

**WORK ON
SYNTAX AND STATIC CROSS-LINGUISTIC SEMANTICS**

- [1] 1987, ‘On the Semantics of the Greenlandic Antipassive and Related Constructions’. *International Journal of American Linguistics* 53:194–231.

This study describes a new field method, suited for investigating scope relations — and other aspects of truth conditional meaning — with native speaker consultants who may speak no other language and have no background in linguistics or logic. This method revealed a surprising scope contrast between the antipassive and the ergative construction in Greenlandic Eskimo. The results of this field work are described in detail and a crosslinguistic scope generalization is proposed based on Greenlandic Eskimo, Basque, Polish, Russian, Finnish and English.

- [2] 1988, *Canonical and Noncanonical Argument Expressions*. Unpublished Ph. D. thesis, University of Texas at Austin.

This work develops a formally explicit theory to explain the crosslinguistic scope generalization proposed in [1]. The focus is on the question why in Greenlandic Eskimo, as well as English and Polish, arguments in the morphologically unmarked case must take scope over VP-level operators (negation etc.), whereas obliques may (or must) take narrow scope. This holds irrespective of the thematic roles — e.g., for agent-patient verbs, the unmarked case is assigned to the patient argument in Eskimo, but to the agent argument in English and Polish. It is proposed that in all languages the unmarked case is syntactically the same — dubbed *nominative*. The scope of nominative arguments is wide because they raise out of the VP at S-Structure to be licensed in [Spec, IP]. Obliques are licensed within the VP and hence have the option of taking narrow scope.

- [3] 1993 (edited 1997), ‘Comparative Notes on Ergative Case Systems’. With Ken Hale. Unpublished Rutgers & MIT manuscript, 28 pages.

Ergative languages make up a substantial percentage of the world’s languages. They have a case system which distinguishes the subject of a transitive verb from that of an intransitive, grouping the latter with the object — the object of a transitive verb and the subject of an intransitive verb are in the same case, the *nominative* (see [2]). However, ergative languages differ from one another in important ways. In Greenlandic Eskimo the nominative, whether it is a subject or an object, is syntactically prominent in the clause, much like a subject in English; but in Warlpiri, the nominative is not prominent, more like an object. The variable prominence of the nominative manifests itself as well in the semantics, e.g., default scope of indefinite and quantified nominals. Using data from Greenlandic Eskimo and Warlpiri, and from Hindi, which represents a split ergative system, this paper develops a general theory of case which explains the observed differences among ergative languages. In addition, the theory is designed to account for the accusative language type, represented by English.

- [4] 1994a, ‘Cross-Linguistic Semantics’. *Linguistics and Philosophy* 17:53–108.

Rooth & Partee (1982) and Rooth (1985) have shown that the English-specific rule-by-rule system of PTQ can be factored out into function application plus two transformations for resolving type mismatch (type lifting and variable binding). Building on these insights, this article proposes a universal system for type-driven translation, by adding two more innovations: local type determination for gaps (generalizing Montague 1973) and a set of semantic filters (extending Cooper 1983). This system, dubbed *Cross-Linguistic Semantics* (XLS), is shown to account for various phenomena — including scope relations in English and Greenlandic Eskimo, internally headed relative clauses in Lakhota, serial verbs in Yoruba and VP ellipsis in English.

- [5] 1994b, *Case, Scope, and Binding*. Kluwer, Dordrecht.

This book presents a theory of the syntax-semantics interface within a framework that combines the syntactic Government-Binding theory (including [3]) with the compositional XLS theory of [4]. It is argued that case, agreement, syntactic binding, control as well as the minimum scope options of indefinites and quantifiers are all determined by the relations that hold at the level of S-Structure. Crosslinguistic variation with respect to these phenomena reflects variation at that syntactic level. The proposed theory is tested in detail against the facts of Greenlandic Eskimo, a language with an ergative system of case and agreement and typologically unusual scope and binding relations.

- [6] 1995a, ‘Quantification in Eskimo: A Challenge for Compositional Semantics’.
In E. Bach et al, eds., *Quantification in Natural Languages*. Kluwer, Dordrecht, 59–80.

The field method developed in [1] revealed a variety of other scope puzzles concerning adverbial and adnominal quantification in Greenlandic Eskimo. This descriptive study presents an overview of the challenges that quantificational structures of this highly polysynthetic language pose for the theory of compositional semantics. Partial solutions to some of these problems are proposed in [4] and [5], but for the most part these Eskimo puzzles remain unsolved. The NSF project [13] will hopefully provide more answers to these difficult problems.

- [7] 1995b, ‘Remarks on Definiteness in Warlpiri’. With Ken Hale.
In E. Bach et al, eds., *Quantification in Natural Languages*. Kluwer, Dordrecht, 81–106.

The Warlpiri word *panu* can mean either ‘many’ or ‘all’ depending on various factors. This descriptive study presents evidence that this ambiguity is an instance of a larger pattern: the Warlpiri *panu* is a noun, and all bare nominals in this article-less language can be either indefinite or definite (cf. ‘*a* lot’ vs. ‘*the* lot’). A puzzle that remains is why this particular ambiguity is not found, e.g., in Greenlandic Eskimo or Polish, which also lack articles. A possibly relevant fact is that the corresponding words in Eskimo and Polish pattern, not with nouns, but with verbs or adjectives. But it remains unclear how this might bear on the observed difference in semantics.

- [8] 1996a, ‘The Structural Determination of Case and Agreement’. With Ken Hale.
Linguistic Inquiry 27:1–68. (First of two descendants of [3].)

We analyze case in terms of independent constraints on syntactic structures — namely, the Projection Principle (inherent case), the Empty Category Principle (marked structural case) and the theory of extended projections (the nominative, an incompletely extended nominal projection). Driven by the local syntactic configuration, the resulting theory accounts for (i) the locality of case assignment, (ii) all major case systems (accusative, ergative, active, three-way, and split), (iii) case alternations (passive, antipassive, ECM) and (iv) the case of nominal possessors. Structural case may correlate with pronominal agreement because case can, and agreement must, involve antecedent-government by a functional head. However, neither phenomenon implies the other.

- [9] 1996b, ‘Ergativity: Toward a Theory of a Heterogeneous Class’. With Ken Hale.
Linguistic Inquiry 27:531–604. (Second of two descendants of [3].)

The configuration-driven theory developed in [8] reduces the traditional distinction between syntactic and morphological ergativity to a structural difference — namely, opacity or transparency of VP to government from C(omplementizer). This hypothesis is tested against detailed evidence from Greenlandic Eskimo (opaque) and Warlpiri (transparent). The complex case and agreement systems of both languages are fully accounted for, and it is shown that the proposed structures further explain other structure-sensitive phenomena (minimal scope options, A'-binding and A'-control). In each area the differences with respect to transparency have predictable consequences, while the similarities follow from universal syntactic principles.

- [10] 1998, ‘Cross-Linguistic Semantics for Questions’. *Linguistics and Philosophy* 21:1–82.

The Hamblin-Karttunen approach has led to many insights about questions in English. In this article the results of this rule-by-rule tradition are reconsidered from a crosslinguistic perspective. Starting from the type-driven XLS theory developed in [4] and [5], it is argued that evidence from simple questions (in English, Polish, Lakhota and Warlpiri) leads to certain revisions. The revised XLS theory then immediately generalizes to complex questions — including scope marking (Hindi), questions with quantifiers (English) and multiple *wh*-questions (English, Hindi, Japanese). Eliminating language- and construction-specific information from the compositional rules, in favor of universal semantic filters, leads to analyses that not only generalize across unrelated languages but are also empirically more accurate, not less.