

Argument Structure and Syntactic Relations

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A cross-linguistic perspective

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Argument structure and syntactic relations*

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1. The topic of argument structure

The present volume is a collection of contributions to the topic of argument structure. These papers combine rigorous theoretical analyses of argument structure and empirical work on more specific aspects of the topic. In a nutshell, these papers propose new cartographic views on argument structure (*contra* more minimalistic recent proposals of a binary template model for argument structure) as the optimal way to account for various syntactic and semantic facts as well as data from a wide cross-linguistic perspective.

In Section 2 of this introductory chapter, we will briefly review the most relevant discussions on argument structure that can be found in contemporary literature. Three issues are raised in the following pages: (i) the question of whether it is a few fixed theta-roles or the aspectual/event structure (or maybe a combination of both) that determine argument structure; (ii) the question of whether arguments are realized according to a hierarchy similar to Baker's (1988) UTAH or not; and (iii) the question of whether argument structure is projected from the lexical items themselves or not. Finally, Section 3 of this introductory chapter briefly presents the papers that constitute this volume, taking the issues spelled out above as a point of departure.

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2. Major discussions on argument structure

2.1 Discussion 1: Is argument structure determined by theta-roles or by event structure?

Many of the traditional studies of argument structure carried out within the generative framework stem from the GB analyses of this topic. In general, the GB approaches to argument structure—and its inheritors—propose that there is a more or less extended collection of semantic roles which are tied to a syntactic position in the X'-structure. The notion of theta-role as a classification of argument types has been used since Gruber's (1965) and Fillmore's (1968) pioneering works.

A representative work of the theta-role approach is Perlmutter (1978), in which the author classified the argument structures present in natural languages as the combinations of the different possible theta-roles in the X'-structure. Thus, sentences are unergative, unaccusative or transitive, depending on the realization of one or another argument (viewed as a theta-role) in the X'-structure. In this way, knowing the theta-roles associated with a verb allows us to predict what the verb's syntactic behavior will be. According to Ramchand (1997), this approach correctly articulates the relationship between argument roles and syntactic positions, but it has a major problem, namely, that it does not define clearly the content of theta-roles.

The theta-role type of approach is oriented toward the classification of the argument types themselves (viewed as theta-roles) that appear with particular verbs (cf. also Belletti & Rizzi 1988, and Jackendoff 1990), while the second type of view of argument structure is oriented toward a characterization of verbs types, namely, a classification of argument structure according to aspectual features of the VP and sentential types in terms of event characteristics.

A pioneer of the event structure approach was Vendler (1967). In this work, Vendler (1967: 102ff) proposed a classification of verbs into four types: activities, states, accomplishments, and achievements. In general, in Vendler's work (and later interpretations of it) three types of concepts tend to recur: the notion of change or transition, the notion of temporal boundedness or telicity, and the concept of temporal extendedness. Any of these classifications, unlike the one based on theta-roles do not correspond directly to specific verbs or other lexical categories; in fact, the addition of plurals, mass nouns, path-phrases, measure phrases, and some (telic or durative) adverbs can alter the *aktionsart* of the sentence (cf. Verkuyl 1972). A problem with a kind of view like Vendler's one is that these parameters never have a direct correspondence with the constituents of syntactic representations. Furthermore, the classification itself has been proven not to fit all verb classes. According to Rappaport Hovav (2008), for instance, Vendler's classification is not appropriate for verbs which lexicalize a scale.

In order to override the shortcomings of the theta-role approach and the event structure approach, combinations of these two views have been also developed: the event structure and the theta-role approaches. Dowty (1987), Chierchia (1989), and

Grimshaw (1990) for example, tried to incorporate theta-roles into a theory of formal semantics, being aware that it is necessary to have other kinds of semantic information in addition to theta-roles.

Along Dowty's line of research, Ramchand (1997) wants to find the correspondence between semantic features and syntactic constituents that Vendler misses. Ramchand (1997) formalizes the relationship between the verb and its arguments, when they combine to give rise to VP aspect. More specifically, she constructs a new typology starting with the Davidsonian tradition of an event variable, which is modified by different elements in the sentence, and relating it to argument structure. Ramchand defines the relationship between verbs and their arguments using event structure and aspectual notions, instead of the traditional theta-roles. More specifically, Ramchand (2008) proposes a tripartite division of events into initiation, process and result (where an initiation leads to a process, and a process can potentially lead to a result state). Each of these subevents is represented as a specific projection (Ramchand 2008: 46), ordered in a hierarchical embedded relation ($\text{initP} > \text{procP} > \text{resP}$). As the reader will notice, this and similar approaches to argument structure are pursued by many of the contributors to this volume.

2.2 Discussion 2: Are arguments realized according to a hierarchy (UTAH-like approaches) or does not argument structure follow any hierarchy?

Related to the previous discussion, most researchers working within GB have assumed that theta-roles are assigned by verbs according to a universal hierarchy, which determines the order of realization of the arguments, thus giving rise to different types of argument structure. Among others, Carrier-Duncan (1985) proposed that certain arguments are higher than others in a hierarchy, which in turn determines their realization in a sentence. The same was claimed by Larson (1988) and Grimshaw (1990). For instance, Grimshaw (1990) orders the realization of the different possible arguments according to the following thematic hierarchy: agent > experiencer > goal/source/location > theme.

The most elaborate and commonly assumed hierarchy of this kind is the one proposed by Baker (1988) within the so-called UTAH (Uniformity of Theta-Assignment Hypothesis). According to Baker (1988: 46), this hypothesis states that identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure (in Baker's 1988 terminology). As Larson (1988) claimed, further differences are to be found in the transformations required by later levels of representation (S-structure and LF).

A problem with theories like Baker's one is highlighted in Ramchand (1997: 6ff). This author argues that hierarchies "linking" theta-roles and syntactic positions are difficult to justify, and usually differ from author to author depending on the phenomenon investigated. Event structure-based approaches, on the contrary, do not need any hierarchy of realization of theta-roles (arguments), as these latter approaches

consider other elements in the sentence (adverbials, semantic properties of the objects, the addition of plurals, mass nouns, measure phrases) as determinant in the realization of the event structure and, as Ramchand argues, of argument structure.¹

2.3 Discussion 3: The lexical projection vs. the functional structure approaches to argument structure

The importance that lexical processes and lexical entries had in GB-type approaches and their inheritors (e.g. Baker 1988) was the basis for later discussions about where to posit argument structure. The major question in this discussion was the following: is argument structure located in the lexical items themselves or is it independent of the properties of specific listemes? The first position is represented by Williams (1981), Grimshaw (1990), Levin & Rappaport (1995), and Hale & Keyser (2002), among others, who claim that argument structure is a syntactic configuration projected by a lexical item, whereas the second position is adopted in, e.g., Borer (2005).

Hale & Keyser (1993) identify thematic roles with points (NP positions) in syntactic projections. Theta-roles have no independent positions in the tree, but are defined by the properties of the lexical entries of the predicates, which project into the syntactic structure, together with certain combinatorial principles. This claim is comparable to the role that lexical processes have in GB and UTAH approaches to argument structure.

Minor variations within Hale & Keyser's (1993) view give rise to questions such as whether the projected structure is lexical or syntactic, whether the syntactic category information is present in each specific lexical entry or in the lexicon (cf. the discussion in Reuland, Bhattachary & Spathas 2007).

Borer (2005), on the other hand, proposes that the properties of argument structure are not directly derived from the properties of specific lexical entries. The interpretation of a given argument is determined by its position in the syntactic structure and, more specifically, in the event structure that the syntactic structures establish.

Thus, according to Borer (2005) there is a rich syntactic functional component (viewed as event structure) and an impoverished lexical component to feed syntax. Just as other authors supporting an event structure-based account, Borer (2005) argues that *aktionsart* is syntactically represented, that "event roles" —rather than thematic roles— (subject of change, subject of process, subject of state) are the relevant semantic roles that determine argument structure, and that these are associated with an argument structure interpretation, which Borer represents as schemas.

1. The link between event structure and argument structure that Ramchand (2008) proposes is, as it has been explained in the previous subsection, the projection of the basic eventual properties in the heads "initiation", "process" and "result" in the tree.

3. The present book

The contributions in this book are written versions of the talks given in the *Workshop on Argument Structure and Syntactic Relations*, held at the University of the Basque Country in May 23–25, 2007.

Some of the papers focus on a specific language/group of languages, while others offer an approach to argument structure from a more general cross-linguistic perspective. Overall, the papers in this book include data from a wide range of languages (Basque, Catalan, Spanish, French, Italian, Portuguese, English, Scandinavian languages, Russian, Nenets, Karachay-Balkar, Turkish, Hebrew, and Mandarin Chinese).

The fourteen contributions to this volume have been conventionally divided according to the aspect of argument structure they focus on.

The first part deals with the semantic and syntactic properties of the event structure. Babicheva and Ivanov ("Aspectual composition in causatives") analyse the aspectual composition in non-derived verbs and in derived causative verbs. They consider two types of aspectual composition found in natural languages: in the English type, the telicity of a verb is determined by the reference properties of its direct object; in the Russian type obligatorily telic verbs impose quantification on the direct object. They present data from indirect causatives where, in a Russian type context, the English type of aspectual composition emerges. They propose that this occurs due to the event structure of the causative and the semantics and syntax of the aspectual operator responsible for the obligatory telicity.

In "Atelicity and Anticausativization", Lyutikova and Tatevosov investigate various interactions between argument structure and eventuality types. They examine one specific type of interaction not addressed so far in the literature, the one between anticausativization and the (a)telicity of a verbal predicate. They focus on how anticausativization affects the range of interpretations of non-culminating accomplishments, showing that a proper understanding of this phenomenon has consequences for the analysis of (the denotation of) *vP*. They argue that inertia modality can be introduced at different levels within *vP*, and that this explains why different kinds of non-culmination are affected by the anticausative morpheme in different ways.

MacDonald, in "Minimalist variability in the verb phrase", argues that language variation in inner aspect can be accounted for by the presence or absence of an aspectual projection, AspP. More specifically, he discusses a range of inner aspectual properties of English and ties them to the presence of AspP; Russian systematically lacks these properties, which he claims is because Russian lacks AspP. On the other hand, he shows that English stative predicates pattern with Russian predicates in systematically lacking this range of properties; he concludes that English eventives have AspP and English statives lack AspP. Regarding inner aspect then, there is no formal difference between cross-linguistic and intra-linguistic variation; it reduces to the presence/absence of AspP which, as he discusses, is not unexpected under Minimalism.

Mateu (“On the l-syntax of manner and causation”) argues that Hale & Keyser’s (2005) lexical-syntactic analysis of some Manner verbs (esp. *smear/splash* verbs) naturally leads us to analyze a variety of complex causative constructions from an even more radical syntactically-driven perspective. When discussing the proper treatment of some complex constructions that involve Manner conflation, he claims that the present Hale & Keyserian perspective can provide us with the right balance between a conservative proposal like Folli & Harley’s (2006) and a radical one like Borer’s (2005).

In their contribution to this volume (“Nominalization, event, aspect, and argument structure: a syntactic approach”), Sleeman and Brito argue that the distinction between process nouns (complex event nominals), and result/object nouns made for nominalizations by Grimshaw (1990) and Alexiadou (2001) is too strict. They propose instead a dichotomy that is based on agentivity, and claim that both process nouns and result nouns have a +agentive and a –agentive value, associated with a difference in argument structure. They argue that in the two values both types of nouns are eventive and that the difference between process and result nouns is simply an aspectual difference. Besides the two eventive types, with a difference in argument structure, they distinguish a non-eventive type, object nouns, which lack argument structure.

The following two papers deal with the hierarchy of arguments from a general point of view. Babby, in the article entitled “The syntax of argument structure”, proposes a derivational theory of the mapping between argument structure and syntax. His main hypothesis is that Argument Structure is an independent level that plays a central role in the sentence’s derivation and that many of the derivational operations that were assumed in earlier theory to be syntactic are in fact Argument Structure-level operations that have predictable syntactic effects. In this way, he produces an integrated theory of morphosyntax, defined as the relation between the syntactically relevant information encoded in a verb’s Argument Structure, the affix-driven operations that alter the initial Argument Structure representation, and the syntactic structure projected from the derived Argument Structure. Thus, all operations involving productive construction-specific morphology (affixation) are, according to Babby, Argument Structure-level operations (e.g., causative and applicative formation).

In his contribution to this volume (“Argument structure and quantifier scope”), Bowers argues in favor of a theory in which all argument DP/PPs (as well as ‘quasi-arguments’ such as Source, Goal, Benefactive, Instrumental, etc.) are projected above the root in specifiers of ‘light verb’ categories. He also argues that the order in which the three basic argument categories Ag(en)t, Th(eme) and Appl(icative) are merged is exactly the opposite of the one which is usually assumed, namely, Agt < Th < Appl. The proposed theory succeeds in deriving the subject of active sentences and the *by*-phrase of passives from the same argument position without assuming syntactic lowering or an *ad hoc* rule of “ θ -transfer”. It also accounts directly for the relation between double object and propositional dative structures in a way that explains their special syntactic properties. Finally, the proposed theory, together with some new ideas about quantifier scope, derives the special scope properties of these dative constructions.

Taraldsen (“Unintentionally out of control”) answers two questions about Norwegian agentive *get*-passives. First, he investigates why the subject of these constructions has to denote sentient beings, even when the verb from which the participle is formed would by itself tolerate inanimate subjects. Building on the analysis of Norwegian adversity passives, he provides a partial answer to this question by taking the subject of an agentive *get*-passive to be necessarily introduced by an applicative head, which likewise only introduces external arguments denoting sentient beings. The second question is why agentive *get*-passives cannot be modified by adverbs ascribing intentionality to the agent, e.g. *intentionally*. This receives an answer in terms of the semantic relation linking the various subevents introduced by the heads constituting the decomposed VP in Ramchand’s (2008) framework. According to Taraldsen, volitional adverbs are appropriate whenever the subject denotes a sentient being and is also an argument of the initial subevent in the chain of “leads to” relations knitting together the various subevents introduced by a VP.

The following contributors focus on other specific syntactic heads involved in argument structure, such as causatives and applicatives. Gallego (“An l-syntax for adjuncts”), in the spirit of Hale & Keyser (1993) and subsequent work, puts forward an l-syntactic approach to VP adjuncts/modifiers, which are analyzed as PPs undergoing Merge with the VP –as high applicatives, in Pytkänen’s (2008) sense. The present proposal argues for a treatment whereby the merger of VPs and adjuncts gives rise to a Figure-Ground relation whereby VPs are interpreted as subjects (Figures), and adjuncts as predicates (Grounds). If tenable, the analysis requires no additional mode of combination for adjuncts (pair Merge, predicate composition, etc.), apart from Chomsky’s unbounded (set) Merge. Given the nature of the matters to be discussed, the paper has the most general goal of re-examining the consequences of Chomsky’s (2008) recent label-free conception of Bare Phrase Structure (BPS) for Hale & Keyser’s l-syntax.

Ormazabal and Romero (“The derivation of dative alternations”), in their contribution, argue for an updated version of the classical derivational approach to Double Object Constructions and parallel dative constructions across languages. They argue that the non-derivational approach to dative construction runs into unsolvable problems, and propose that the structural alternation is triggered by Preposition (applicative) incorporation and Case/Agreement-relational considerations, maintaining a unified analysis of dative and PP constructions at the level of argument structure, while deriving the structural and Case differences as a consequence of the incorporation of P and its modification of the Case requirements. Combined with a non-symmetric theory of Case, they show that this approach yields the right results for most of the properties traditionally associated with dative constructions, and neatly accounts for the “mixed” behaviour of the applied and the second objects in dative constructions with regard to “direct object”-hood.

Oyharçabal (“Basque Ditransitives”) proposes an analysis of Basque ditransitive clauses within a framework in which argument structure is syntactically built. After examining the categorial status of the dative phrase and its structural relation to the

DO, he briefly exposes the two major proposals that have been made in previous analyses, and makes his own, which combines the basic insights of these two proposals: a non-derived hierarchic order in which the IO c-commands the DO, and the introduction of an applicative head under VP relating the two objects (this view rests on the analysis of applicative constructions by Pyllkkänen 2008). Then, he presents the distinction between low and high applicatives, and applies the major tests of the applicative diagnostic.

Paul and Whitman ("Applicative structure and mandarin ditransitives") argue for a distinction between thematic and raising applicatives. They propose that the former introduces an additional argument above the root VP, while the latter functions as a raising head, introducing no additional argument, but "attracting" the IO from its base position in the VP. For them, in both cases, there is a single structural position for APPL, i.e. above the VP.

The last two papers share a common linguistic methodology, namely, they are two case studies in language acquisition: Demirdache and Lungu, in "Zero-time arguments in French child language", explore the construals of present and past under past in L1 French, showing their relation with argument structure. They show that children allow non-indexical/zero-tense construals of present—although present (under past) is utterance-indexical in Sequence-Of-Tense languages. They derive this analysis from the proposal that children allow zero-tenses to surface as past (as in Sequence-Of-Tense languages), or present (as in non-Sequence-Of-Tense languages). This proposal extends to children acquiring a non-SOT language: Japanese children allow zero-tense construals of past. Their second proposal is that children enforce nonindexical/zero-tense construals of present/imperfective past in Relative Clauses, which they derive from a scopal account of indexical/independent construals of relative clauses and the observation of isomorphism in the syntax/LF mapping in child language.

Finally, Uziel-Karl ("Reevaluating the role of innate linking rules in the acquisition of verb argument structure: Evidence from child Hebrew") examines the hypothesis that the acquisition of Verb Argument Structure is regulated by a set of universal, innate linking rules between thematic roles and syntactic functions, against the hypothesis that linking patterns are learned. The study draws on naturalistic longitudinal speech samples from two Hebrew-speaking girls between ages 1;5–2;9. Her findings show no advantage for the innate linking hypothesis and, instead, they support the hypothesis whereby children initially acquire Verb Argument Structure on the basis of linguistic experience with individual verbs.

References

- Alexiadou, A. 2001. *The Functional Structure in Nominals. Nominalization and Ergativity*. Amsterdam: John Benjamins.

- Baker, M.C. 1988. *Incorporation: A Theory of Grammatical Function Changing*. Chicago IL: University of Chicago Press.
- Belletti, A. & Rizzi, L. 1988. Psych-Verbs and Theta-Theory. *Natural Language and Linguistic Theory* 6: 291–352.
- Borer, H. 2005. *The Normal Course of Events*. Oxford: OUP.
- Burzio, L. 1986. *Italian Syntax: A Government-Binding Approach*. Dordrecht: Reidel.
- Carrier-Duncan, J. 1985. Linking of thematic roles in derivational word formation. *Linguistic Inquiry* 16: 1–34.
- Chierchia, G. 1989. A semantics for unaccusatives and its syntactic consequences. Ms, Cornell University.
- Chomsky, N. 2008. On Phases. In *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*, R. Freidin, C. Otero & M.L. Zubizarreta (eds). Cambridge MA: The MIT Press.
- Dowty, D. 1987. Thematic proto roles and argument selection. *Language* 67: 547–619.
- Fillmore, C. 1968. The case for case. In *Universals in Linguistic Theory*, E. Bach & R. Harms (eds). New York NY: Holt, Rinehart and Winston.
- Folli, R. & Harley, H. 2006. On the licensing of causatives of directed motion: Waltzing Matilda all over. *Studia Linguistica* 60(2): 121–155.
- Grimshaw, J. 1990. *Argument Structure*. Cambridge MA: The MIT Press.
- Gruber, J. 1965. *Studies in Lexical Relations*. Cambridge MA: The MIT Press.
- Hale, K.L. & Keyser, S.J. 1993. On the argument structure and the lexical expression of syntactic relations. In *The View from Building 20*, K.L. Hale & S. J. Keyser (eds), 53–109. Cambridge MA: The MIT Press.
- Hale, K. L. & Keyser, S.J. 2002. *Prolegomenon to a Theory of Argument Structure*. Cambridge: CUP.
- Hale, K. L. & Keyser, S.J. 2005. Aspect and the syntax of argument structure. In *The Syntax of Aspect. Deriving Thematic and Aspectual Interpretation*, N. Erteschik-Shir & T. Rapoport (eds), 11–41. Oxford: OUP.
- Jackendoff, R. 1990. *Semantic Structures*. Cambridge MA: The MIT Press.
- Larson, R. 1988. On the double object construction. *Linguistic Inquiry* 19: 335–391.
- Levin, B. & Rappaport Hovav, M. 1995. *Unaccusativity at the Syntax-Lexical Semantics Interface*. Cambridge MA: The MIT Press.
- Perlmutter, D.M. 1978. Impersonal passives and the unaccusative hypothesis. In *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistic Society*, J. Jaeger et alii (eds), 157–189. Berkeley CA: University of California.
- Pylkkänen, L. 2008. *Introducing Arguments*. Cambridge MA: The MIT Press.
- Ramchand, G.C. 1997. *Aspect and Predication: The Semantics of Argument Structure*. Oxford: OUP.
- Ramchand, G.C. 2008. *Verb Meaning and the Lexicon: A First Phase Syntax*. Cambridge: CUP.
- Rappaport Hovav, M. 2008. Lexicalized meaning and the internal temporal structure of events. In *Crosslinguistic and Theoretical Approaches to the Semantics of Aspect* [Linguistik Aktuell/Linguistics Today 110], S. Rothstein (ed.), 13–42. Amsterdam: John Benjamins.
- Reuland, E., Bhattacharya, T. & Spathas, G. (eds.). 2007. *Argument Structure* [Linguistik Aktuell/Linguistics Today 108]. Amsterdam: John Benjamins.
- Vendler, Z. 1967. *Linguistics in Philosophy*. Ithaca NY: Cornell University Press.
- Verkuyl, H. 1972. *On the Compositional Nature of Aspect*. Dordrecht: Reidel.
- Williams, E. 1981. Argument structure and morphology. *Linguistic Review* 1: 81–114.

PART 1

**Semantic and syntactic properties
of the event structure**

