

Review of Rose-Marie Déchaine, *Predicates Across Categories* (Dissertation Amherst, 1993).

For *GLoT International*.

Rose-Marie Déchaine's thesis *Predicates Across Categories* (PAC) is a classic study of the relations between the three parts of speech in a tradition ascribed to Aristotle: subject, predicate, and tense. Déchaine (RMD) argues that the subject is not related to the predicate through thematic role assignment, but through a new relation, the π -relation, which is the subject-predicate relation. This yields a category neutral conception of predication. Predicates headed by *all* lexical categories (N, A, V, P) are related to their subject in the same way, via the π -relation. This is less clearly the case if subjects are related to predicates via thematic role assignment, as categories other than V are not obviously doted with thematic properties in the same way as verbs are. Thus, *John* in *John is sick/a fool/in the garden* is to *sick/a fool/in the garden* what it is to *loves Mary* in *John loves Mary*. This raises the question what the copula *is* is doing there in *John is sick/a fool/in the garden*, and what governs the distribution of copular *be* across languages and constructions. This is where the third Aristotelian element, tense, comes in. RMD proposes that tense is associated with a functional head T which, if morphologically filled, subcategorizes for a Verb Phrase (VP). Copular *be* is analyzed as a verb, heading a VP. This VP intercedes between morphologically filled T and predicates headed by N, A, or P, in order to satisfy the subcategorization requirement on morphological tense. Languages without a copula in non-verbal constructions lack morphological tense, but *no* language lacks TP. RMD argues that zero tense in languages without morphological tense is relevant for the temporal interpretation of sentences, through interaction with aspectual properties of the predicate.

The π -relation, which is defined structurally as well as linearly (the subject precedes the predicate), does a lot of work in the domain of multi-predicate constructions: serial verb constructions, pseudo-coordinations, double complement constructions (involving PPs), resultative constructions, and secondary predicate constructions (involving subject depictives and object depictives). RMD assumes that the θ -relation (thematic role assignment relation) applies to a lexical head and its complement only, thus avoiding overlap of the π -relation and the θ -relation. Moreover, there cannot be more than one complement, the *Single Argument Hypothesis*. It follows that multi-predicate constructions have binary branching structures, a conclusion reached in much research of the past decade. In RMD's analysis, the second predicate in all multi-predicate constructions listed above is adjoined to the projection of the head of the first predicate, giving rise to a projection dominating two heads (a *bivalent* projection). This yields a unification not reached in alternative approaches, involving Larsonian structures or Small Clauses.

Predicates Across Categories is an admirable work, in many respects. My copy has 548 densely printed pages, but I am told that the version that was originally filed had over 1000 pages (the page reduction is the result of lay out requirements, not of cuts). On top of that, the style is extremely crisp and the formulation (including the selection of quotations) is always to the point. One could call this book a collection of monographs (which could each be read independently of the others to great advantage) if it were not the case that each monograph is

remarkably consistent with all the others, each also contributing essential parts to the overall structure.

Also remarkable is RMD's respect for descriptive linguistics, not only in the way she incorporates the results of descriptive work in this thesis (the list of references is impressive, and references in the text are almost always in the form of exact page references), but also in the fresh way she presents and discusses well-known facts and paradigms from English. It appears to me that getting the descriptive part right is an important part of our work, if only because an explanation distilled from description often turns out to be a more sophisticated description, crying out for further explanation (which is progress). This is not to say that RMD has produced a work of descriptive linguistics (as it is commonly understood). It's just that the exactness of her descriptions will be a source of joy for everyone interested in linguistics.

In the remainder of this review, I would like to discuss some of the more important theoretical proposals that RMD makes.

First of all, the proposal that subjects and predicates are related through the π -relation. At first glance, this may not seem to be a giant step ahead, but I think that would be hasty judgment. RMD is careful to point out that the current conception of the subject-predicate relation in the Principles and Parameters approach (or later, for that matter), involving external θ -role assignment, nominative Case assignment, and an extension of the Projection Principle (EPP) to the extent that the structural subject position must always be occupied, is inexact and insufficient at the same time. It is inexact in the sense that the structural subject position is 'doubly licensed' (even if the subject is generated VP-internally, both the Case Filter and the EPP require the subject to occupy the structural subject position). It is insufficient in the sense that many instances of predication (including predication with non-verbal predicates) are not covered in the standard conception of the subject-predicate relation. RMD's π -relation proposal therefore is nothing more, but also nothing less, than the first step in getting our perspective on the subject-predicate relation right.

What's right about the π -relation is that this relation is defined in a category neutral way. Its empirical coverage is much larger than the current system of θ -assignment *cum* Case assignment *cum* EPP. RMD rejects the one alternative which would be conceptually preferable, if executable, namely to generalize one of the well-known relations, θ -assignment, to cover all cases of predication (cf. Williams 1980). The reason I think θ -role assignment cannot be the generalized subject-predicate relation is that there is no obvious sense in which assignment of an external θ -role with a non-verbal predicate is part of the same system as assignment of an internal θ -role by a verb. (The simple fact that an external θ -role is *designated* in Williams 1980 already gives this away: the external θ -role is set apart from all other θ -roles.) Therefore, nothing is lost by passing over existing terminology and calling the subject-predicate relation just ' π -relation'.

More interestingly, if there is a general π -relation, the notion 'external θ -role' is made redundant. This recalls Marantz' (1984) *single role hypothesis* (a head assigns just a single θ -role), leading to a simplification of the description of the thematic properties of heads.

RMD does not discuss much the commonly held view that subjects are generated VP-internally. In her view, subjects are generated in Spec,TP. The most convincing argument in support of the VP-internal subject hypothesis has always been conceptual: on this hypothesis, all θ -roles issued by a head are assigned

within the projection of that head. Obviously, if subjects do not get a θ -role, this conceptual argument vanishes. (RMD 184:fn52 briefly mentions that empirical arguments supporting the VP-internal subject hypothesis based on coordination of unergatives and unaccusatives (*they sinned and were punished*, see Burton and Grimshaw 1992, McNally 1992) cannot be reproduced in her analysis of coordination.)

On the other hand, nothing in the definition of the π -relation excludes that the subject is generated as a sister to VP (or V', assuming no distinction between the two here) rather than as a sister to TP. Apart from locality conditions, all that is required by the definition is that the subject precedes the predicate and that the projection of the sister of the subject does not exclude the predicate. The VP-internal subject hypothesis is tenable, on this definition of the π -relation, as the predicate and the sister of the subject coincide in that case, and the VP (the projection of the sister of the subject) does not exclude the predicate by definition (as it is also the projection of the predicate). RMD seems to assume that the *external subject hypothesis* she adopts follows from the distinction between θ -role assignment and π -relatedness, but I fail to see how. If θ -role assignment defines the head-complement relation, there is every room for a VP-internal subject-predicate relation, without mixing up the θ -domain and the π -domain (see also Heycock 1991).

On the other hand, accepting the external subject hypothesis, it does not follow that the head introducing the subject has to be Tense, rather than a zero head *Pr* (as in Bowers 1993). The central role of Tense in PAC does not follow from the external subject hypothesis, and is an empirical matter. This becomes relevant if we consider the structure of Small Clauses, an alternative for the bivalent projections proposed by RMD, at least for a number of constructions discussed in this context.

RMD analyzes ECM constructions (*John considers Mary a fool*), which feature clausal complementation with a zero Tense head in the complement, and resultative constructions (*John ran the soles of his shoes thin*) differently. The latter are analyzed as involving a bivalent projection, with *the soles of his shoes* a complement of *ran* and *thin* a secondary predicate, left adjoined to the projection of the verb. This makes resultatives structurally akin to object depictives (*John submitted the manuscript unfinished*). A problem with this analysis of resultatives is that the head-complement relation between *ran* and *the soles of his shoes* is not justified by a thematic relation between *ran* and *the soles of his shoes*. In this sense, resultatives are comparable to ECM constructions. Admittedly, it is not clear that *the soles of his shoes thin* can be analyzed as a clausal complement headed by zero Tense, just like *considers Mary a fool*. But it also is not clear that zero Tense is the only type of element that could head a clausal complement. If Bowers (1993) is right, all Small Clauses are headed by a zero head 'Pr'. This would make resultative complements structurally comparable to ECM complements.

The absence of a θ -relation between *ran* and *the soles of his shoes* might be taken to illustrate that the head-complement relation is not defined by a thematic relation any more than the subject-predicate relation is. One wonders whether, after abandoning external θ -role assignment, one could take the additional step of doing away with θ -theory altogether. This is the approach taken by Hoekstra (1990), according to which the complement of a verb serves to introduce an end point to the event referred to by the verb. *The soles of his shoes thin* marks the end point of the running, thus creating an eventive predicate out of a stative verb.

RMD's discussion of the redundancy of external θ -role assignment makes one wonder why a discussion of the status of internal θ -role assignment, with its consequences for the analysis of resultatives and other constructions for which a Small Clause analysis has been proposed, has been left out.

There is some discussion of the properties of resultatives vis-à-vis depictives and ECM-constructions, but this is inconclusive (p. 145ff). These matters are hard to settle on empirical arguments only.

Also disappointing is RMD's discussion of the dative alternation. The prepositional variant (*give a book to Mary*) is analyzed as a bivalent projection, with the PP adjoined to the projection of V. The prepositionless variant (*give Mary a book*) receives a different analysis: the indirect object is the complement of the verb, and the direct object is adjoined to the indirect object. A problem with this analysis is that it is not clear that the indirect object has the status of (direct) complement to the verb (a problem that has been with us at least since Chomsky 1981). The Small Clause analysis (e.g. Kayne 1984) does not suffer from this problem.

It appears to me that adopting the Small Clause analysis would not put RMD's analysis of predication in any kind of jeopardy. There may be a question as to what heads the Small Clause. Here, Bowers (1993) may be right in assuming that there is a Pr element heading the Small Clause, or there may be an empty head for purely structural reasons (cf. Kayne 1994). Finally, it might be the case that Stowell (1983) is right in assuming that the Small Clause is just a projection of its head (the *Subjects Across Categories* hypothesis). None of these solutions is incompatible with RMD's definition of the π -relation.

Perhaps what blocks these possibilities is that they detract from the all-importance of tense in the proposed analysis of predication. Tense is what makes predicates visible (the *Predicate Visibility Condition*, requiring a predicate to be c-commanded by tense). Moreover, morphological tense requires the predicate to be verbal (via category-selection). If there is no morphological tense, there still must be a TP, headed by zero T (the *TP Hypothesis*).

The Predicate Visibility Condition is an extension of earlier proposals according to which a VP must be licensed by Tense (e.g. Fabb 1984, Guéron and Hoekstra 1988). If predication is category neutral, this requirement must be generalized over all predicates (p. 297).

However, although I agree with RMD that we should have a category neutral theory of predication, it is not so clear that we can immediately transfer the visibility conditions proposed for VP to predicates of other categories. For Fabb (1984), the visibility condition is motivated by θ -theory: VP must be licensed in order for V to assign its θ -roles. But the importance of θ -role assignment is not so clear in other categories than VP (assuming that it is still relevant inside VP). For Guéron and Hoekstra (1988), Tense-marking is a defining characteristic of verbal projections, setting them apart from nominal projections. Again, a transfer of Tense-marking to non-verbal projections is not clearly called for. So, it may still be the case that tense is something that pertains to verbal projections in particular, for reasons that have nothing to do with predication.

RMD backs up her hypothesis that morphological tense c-selects for a verbal projection with a beautiful theory of categorization (p. 71). Taking a moderate approach to the architecture of the functional domain, RMD distinguishes four universal functional categories: Tense, Comp, Det, and Kase. Adopting a privative feature system involving three features ([functional], [referential], and [nominal],

where V, T, D, and N are [+referential]), RMD reaches the following generalizations (my formulation):

- (1) An [α functional] head c-selects an [α referential] complement
- (2) A [+functional], [α nominal] head c-selects an [α nominal] complement
- (3) A [-functional] head selects a [+functional] complement

For T, which is [+referential], [+functional], this implies that it c-selects a VP (V being [+referential] only).

Unfortunately, on p. 315, we understand that this c-selection property of T applies to morphologically filled T only. If T is not associated with any kind of morphology (zero tense), the complement of T can be a projection of N, A, or P (i.e. all lexical categories except VP). Taking the system outlined in (1)-(3) seriously, this can only mean that the zero tense element on p. 315 is not identical to the element identified as T on p. 71. The latter participates in the system in (1)-(3) and c-selects for VP, the former does not.

RMD presents a very interesting discussion of temporal interpretation in zero tense languages (of which we all have judgments to some extent, if Headlines is among the zero tense languages, cf. Stowell 1991) (p. 432ff). In the absence of an overt marker of temporal reference, the temporal reference is interpreted as overlapping with the utterance situation (p. 443). In that case, the predicate type is decisive for temporal interpretation (p. 440): “A state which overlaps with the utterance situation is non-past. A completed event which overlaps with the utterance situation is past. A stativized event is ongoing and is either progressive or generic according to whether it is viewed as a Stage-level or Individual-level property respectively.” RMD expresses these generalizations in terms of interpretation of events and states with respect to zero Tense. But I find it hard to distinguish between an analysis involving a syntactic zero tense node which the interpretation is hooked up to, and an analysis involving no syntactic tense position at all. If anything, RMD’s findings demonstrate that tense is not needed for interpretation of the temporal reference.

When T is understood as morphological tense, the c-selection generalizations provide an elegant explanation for the distribution of the copular verb *be*. It appears wherever T c-selects a VP, and no verbal predicate is present. *Be* being a kind of null verb, it steps in to provide the necessary VP complement to T. If languages without morphological tense lack T, no restrictions on the categorial status of the predicate are predicted. Hence, there need not be a copular verb that puts a verbal layer on top of a non-verbal predicate.