

CONTROL AND SPANISH PSYCHOLOGICAL VERBS¹

María Biezma-Garrido
University of Ottawa

This paper is focused on *control*. I take the position that one of the factors required for a successful theory of control is the semantic content of *case*, and not just the syntactic structure. Here I focus on Landau's (1999, 2003.b) typology of control, his generalization for psychological predicates, and the problems with these proposals when applied to Spanish.

I show that in examples such as (1), either *Juan* or another controller could control PRO, unlike Landau's prediction that *Juan* is the only possible controller.

- (1) A Juan₁ le admiraría PRO_{1/2} cambiar de régimen.
'It would surprise Juan that HE= Juan would change the government'
['It would surprise Juan that THEY would change the government']

The paper is organized as follows. First, I recall some relevant aspects about the treatment of *psychological verbs* in the literature which are relevant for my purposes; second, I review Landau's typology of *control* and third, I recall Landau's generalization about control and psychological verbs.

At this point, I review this generalization for Spanish and I show how it doesn't work for all the kind of verbs.

1. Psychological Verbs²: a Long Story in Short.

1.1 Belletti and Rizzi (1988).

The problem that B&R try to solve in their work is the mapping of the θ -grids onto D-structures, because the θ -grid *Experiencer* and *Theme* can be projected onto a variety of syntactic configurations. They describe three different classes of experiencers:

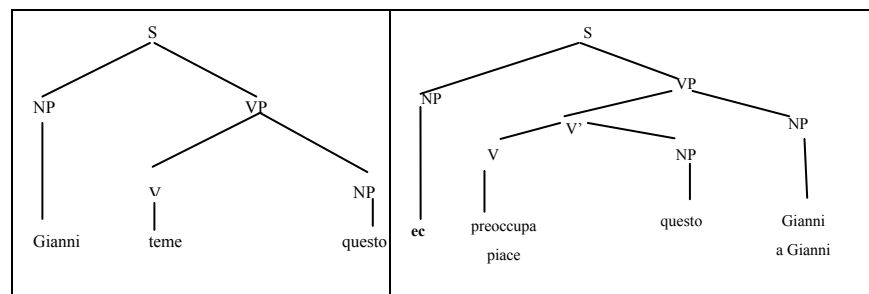
¹ This paper is part of my M.A. Memoir, *Control and Spanish Psychological Verbs*, finished in Winter 2005 at the University of Ottawa. I am very thankful to Prof. María-Luisa Rivero, my supervisor, for her always helpful and enlightening comments.

² I am not going to define here what a psychological verb is and I will assume an intuitive concept of it. Actually, it is not that easy to find a definition in the literature, but one of the possible is the one given by Landau (2003.b, pg. 2₂):

"A psych-verb is any verb that carries psychological entailments w.r.t. one of its arguments (the experiencer). A psychological entailment involves an individual being in a certain mental state. Thus frighten is a psych verb since Mary frightened Bill entails that Bill is in a certain mental state (i.e., fright); whereas invite is not a psych verb, since Mary invited Bill carries no entailments as to Mary's or Bill's state of mind (although it does entail that both are human)."

(2) Tripartite Classification.a. Class I: Nominative experiencer (*temere* type)i. *Gianni teme questo.*G_{NOM} fears thisb. Class II: Accusative experiencer (*preoccupare* type)i. *Questo preoccupa Gianni.*This worries G_{ACC}c. Class III: Dative experiencer (*piacere* type)i. *A Gianni piace questo.*G_{DAT} pleases thisii. *Questo piace a Gianni.*This pleases G_{DAT}

Their proposal is that there are two types of D-structure for psych verbs:

(3) a. NOM. experiencerb. ACC/ DAT experiencer

B&R's proposal is that the ACC Experiencer is not a deep subject, but a non-thematic surface subject, moved from a VP-internal position. In order to support their proposal, they look at different phenomena: *anaphors*, *arbitrary pro*, *causatives*, *passives*.

1.2. Landau, amongst others.

There have been several important hypothesis about psychological verbs, based on B&R, either to reformulate it or to go against it, like Pesetsky (1995) or Cuervo (2003), but we will look just at Landau (2003.b) because of space limitations.

Landau assumes the already well known classification of B&R (1988). He also claims that Class II verbs are *stative* and *agentive*, and that all predicates in Class III are *stative*. Contrary to B&R, he says that not all the verbs in class II are unaccusatives, and that the verbs with eventive reading in class II are transitive; they project a light *v* and an external argument (Causer). Landau also

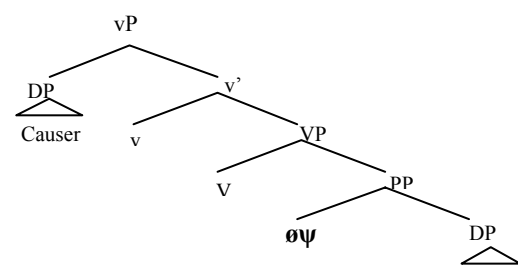
assumes that the verbs in class III are unaccusative and the ‘theme’ argument is *Target of Emotion / Subject Matter of Emotion* (T/SM)³.

The general ideas in his work are summarized below in (4).

- (4) Experiencers are mental locations, i.e. locatives and consequently:
- a. All object experiencers are oblique (or dative).
 - b. Experiencers undergo ‘locative inversion’.
 - c. Universally, non-nominative experiencers bear inherent case

The consequences are that ACC case in class II and DAT in class III verbs are inherent and that ACC.Exp. are objects of a null preposition ($\emptyset\psi$). He also affirms that DAT and ACC Experiencers raise at LF to the subject position (‘scopal’ properties).

- (5) Syntactic structure of psych – verbs:
- a. Class II verbs: Cause v-V Exp

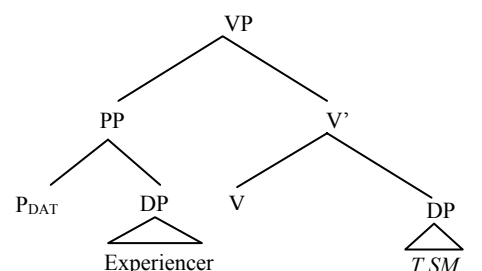


³Landau follows Pesetsky (1995) on this respect. Pesetsky claims that the label *theme*, which is applied to the non-experiencer argument, comprises a number of distinct θ -roles, and finds it important to make a distinction between (2.a) and (2.b).

- (1) a. The subject argument in the ObjExp class always bears the role Causer.
 b. The object argument in the SubjExp class always bears one of the two entirely distinct roles: *Target of Emotion / Subject Matter of Emotion*. (T/SM)

He argues that the *causer* is causally connected to the emotion described by the predicate and borne by the Experiencer. It is always related to the subject position. The *target* is evaluated by the experiencer (positively or negatively) and it is always related to the object position. Finally, the *Subject Matter* is something that the Experiencer is ‘thinking about’ in a certain way. The SM provokes worries (in this example) about other matters. Pesetsky claims that the linking of particular arguments to grammatical relations is predictable. The assignment for Experiencer is made on the basis of argumental hierarchy: CAUSER > EXPERIENCER > TARGET / SUBJECT MATTER

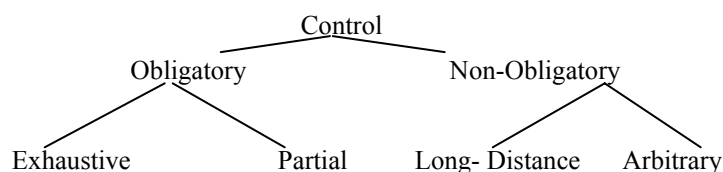
- b. Class III verbs: T/SM V P_{DAT} Exp



2. Control: Landau's Typology.

As I pointed out at the beginning of this paper, this work focuses on Landau's (1999, 2003.b) typology of control, his generalization for psychological predicates and the problems with these proposals when applied to Spanish. For Landau, control has the typology in (6).

- (6) Landau's typology of Control



- a. *Exhaustive control* (EC) refers to the case where PRO must be identical to the controller.
- b. *Partial control* (PC) refers to the case where PRO must include the controller.
- c. *Long-Distance Control* (LD) refers to the case when the controller and the infinitive are not clause-mates.

There are other typologies of *control*, as the one by Jackendoff and Culicover (2003), summarized in (7).

- (7) Jackendoff and Culicover's typology of control
- a. Free control (= non-obligatory control)
 - b. Nearly Free Control
 - c. Unique Control (=Obligatory Control).

Contrary to Landau's proposal, Jackendoff and Culicover claim that the syntactic position of a complement "plays no direct role in the type of control it displays" and "the type of control a complement displays is a consequence of the semantic role it is assigned by the head that selects it, not a consequence of its syntactic position or that of its controller".

The theory of Jackendoff & Culicover (2003) is more satisfying for the purposes of this paper because, in the proposal I develop here, it is assumed that the case of the experiencer associates with semantic content and that it has to be considered in an appropriate account of control.

3. Landau's Generalization about Control and Psychological verbs.

For Landau, LD is susceptible to intervention only if two conditions are met:

- (8) Conditions for LD
- a. In extraposition.
 - b. When the intervener bears an *Experiencer θ -role*.

In addition, in super- equi constructions only extraposition under psychological predicates falls under obligatory control (OC). Landau expresses his proposals in terms of the generalization in (9)⁴.

- (9) Landau's Generalization about Control and Psychological Verbs
- a. In a structure [... X... [it Aux Pred Y [_sPRO to VP]], where Y and S are arguments of Pred:
 - i If Pred is psychological Y must control PRO.
 - ii If Pred is non- psychological, either X or Y may control PRO.
 - b. In a structure [... X... [_s[_sPRO to VP] Pred... Y]], either X or Y may control PRO.

The condition described in (9)a.i shows the circumstances of OC and the one in (9)a.ii shows the circumstances of *non obligatory control* (NOC). Landau (1999) offers the examples below, in (10), for English.

- (10) a. Mary knew that it was painful to John [PRO to perjure himself/*herself].
- a. Mary thought that it pleased John [PRO to speak his/*her mind].
- b. Mary thought that it was relief to John [PRO to take care of himself/*herself].

As we can see in the examples, *John*, who would be Y in the structure in (9), controls PRO obligatorily in (10), whereas in the examples in (11) the controller could be *Mary* or *John*.

- (11) a. Mary knew that it was harmful to John [PRO to perjure himself/herself].
- b. Mary thought that it helped John [PRO to speak his/her mind]

⁴ Landau (1999, 2003.b).

- c. Mary thought that it was a help to John [PRO to take care of himself/herself].

Landau affirms that only a combination of syntax and semantics can provide an answer to control problems.

- (12) Problems with Landau's theory:
 a. The semantic account needs to be more specific.
 b. A general principle for all psychological predicates and the position of the infinitive clause in the structure is insufficient.

Below I will show that, in Spanish, (9) does not apply to all psychological predicates and fails when the experiencer is dative and the object is nominative, as in (1), repeated here in (13). As I said at the end of section 2, I agree with Jackendoff & Culicover (2003) in what respects to the role of the syntactic position of a complement and control, and when arguing that the type of control displayed by it is a consequence of the semantic role it is assigned by the head that selects it, not a matter of its syntactic position or that of its controller.

Henceforth, it is assumed that the case of the experiencer associates with semantic content, an idea that will play a very important role when dealing with the generalization in (9). Therefore, in the example in (13) I will show below that, because the experiencer is in dative, it is not obligatory for it to control PRO.

- (13) A Juan_i le admiraría PRO_{i/2} cambiar de régimen.
 'It would surprise Juan that HE= Juan would change the government'
 ['It would surprise Juan that THEY would change the government']

4. Spanish Psychological Verbs and Control.

Recall that since B&R (1988), psych predicates are usually divided into three classes. In this section, I will show that Landau's generalization works well for predicates of Class I and Class II, but not with Class III predicates. It will be argued that the semantics of case⁵ needs to be taken into consideration in a proper account of control. Examples of these classes are given below.

- (14) a. Juan teme salir a la calle.
 Juan fear-3sg go-INF to the street.
 'Juan fears to go to the street'.
 b. A Juan le preocupa salir a la calle.
 To Juan CL-3sg worry-3sg go-INF to the street.
 'Juan worries about going to the street'.

⁵ On this respect, the semantic content of case, there are various authors following this idea. Svenonius (2001) is one of the clearest examples.

- c. A Juan le gusta salir a la calle.
 To Juan CL-3sg like go to the street.
 ‘Juan pleases to go to the street’.

4.1. Class I and Class II Predicates

In this section, we look at class I predicates, such as *temer* (‘fear’), (14)a, which needs an experiencer in the nominative and an object in the accusative, and Class II predicates, such as *preocupar* (‘worry’), in (14)b, which need an experiencer in the accusative and an object in the nominative. We will see that predicates in class I and II do follow Landau’s prediction in (9) above. Furthermore, I show that with these two classes of predicates, the experiencer is the only possible controller of S, in Landau’s generalization given in (9), and it will be argued that it is due to the case of the experiencer. The idea is that nominative and accusative may denote agentivity⁶. Class I⁷ predicates need an experiencer in the nominative case and a theme in the accusative, such as *temer* (‘fear’) in (15), and *pensar* (‘think’) in (16).

- (15) a. Juan₁ temería PRO_{1/1+/*2} salir tarde.
 Juan fear depart INFIN late.
 ‘It would fear Juan to depart late’.
- b. Juan₁ temería PRO_{1/1+/*2} entrar en Guerra.
 Juan fear start INFIN a war
 ‘It would fear Juan to start a war’
- (16) a. Juan₁ pensaría PRO_{1/1+/*2} salir tarde.
 Juan think depart INFIN late.
 ‘Juan would think about going out late’.
- b. Juan₁ pensaría PRO_{1/1+/*2} entrar en guerra.
 Juan think start INFIN a war
 ‘Juan would think about starting a war’.

In the sentences in (15) and (16), the experiencer of the psychological predicate is the controller of the non finite predicate.

To summarize, with Class I predicates the experiencer is in the nominative case and, as expected, it is the controller.

Class II predicates follows the same generalization.

⁶ I am not claiming that any accusative NP is the agent of a clause, obviously it is not the case in

1. Juan pegó a Luis.
 Juan hit Luis

In (1) *a Luis* is accusative and is not obviously the agent.

⁷ As Landau, I use the notation [DP₁... [PRO_{1+...}]] to indicate partial control.

- (17) A Juan₁ lo preocuparía PRO_{1/1+/*2} salir tarde.
 To Juan cl.ACC worry go out INFIN late
 ‘It would worry Juan to go out late’

In (17) the controller must be the experiencer and there is no need to consider any other. It could be assumed that the relation between the two predicates gives one or the other reading. But it is not the argument structure of the predicates which is responsible for this effect, but the case of the clitic itself. If the predicate in S is changed, the same reading is obtained, as in (18).

- (18) A Juan₁ lo preocuparía PRO_{1/1+/*2} entrar en guerra.
 To Juan clitic ACC worry start INFIN in war
 ‘It would worry Juan to start a war’

In (18), *Juan* is the controller of the infinitive, as the unique controller or with partial control, but in both cases, *Juan* is involved. Therefore,] There is no problem with Landau’s proposal at this point. The controller is the expected in his generalization in (9). *Juan* is the person who is going to start a war or one of the persons who would start a war. Therefore, we have the situation of obligatory control with psychological predicates.

So far, we have seen that predicates in Class II have accusative experiencers, and as Landau (2003.b) says, accusative experiencers do exist, but only in agentive contexts. This explains why Landau’s generalization is true for Class II predicates. The experiencer of these predicates is in the accusative case.

4.2. Class III Predicates

One of the most important features in (13) is the clitic *le*. The distinction between Class II and Class III predicates in Spanish is not easy to make. [One reason for this difficulty for most speakers is the choice of the clitic which refers to the experiencer.

The predicate in (13), *admirar* (‘astonish’), belongs to Class III, therefore it must be dative, but it is common for speakers to use the accusative pronoun instead. These two classes of predicates are often confused.

Franco states, however, that “there are some dialects of Spanish, especially from the Southern Cone of Latin America and some areas of Spain, in which homophonous forms of experiencer verbs allow an alternation accusative- dative in the case marking of experiencer arguments”. That is clear when a clitic doubles the object. Franco mentions the next examples in (19).

- (19) a. Ese tipo de comentarios le₁ enojan a Juan₁.
 That type of comments cl.DAT anger to Juan
 ‘That type of comments anger Juan’
- b. María lo₁ enojó a Juan₁.
 María cl.ACC anger to Juan
 ‘María angered to Juan’

Franco points out that the subject of (19) is understood as a theme, but the subject in b is understood as an agent.

In what follows, I show that Class III predicates do not follow Landau's prediction. To this effect consider (20).

- (20) A Juan₁ le admiraría PRO_{1/2} cambiar de régimen
 To Juan cl.DAT3sg astonish change-INF of government
 después de tanto tiempo.
 after of so much time
 'It would astonish Juan that HE=Juan would change the government'
 ['It would astonish Juan that they would change the government']

The sentence in (20) has two interpretations. In (20) we can consider *Juan* as the controller of *cambiar* ('change') in the sense that it is Juan himself who changes the government. This, however, is not the most usual reading. In the second interpretation, we could consider that *Juan* is not the agent of the verb *cambiar* ('change'). It is easier to think that there is something that happens to him, such as things that affect him without his intervention and result in a change of government.

Therefore, there is an ambiguous reading in (20). If Landau's prediction is considered, Juan should be the unique controller that could be expected, but it is not the case with this kind of predicates.

In order to show that it is not necessary to have the subject as the agent of the infinitive clauses we can add the next examples:

- (21) a. A mí me admiraría mucho PRO₂ empeñarse en invadir
 To me cl.1sg astonish a lot insist-INF.cl.SE in invade
 Irak cuando ni se han visto armas de destrucción
 Iraq when Neg cl.3sg. having seen weapons of destruction
 masiva.
 mass.
 'It would astonish me to invade Iraq without having seen weapons
 of mass destruction'.
- b. A mí me admira el empeñarte tú constantemente en
 To me cl.1sg astonish the insist-cl.2sg you constantly in
 repetir el curso.
 repeat-INF the course.
 'It astonishes me your insistence in repeating the course'

In (21) it is not possible to think that *se* refers to *a mí* ('to me'), because the clitic *se* is in third person and *a mí* ('to me') refers to the first person, therefore, the controller cannot be the one predicted by Landau.

5. Conclusion and Further Research: Some Notes for a Future Analysis.

For Landau, the most important factor, in order to determine the controller in the structure in (9), is syntactic, that is to say that the position of the argument of the predicate gives us the controller.

It is claimed here, however, that it is a semantic factor which provides the answer. When the experiencer is accusative it displays agentivity and therefore it is the controller of the embedded clause. As Landau predicts in (9), we have obligatory control. When it is dative, however, it is possible to consider a different controller. Unlike Landau's proposal, we have a case of non obligatory control. Our explanation for that is that case has semantic content and that it has to be considered in a correct account of control.

An elaborated analysis is necessary. However, I am pointing out several aspects in order to finalize the analysis in the future.

One of the characteristics of the examples like the ones in (22) is that they are prospective.

- (22) a. A mí₁ me admiraría mucho PRO₂ empeñarse en invadir
 To me cl.1sg astonish a lot insist-INF.cl.SE in invade
 Irak
 Iraq
 cuando ni se han visto armas de destrucción masiva.
 when Neg cl.3sg. having seen weapons of destruction mass.
 'It would astonish me to invade Iraq without having seen weapons
 of mass destruction'.
- b. A mí me admira el empeñarte tú constantemente en
 To me cl.1sg astonish the insist-cl.2sg you constantly in
 repetir el curso.
 repeat-INF the course.
 'It astonishes me your insistence in repeating the course'

In Spanish there are examples with non finite sentences, not subordinated, with this same peculiarity.

- (23) ¿Ir al teatro sin saber si hay función? Sería una pérdida de tiempo.
 'To go to the theatre without knowing if there is performance? It would
 be wasting time'.

These sentences have a null subject which is not controlled by anything. The meaning is adversative or it shows something unexpected. Some of the psychological verbs we are treating have the same meaning, as *admirar* ('astonish') or *sorprender* ('surprise').

- (24) Me sorprendería mucho empeñarse en dar la vuelta al mundo sin una tarjeta de crédito.
‘It would surprise me a lot to insist in going around the world without a credit card’.

Luis Ángel Sáez del Álamo points out that in examples like the one above, there may be a possibility of having infinitive sentences adjoined on the right. If this would be the case, then the expected subject of the verb *sorprender* (‘surprise’) in this example would be a null element.

- (25) Me sorprendería mucho *pro* empeñarse...
‘It would surprise me a lot to insist...’

These infinitives could be preceded by the article *el* (‘the’) or by *el hecho de* (‘the fact of’).

- (26) Me sorprendería mucho el hecho de empeñarse...
It would surprise me a lot the fact of insisting in...

Furthermore, in (3) there is a little pause before the infinitive sentence which suggests dislocation to the right.

It is not possible to make these constructions with the article:

- (27) *Me sorprendí del empeñarse en...
Ref. Cl surprised of the insisting in...

Therefore, a preposition cannot govern a *pro* in an argument position (I am considering the case in which the infinitive clause is dislocated to the right). This is not surprising because in Spanish a preposition can never govern a null element.

References

- Anagnostopoulou, E. 2003. *The Syntax of Ditransitives: Evidence from Clitics*, Berlin: de Gruyter.
- Arad, M. 1998. *VP- Structure and the syntax-lexicon interface*. MIT, Occasional Papers in Linguistics. Number 16. MIT Press. Massachusetts.
- Arad, M. 1999. “Psych-Notes”, en *UCL Working Papers in Linguistics*, 10.
- Arad, M. 2000. *Psych Verbs and the Syntax-Lexicon Interface*. Ms, University of Geneva.
- Boeckx, Z. and Hornstein, N. 2004. “Movement Under Control. *Linguistic Inquiry* 35.
- Chierchia, G. and P. Jacobson. 1986. “Local and Long Distance Control”, *NELS* 16, GLSA Publications, UMASS: Amherst, MA, 57-74.

- Chierchia, G. 1989. "Structured Meaning, thematic roles and control". in *Properties, Types and meanings*, G. Chierchia, B. Partee and R. Turner eds., Dordrecht, Kluwer.
- Chomsky, N. and H. Lasnik: 1993. "The theory of principles and parameters". In *Syntax: An international handbook of contemporary research*, ed. Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld, and Theo Vennemann, 506–569. Berlin: Walter de Gruyter.
- Culicover, P. and R. Jackendoff: 2001. 'Control is not movement'. *Linguistic Inquiry* 32. 493–512
- Filip, H.: 1996. "Psychological Predicates and the Syntax-Semantics Interface", in *Conceptual Structure, Discourse and Language*. Stanford: Center for the Study of Language and Information. Goldberg, A. E. (ed.)
- Franco, J.: 1990, "Towards a Typology of Psych Verbs: Evidence from Spanish", in GREEN, T. & U. SIGAL (eds.), *Proceedings of 2nd Meeting of SCIL*, MITW PL 12, 46-62.
- Grimshaw: 1990. *Argument Structure*, Cambridge, MA, MIT Press.
- Hornstein, N.: 1999. "Movement and Control". *Linguistic Inquiry* 30.
- Jackendoff, R.: 1983. *Semantics and cognition*, Cambridge, Mass.: MIT Press.
- Jackendoff, R.: 1990. *Semantic structures*. Cambridge, Mass.: MIT Press.
- Jackendoff, R.: 2004. *Language, Culture, Consciousness: Essays on Mental Structure*, book in progress. <http://people.brandeis.edu/~jackendo/>
- Jackendoff, R., R. and P. Culicover: 2003. "The Semantics Basis of Control in English", in *Language*, 79, III
- Landau, I.: 1999. *Elements of Control*, Ph.D. dissertation, MIT Press.
- Landau, I.: 2001. "Control and extraposition: The case of super-equi". *Natural Language & Linguistic Theory* 19:109–152.
- Landau, I.: 2003 (a). "Movement out of control". *Linguistic Inquiry*, Volume 34, Number 3, Summer 2003, 471–498
- Landau, I.: 2003 (b). *The Locative Syntax of Experiencers*. Unpublished monograph.
- Landau, I.: 2004. (a) "The Scale of Finiteness and the Calculus of Control". To appear in *Natural Language and Linguistic Theory*.
- Landau, I.: 2004. (b) "Movement-Resistant Aspects of Control", in http://www.bgu.ac.il/~idanl/files/Language_revised_mine.pdf
- Landau, I.: 2005. "Severing the Distribution of PRO from Case", to appear in *Syntax*.
- Lasnik, H.: 1992. 'Two Notes on Control and Binding', in Larson et al. (eds.), *Control and Grammar*, pp. 235–251.
- Manindra K. Verma & K.P. Mohanan: 1990. *Experiencer Subjects in South Asian Languages* Univ of Chicago Press
- Martin, R.: 2001. "Null Case and the Distribution of PRO", in *Linguistic Inquiry* 32, 141-166.
- Parodi, C. & Luján, M.: 2000. "Aspect in Spanish Psych Verbs", in *Hispanic Linguistics at the turn of the Millenium*, Cascadilla, Somerville.
- Pesetsky, D.: 1995. *Zero Syntax*. Cambridge: MIT Press.
- Rivero, M. L.: 2004. "Quirky subjects, peson restrictions, and the Person-Case-Constraint". *Linguistic Inquiry* 35, 3. Pp. 494 - 502..
- Stowell, T.: 1982. The tense of infinitives. *Linguistic Inquiry* 13:561–570.
- Stowell, T.: (to appear) "Tense and Modals", in *The Syntax of Time*, J. Gueron & J. Lecarme, eds., MA, MIT Press.
- Torrego, E.: 1998. *The Dependences of Objects*, Cambridge, MIT Press.
- Svenonius, P.: 2001. "Case and Event Structure." in *ZASPIL 26* (Zentrum für allgemeine Sprachwissenschaft Papers in Linguistics).