

Operator, information: Revisiting the operator projection in RRG, with special emphasis on tense, aspect, and finiteness

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This presentation tackles a wide range of questions surrounding the treatment of functional categories ('operators') in Role and Reference Grammar (RRG; Van Valin 2005). I begin by proposing a typology of operators and an evolutionary account of their grammaticalization. This model correctly predicts that operators are not universal, but nevertheless cross-linguistically recurrent. It also imposes severe restrictions on the possible occurrence of covert (unexpressed) operators.

Operator projections capture three types of behavioral properties of operators: (i) their taking particular syntactic units as operands (in RRG, these units are spelled out by the Layered Structure of the Clause model); (ii) the partial dissociation between their operand and their morphological realization as a result of grammaticalization; and (iii) scope relations among operators. I argue that the combination of (ii) and the complex relational semantics of some operators infuses operator projections with a certain degree of fluidity.

The remainder of the presentation probes into the complexities of the tense-aspect-mood domain as a test case, drawing mostly on data from English, Russian, and Yucatec Maya. I propose to incorporate into RRG a unified neo-Reichenbachian theory of tense and viewpoint aspect (and mood) consistent with what has emerged as a consensus model in the temporal semantics literature. The most prominent exponents of this family of approaches are Kamp & Reyle (1993: 483-690) and Klein (1994); an LF-based version was proposed by Demirdache and Uribe-Etxebarria (2004, 2007). The RRG treatment I develop follows Klein's approach most closely.

I assume an informal semantic type system in which both nuclei and cores express situation *types* (i.e., *kinds* of situations/events; Parsons 1990), whereas finite clauses encode propositions about individual situations. The nucleus expresses the relational content of the situation type description and the other core constituents add descriptions of the event participants. Sentences express speech acts that stand in an aboutness relation to the situation described by their matrix clauses; this is the sentence's 'topic situation' (Austin 1950; Klein 2009; Kratzer 2014). Topic situations are anaphorically tracked in discourse.

Following the terminology of Smith (1991), I distinguish between situation aspect, which comprises the temporal properties associated with the situation type description expressed by the nucleus and core, and viewpoint aspect. While situation aspect is not itself an operator (class), aktionsarten in the sense of Agrell (1908) can be defined as operators on situation-aspectual properties. Even though situation aspect is most commonly fully determined only at the core layer, aktionsarten are primarily nuclear-layer operators.

Viewpoint aspects are operators that map the situation type description expressed by the core to the sentence's topic situation. In doing so, they embed the situation type into a causal chain frame from which they select a portion to be instantiated by the topic situation. Following Bohnemeyer (2002), I propose eight primitive notional viewpoint aspect operators. Due to their complex relational semantics, viewpoint aspects

semantically affect the core, clause, and sentence layers. However, I argue that viewpoint aspects are most closely associated with the core layer, since they occur (to a limited extent) in non-finite projections, but require application to a complete situation type description for their interpretation.

Finally, I argue for the treatment of finiteness as a kind of meta-operator in its own right. The primary function of finiteness is to map situation type descriptions to individual situations and, in the case of matrix clauses, to the topic situation. Finiteness plays a role in the verbal/sentential system of grammar that parallels the role of determination in the nominal system. In both cases, the specific morphological categories tied up with finiteness/determination vary across languages. While tense and mood are inherently linked to finiteness, viewpoint aspect may become inextricably linked to finiteness in individual languages as well – I illustrate with Yucatec data. One advantage of the recognition of finiteness as an operator in its own right is that it offers a solution to the puzzle of so-called ‘temporal anaphora’ phenomena in tenseless languages such as Kalaallisut (Bittner 2008) and Yucatec (Bohnenmeyer 2009). Temporal anaphora is the (quasi-)anaphoric tracking of the topic situation in discourse. Following Partee (1973), much of the literature continues to assume that temporal anaphora is a property of tense markers. The evidence from tenseless languages shows that this analysis cannot be correct. I argue instead that temporal anaphora is a property of finiteness.

From its beginnings, RRG was designed as a theory, not merely of syntax, but of the syntax-semantics interface. Operators are a key component of this interface. This lecture aspires to contribute toward greater attention to them.

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