-DO]-MAKE ] her thanks] (i.e., (Pauline) expressed her thanks smiling)

### Selected references

- Atkins, B. T., Kegl, J. and B. Levin (1988). “Anatomy of a Verb Entry: From Linguistic Theory to Lexicographic Practice”. *International Journal of Lexicography* 1.2: 84-126.
- Hale, K., Keyser, S. J. (2002). *Prolegomenon to a Theory of Argument Structure*. Cambridge, MIT Press.
- Levin, B., Rapoport, T. (1988). “Lexical Subordination”. *CLS*: 275-289.
- Mateu, J., Rigau, G. (2002). “A Minimalist Account of Conflation Processes: Parametric Variation at the Lexicon-Syntax Interface.” In Alexiadou, A. (ed.). *Theoretical Approaches to Universals*. LA Series, John Benjamins: Amsterdam/Philadelphia, pp. 211-236.
- Snyder, W. (2001). “On the Nature of Syntactic Variation: Evidence from Complex Predicates and Complex Word Formation”. *Language* 77.2: 324-342.
- Talmy, L. (2000). *Toward a Cognitive Semantics*. Cambridge, MIT Press.