

AUTOUR DU VERBE / AROUND THE VERB
Colloque en l'honneur de Claude Delmas

Université Sorbonne Nouvelle Paris 3

22 September 2012

Abandoning manner-result complementarity

Tova Rapoport

Ben-Gurion University of the Negev

1. Manner-Result Complementarity as a lexical constraint on verb composition

Kiparsky 1997:

The lexicalization constraint: A verb can inherently express at most one semantic role (theme, instrument, direction, manner, path....)

This should follow from the constraint that "Only the lowest (most deeply embedded) theta-role can be "incorporated" [in the formation of a verb -TR].

Levin & Rappaport Hovav 2011, RH&L 2010 (LRH):

Manner and result meaning components are in complementary distribution:

A single verb can encode manner or result (including direction), but never both.

This follows from the way verb meanings are composed by root association with lexical event positions.

→ different lexical entries for every verb that exhibits both manner and result characteristics

Mateu & Acedo-Matellán 2012 (MAM) argue for a constraint on *syntactic* verb composition.

A root cannot be interpreted as manner and result simultaneously:

A root cannot syntactically be associated simultaneously with a result structure (where it is the complement of an abstract result P and incorporated) and a manner structure (where the root is adjoined to null v via conflation).

→ different structures for each aspect of the verb

In both LRH and MAM, M-R complementarity derives from the impossibility of association of a root with two positions simultaneously (whether in lexical or syntactic structure).

But I consider multiple lexical entries/structures to be, at the very least, unnecessary. Therefore

An alternative approach is offered here:

Atom Theory – Erteschik-Shir & Rapoport (ESR):

A verb's meaning consists of a manner atom, a result atom, or *both manner and result atoms*.

Each atom acts independently, directly projecting syntactic structure.

Apparent manner-result complementarity derives from differences in "Aspectual Focus":

When interpreting a structure, only one part of the structure can be foregrounded; the other, while present, is backgrounded.

Simultaneous aspectual foregrounding of both parts of a structure is impossible.

Assuming Atom Theory, I argue here against a verb root view of manner-result complementarity and question some of the evidence used as support for it.

Structure of the talk:

- Introduce Atom Theory
- Demonstrate Atom Theory's Aspectual Focus
- Examine the conative construction, used as an argument for a distinct Manner use of a verb
- Bring up objectless constructions, a counter-argument to a distinct Manner use of a verb
- Check out *climb*, which has been used as an example of two different verb meanings

2. Atom Theory (AT) (Erteschik-Shir & Rapoport 1997, 2000, 2004, 2005, 2010, etc.):

A theory of the lexicon-syntax interface, based on the fact of the flexibility of verb behaviour (the unmarked case): a highly-constrained lexicon and an unrestricted interface

- a minimal semantic lexical entry: atomic meaning components only
- each atom freely—and independently—merges syntactic structure
- all verb uses directly derived from one lexical entry
- one verb's atoms can yield multiple syntactic constructions, each with its own argument/ *aktionsart* properties:
 - information re: argument number (e.g. transitivity) and type is structurally derived
 - aspectual information is structurally derived
- apparent polysemy results from merge possibilities

THE ATOMS

A lexical entry's atoms: taken from a universal inventory consisting of only two basic types: Manners (manners, instruments, means) and Results (states, locations)

The lexical semantic representation of a verb consists entirely of either:

A Manner atom or a Result atom or both Manner and Result atoms

(That's it; there are no theta-roles, no lexical argument/event structure, no linking rules.)

Verb analysis: separate morphophonological verbal head and semantic atoms (no 'root'):

cut =	/kut/;	M: sharp (-bladed) tool*;	S: some linear separation in material integrity
break =	/brek/;	M: forceful means;	State: dysfunctional
melt =	/melt/;	M: heat means;	State: liquid/fluid
hit =	/hit/;	M: forceful manner;	Location: point of contact
run =	/run/;	M: quick manner of progression	

(*tool = instrument that must be wielded, or at least controlled)

(This view differs significantly from Beavers & Koontz-Garboden's 2011 claim that when a verb encodes both Manner and Result, "they are encoded in a single, undecomposable manner+result root at event structure".)

Atoms are not arguments; atoms are not theta-roles. Atoms are semantic morphemes.

ATOMIC PROJECTION

Each atom independently merges structure.

Atoms merge as either: (i) complements to the verbal head (e.g. **S** in (1) below)

Or as: (ii) modifying adjuncts (e.g. **M** in (1) below)

(i) → constrained set of Hale & Keyser-inspired structures

Each eventive structure has an interpretation, one of:

activity, change of state/location ('achievement'), or cause + change ('accomplishment')

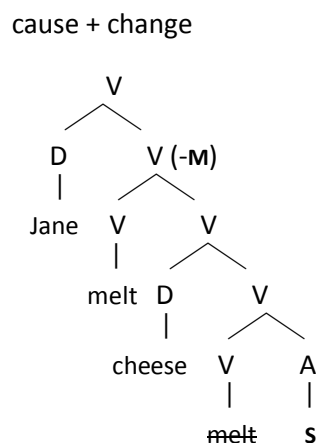
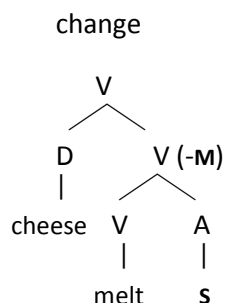
(ii) Manners act adverbially; States act adjectivally.

An example of the possible structures resulting from freedom of atomic projection:

(no base root, no Hale & Keyser (1993, etc.)-type root incorporation (see Kiparsky 1997))

(1) a. The cheese melted.

b. Jane melted the cheese.



Both structures of (1) result from the single lexical entry of the verb *melt*.

(Atoms in complement position here have categorical realizations: e.g. **S** → A.)

(Modifiers are merged on a separate plane. See Erteschik-Shir '87, Afarli '97, Rapoport '99, etc.)

(In the cause + change structure, the same V is merged twice; the two copies form a chain.)

AT: free projection: a syntax-driven approach to aspectual and argument information

But: structural possibilities are constrained by atomic interpretation:

the principle of Full Interpretation: an uninterpretable atom → *

So: the lexical entry constrains structure interpretation but not the structures themselves.

ATOMIC INTERPRETATION, STRUCTURE INTERPRETATION

(1) meets Full Interpretation: both *melt*'s atoms are interpreted: (a) S types the predicate

(b) M modifies predicate

The V-S predicate: → change / achievement

→ subject = the affected 'object' (incremental theme)

The V-V predicate: → cause (+ change = accomplishment)

→ subject = causer (includes agent, instrument)

AT:

- no lexical (argument/theta) operations, no multiple lexical entries, no theta-roles
- no interface rules, no mapping rules
- no little *v*, no functional categories (other than tense and reference anchors)
- contra LRH, atoms cannot ‘drop out’; are not sometimes ‘lexicalized’, sometimes not

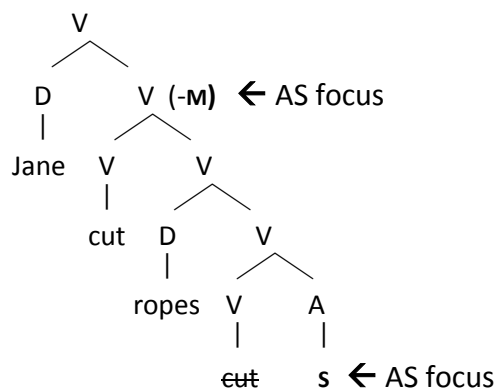
3. Aspectual Focus

In AT, apparent polysemy can be due to different shadings of the same structure = AS focus.

Aspectual (AS) focus (ESR 1995, 2004) is the foregrounding of one part of a verbal structure, with the consequent backgrounding of other parts of that structure. (And see Smith 1991/97). (AS focus is not the same as sentential focus, as expressed intonationally, although the two types of focus are related.)

In the complex cause +change structure, either atom can be AS-focussed (see E-S 2007):

(2) Jane cut the ropes.



(Freely-assigned) AS focus results in focus on part of the meaning of the verb:

AS focus on M foregrounds the activity (/manner).

AS focus on R (= S, L) foregrounds the result (/endpoint).

Thus, the same complex (cause + change) structure may have an atelic or telic reading. (The telic/atelic distinction does not correspond to different structures/classes in AT.)

ASPECTUAL FOCUS AND TELICITY

- (3) a. Jane melted the cheese in two minutes.
b. Jane melted the cheese for two minutes.
- (4) a. Jane cut the ropes in ten minutes.
b. Jane cut the ropes for ten minutes.
- (5) a. Jane chopped the potato in two seconds.
b. Jane chopped the potato for two minutes.

Each of the two adverbials is compatible with AS focus on a particular atom.

The *in*-adverbial associates with aspectual focus on an R (State or Location) atom.

The *for*-adverbial associates with aspectual focus on an M atom.

(These classic time-adverbial diagnostics (Vendler 1967; Dowty 1979) are compatible with endpoint or duration—they are diagnostics of AS focus rather than of aspectual class.)

Aspectual focus is affected by context:

- (6) a. Jane painted a picture in an hour.
b. Jane ran to the store in five minutes.
- (7) a. Jane painted a picture for an hour and then just sketched it in.
b. Jane ran to the store for five minutes and then walked the rest of the way.

Different adverbials are compatible with different AS foci.

Subject-oriented manner adverbs are compatible with AS focus on M:

- (8) a. The workers crushed the rocks vigorously for an hour/#in an hour.
b. Jane carefully cut the ropes for ten minutes/#in ten minutes.

Adverbs of completion are compatible with AS focus on S:

- (9) a. The workers crushed the rocks completely in an hour/# for an hour.
b. Jane cut the ropes entirely in ten minutes/#for ten minutes.

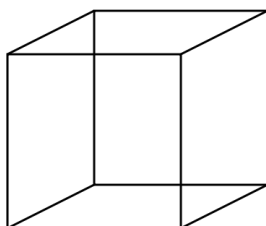
A NOTE ON THE CONTEXT OF ASPECTUAL FOCUS

The idea of looking at the same structure from more than one point of view is not a new one, nor is it restricted to linguistics; focus is a general cognitive mechanism.

In their discussion of how a sentence is inherently organized into dominant and nondominant constituents (information structure), Erteschik-Shir and Lappin 1987 (ES&L) note that visual and auditory modes of perception are also organized into salient and background constituents.

ES&L consider cases of perceptual ambiguities of the kind discussed by Gestalt psychologists that allow two incompatible perceptual organizations, such as, the Necker cube, Rubin's vase, and the duck-rabbit:

- (10) Ambiguous figures



In each of (10) two foci (the foregrounding of certain components), and so two interpretations, are possible, but not simultaneously.

ES&L note that:

“in perceptually neutral contexts, both views of such a figure are equally possible...” and “Hochberg (1970) shows that which view of an ambiguous figure one perceives is in part dependent upon the set of expectancies which one brings to the perceptual situation. “

The same is true of language. Our expectations (e.g. discourse context), at least in part, shape the interpretation of potentially-ambiguous sentence structures.

Depending on context,
the same syntactic structure can have different topic-focus assignments;
the same syntactic structure can have different aspectual focus assignments

As with sentential focus, AS focus divides a structure into the salient and the non-salient. But only one division is possible at a time.

ASPECTUAL FOCUS AND ADVERB CO-OCCURRENCE

Simultaneous focus on two atoms, i.e. two distinct aspectual interpretations, is not possible: Using our adverbials as diagnostics of AS focus:

(11) #The workers crushed the rocks in an hour for an hour/ for an hour in an hour.

Other adverb co-occurrence is also restricted (recall (8) and (9)):

- (12) a. #The workers crushed the rocks vigorously and/’n’ completely.
b. #Jane cut the ropes carefully and entirely.
c. #Jane composed the song happily and totally.

Subject-oriented manner adverbs are compatible with AS focus on M.

Adverbs of completion are compatible with AS focus on S.

Therefore, both adverbs are not simultaneously possible.

Both M and S atoms in a single verb structure cannot simultaneously be in focus.

→ Manner and Result cannot be simultaneously focussed in one structure

But: Manner and Result atoms are (obviously) both present in every structure they merge.

Is this manner-result complementarity?

Claim: a verb can have both M and R atoms, in which case, both project syntactic structure.

Context allows/forces AS focus on a particular atom, and so on a particular aspect of the verb.

4. The conative ('at' constructions)

- (13) a. Jane kicked at the door/the ball.
 b. The cat clawed at the door.
 (dab at, pat at, clutch at, grab at)

Only verbs with Manner can be in the conative construction:

- (14) a. *Jane entered at the house.
 b. *Jane descended at the stairs.

Claim: The conative is not disallowed for 'Result' verbs (contra LRH).

Rather, the conative is possible for any verb that has a Manner that can be AS-focussed.

- (15) a. Jane cut at the ropes.
 b. Jane slashed at the new curtains.
 c. Jane hacked/sawed at her hair.

LRH: *cut* is a Result verb; any apparent Manner is derived from the Result/contextually inferred
 In the conative, *cut* lexicalizes manner and *cut*'s result "drops out".
 This is a different sense of the same verb → two lexical entries for *cut* (etc.).

Bohnenmeyer 2007: the opposite: "cut" verbs (*slice, hack, saw*) "specify some *property* of the Instrument or of the way it is used" but "are nonspecific regarding the change effected by it."
 Rather, *cut* verbs specify only a generic result: "For instance, a *cut* can vary from mere incision in the Theme's surface all the way to separation of the Theme into two parts."

It is hard to see how *cut*'s manner could be derived from this generic result state.

(And note: LRH's 'conventionally-associated activity' of *cut* is what is associated with a tool M.)

Cross-linguistic evidence against deducing M from R abounds (see Bohnemeyer 2007) and:

Consider Danish:

Cut with a knife = *skære*

Cut with scissors = *klippe*

Let us proceed, assuming that there is not one result verb *cut* and another manner verb *cut*.
 Still, does the conative distinguish somehow between manner uses and result uses?

THE CONATIVE: A DEMONSTRATION OF ASPECTUAL FOCUS

The term 'conative' covers a wide range of 'at' constructions (Broccias 2001).

'At' constructions (AtC): interpreted as repetitive, intense (as well as 'not the intended result')

In AtCs, the R atom is defocussed and the M atom is focussed.

Focus on M yields the intense, repetitive (and even intentional) interpretation of AtCs.

Cut/saw: focus on the tool atom allows focussing on the motion of its wielding (→ intense).

(This accords with Guerssel et al. 1985: the conative is licensed by motion and contact components. Wielded tools imply motion and contact.)

In AtCs, AS focus needs something to focus *on*.

The motion associated with the wielding of a particular instrument can be focussed.

But Means & State verbs, unlike Instrument & State verbs, do not offer this:

- (16) a. #Jane melted at the cheese.
 b. #Jane broke at the vases.
 c. #Jane bent at the plastic plate.
 d. #Jane cooled at the soup.

There is no focussable action associated with implementing heat, forceful, or cold means. Hence the misleading notion that 'Manner' verbs, but not 'Result' verbs, can be in the conative.

Context and M focus:

- (17) a. *Jane ate at her cake.
 b. The sea ate (away) at the coastline.

- (18) a. *Jane knifed at Bill.
 b. Cold winds knifed at them. (Broccias' 5)

- (19) a. *Sam swigged at the glass of vodka. (B's 7)
 b. While the Russians swigged away at bottles of Sambucca... (Z. Smith, *White Teeth*)

- (20) a. *The artist carved at the wood
 b. The wind and rain carved at them, pebble by pebble, until they were striated by the weather's relentless touch. (net)

Is there any restriction on what can be aspectually defocussed?

Bohnemeyer 2007 suggests that only verbs with a generic result can undergo the conative. Verbs that do not undergo the conative (*carve, slice, cube, grind*) have a specified result state. When cause and/or change are semantically specified by a particular verb, that verb cannot undergo any alternation that removes them.

This could be useful for constraining defocussing, but see (20).

Is the result really jettisoned in AtCs?

- (21) a. Jane kicked at the door but #never touched the door/#nothing at all happened to it.
 b. Jane cut at the ropes but #never touched the ropes/#nothing at all happened to them.
 c. Jane sprayed at the wall but #nothing touched the wall/#nothing at all happened to it.

(-following Fillmore 1970; Beavers & Koontz-Garboden 2011)

- (22) a. Jane kicked at the ball and it finally moved.
 b. #Jane pointed at the ball and it finally moved.

'AT' AND ASPECTUAL FOCUS

'At' defocusses the verb's R; this forces focus onto the verb's M.

The defocussing of the verb's Result means that the Result is there to be defocussed.

- 'at' is a preposition, an L meaning 'aim/edge/target'
- 'at' defocusses a verb's L (e.g. of *kick*), anticipating it by adding its own 'edge' L
- 'at' defocusses a verb's S (e.g. of *cut*), preempting it with its L

(AtCs provide evidence for Atom Theory's analysis of *kick* and *spray* as M & L verbs.)

Perek & Lemmens 2010: "The contrast with the transitive variant can be explained as a Gricean implicature: given its frequency, the transitive construction is assumed to be the most "natural" choice for a given verb....; using a prepositional construction with *at* negates the (prototypical) contact between Agent and Patient (given the semantics of *at*) and thus downplays the transitivity." → aspectual defocussing

AtC focus (defocussed R; focussed M) is compatible only with M-focus adverbials:

- (23) a. Jane cut at the ropes for an hour.
b. #Jane cut at the ropes in an hour.
- (24) a. Jane sawed at the wood happily
b. #Jane sawed at the wood completely

The progressive also involves AS focus on M:

- (25) a. Jane was cutting the bread for an hour.
b. #Jane was cutting the bread in an hour.
- (26) a. Jane was happily cutting the bread...
b. #Jane was cutting the bread completely...

The progressive is therefore compatible with AtC:

- (27) Jane was cutting at the ropes (when she was rescued).

(Would an LRH-type view require a separate Manner entry for every verb in the progressive?)

Conclude:

The conative is the result of the preposition *at* and its aspectual focus effect.

The conative does not distinguish so-called Manner verbs and so:

- does not constitute evidence for a distinct manner verb *cut* in particular,
- does not provide an example of a Result 'dropping out',
- does not contribute an argument for manner-result complementarity in general.

LRH 2011: Additional facets of meaning of a verb can be inferred from a particular use of that verb in context and from its choice of arguments.

Cowper 1990: The lexical conceptual structure of a single lexical item contains no optional elements.

Atom Theory: A verb's interpretation can be shaded by AS focus, but there is no core-derived meaning distinction. The atoms of a verb's lexical entry are present in all uses of that verb.

5. Unspecified-object/objectless constructions

Objectless constructions (OCs) offer evidence that there is no separate manner verb *cut*.

Manner verbs are fine in objectless constructions:

- (28) a. What are you doing? I'm climbing/eating/studying.
b. I climbed/ate/studied all day.

Rice 1988: Omissible objects are those whose content is predictable, given verb meaning.

Mittwoch 2005: Core OCs have verbs whose meaning has a prominent manner component.

Lemmens 2006: In OCs, emphasis (provided by verb, context) is put on the action/Agent

Mittwoch: Most OCs are sensitive to context.

Some verbs require a "narrower extra-linguistic or extra-sentential context":

- (29) a. #John is building/built all day.
b. John is building on the empty lot at the bottom of the road. (M's 12)

- (30) a. #Jane is polishing/chopping.
b. Jane loves household chores. Right now she is polishing/chopping.

(M: There is still a feeling of ellipticality/coercion about this usage; add '*something*'.)

Recipe contexts (e.g. Massam & Roberge 1989):

- (31) a. Take several ice cubes and melt slowly over hot water.
b. Take the ingredients. Mix well and beat for five minutes.

M&R: the reference of the empty category is contextually defined.

Contrast with: #Jane melted all day in the bakery.

#What is Jane doing in the bakery? She is beating.

AT: In OCs, AS focus is on M (on the activity - Erteschik-Shir 2007, adapting Rice 1988).

In OCs, as with any construction, all atoms project and all are subject to Full Interpretation.

Verbs that require more context in OCs are those that have not only M, but an R (=S or L) atom also requiring interpretation.

If there were a Manner verb *cut* whose Result has dropped out, as claimed by LRH, a straightforward OC should be possible:

- (32) a. #What is Jane doing? Jane is cutting/hacking/slashing.
 b. #Jane cut all day.
 (c. #Jane cuts well.) (compare: Jane climbs/studies/eats well.)

Instead, however, heavy context is required so that R can be interpreted:

- (33) a. ?Jane has been working in the bakery all day—she has kneaded and chopped. Right now, she is cutting.
 b. Yesterday in the salad bar, Ronny chopped, Sal diced, and Jane cut.

Conclude:

Cut (always) has two atoms, both of which must be interpreted in every structure they merge. It is the interpretation of *cut*'s State atom that requires extra context in OCs.

→ There is no distinct Manner verb *cut*.

(Given AS focus on M: OCs, as expected, are compatible with M-focus, not S-focus, adverbials:

- (34) a. Beat for five minutes/#in five minutes.
 b. At the salad bar, Ronny chopped and Jane diced for an hour/#in an hour.
 c. Jane is happily chopping/#Jane is chopping completely.)

6. *Climb*

Arguments for different meanings for a single verb can be due to initial misidentification of that verb's meaning. A verb's meaning may look inconsistent, but that's our fault, not the verb's.

Climb has been used in arguments for manner-result complementarity.

Jackendoff 1985, Goldberg 2010, LRH: *Climb*: clambering Manner; upward direction Result.

They argue that *climb* has one manner use:

- (35) Mary climbed up/down the hill.

And another result (direction) use:

- (36) The prices/temperature/plane climbed.

LRH: "When the basic manner meaning of *climb* is dropped out, this verb lexicalizes [only] a directional or result sense."

Jackendoff: there is no 'core meaning' necessary and sufficient for all the uses of *climb*. 'path upward' or 'to top of' or 'clambering manner' can be found in different combinations and any one can be missing in any given sentence.

LRH, Kiparsky 1997, etc.: *climb* is polysemous.

Recall, however:

AT: The atoms of a verb's lexical entry are present—and interpreted—in all uses of that verb.

Cowper 1990: "If something is part of the conceptual structure of a lexical item, then that aspect of the meaning must always be present. *Climb* can therefore contain in its lexical conceptual structure nothing referring to upwards motion...."

And note cases in which there is neither upward Result nor clambering Manner (G&W 2008):

- (37) a. The plane had climbed down to 14496 feet.
 b. The snake climbed down the crack.
 c. Watching the sun also as it climbed down the cloudless sky....

AT: While climbing can be done in any direction, the default direction is up because *climb* means 'effortful manner of progression'.

Cowper is more accurate: Climbing involves effort being exerted against the force of gravity. "If one did not oppose the force of gravity while climbing down, it would be called falling. So it is obvious why the default direction is up. "Down, in fact, can be defined as 'in the direction of the force of gravity'. Up is simply the opposite of down."

Geuder & Weisgerber 2008 (while assuming some polysemy):

Climb denotes a manner feature "force exertion against gravity".

Corollary: *climb* as a downward movement requires a controlled, stepwise descent.

Mateu & Acedo-Matellán 2012: The root *VCLIMB* can be structurally interpreted in different ways depending on the syntactic position it occupies.

Let us consider, noting (36) and following Cowper (pc), that *climb* means progression against entropy, against the tendency to proceed in a particular (or expected) direction.

G&W: *climb* is confined to objects that are bearers of impetus;
climb is applicable to self-generated or ballistic movement.

We can thus account for the 'effort' in (35) as well as (36) and:

- (38) a. The arrow climbed into the sky. (G&W) vs. The arrow rose/flew into the sky.
 b. The elevator climbed to the top floor. vs. The elevator rose to the top floor.

Conclude:

Climb's meaning has been misanalysed. *Climb* has Manner, but no Result.

Climb, then, can offer no argument in favour of manner-result complementarity.

7. Conclusion

The lexical semantic representation of a verb consists entirely of either:
a Manner atom or a Result atom or both Manner and Result atoms.

One lexical entry's atoms project all uses of a verb and are interpreted in all uses.
Verbs do not lexicalize or drop different meaning components in different contexts.

Rather, aspectual focus foregrounds a projected atom, thus affecting interpretation.

→ There is no Manner-Result complementarity in lexical (or syntactic) verb composition.

References

- Åfarli, T. A. 1997. Dimensions of phrase structure: the representation of sentence adverbials. In *Motskrift*. Institutt for nordistikk og litteraturvitenskap, NTNU. 91-113.
- Beavers, J. & A. Koontz-Garboden. 2011. Manner and result in the roots of verbal meaning. Ms. University of Texas at Austin and University of Manchester.
- Bohnemeyer, J. 2007. Morpholexical transparency and the argument structure of verbs of cutting and breaking. *Cognitive Linguistics* 18. 153-177.
- Broccias, C. 2001. Allative and Ablative At-Constructions. In M. Andronis, C. Ball, H. Elston and S. Neuvel (eds.), *Papers from the 37th Meeting of the Chicago Linguistic Society*. 67-82.
- Cowper, E. 1990. Apparent polysemy and thematic underspecification. In B. Brunson and T. Wilson (eds.), *Toronto Working Papers in Linguistics* 11: 2. 9-14.
- Dowty, D. 1979. *Word meaning and Montague grammar*. Dordrecht: Reidel.
- Erteschik-Shir, N. 1987. Right Node Raising. In M. A. Browning, E. Czaykowski-Higgins and E. Ritter (eds.), *MITWPL*.
- Erteschik-Shir, N. 2007. *Information Structure: The Syntax-Discourse Interface*. Oxford: Oxford University Press.
- Erteschik-Shir, N. & S. Lappin. 1987. Dominance and modularity. *Linguistics* 25. 671-685.
- Erteschik-Shir, N. & T. Rapoport. 1997. Verbal projection. In G. Matos, M. Miguel, I. Duarte, and I. Faria (eds.), *Interfaces in Linguistic Theory*. Lisboa: APL/Edições Colibri. 129-148.
- Erteschik-Shir, N. & T. Rapoport. 2000. Aspectual Focus, Paper presented at GLOW. Bilbao.
- Erteschik-Shir, N. & T. Rapoport. 2004. Bare Aspect: a theory of syntactic projection. In J. Guéron and J. Lecarme (eds.), *The Syntax of Time*. Cambridge, Mass: MIT Press. 217-234.
- Erteschik-Shir, N. & T. Rapoport. 2005. Path predicates. In N. Erteschik-Shir & T. Rapoport (eds.), *The Syntax of Aspect: Deriving Thematic and Aspectual Interpretation*. Oxford: Oxford University Press.
- Erteschik-Shir, N. & T. Rapoport. 2010. Contact and other results. In M. Rappaport Hovav, E. Doron, and I. Sichel (eds.) *Lexical Semantics, Syntax, and Event Structure*. Oxford: Oxford University Press.
- Fillmore, C. 1970. The grammar of hitting and breaking. In R. Jacobs and P. Rosenbaum (eds.), *Readings in English transformational grammar*. Waltham, Mass.: Ginn. 120-133.
- Geuder, W. & M. Weisgerber. 2008. Manner of Movement and the Conceptualization of Force". Presented paper (slides). Université d'Artois, Arras.
- Goldberg, Adele. 2010. Verbs, constructions, and semantic frames. In M. Rappaport Hovav, E. Doron, and I. Sichel (eds.), *Lexical Semantics, Syntax, and Event Structure*. Oxford: OUP. 39-58.
- Guerssel, M., K. Hale, M. Laughren, B. Levin, & J. White Eagle. 1985. A Cross-Linguistic Study of Transitivity Alternations. *Papers from the Parasession on Causatives and Agentivity*. Chicago Linguistic Society. 48-63.
- Hale, K. & Keyser, S. J. 1993. On argument structure and the lexical expression of syntactic relations. In K. Hale & S.J. Keyser (eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. MIT Press.
- Hochberg, J. 1970. Attention: organization and consciousness. In D. I. Mostofsky (ed.), *Attention: Contemporary Theory and Analysis*. New York: Appleton-Century-Crofts.

- Jackendoff, R. 1985. Multiple Subcategorization and the Theta-Criterion: The Case of Climb". *Natural Language and Linguistic Theory* 3. 271-295.
- Kiparsky, P. 1997. Remarks on Denominal Verbs. In A. Alsina, J. Bresnan and P. Sells (eds.), *Complex Predicates*. Stanford: CSLI Publications. 473-499.
- Lemmens, Maarten. 2006. *More on objectless transitives and ergativization patterns in English. Special volume of the Journal Constructions with selected papers of the Construction Grammar conference in Marseille (2004)*.
- Levin, B. and M. Rappaport Hovav. 2011. Lexicalized Meaning and Manner/Result Complementarity. In B. Arsenijević, B. Gehrke, and R. Marín, eds., *Subatomic Semantics of Event Predicates*. Dordrecht: Springer.
- Massam, D. & Y. Roberge. 1989. Recipe Context Null Objects. *Linguistic Inquiry* 20:1. 134-139.
- Mateu, J. & V. Acedo-Matellán. 2012. The Manner/Result Complementarity Revisited: A Syntactic Approach. In M. C. Cuervo and Y. Roberge (eds.), *The End of Argument Structure? (Syntax and Semantics 38)*. Emerald Publishing.
- Mittwoch, A. 2005. Unspecified arguments in episodic and habitual sentences. In N. Erteschik-Shir and T. Rapoport (eds.), *The Syntax of Aspect: Deriving Thematic and Aspectual Interpretation*. OUP.
- Perek, F. & M. Lemmens. 2010. Getting at the meaning of the English *at*-construction: the case of a constructional split. *CogniTextes*. URL : <http://cognitextes.revues.org/331>
- Rapoport, T. 1999. Structure, Aspect, and the Predicate. *Language* 75. 653 - 677.
- Rappaport Hovav, M. & B. Levin. 2010. Reflections on Manner/Result Complementarity. In M. Rappaport Hovav, E. Doron, and I. Sichel (eds.), *Lexical Semantics, Syntax, and Event Structure*. OUP. 21-38.
- Rice, S. 1988. Unlikely lexical entries. *BLS* 14. 202-212.
- Ritter, E. & S. T. Rosen. 1998. Delimiting events in syntax. In M. Butt and W. Geuder (eds.), *The projection of arguments: Lexical and compositional factors*. Stanford: CSLI. 135-64.
- Smith, C. S. 1991/7. *The Parameter of Aspect*. Dordrecht: Kluwer.
- Van Voorst, J. 1988. *Event structure*. Amsterdam: Benjamins.
- Vendler, Z. 1967. *Linguistics in Philosophy*. Ithaca: Cornell University Press.