

“LEXICAL EXTENSION”:
SOME LEXICOGRAPHICAL NOTES CONCERNING
THE MODERN GREEK VERB *piyeno*
AND THE REALIZATION OF ITS ARGUMENTS

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0. Introduction

In almost all current linguistic theories there has been a reassessment of the importance of the role played by the lexicon in accounting not only for semantic but also for syntactic facts. The lexicon is no longer “the house of idiosyncrasies” and need not, therefore, be learned piece by piece, as was originally believed; quite the contrary, current theories are much more optimistic in that respect and claim that there is a high degree of regularity in the lexicon and that this regularity is knowledge possessed by the native speaker of a language, it is, in fact, the native speaker’s LEXICAL COMPETENCE (cf. Levin 1985).

Given that there is a range of syntactically relevant semantic regularities inherent in the knowledge possessed by the speaker of a language, learning a second language implies that one should become almost as lexically competent in the target language as one is in the source language. This, in its turn, implies that a person who has mastered a foreign language possesses a thorough knowledge of (a): the LEXICAL CONCEPTUAL STRUCTURE (LCS) of words in the source and the target language, roughly speaking: their dictionary meaning in a decomposable form that reveals basic aspects of their complexity (cf. Hale and Keyser (1987), among others, and (b): the ARGUMENT STRUCTURE (AS), i.e., the set of semantic roles (e.g. AGENT, PATIENT, THEME, GOAL, EXPERIENCER, etc.) associated with the argument taking possibilities of the predicators (i.e. verbs, adjectives, nouns), i.e. the mapping of those roles onto the syntactic structure¹.

Knowledge of LCS in the case of two languages to be compared is of vital

¹ For an extensive book length treatment of Argument Structure see Grimshaw (1990).

importance since the possibility of decomposing the meaning of lexical items into submeanings may guarantee a better resolution to the problem of lexical equivalence across languages. A typical case of structural disparity between two languages is the one concerning the *resultative construction*, cf. Simpson (1983); Carrier and Randall (1992) and also Kakouriotis (1992b). In the last one of these three papers on resultatives, it was demonstrated that, unlike English, Mod Greek lacks such constructions because this language seems incapable of *conflating*, i.e., incorporating extra subcomponents of meaning into the verb's semantic structure in the way that English does. Resultatives in English, as will be illustrated below, can have a meaning extension that is not found in Modern Greek. Consider the following examples by way of illustration. The examples in (2) are word for word translations of the English examples (1):

- (1) a. The policeman shot the demonstrator dead
 b. Mary scrubbed the table clean
- (2) a. *o astinomikos pirovolise to diadiloti nekro*
 'The policeman shot the demonstrator dead'
 b. *i maria etripse to trapezi katharo*
 'Maria scrubbed the table clean'

The crucial point to be made here is that the examples in (2) cannot have other than a depictive meaning (cf. Halliday 1967), i.e. *The policeman shot the demonstrator while the latter was already dead* and *Maria scrubbed the floor when it was clean*. In English, on the other hand, the meaning is normally: *The policeman shot the demonstrator and as result the latter died* and *Maria scrubbed the table and as a result the table became clean*. In other words, English is capable of extending the lexical semantics of a verb by incorporating a kind of subconstituent of meaning, not to be found in the Mod Greek the word for word translation of (1), namely the abstract predicates CAUSE and BECOME (cf. Dowty 1979, among others, for use of such notions):

- (3) a. LCS of conflated *shoot*: *x CAUSE y BECOME z by shooting y*
 b. LCS of conflated *scrub*: *x CAUSE y BECOME z by scrubbing y*

The aim of the paper is to offer some lexicographical advice *qua* conflation and lexical extension (see brief comment about those terms, above) by comparing a particular lexical item, of some crucial importance from a lexicosemantic viewpoint, the basic predicate of motion in Modern Greek, namely the verb *piyeno*, and what is held to be its English counterpart, the verb *go*, (cf. *The Oxford Advanced Learner's English-Greek Dictionary* by Hornby and Stavropoulos, among others).

The paper is organized as follows: In the first section, there is a brief description of motion verbs in English and Mod Greek; in the second section, we discuss the exceptional behaviour of the Mod Greek verb *piyeno* compared to its English counterpart *go*. In the third section, we probe into AS and LCS of the verb *piyeno* and attempt to offer a principled account for the behaviour that this verb exhibits. The final section includes a summary and conclusions.

1. Motion verbs in English and Mod Greek

Following previous work by Rosen (1984) and Rappaport (1988), among others, we will divide motion verbs into three distinct classes, as follows:

- (4) a. *arrive* class: *arrive, come, go, depart, fall, descend...*
 b. *roll* class: *roll, slide, move, spin, swing, rotate...*
 c. *run* class: *run, walk, gallop, hop, march, swim...*

1.1. On the syntax of motion verbs

As far as their syntax is concerned, class (a) is made up of intransitive verbs of the *Unaccusative* type, cf. Perlmutter (1978). Classes (b) and (c), on the other hand, are more interesting groups *qua* syntax in the sense that although basically intransitive verbs, they both have a transitive alternant. Note, however, that (b) and (c) differ semantically in that in the former the grammatical object is not normally an animate entity and has no control over the action expressed by the verb. In the (c) class, however, the verbs express a kind of accompanying causation, in connexion with their objects in the sense that the latter are also actors: in other words, the object argument of those verbs, when they are transitively used, is capable of both agency and intentionality. Broadly speaking, the grammatical object of verbs in both (b) and (c) classes, bears the role of *Theme*, the entity that moves in a concrete or abstract sense. Class (3), however, has a different kind of grammatical object in the sense that although, again, this time, the argument is an entity that moves, (=a *Theme*), it also is an entity which is in control of the act of moving and thus bears the role of the *Agent*, too².

- (5) a. *The escorts have arrived the debutantes
 b. The debutantes have arrived
- (6) a. Ed rolled the ball on the grass
 b. The ball rolled on the grass
- (7) a. The bartender slid the glass of beer across the table
 b. The glass of beer slid across the table
- (8) a. The rider galloped the mare in the fields
 b. The mare galloped in the fields

Thus, of the three classes of intransitive verbs of motion in English, only classes (b) and (c) can also be used transitively. Now Mod Greek verbs can be classified in a similar fashion; the semantically equivalent of (4a, b, c) classes, i.e. (9a, b and c) below behave similarly in they, too, can be used transitively, cf. (11a, b) and (12a, b):

- (9) a. *arrive* class: *ftano, 'arrive', erxome, 'come', piyeno, 'go', anaxoro, 'depart', pefto, 'fall', kateveno, 'descend' ...*

² We adopt here Zubizarreta's (1985) claim that an NP may bear a secondary role, e.g. *Agent*, apart from its primary role, e.g. that of *Theme*. See also Roeper (1987).

- b. *roll* class: *kilao*, 'roll', *rolaro*, 'roll', *γlistrao*, 'slide' *stifoyrizo*, 'spin', *spinaro*, 'spin', *strivo*, 'swerve' ...
- c. *run* class: *trexo*, 'run', *perpato*, 'walk', *vadizo*, 'march', *proxoro*, 'march', *kalpazo*, 'gallop' ...
- (10) a. **o ikodespotis eftase tus kalezmenus*
The host (has) arrived the guests
b. *i kalezmeni eftasan*
The guests (have) arrived
- (11) a. *o bakalis kilise to vareli s to pezodromio*
The grocer rolled the barrel on the pavement
b. *to vareli kilise s to pezodromio*
The barrel rolled on the pavement
- (12) a. *o kavalaris kalpase ti forada s ta xoraffa*
The rider galloped the mare in the fields
b. *i forada kalpase s ta xoraffa*
The mare galloped in the fields

2. On the exceptionality of the verb *piyeno*

Note, however, that quite exceptionally, the verb *piyeno*, which belongs to the *arrive* class, and is considered the translational equivalent of *go*, has also a transitive alternant, thus behaving like the *roll* class of verbs and like the *run* class of verbs, (in its accompanying causation use), depending on the animacy/non animacy of the grammatical object:

- (13) a. *o aeras piye to kapelo tis s ta xoraffa*
the wind went the hat: Acc of her to the fields
The wind took her hat to the fields
b. *to kapelo tis piye s ta xoraffa (me ton aera)*
Her hat went to the fields (because of the wind)
- (14) a. *emis piyame ta pedja (s to) sxolio*
we went the children: Acc to the school
We took the children to school
b. *ta pedja piyan (sto) sxolio*
The children went to school

The difference between the two intransitive alternants (13b) and (14b) is that in the latter the subject can bear the role of the Theme *and* that of a (Secondary) Agent, whereas in the former, the subject NP bears only the Theme role.

Note that the verb *piyeno* is transitive cannot be proved by passivization, given that not all transitive verbs in Mod Greek can have a passive alternant, cf. Campos (1987) and Kakouriotis (1992a), but by fact that, like any other transitive verb, can have a clitic object, coreferential to the full NP object. Note that when intransitively used, the verb *piyeno* may also be followed by a bare (accusative) NP. In such case, however this NP is simply an *Adjunct* (e.g. Locative or Temporal) and cannot have a coreferential clitic (cf. (17b)):

- (15) *o aeras (to) piye kapelo s ta xoraffa*
the wind it: Obj-CI went the: Acc hat: Acc to the fields
- (16) *emis (ta) piyame ta pedja s to sxolio*
we them: Obj-CI went the children: Acc to the school
- (17) a. *emis piyame to savato s ta xoraffa*
we went the Saturday: Acc to the fields
We went to the fields on Saturday
b. *emis (*to) piyame to savato s ta xoraffa*
we it: Obj-CI went the Saturday to the fields

So far, then, we have offered some data concerning the syntax of motion verbs in English and Mod Greek, paying particular attention to the behaviour exhibited by the Mod Greek verb *piyeno*. The next step will be to attempt to probe into the LCS and the AS of this verb and compare it to its English counterpart *go*.

3. On the AS and LCS of the verb *piyeno*

It appears, then that the verb *piyeno*, unlike its English counterpart *go*, exhibits a different syntactic behaviour which presumably stems from the fact that it is capable of some kind of lexical extension. We have already seen that the two verbs have different syntactic status (i.e., English *go* is always *in* transitive, whereas Mod Greek *piyeno* has also an alternant transitive construction). The reason for this difference in syntax and in AS is due a difference in the LCS of the two verbs. Argument Structure and argument realization have been claimed to be projections of LCS (cf. Hale and Keyser 1988); *piyeno* appears to have different AS and LCS from *go*, in the sense illustrated below:

- (18) AS for *go*: <Theme, Goal Source>
(19) AS for *piyeno*: <(Agent), Theme, Goal Source>
(20) a. LCS for *go*: x MOVE from y to z
b. LCS for *piyeno*: ([w CAUSE]) x MOVE from y to z

The AS in (18) and (19) has been simplified for expository purposes given it does not show any "secondary" semantic roles (cf. fn. 2). For instance, in the verb *go*, the non-goal argument NP may also be an Agent, apart from being a Theme. Similarly, in the AS of the optionally transitive *piyeno*, (hence the round brackets in (19) and (20b), the second argument, the Theme, may also be an Agent. For example, at least on one reading, (21a) and (21b) are synonymous, although in the former the argument NP *to jo mu* is in accusative, the canonical case for objects and Themes, whereas in the latter, the argument NP *o jos mu* is in the nominative, the canonical case for subjects and Agents:

- (21) a. *i miteria piye to jo mu sxolio*
Agent Theme/Agent Goal
Art: NOM: mother went the: ACC: son me: GEN school: ACC
'Mother took my son to school'

b. *o jos mu piye sxolio me ti mitera*

Theme/agent Goal Accompaniment Adjunct

Art: NOM: son me: GEN went walk: ACC with Art: ACC: Maria

'My son went to school with mother'

Coming now to the LCS, where the *participants* in the situation (action, process, event or state) expressed by the verb are represented by the variables *w, x, y, z* in the LCS, we observe that not all variables are realized as syntactic arguments. For example the *y* variable corresponding to the Source argument is not always realized although it is an *inherent* argument, cf. Carrier-Duncan (1985) in the sense that it is integrated into the meaning of any motion verb expressing change of position.

Now, as far as the LCS of the two verbs is concerned, *piyeno* differs from its English counterpart *go* in that it can be optionally embedded in the abstract predicate CAUSE. This is what gives the verb *piyeno* its transitive use. The verb undergoes a process of causativization, (as in *break*, in *X broke Y broke X*) whereby a new external argument is introduced to its AS.

3.1. *piyeno* as a double object construction verb

Our lexicographer's notes, however, must go even further in order to give a fuller account of the argument taking possibilities of *piyeno*, compared to those of its allegedly English translational equivalent *go*. As a change of position verb, *piyeno* will also function as a change of possession verbs, and in such a case, it can be also classified as a member of the semantic group of verbs that inherently signify acts of giving and participate in the process of Dative Alternation. This class includes verbs like the following:

- (22) *dino*, 'give', *danizo*, 'lend', 'loan', *plirono*, 'pay', *prosfero*, 'offer', *serviro*, 'serve', *xarizo*, 'give away'.

As has been claimed in Kakouriotis (1991), (1993), these verbs behave, more or less, like their English counterparts in the sense that they exhibit the following alternation where an NP headed by a preposition is "promoted" to an oblique genitive/dative case NP (cf. the underlined NP in (24b)):

- (23) NP V NP PP --> NP V NP NP

- (24) a. *o jatros edose to dactiliði s tin eromeni tu*

'The doctor gave the ring to his mistress'

- b. *o jatros (tis) (to) edose tis eromenis tu to dactiliði*

Art: NOM: N: NOM GEN-CL ACC-CL gave Art: GEN: N Art: NOM: N

'the doctor gave his mistress the ring'

Two basic differences between English and Mod Greek here are (a): that the "promoted" object *his mistress* in the English gloss of the Mod Greek double object construction in (24b) is not morphologically marked, whereas its Mod Greek counterpart, *tis eromenis tu*, is in the Genitive/Dative Case. (cf. Comrie (1989) and

Kakouriotis (1993) for discussion) and (b): that the accusative case direct object and Genitive/Dative indirect object can cooccur with coindexed object clitics, (put in brackets in (24b)).

Now the verb *piyeno* exhibits the same alternation, as in (24) with either a prepositional object (25a) or, a Genitive/Dative NP NP expressing the (recipient) Goal argument. Clitic doubling, here, again, is possible (cf. the Genitive clitic *tis*, which is coindexed with the Genitive NP *tis eromenis* and the Accusative clitic *to*, which is coindexed with the Accusative NP *to dactiliði* in (25b)):

- (25) a. *o jatros piye to dactiliði s tin eromeni tu*
'The doctor offered/took the ring to his mistress'
b. *o jatros (tis) (to) piye tis eromenis tu to dactiliði*
'o jatros offered/took his mistress a very expensive ring'

In other words the verb *piyeno*, unlike its English counterpart *go*, can be used not only monotonically, but also ditransitively behaving like all the other Mod Greek Dative alternation verbs and has, like them, the following AS and LCS:

- (26) a. AS for ditransitive *piyeno*: <Agent, Theme, Goal>
b. LCS for ditransitive *piyeno*:
x CAUSE y come-to-be in possession of z

The variables *x, y, z*, in (26a) stand for the participants that are realized as Agent, Theme and Goal respectively, in the AS of (26b). Needless to say that *piyeno*, as a ditransitive verb denoting the act of giving, obeys the same restriction spelt out in (26b), namely that the Goal argument should not be a location thematic relation (cf. (27)) but a recipient Goal, that is an entity, capable of possession (cf. 25):

- (27) a. *o jatros piye to dactiliði sto enexirodanistirio*
'The doctor went (took) the ring to the pawnhouse'
b. **o jatros piye tu enexirodanistiriu to dactiliði*
'*The doctor took the pawnhouse the ring'

In sum *piyeno* has also an LCS, an AS and a syntactic realization of its arguments identical to that of the verbs of giving in Mod Greek (cf. Kakouriotis 1991, 1993 for discussion).

4. Summary and conclusion

The aim of this paper was to give an account of the native speaker's lexical knowledge of a predicate's LCS and AS and to show how s/he organizes his lexicon on the basis of that knowledge. It appears that across languages verbs of a specific semantic class seem to vary as far as the syntactic realization of their arguments is concerned. For example a native speaker of English knows that s/he may have two alternative ways of argument realization as far as a verb of creation is concerned:

- (28) a. John carved a cross out of a piece wood
 b. John carved the piece of wood into a cross
- (29) a. Mary sewed a shirt out of the remnants
 b. Mary sewed the remnants into a shirt

English is capable of mapping onto a *direct object* position either the effected argument (28a) and (29a) or the affected argument (28b) and (29b). In Mod Greek, on the other hand, only the former alternant is possible, as the Mod Greek counterparts of (28) and (29) show, below³:

- (28') a. *o janis skalise ena stavro apo ena komati ksilo*
 'John carved a cross out of (from) a piece of wood'
 b. **o janis skalise to komati to ksilo se ena stavro*
 'John carved the piece of wood into a cross'
- (29') a. *i maria erapse ena pukamiso apo ta retalja*
 'Mary sewed a shirt out of the remnants'
 b. **i maria erapse ta retalja se ena pukamiso*
 'Maria sewed the remnants into a shirt'

Mod Greek, on the other hand, however, as we have shown above, exhibits a different argument realization, as far as its basic verb of motion *piyeno* is concerned, compared to that of its English counterpart *go*.

We can claim that basically both *go* and *piyeno* are primarily used as verbs of change of position. However the Mod Greek verb can have more abstract uses. In the first place, *piyeno* can incorporate the abstract predicate CAUSE in the sense of Jackendoff (1972), (1983) and Dowty (1979), in which case a new external argument is introduced into the AS of the verb. In the second, it can be lexically extended to become a verb of possession in which case it syntactically behaves just like any double object construction verb in Mod Greek.

Notice that both the verb *go* and its Mod Greek counterpart *piyeno*, (cf. (30) and (30')) may basically have either a positional or a possessional meaning (cf. Jackendoff (1972), for a discussion of these facts in English):

- (30) a. Paul went to Boston (positional)
 b. The whole inheritance went to Martha (possessional)
- (30') a. *o pavlos piye s ti vostoni*
 'Paul went to Boston'
 b. *oli i klironomja piye s ti martha*
 'The whole inheritance went to Martha'

The fact, however, that *piyeno* not *go* can have either an anti-causative alternation, of the type *NP1 V --> NP2 V NP1*, or a dative alternation, of the type

³ We compare here the verbs *sew* and its counterpart *ravo*, as verbs of creation rather than verbs of attachment. That is in both the English and the Mod Greek examples it is implied that the shirt did not exist before the event of sewing.

NP1 V NP2 P NP3 --> NP1 V NP3 NP2 (cf. (25a and b)) can be attributed to the ability of the former verb to conflate the abstract predicate CAUSE, which is just a Greek-specific property of *piyeno* that does not apply to its counterpart *go*.

Note that our data lead us to an important conclusion concerning the relation between Lexical Semantics and Syntax. A verb in a given language may have multiple LCSs each of which gives rise to a different syntactic realization.

In sum, linguistics have now begun to better understand the importance of the role of the lexicon in language human capacity. However, the role that the lexicon can play in foreign language learning does not seem to have been equally appreciated so far. Offering any definitive solutions to this problem would be beyond the scope of this paper. Still, the kind of "syntactic" lexicon which has been suggested in the present paper, of a lexicon, that is, which goes beyond phonological representations and semantic definitions and aims instead to be a reflection of the native speaker's Lexical Competence, might offer some invaluable help not only to the language researcher but also to the teacher and the advanced learner of a foreign language. In fact, acquisition of a native speaker's Lexical Competence should be one of the chief objectives of both the teacher and the advanced learner. Otherwise, an in-depth knowledge of the relation between the semantic and syntactic structure of the language to be learned will never be mastered. To be more specific and also more practical, as it was already stated, one of the acutest problems facing foreign language learning, that of "translational equivalence" will be coped with more efficiently, if we take into account that synonymy across languages is better dealt with if we adopt the decompositional approach of LCS sketchily shown, above: if two verbs of two different languages share identical subcomponents of meaning, then we have good reasons to claim that these words are translational equivalents.

Moreover, structural problems such as subject and object forming possibilities which are related to how one organizes language in discourse will find a more adequate treatment (cf. Kakouriotis 1993), if the teacher or advanced learner of a foreign language has grasped the knowledge of how argument structure is realized on the syntactic level.

In conclusion, the lexicon seems to deserve a much more serious treatment in foreign language learning. To quote Fromkin and Rodman (1993:100):

"...The lexicon is a key component in the grammar containing vast amounts of information on individual words."

However, the dictionaries currently used are simply an impoverished version of the native speaker's Lexical Competence and thus the foreign language learner has no access to these vast amounts of information on individual words that Fromkin and Rodman refer to. What we need is to find ways of incorporating this information into a comprehensive dictionary. A theory of AS and LCS, like the one briefly outlined in the present article can go a long way towards explaining a great variety of linguistic facts that both grammars and dictionaries have left unexplained.

As was already stated, this paper cannot offer any definitive solutions to the problem of foreign language learning but it could be the seeds of a theory of *Contrastive Lexical Semantics* which, in its turn, could not give all the answers to the problems facing the foreign language, either. However, such a theory could be a big step forward towards the utilization of the possibilities that the lexicon can offer as a key component in grammar in order to benefit both the teacher and advanced learner of a foreign language.

REFERENCES

- Campos, H. 1987. "Passives in Modern Greek". *Lingua* 73. 301-312.
- Carrier-Duncan, J. 1985. "Linking of thematic roles in derivational word formation". *Linguistics Inquiry* 16. 1-35.
- Carrier, J. and Randall, J. 1992. "The argument structure and syntactic structure of resultatives". *Linguistic Inquiry* 21. 179-234.
- Comrie, B. 1989. *Language universals and linguistic typology*. Oxford: Basil Blackwell.
- Dowty, D. 1979. *Word meaning and Montague grammar*. Dordrecht: Reidel.
- Fromkin, V and Rodman, J. 1993. *Introduction to language*. New York: Harcourt, Brace & Jovanovitch.
- Grimshaw, J. 1990. *Argument structure*. Cambridge, Mass.: MIT Press.
- Hale, K. and Keyser, J. 1987. "A view from the middle". *Lexicon Project Working Papers* 10. 1-36. Center for Cognitive Science, MIT.
- Hale, K. and Keyser, J. 1988. "Explaining and constraining the English middle". In Tenny, C. (ed.). 1988. 41-58.
- Halliday, M.A.K. 1967. "Notes on transitivity and theme in English" part 1. *Journal of Linguistics* 3. 37-81.
- Jackendoff, R. 1972. *Semantic interpretation in generative grammar*. Cambridge, Mass.: MIT Press.
- Jackendoff, R. 1983. *Semantics and cognition*. Cambridge, Mass: MIT Press.
- Kakouriotis, A. 1991. "On the dative alternation in English and Mod Greek". *Proceedings 5th Symposium on English and Modern Greek*. 90-108. Department of Theoretical & Applied Linguistics University of Thessaloniki.
- Kakouriotis, A. 1992a. *Comparative syntax of English and Modern Greek*. Thessaloniki: Art of Text Publications.
- Kakouriotis, A. 1992b. "Conflation". *Proceedings of the 6th Symposium on English and Modern Greek*. 1-16. Department of Theoretical and Applied Linguistics, University of Thessaloniki.
- Kakouriotis, A. forthcoming. "On the double object constructions in English and Modern Greek". *Studies in Language*.
- Levin, B. 1985. "Lexical semantics in review: An introduction". In Levin, B. (ed.). 1985. 1-73.
- Levin, B. (ed.). 1985. *Lexical semantics in review*. Cambridge, Mass.: Center for Cognitive Science, MIT.
- Levin, L., Rappaport, M. and Zaenen, A. (eds). 1983. *Papers in functional grammar*. Bloomington: Indiana University Linguistics Club Publications.
- Perlmutter, D. 1978. "Impersonal passives and the unaccusative hypothesis". *BLS* 4. 157-189.
- Perlmutter, D. and Rosen, C. (eds). 1984. *Studies in relational grammar*. Chicago: University of Chicago Press.
- Rosen, C. 1984. "The interface between semantic roles and initial grammatical relations". In Perlmutter, D. and Rosen, C. (eds). 1984. 38-87.
- Simpson, J. 1983. "Resultatives". In Levin, L. Rappaport, M. and Zaenen, A. (eds). 1983. 143-157.
- Rappaport, M. 1989. "Unaccusativity and verbs of motion". *Proceedings of the 2nd Symposium on English and Modern Greek*. 113-140. Department of English, University of Thessaloniki, Greece.
- Roeper, T. 1987. "Implicit arguments and the head-complement relation". *Linguistic Inquiry* 18. 167-310.
- Tenny, C. (ed.). 1988. *Studies in generative approaches to aspect*. Cambridge, Mass.: Center for Cognitive Science, MIT.
- Zubizarreta, M. L. 1985. "The relation between morphophonology and morphosyntax: The case of Romance causatives." *Linguistic Inquiry* 16. 247-289.