

On reflexive resultatives

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Secondary Predication in Formal Frameworks

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1 Our topic

- Ordinary resultatives involve an event or action which places its theme (or similar internal argument) in a certain state. (The “Direct Object Restriction”: Simpson 1983, Levin and Rappaport Hovav 1995, etc.) The theme-like argument is required:

- (1) a. Hij schiet de vijand dood. [Agent+theme]
he shoots the enemy dead
b. Hij valt dood. [Unaccusative]
he falls dead
'He falls to his death (= dies as a result of falling)'
c. * Hij rent dood. [Unergative]
he runs dead
* 'He dies as a result of running'

- So-called “reflexive resultatives” (LRH 2004) describe an action that results in placing its **initiator** in the result state.

(2) The fans screamed themselves hoarse.

- Note that the reflexive does **not** express a theme or patient of the verb (“fake reflexive”).

(3) **Reflexive resultative:** A resultative-like construction for which (a) the result state is entered into by the initiator, not the patient, of the matrix verb, and which (b) involves a reflexive.¹

¹Nothing keeps us from using a reflexive in an *ordinary* resultative:

- (i) He shot himself.
(ii) He shot himself dead.

Here, the *patient* enters into the result state: We will not use the name “reflexive resultative” for such cases.

- We consider a family of subclasses of reflexive resultatives in Dutch, all of which can be analyzed as cases of secondary predication (Hoekstra and Mulder 1990), and whose resulting state can be described as undesirable (adversative; cf. Everaert 1986).

- (4) a. Hij rent zich rot. (Adjective complement)
he runs SELF dead
'He runs himself to the ground'
b. Hij werkt zich een ongeluk. (NP complement)
he works SELF an accident
'He wears himself out by working'
c. Hij over-eet zich. (incorporated preposition)
3sg EXC-eat SELF
'He eats too much'
(= X eats (unspecified) Y, causing X to be in an overtaxed state).

- We'll treat example (4c) as an incorporated counterpart to the other cases.
- The undergoer of the result state is the agent, not the patient. This holds even for transitive verbs that appear in this construction (e.g., *eat*).

- Dutch reflexive resultatives are **obligatorily formed with *zich*** (and not *zichzelf*). This highlights the special nature of the construction, since reflexive *zich* is ordinarily limited to “inherently reflexive” verbs (corresponding to zero-reflexivization in English).

- (5) a. Jan sloeg Karel / zichzelf / *zich. (Transitive)
Jan hit Karel / himself / *SELF.
'Jan hit Karel/himself'
b. Jan sloeg Karel / zichzelf suf. (Ordinary resultative)
Jan hit Karel / himself dizzy
'Jan hit Karel/himself, making Karel/himself dizzy'
c. Hij sloeg zich suf. (Reflexive resultative)
he hit SELF dizzy
'He wore himself out by hitting [something unspecified]'

- The reflexive **seems** to serve as the subject of the resultative small clause. However, it can be shown that *zich* is not an argument, but a detransitivizing operator. Ordinary *zich*-reflexives are intransitive.
- **Our focus:** What are the argument structure and semantics of this construction? How are they derived? How does the agent/cause of the main predicate come to also be associated with the result predicate?

- We propose that this involves a variant of *bundling* (Reinhart and Siloni 2005), the arity operation involved in deriving reflexive verbs.

2 Adversative resultatives in Dutch

- The activity described by the main verb is carried out, and an adverse, generally unintended result ensues as described by the complement. (While all our examples of this construction are adversative, we have no principled explanation for this observation.)

(6) # Hij rende zich opzettelijk rot.
 He ran SELF intentionally dead
 ‘He intentionally wore himself out running’

- We consider two subtypes:

2.1 Class 1: Periphrastic resultatives with obligatory control

(7) a. Hij rent zich rot.
 he runs SELF dead
 ‘He wore himself out running’
 b. Hij werkt zich een ongeluk.
 he works SELF an accident
 ‘He wears himself out working’

- Resultatives of the semi-productive type in (7) are commonly analyzed as small clauses (e.g., by Hoekstra and Mulder 1990).
- Although they use *zich*, they select *have*, not *be* auxiliary (along with transitive and unergative verbs). Everaert (1986) argues that they are nevertheless unaccusatives.
- Result complements are frequently idiomatic, and many are collocationally restricted:

(8) Hij rent/loopt/#zwemt zich rot. (semi-productive)
 he runs/walks/swims SELF dead
 ‘He wears himself out by running/walking/#swimming’

- Compare an ordinary resultative involving a reflexive:

(9) Hij loopt zich/Karel in.
 he walks SELF/Karel in
 ‘He walks to warm up’/‘He walks so that Karel warms up’

- In accordance with the familiar “imperfective paradox”, the result state of (9) will not necessarily be reached. For the reflexive resultatives in (7), the result state *must* be reached.²

²The examples in (7) are also incompatible with progressive mood, which would otherwise allow non-achievement of the result state.

2.2 Class 2: Incorporated resultatives

- The following compound verbs also license *zich*, and are impossible with a different affected argument (Everaert 1986):

(10) a. Ze zingen, schreeuwen
 ‘They sing, shout’
 b. Ze over-zingen zich
 3pl EXC-sing SELF
 ‘They sing too much’
 c. * Ze over-zingen Jan
 they EXC-sing Jan
 * ‘They sing to an extent that harms Jan’

(11) a. Hij over-schreeuwt zich
 3sg over-shouts SELF
 ‘He overstrains his voice’
 b. Hij over-eet zich
 3sg EXC-eat SELF
 ‘He eats too much’

(12) a. Zij telt.
 she counts
 ‘She counts.’
 b. Zij ver-telt zich.
 she mis-counts SELF
 ‘She miscounts’

- Again, these are necessarily adversative.
- We will analyze this construction as an incorporated resultative, involving an incorporated secondary predicate. The subject of the secondary predicate is identified with the subject of the main verb, an operation reflected in the introduction of *zich*.

(13) $x \text{ eats } y \rightarrow \lambda x .x \text{ eats} \wedge [x \text{ OVER}]$

3 Making a reflexive resultative

- We analyze all the above as resultative secondary predicates (Hoekstra and Mulder 1990), interpreted as follows:

(4a) Hij rent zich rot.
he runs SELF dead
'He runs himself to the ground'

(14) **Interpretation of (4a):**
(X runs) CAUSES (X worn-out)

- Note that the theme, if there was one, can still be mentioned as an adjunct:

(15) Hij overeet zich aan taart.
'He eats too much tart'

- The result state can be temporally and aspectually distinct from the event described by the main verb: E.g., earlier I ate too much tart and now I have a stomach ache. (This is an indication of separate subevents, according to Levin and Rappaport Hovav (2004)).

3.1 A sketch of the analysis

(16) Reflexive resultative construction:

- Demote the theme, if any. Like the demoted subject of passives, it cannot be projected as the direct object.
- Add a small clause resultative complement.
- Bundle* the main verb's Agent and the resultative Theme into one complex role (assigned to a single argument.)

4 "Bundling" in reflexive verbs

4.1 The problem of intransitive reflexives

- A simple reflexive predicate involves a **single participant** (entity in the real world), which is related to an event in **two different capacities** (theta roles):

(17) John criticized himself.

- While some reflexive predicates are syntactically transitive (the a. examples below), others have been shown to be syntactically **intransitive**, i.e., they have a **single syntactic argument** (the b. examples).

(18) a. János lát-ta mag-á-t. (Hungarian)
John.Nom see-Pst.3sg.Def Self-Poss.3sg-Acc
'John saw himself'

b. János fésül-köd-ik.
John.Nom comb-Refl-Pres.3sg
'John combs himself (his hair)'

(19) a. O Nikos thavmazi ton eafto tu. (Greek)
the Nick admire.3sg the Self his
'Nick admires himself'
b. O Nikos ksiriz-ete.
the Nick shave-Refl.3sg
'Nick shaves himself.'

- Zero reflexives in English and *zich* reflexives in Dutch are also intransitive.

(20) a. John admires himself. (English)
b. John shaves.

(21) a. Jan bewondert zichzelf (Dutch)
John admires Refl
'John admires himself'
b. Jan scheert zich
John shaves Refl
'John shaves himself'

- In brief:

- Reflexive verbs are **syntactically intransitive**, while their semantics is crucially dependent on **two semantic roles** (*dyadic* predicates).
- This discrepancy can be explained by making use (for verbal reflexives *only*) of the notion of (theta) **bundling** (Reinhart and Siloni 2005), the combination of two semantic roles into a complex role assigned to a single syntactic argument.

4.2 What's a reflexive?

- Our criterion for identifying "reflexives" is based on Faltz (1977). Roughly, a reflexive is a **construction** (a grammaticized device) which indicates identity between two arguments of a **transitive base predicate**.

(22) a. **Archetypal reflexive context:** "We assume that in any language we can identify a class of *simple* [transitive] *clauses* expressing *two-argument predication*, and involving a human agent or experiencer and a theme/patient."
b. If the language has a *grammatical device* which *specifically* indicates that the agent/experiencer and the patient in such clauses are in fact *the same referent*, this device will be called a **reflexive**.³

³In addition to distinguishing argument from verbal reflexives, Faltz classifies reflexives on the basis of their distribution: **primary reflexive** (a *productive* reflexive strategy that can be used with any semantically compatible transitive verb), **middle reflexive** (a strategy restricted to a lexically determined class of verbs), **secondary reflexive** (used with oblique NPs) etc. These categories do not play a role in our discussion.

- Note that reflexives **necessarily involve derivation** from a transitive base. The resulting (reflexive) predicate may be transitive or intransitive.
- This definition allows a language to have more than one reflexive device, or none. E.g., we distinguish between *himself* and the zero reflexive in English.
- From this perspective, only constructions that involve identification of two argument positions can be called reflexives. Our definition excludes other uses of the same grammatical forms from being considered reflexives:

(23) Intensifiers:

- The cook caught the fish himself.
- The cook himself caught the fish.
- The cook caught the fish by himself.

(24) Middles

Dieses Buch liest sich leicht. (German)
 this book.Nom reads SELF easily
 ‘This book reads easily’

(25) So-called “inherent reflexives” (no reflexive meaning or a transitive version)

Jan vergist zich (Dutch)
 John err.3sg SELF
 ‘John is making a mistake’

4.3 Why bundling?

- Due to their meaning, verbal reflexives like (2b–3b) involve two semantic roles/theta roles, which are (ultimately) assigned to the same individual.
- But we will see that such reflexives really are **intransitive**: They project only one syntactic argument.
- This kind of reflexivization must involve **detransitivization** of a transitive verb. What happens to the other argument, and what happens to its theta role?
- **The syntactic answer**: One argument is reduced (dropped). But which argument? Reflexive verbs are either unaccusative or unergative.
- **The semantic answer**: Both theta roles continue to be part of the verb meaning. Therefore, they have to be both assigned to the remaining argument. It is technically very easy to associate both theta roles to the same argument (although this is prohibited by versions of the Theta Criterion). Following Reinhart and Siloni (2005), we call this **bundling**.
- We first consider the syntactic side of detransitivization. We will **refute** the following possibility: Could verbal reflexives (in English and in other languages that concern us) involve a **zero object** interpreted just like *himself*?

- (26) a. John_i admires himself_i
 b. John_i washes ϕ_i

5 Reflexive predicates are intransitive

5.1 The syntactic structure of French *se*: Kayne (1975)

- Kayne (1975): French reflexive clitic *se* is not an argument, but a detransitivizer.

(27) Causatives: The demoted subject of reflexives is coded like that of intransitives.

- Je ferai laver Max *(à) Paul. (transitive)
 I will.make wash Max to Paul
 ‘I will make Paul wash Max’
- Je ferai courir Paul. (intransitive)
 I will.make run Paul
 ‘I will make Paul run’
- Je le ferai laver à Paul.
 I him will.make wash to Paul
 ‘I will make Paul wash him’
- Je ferai se laver Paul.
 I will.make Refl wash Paul
 ‘I will make Paul wash himself’

- **Conclusion**: *Se* reflexives in French are syntactically intransitive. (We leave aside whether they are unaccusative or unergative.)

5.2 The syntactic structure of the English “zero” reflexive

- For English we use the object-comparison test of Zec (1985), which has wide cross-linguistic applicability.⁴

(28) John hates Bill more than George.

- Subject comparison* (irrelevant to transitivity)
 John hates Bill more than George ~~hates Bill~~
- Object comparison*
 John hates Bill more than ~~John~~ hates George

(29) John washes himself more than George.

- Subject comparison*, strict or sloppy
 John washes himself more than George ~~washes John/himself~~
- Object comparison*: Shows that *washes himself* is **transitive**.
 John washes himself more than ~~John~~ washes George

(30) John washes more than George.

- Subject comparison*
 John washes himself more than George ~~washes himself~~.
- Object comparison*: Impossible, showing that *washes* is **intransitive**.
 * John washes himself more than ~~John~~ washes George.

⁴When applying this test to languages with morphological case, accusative case on *George* can force unambiguous object comparison.

- Object comparison requires a transitive antecedent clause, so these show that *wash*-type reflexives in English are syntactically intransitive (rather than, say, having a zero object).
- French *se* gives the same result.

5.3 Not quite a minimal pair: reflexive *sich* (German), *zich* (Dutch)

- The evidence for German is somewhat mixed, but several tests suggest that *sich* is an argument, i.e., *sich* reflexives are transitive:
- Object comparison

(31) Die Pferde hassen sich mehr als den Hund.
The horses hate REfl/Rcp more than the.Acc dog
'The horses hate themselves/each other more than (they hate) the dog'
- Focus test (Schäfer 2013)

(32) Morgens wäscht sie sich immer/erst mal selber
at.morning washes she REFL always/first-of-all self
i. agent focus: She washes herself, no-one else washes her. (context: She is a disabled patient.)
ii. theme focus: She washes herself, she washes no-one else. (context: She is a nurse.)
- **Conclusion:** *Sich* reflexives are (or can be) transitive verbs.
- For **Dutch**, the equivalent examples are ungrammatical:

(33) Object comparison:
a. Peter verwondt zichzelf vaker dan haar
Peter injures REFL more.often than she.Acc
'Peter injures himself more often than he injures her' (object comparison: perfect)
b. * Peter wast zich vaker dan haar
Peter washes REFL more.often than she.Acc
* 'Peter washes himself more often than he washes her'

(34) In de ochtend wast hij zich eerst zelf
in the morning washes he REFL first self
Agent focus: yes
Theme focus: no
- **Conclusion:** Dutch *zich* reflexives are syntactically intransitive.

6 Matching the syntax to the semantics: How bundling works

- If such reflexive verbs are intransitive, what kind of intransitives are they?
 1. **Reflexives are unaccusatives.** The clitic absorbs the external argument (Marantz 1984, Bouchard 1984, Grimshaw 1990), or is itself the external argument (Kayne 1988, Pesetsky 1995, Sportiche 1998).
 2. **Reflexives are unergatives**, formed through "reduction" of the internal theta role (Chierchia 1989/2004, Reinhart 1996, 2000, Reinhart and Siloni 2004): "Reduction applies to a two-place relation (predicate), identifies the two arguments, and reduces the relation to a property. Reflexive reduction turns a transitive entry such as *wash* into an intransitive entry whose single θ -role is the external θ -role." (Reinhart and Siloni 2004)
 - But what should the meaning of (35) be? It should be essentially the same as for the transitive version: Jean is both the **agent** and the **theme** of washing.

(35) Jean se lave.
'John washes'
 - We adopt an event semantics (Parsons 1990, Landman 2000), which allows theta roles to be explicitly represented:

(36) $\exists e \text{ wash}(e) \wedge \text{Agent}(e, \text{Jean}) \wedge \text{Theme}(e, \text{Jean})$
 - Reduction would completely eliminate the internal theta role, leaving the "identified" arguments with only the external role. Semantically, this is incorrect.
- ### 6.1 Options for handling the mismatch:
- a. Consider theta roles to be purely syntactic objects. They have nothing to do with actual verb meaning. (But they do).
 - b. Introduce separate notions of theta roles for the syntax and the semantics. There is only one *syntactic* theta role, but the verb retains both semantic ones. Add a theory of their correspondence, and specify how each arity-manipulating operation affects syntactic and semantic theta roles. (But that's needlessly complex)
 - c. Instead of deleting the second theta role, assign them both to the remaining syntactic argument. (But what about the theta criterion?)
- We will show that both roles are still syntactically relevant in reflexive verbs, ruling out options (a) and (b). That leaves option (c): assigning both roles to the same NP.

6.2 Bundling: Identifying two theta roles

- **Bundling** (Reinhart and Siloni 2005, Dimitriadis 2004, 2012) combines two theta roles into a single, complex one (which could be considered a single theta role for purposes of the theta criterion):

(37) Reflexivization Bundling (Reinhart and Siloni 2005)

$[\theta_i][\theta_j] \rightarrow [\theta_i - \theta_j]$

Restriction: θ_i is an external θ -role.

- A two-place (transitive) predicate has an event semantics denotation like (38a). It can easily be transformed to the one-place predicate in (b).⁵

(38) Semantic counterpart (Dimitriadis 2004)

a. $\lambda x \lambda y \lambda e \text{ wash}(e) \ \& \ \text{Agent}(e, y) \ \& \ \text{Patient}(e, x)$ (transitive)

b. $\lambda x \lambda e \text{ wash}(e) \ \& \ \text{Agent}(e, x) \ \& \ \text{Patient}(e, x)$ (reflexive)

- In short: Bundling is a simple way to assign two theta roles to a single NP without (directly) violating the theta criterion. (In any case we are not opposed to a weaker version of the theta criterion which requires theta roles for arguments, but does not enforce biuniqueness).
- We now demonstrate that we do indeed need to assign both theta roles: They are syntactically present (active) in the verbal reflexives we have considered, just as the agent is present in passives.

7 Testing for agents and patients

- We now test for the presence of syntactically active agents and patients, **regardless of their position**.⁶

7.1 Reflexives are agentive

- Uncontroversially, reflexives are agentive. E.g., they can be used with agent-oriented adverbs, with imperatives, and in the complement of *persuade*:⁷

(39) a. John shaved carefully.
 b. Shave!
 c. Mary persuaded John to shave.

⁵The operation that carries this out can be written in general form as follows (Dimitriadis 2004):

(i) REFL = $\lambda P_{\langle e, \langle e, st \rangle \rangle} [\lambda x \lambda e P(x)(x)(e)]$

⁶We focus on Agent-Patient verbs, since they are the simplest. We assume that our general claims apply to transitive verbs with other combinations of theta roles, but will leave open the question of how to test for them.

⁷These diagnostics were first used by Lakoff (1966) as tests of the stative-eventive distinction; Levin (2007) points out that they are really tests of agentivity.

- The adverb *carefully* targets agents, not subjects. The agent need not even be overtly realized, but it must be syntactically “active” in some non-trivial sense:

(40) a. John threw the rock carefully.
 b. The boat was carefully sunk. [unexpressed but active agent]
 c. * The boat sank carefully. [non-agentive]
 d. ?*John died carefully. [non-agentive]
 e. Bill washed carefully.

- Similarly for Dutch:

(41) a. Jan gooide de kei opzettelijk.
 John threw the rock intentionally
 b. De kei werd opzettelijk gegooid. [unexpressed but active agent]
 the rock was intentionally thrown
 c. * De kei zonk opzettelijk. [non-agentive]
 The rock sank intentionally
 d. * Jan stierf opzettelijk.
 John died intentionally
 e. Jan wast zich opzettelijk (slecht).
 John washes REFL intentionally poorly
 ‘John washes himself (poorly) intentionally.’

7.2 Testing for theme/patient

- We will show: Reflexives are compatible with adverbs that require a syntactically realized theme.
- To demonstrate that an adverb is sensitive to themes/patients, rather than objects, we can apply it to **derived subjects** (theme/patient moving to subject position) and “**theme unergatives**” such as verbs of emission (base-generated theme/patient subject).

(42) a. John sang the song completely. [theme]
 b. * John sang/baked completely. [unexpressed theme]
 c. The fruit was peeled completely. [passive theme]
 d. The vase broke apart completely. [unaccusative]
 e. The rose blossomed completely. [theme unergative]
 f. John shaved/disrobed completely. [reflexive]

- The adverb *painfully* must similarly modify an explicit patient/theme.

(43) a. Mary hit me painfully.
 b. * Mary hit painfully.
 c. Bill shaved, painfully, with a dull razor. [reflexive]

- (44) a. * Bill ran painfully. [unergative]
 b. Bill fell painfully. [unaccusative]
 c. Everyone began to sweat painfully after a few mouthfuls [of spicy food]⁸ [theme unergative]

- Similarly, for Dutch:

- (45) a. * Jan zong volledig
 John sang completely
 b. Jan zong het lied volledig
 John sang the song completely
- (46) a. Jan waste het kind volledig
 John washed the child completely
 b. Jan wast zich volledig
 John washes REFL completely
 ‘John washes (himself) completely’

- These adjectives need to modify a **theme**, regardless of its syntactic position.
- So, for reflexive verbs in both Dutch and English we can show that:

- (i) The predicate is syntactically intransitive: A single projected argument.
 (ii) The predicate is semantically a two-place predicate, i.e., both semantic roles are syntactically encoded and accessible.

- It follows that both theta roles **must** be retained, and are assigned to the single remaining syntactic argument.

8 Interim summary

- Many languages have verbal reflexive strategies (either productive, or limited to a lexically/semantically defined verb class) that involve a reflexive predicate which projects a single syntactic argument.
- We have shown that in such cases there is a discrepancy between semantic and syntactic arity: one syntactic argument is associated with both theta roles of the predicate.
- “Bundling” of the two theta roles into a single, complex theta role provides a straightforward account of detransitivizing reflexives.

⁸Found on http://stephenjohndawson.blogspot.nl/2007_10_01_archive.html. Retrieved on 1/3/2013.

9 Back to reflexive resultatives

- We have proposed that reflexive resultatives also involve bundling.

- (4a) Hij rent zich rot. (Adjective complement)
 he runs SELF dead
 ‘He runs himself to the ground’

- (47) **Interpretation of (4a):**
 (X runs) CAUSES (X worn-out)

- The theta roles of the two simple predicates are bundled together, creating a one-place complex predicate.
- This is simplest to formulate for our second class (prefixed verbs), since bundling can occur in the “active lexicon”. More work is needed for the first class (adjective or nominal complements).

(48) **Agent resultative construction:**

1. Demote the theme, if any. It cannot be projected as direct object. (Cf. the demoted subject of passives).
2. Add a small clause resultative complement.
3. Bundle the main verb’s agent and the resultative theme into one complex role (assigned to a single argument.)

(49) **Interpretation: Compare**

- a. **Reflexive VP (=38b):** $\lambda x \lambda e \text{ wash}(e) \ \& \ \text{Agent}(e, x) \ \& \ \text{Theme}(e, x)$
- b. **Resultative VP:**
 $\lambda x \lambda e_1 \text{ run}(e_1) \ \& \ \exists e_2 : \text{worn-out}(e_2) \ \& \ \text{CAUSES}(e_1, e_2) \ \& \ \text{Agent}(e_1, x) \ \& \ \text{Theme}(e_2, x)$

- While a true reflexive describes a single event, the argument of the bundled resultative is the Agent of one event and the Theme of another.⁹

⁹Our story would be more elegant if we could claim that only one event is involved.

10 Implications and open questions

- The special status of the reflexive resultative is highlighted by the use of *zich*, a grammaticized marker of arity manipulations.
- If *zich* is not an argument, our account seems to go against the “argument-per-subevent condition” (Rappaport Hovav and Levin 2001):
(50) ARGUMENT-PER-SUBEVENT CONDITION: There must be at least one argument XP in the syntax per subevent in the event structure.
- Conversely, English reflexive resultatives use *himself*, not the zero verbal reflexive as an argument structure would lead us to expect. Why the asymmetry between Dutch and English?

| | | |
|------------|---|-----------------|
| | Primary reflexive | verbal operator |
| (51) Dutch | <u>zichzelf</u> | <u>zich</u> |
| English | <u>himself</u> | ϕ |
| | (The form used in reflexive resultatives is underlined) | |

- We suggest that the English pattern is due to the requirement for *overt* marking of the construction, though not necessarily through an argument.
(52) The resultative construction must be overtly marked.
- This overrides the preference for the grammaticized reflexivization operator. We can summarize the situation as a pseudo-OT tableaux:

(53) Preference matrix for English

| | OVERT | OPERATOR |
|------------|-------|----------|
| ϕ | * | |
| 🗨️ himself | | * |

- We hypothesize that English, like Dutch, utilizes bundling in its reflexive resultatives; but it exceptionally codes it with the overt argument reflexive, *himself*, in order to avoid zero-marking.

References

Alexiadou, Artemis, Elena Anagnostopoulou, and Martin Everaert, ed. 2004. *The unaccusativity puzzle*. Oxford: Oxford University Press.

Bouchard, Denis. 1984. *On the content of empty categories*. Dordrecht: Foris.

Chierchia, Gennaro. 1989/2004. A semantics for unaccusatives and its syntactic consequences. In Alexiadou et al. (2004). (Circulated as ms., Cornell University, 1989).

Dimitriadis, Alexis. 2004. An event semantics for the Theta System. Ms., Utrecht institute of Linguistics OTS, March 2004.

Dimitriadis, Alexis. 2012. An event semantics for the Theta System. In *The theta system: Argument structure at the interface*, ed. Marijana Marelj Martin Everaert and Tal Siloni, 308–353. Oxford University Press.

Everaert, Martin. 1986. *The syntax of reflexivization*. Dordrecht: Foris.

Faltz, Leonard M. 1977. Reflexivization: A study in universal syntax. Doctoral Dissertation, University of California at Berkeley. Published by Garland, 1985.

Grimshaw, Jane. 1990. *Argument structure*. Cambridge, MA: MIT Press.

Hoekstra, Teun, and René Mulder. 1990. Unergatives as copular verbs; locational and existential predication. *The Linguistic Review* 7:1–79.

Kayne, Richard. 1975. *French syntax: The transformational cycle*. Cambridge, MA: MIT Press.

Lakoff, George. 1966. Stative adjectives and verbs in English. Report NSF-17, Harvard Computation Lab.

Landman, Fred. 2000. *Events and plurality: The Jerusalem lectures*. Dordrecht: Kluwer.

Levin, Beth. 2007. The lexical semantics of verbs II: Aspectual approaches to lexical semantic representation. Handout from course taught at the LSA Summer School, Stanford University, July 1–3, 2007.

Levin, Beth, and Malka Rappaport Hovav. 1995. *Unaccusativity: At the syntax-lexical semantics interface*. Linguistic Inquiry Monograph 26. Cambridge, MA: MIT Press.

Levin, Beth, and Malka Rappaport Hovav. 2004. The semantic determinants of argument expression: A view from the English resultative construction. In *The syntax of time*, ed. Jacqueline Guéron and Jacqueline Lecarme. Cambridge, MA: MIT Press.

Marantz, Alec. 1984. *On the nature of grammatical relations*. Linguistic Inquiry Monograph 10. Cambridge, MA: MIT Press.

Parsons, Terence. 1990. *Events in the semantics of English: A study in subatomic semantics*. Cambridge, MA: MIT Press.

Pesetsky, David. 1995. *Zero syntax: Experiencers and cascades*. Cambridge, MA: MIT Press.

Rappaport Hovav, Malka, and Beth Levin. 2001. An event structure account of English resultatives. *Language* 77:766–797.

Reinhart, Tanya. 1996. Syntactic effects of lexical operations: Reflexives and unaccusatives. OTS working papers in linguistics, Utrecht institute of Linguistics OTS.

Reinhart, Tanya. 2000. The theta system: Syntactic realization of verbal concepts. OTS Working Papers in Linguistics 00,01/TL, Utrecht institute of Linguistics OTS.

Reinhart, Tanya, and Tal Siloni. 2004. Against the unaccusative analysis of reflexives. In Alexiadou et al. (2004).

Reinhart, Tanya, and Tal Siloni. 2005. The lexicon-syntax parameter: Reflexivization and other arity operations. *Linguistic Inquiry* 36:389–436.

Schäfer, Florian. 2013. Passives of reflexive verbs: The repair of a Principle A violation. In *Repairs: The added value of being wrong*, ed. Patrick Brandt and Eric Fuß. Berlin: Mouton de Gruyter.

Simpson, Jane. 1983. Resultatives. In *Papers in Lexical-Functional Grammar*, ed. Lori Levin, Malka Rappaport, and Annie Zaenen, 143–157. Bloomington: Indiana University Linguistics Club.

Zec, Draga. 1985. Objects in Serbo-Croatian. In *Proceedings of the 11th Annual Meeting of the Berkeley Linguistics Society*, ed. Mary Niepokuj et al., 358–371.