'Predicate': A Grammatical Relation*

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References

0. Introduction

Because grammatical relations play a fundamental role in syntax, syntactic representations in the form of relational networks (RNs) have been introduced which directly represent the grammatical relations elements bear to other elements. The fact that an element $\underline{a}$ bears a relation GR_x to an element $\underline{b}$ at a level of representation c_i is represented by means of an arc with $\underline{a}$ as head, $\underline{b}$ as tail, R-sign 'GRx' and coordinate c_i.[1]

This paper argues that there are indeed empirical grounds for recognizing the notion of 'predicate' as a grammatical relation. Thus, the class of grammatical relations that elements of a clause can bear to the clause includes the Predicate relation, and the fact that an element $\underline{a}$ bears the Predicate relation to a clause $\underline{b}$ at a given level can be represented by means of an arc with R-sign 'P' (the R-sign of the Predicate relation) and with $\underline{a}$ as head and $\underline{b}$ as tail of the arc. Thus, the simplified RN[2] for the clause

(1) Tom works in Tijuana.

would be:

(2)
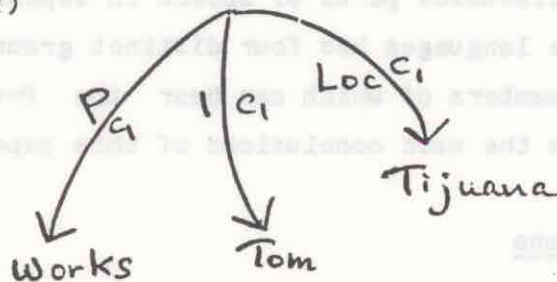
The point of relevance here is the P-arc headed by the verb <u>works</u>.

Once P-arcs are admitted in RNs, questions arise concerning the number of P-arcs there may be in the RN of a clause, whether different elements can head P-arcs in different strata, and so on. The following can be proposed as a universal:

(3) The Predicate Uniqueness Law

> Every stratum of every basic clause node[3] contains
>
> exactly one P-arc.

This law excludes from the class of well-formed RNs for natural languages
any RN in which a basic clause node has a stratum with more than one P-arc,
or a stratum with no P-arcs. However, I will not attempt to justify this
law here. I also ignore here the question of whether distinct elements can
head P-arcs with the same tail (i.e. the question of whether distinct ele-
ments can bear the Predicate relation to the same basic clause node at dif-
ferent levels).

   This paper assumes that there are grounds (internal to the grammars of
individual languages) for distinguishing different grammatical categories
or "parts of speech," and argues that the notion of 'predicate' is not a
categorial but a relational notion, and that 'Predicate' must therefore be
recognized as a grammatical relation. §1 states the basic distinction
between categorial and relational notions and the form of argument to be
used. §2 gives an argument for the Predicate relation based on word order
rules in Cebuano and Choctaw, and §3 gives an argument based on hypotheti-
cal forms in Palauan. §4 briefly discusses parts of speech in Japanese and
Russian, showing that each of these languages has four distinct grammatical
categories (or "parts of speech") members of which can bear the Predicate
relation to clauses. §5 summarizes the main conclusions of this paper.

1. Categorial vs. Relational Notions

   The basic distinction between categorial and relational notions can be
simply stated. A word can be assigned to one category or another (noun,
adjective, verb, etc.) on the basis of certain intrinsic properties; its
category membership does not vary from one clause to another.[4] Relational
notions (subject, direct object, etc.), however, concern the relation a
given element bears to a given clause, and this may be different in dif-
ferent clauses, or in the same clause at different levels. Thus, a given
nominal can be the subject of one clause, the direct object of another, and

can also be both the subject and the direct object of the same clause at different levels, or even at the same level.[5]

A basic form of argument that can be used to show that a given notion is relational rather than categorial is simply to show its independence of category membership. Thus, for example, arguments for a relation such as the 3-relation or the chomeur relation consist of showing that the grammars of individual languages and/or linguistic universals must refer to the relation and that the rules or universals in question cannot be stated in terms of category membership. In most cases, the second step is so obvious that it is not made explicit; such arguments typically consist of showing that the same nominal, or similar nominals, behave differently in examples in which they bear different grammatical relations. If the rules or generalizations in question could be stated in terms of the category membership of the elements in question, some other argument would be required for stating them in terms of grammatical relations.

In this paper, I argue that the notion 'predicate' is relational rather than categorial, and that 'Predicate' must therefore be included in the class of grammatical relations that elements of a clause can bear to the clause. The basic form of argument is the same as that used to argue for other grammatical relations: it is shown that rules and generalizations in individual grammars must refer to the notion, and that it is independent of category membership. However, there is a superficial difference between the arguments used here and those used in other cases. While arguments for certain other grammatical relations show independence of category membership by showing that elements with the same category membership behave differently in cases where they bear different grammatical relations, the arguments used here show that elements that differ in category membership behave alike in cases where they bear the same grammatical relation — the Predicate relation. Elements bearing the Predicate relation in English may belong to any of (at least) three different grammatical categories: Verb, Adjective, and Noun.[6]

(4) a. Tom works in Tijuana. [Verb]

　　　b. Tom is tall. [Adjective]

　　　c. Tom is a teacher. [Predicate nominal]

The arguments for the Predicate relation consist of showing that the grammars of individual languages contain rules that treat predicates alike, regardless of their category membership. This can be captured in a theory of grammar in which the notion 'Predicate' is reconstructed as a grammatical relation, and the rules of the languages in question are formulated in terms of well-formedness conditions on RNs that refer to P-arcs.

Among elements that bear the Predicate relation in clauses, verbs and adjectives differ from nominals in one respect: the Predicate relation is the only relation that verbs and adjectives can bear to clauses, while nominals can bear other grammatical relations as well. Arguments showing only that verbs and adjectives behave alike in some way do not exclude the possibility that the rules in question refer to a disjunction of grammatical categories, or that verbs and adjectives are both members of a single grammatical category, as proposed by Lakoff (1970).[7] Where it can be shown that predicate nominals behave like verbs and adjectives, while nominals bearing other grammatical relations behave differently, the argument for the Predicate relation is stronger. In such cases, the behavior of predicate nominals cannot be accounted for by means of a rule referring to category membership, for such a rule would fail to distinguish between nominals bearing the Predicate relation and those bearing the subject relation, direct object relation, etc. For this reason, the arguments in this paper are based on cases in which predicate nominals behave like verbs and adjectives. These constitute the stongest type of argument that the phenomena in question must be stated in terms of the Predicate relation instead of category membership.

2. Word Order Rules

In order to account for word order in individual languages, one can define a relation "Linear Precedence," and state which elements bear the Linear Precedence relation to which other elements by means of rules in individual grammars that are formulated in terms of grammatical relations. The Linear Precedence relation must be represented in reasonably complete RNs for particular sentences, but in the simplified RNs given here and in much of the other literature on relational grammar, LP-arcs are systematically omitted.

Questions concerning the nature of the Linear Precedence relation and the rules stating it in individual grammars are beyond the scope of this paper. My goal here is to show that such rules whose effect is to provide the correct linear order of elements in sentences also provide arguments for conceiving of the notion 'predicate' as a grammatical relation. To make this point, it is not necessary to discuss the formal nature of such rules. The discussion here will therefore be extremely informal, showing that predicate nominals behave like verbal predicates with respect to the word order patterns of individual languages. The relevant generalizations will be captured by grammars whose word order rules are stated in terms of the Predicate relation (referring to P-arcs in RNs) rather than in terms of categorial notions such as "Verb".

Consider Cebuano, a Philippine language studied by Bell (1976, to appear) in which the verb normally stands first in the clause:

> (5) Magluto' si Rosa ug bugas.
>   ACT/cook NOM   OBL rice
>   'Rosa will cook some rice.'

If the rule responsible for the initial position of verbs refers not to the category 'Verb' but rather to the relation 'Predicate' (i.e. to elements heading P-arcs in RNs), then it is predicted that predicate nominals will also be clause-initial. And this is correct:

(6)   Maestra   si   Rosa.

     teacher   NOM

     'Rosa is a teacher.'

Note that Rosa in (6) is marked with the nominative marker si. Under Bell's analysis, Cebuano has a rule that ensures nominative marking for nominals heading a final-stratum 1-arc in a clause. Thus, if Rosa heads a final-stratum 1-arc in the RN associated with (6), its nominative marking will be accounted for automatically by an independently motivated rule. The Predicate Uniqueness Law in (3) requires that there must also be a P-arc. Hence, maestra must head it. Thus, the simplified RN for (6) must be:[8]

(7)

$$P \underset{c_i}{\diagup} \quad 1 \underset{c_i}{\diagdown}$$

maestra   Rosa
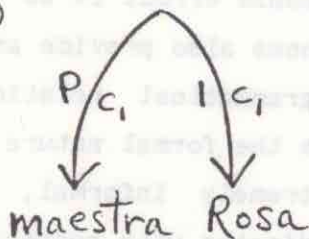
Given (7), the initial position of maestra in (6) and that of magluto' in (5) result from the same rule, which assigns clause-initial position to the element heading a final-stratum P-arc. That rule embodies the claim that it is not an accident that maestra precedes Rosa in (6); this and the initial position of magluto' in (5) are different aspects of the same fact.

    Now consider:

(8)   Rosa   ang   maestra.

       NOM   teacher

     'The teacher is Rosa.'

The nominative marking ang on maestra indicates that it heads a final 1-arc. Since there must also be a P-arc, Rosa must head it. The simplified RN for (8) is thus:

(9)

$$I \quad c_i \quad P \quad c_i$$
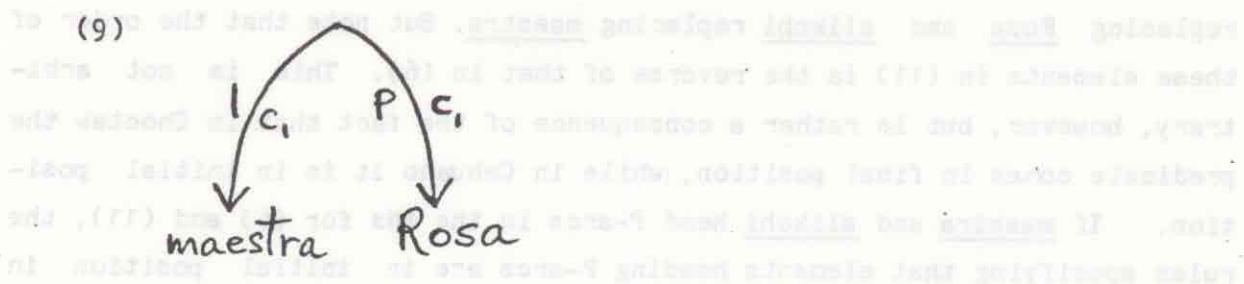
maestra   Rosa

The initial position of Rosa in (8) now follows form the same rule that assigns initial position to magluto' in (5) and to maestra in (6).

It is claimed, then, that the initial position of magluto', maestra, and Rosa in their respective sentences constitutes a single phenomenon. A priori, the initial position of magluto' in (5) does not entail that of maestra in (6) or Rosa in (8). But the fact is that all three are in initial position. If they all head P-arcs in their respective RNs, the grammar of Cebuano will be able to capture the generalization. In order for this to be the case, 'Predicate' must be a grammatical relation that is independent of category membership.

Now consider Choctaw, a Muskogean language of Mississippi and Oklahoma in which the verb is normally in clause-final position:[9]

(10) Hattak-at oho:yo-yã chokka í-kãchi-tok.

man-NOM woman-OBJ house 3DAT-sell-PST

'The man sold the house to the woman.'

In (10), the verb íkãchitok is in final position. Not only verbal predicates, but also predicate nominals, stand in final position:

(11) Mary-at alikchi.

NOM doctor

'Mary is a doctor.'

In (11), Mary has the nominative ending –at, which indicates that it heads a 1-arc. The nominal alikchi is the predicate. Thus, the RN of (11) in Choctaw is just like that of (6) in Cebuano – namely, (7), with Mary

replacing <u>Rosa</u> and <u>alikchi</u> replacing <u>maestra</u>. But note that the order of these elements in (11) is the reverse of that in (6). This is not arbitrary, however, but is rather a consequence of the fact that in Choctaw the predicate comes in final position, while in Cebuano it is in initial position. If <u>maestra</u> and <u>alikchi</u> head P-arcs in the RNs for (6) and (11), the rules specifying that elements heading P-arcs are in initial position in Cebuano and in final position in Choctaw will yeild the desired results.

Now consider:

(12) Alikchi-at Mary.

doctor-NOM

'The doctor is Mary."

The nominative ending -<u>at</u> on <u>alikchi</u> indicates that it heads a 1-arc, so <u>Mary</u> is the predicate. Thus, the RN of (12) in Choctaw is like that of (8) in Cebuano, namely (9), with <u>Mary</u> again replacing <u>Rosa</u> and <u>alikchi</u> replacing <u>maestra</u>. The fact that the order of elements in (12) in Choctaw is the reverse of that of (8) in Cebuano is again due to the fact that in Choctaw the predicate is in final position, while in Cebuano it is in initial position. This will result from the RNs proposed here and word order rules referring to P-arcs.

Many discussions of word order in the literature, apparently following Greenberg (1963), speak of languages as having "VSO," "SVO," "VSO," etc. word order, or speak of languages as being "verb-initial," "verb-final," etc. Implicit in this terminology is the claim that the rules responsible for the word order patterns of individual languages refer to the category "Verb," i.e. that they refer to category membership. In all the cases with which I am familiar, the evidence seems to show that such rules refer not to category membership, but rather to grammatical relations.[10] Since verbs, adjectives, and predicate nominals, which differ in category membership, may all bear the Predicate relation (and hence head P-arcs in RNs), the effect of such word order rules is to treat elements bearing the Predicate relation alike, despite differences in category membership. In other words, the designations "SVO," "SOV,' "VSO," "verb-initial," "verb-final,"

etc. seem to be incorrect. It would be more accurate to speak of "SPO languages," "SOP languages," "predicate-initial languages," etc. It is well known that clitics have different linear position from other elements, and there is a vast literature dealing with the position of the verb in various languages, but the more general question of the extent to which the linear position of elements in clauses depends on category membership and the extent to which it depends on grammatical relations has not been studied in depth. It is hoped that future research will address this question.

3. Hypothetical Forms in Palauan

An argument for recognizing 'Predicate' as a grammatical relation can be based on the so-called "hypothetical forms" in Palauan, an Austronesian language studied by Josephs (1975). In a variety of syntactic environments in Palauan, the hypothetical form of the pronoun (underlined in the examples below) is prefixed to the predicate:[11]

(13) a. kulim

'(if) I drink'

b. lolim

'(if) he/she/it/they drink(s)'

(14) a. A kbo er a Guam, e ak mo kie er a blil a Toki.

'If I go to Guam, I'll stay at Toki's house.'

b. Ng diak lebo er a party.

'He's not going to the party.'

(15) a. A kusuub e ak mo pass er a test.

'If I study, I'll pass the test.'

b. A losuub e ng mo pass er a test.
    'If he studies, he'll pass the test.'

The hypothetical pronouns show fewer person/number distinctions than any of the other pronoun sets in Palauan. In particular, there is no distinction between singular and plural forms in the second and third persons. In the examples in (15-17), the hypothetical forms of the pronouns are prefixed to verbs designating activities. They also appear on verbs describing states or conditions:

(16) a. Ng diak ksecher.
        'I'm not sick."

     b. A mubi a dimlak lemekngit.
        'The movie wasn't bad.'

It is not clear whether or not there is motivation internal to Palauan for treating these statives as categorically distinct from active verbs, e.g. for treating them as adjectives. What shows that the rule for prefixation of hypothetical pronoun forms must be stated in terms of the Predicate relation is the fact that these forms appear prefixed to predicate nouns as well as to verbs:

(17) a. Ng diak ksensei.
        'I'm not a teacher.'

     b. Ak mo olengull se el kbo krubak.[12]
        'I'm going to take things easy when I get to be
        an old man.'

In (17), the hypothetical pronoun k- is prefixed to the nouns sensei 'teacher' and rubak 'old man.' Crucially, these examples exemplify predicate nominal constructions, in which a nominal bears the Predicate relation. This shows that the rule for hypothetical forms in Palauan cannot simply refer to the category 'Verb,' but must refer to the Predicate

relation instead. If it refers to the Predicate relation, it will correctly account for the fact that hypothetical pronoun forms appear with predicates, regardless of their categorial membership.

The hypothetical forms in Palauan show that there are generalizations internal to the grammars of individual languages that must be stated in terms of the Predicate relation. The rules for linear precedence in various languages, illustrated here by Cebuano and Choctaw, show the same thing. These examples support the conception of 'Predicate' as a grammatical relation. The prediction is that generalizations that must be stated in terms of this relation will also be found in the grammars of other languages.

4. "Parts of Speech" in Japanese and Russian

4.1 Japanese

The grammar of Japanese must distinguish four different types of predicates, based on what are primarily morphological criteria.

(18) Taroo wa nitiyoobi ni sae hataraku.

          TOP Sunday on even works

      'Taroo works even on Sundays.'

(19) Sono rekoodo wa subarasii.

      that record TOP excellent

      'That record is excellent.'

(20) Sono rekoodo wa dame da.

      that record TOP bad is

      'That record is bad.'

(21) Yamada-san wa ginkoo-in da.

              TOP bank-employee is

'Mr. Yamada   is a bank employee.'

(22)   Ginkoo-in   wa   Yamada-san da.
       bank-employee   TOP   is
       'The bank employee is Mr. Yamada.'

Predicates like <u>hataraku</u> in (*18*) are usually called verbs, while those like <u>subarasii</u> in (*19*) are usually called adjectives. These examples illustrate the fact that they take different endings. The predicates in (*20-22*) differ from those in (*18-19*) by virtue of the fact that they occur with forms of the copula (<u>da</u> in these examples). A difference between predicates like <u>dame</u> in (20) and predicate nominals like <u>ginkoo-in</u> in (21) appears in relative clauses; the former appear with <u>na</u>, and the latter with <u>no</u>:

(23)   dame na rekoodo
       'a bad record'

(24)   ginkoo-in no Yamada-san
       'Mr. Yamada, who is a bank employee'
       'the Mr. Yamada who is a bank employee'

The three types of predicates in (18-20) differ from the predicate nominals in (21-22) in an important respect: the Predicate relation is the <u>only</u> grammatical relation they can bear to clauses. Thus, they cannot be subjects, direct objects, Comitatives, etc. The predicates in (21-22), on the other hand, being nominals, can also bear other grammatical relations to clauses.

Thus, whereas English has (at least) three classes of predicates (verbs, adjectives, and nominals), Japanese has (at least) four. The point of interest here is the fact that, ignoring the complication caused by the appearance of auxiliaries in (20-22), they behave alike with respect to word order rules; all four types of predicates appear in final position.

If they head P-arcs in their respective RNs, and if the word order rules of Japanese specify that an element heading a final-stratum P-arc appears in clause-final position, the linear position of the different types of predicates will be accounted for.[13] Japanese thus provides an argument of the type given in §2 for recognizing Predicate as a grammatical relation.

4.2 Russian

Verbs are distinguished from adjectives in Russian by various morphological and surface syntactic criteria. For example, verbs but not adjectives are inflected for tense, and have infinitival, gerund, participial, etc. forms. Verbs but not adjectives agree with their subjects in person in the non-past. Adjectives but not verbs regularly co-occur with the copula.[14]

By all these criteria, <u>rabotaet</u> in (25) is a verb and <u>molod</u> in (28) is an adjective.

(25) Boris rabotaet na tom zavode.
          works   at that factory
     'Boris works at that factory.'

(26) Boris molod.
           young
     'Boris is young.'

There are also predicate nominals:

(27) Boris - učitel'.
               teacher
     'Boris is a teacher.'

<u>Učitel'</u> is a noun, behaving like other nouns in all relevant respects. There is also another class of predicates that do not fit into any of the three categories above. These include <u>nel'zja</u> 'impossible, forbidden,'

možno 'possible, permitted,' nado 'necessary,' pora 'time,' žal' 'sorry,' and others. These predicates are like adjectives and predicate nominals in occurring with the copula, but they differ from them morphologically; they are invariant in form, exhibiting no changes in form for agreement with the subject, for case, or for anything else. By the morphological criteria distinguishing verbs, adjectives, and nouns, these predicates do not fall into any of these categories. Syntactically, they govern the Inversion construction:[15]

(28) Borisu žal'   tvoju   sestru.
      DAT   sorry   your   sister/ACC
      'Boris feels sorry for your sister.'

I will therefore refer to these predicates as "invariant Inversion predicates."

Relevant to this paper is the fact that invariant Inversion predicates behave syntactically like other predicates in (at least) three ways. First, with respect to word order, they are like other predicates in that they generally occur in second position in the clause in normal, unmarked word order, as can be seen by comparing (28) with (25-27). Deviations from this unmarked word order for invariant Inversion predicates seem to be governed by roughly the same conditions that govern deviations from this pattern for other predicates. Second, they are like other predicates in governing particular syntactic constructions, as evidenced by the fact that they govern the Inversion construction. Third, they behave like other predicates with respect to questions formed with the question particle li. In yes-no questions in which a particular element is isolated as the element being questioned, that element appears in initial position followed by the question particle li. Compare (25) with:

(29) Boris li rabotaet na tom zavode?
      'Is it Boris that works at that factory?'

(30)　Na tom zavode li rabotaet Boris?
　　　　'Is it at that factory that Boris works?'

In neutral yes-no questions, however, the predicate appears in initial
position followed by li. With respect to this phenomenon, not only verbs
and adjectives, but also predicate nominals and the invariant predicates
mentioned above behave alike:

(31)　Rabotaet li Boris na tom zavode?
　　　　'Does Boris work at that factory?'

(32)　Molod li Boris?
　　　　'Is Boris young?'

(35)　Učitel' li Boris?
　　　　'Is Boris a teacher?'

(34)　Žal' li Borisu tvoju sestru?
　　　　'Does Boris feel sorry for your sister?'

If predicates of all four types head P-arcs in their respective RNs, and if
the rule(s) whose effect can be seen in (31-34) refer to elements heading
P-arcs, then the grammar of Russian will capture the generalization that
all four types of predicates behave alike with respect to neutral yes-no
questions with li. This phenomenon thus provides a novel argument for
recognizing Predicate as a grammatical relation.

It is interesting to compare the conclusion reached here with respect
to morphologically invariant Inversion predicates such as žal', nel'zja,
etc. with Ščerba's (1928) classic study of the parts of speech in Russian.
While these predicates are often classified as adverbs because of their
morphological invariance, Ščerba rejects this classification, noting that
unlike adverbs, they do not modify verbs, adjectives, or other adverbs. He
further points out that they constitute a single group together with other
elements governing what I call the Inversion construction, pointing out

that these cannot be considered adverbs or adjectives either. Ščerba pro-
poses that these elements might constitute what he calls a "stative
category" whose formal earmarks would be morphological invariance and
occurrence with the copula, the first property distinguishing its members
from verbs and adjectives, and the second from adverbs. Ščerba expresses
some doubt as to whether this is a clear category in Russian, and goes on
to point out that there are also personal constructions in Russian (i.e.
constructions with an overt subject in the nominative case) that might be
included in this category. Here he seems to be relying essentially on the
semantic criterion of stativity. He also cites doublets in Russian where
the meaning is essentially the same, but the two sentences are constructed
with different parts of speech. Ščerba's doubts concerning the validity of
the "stative category" he proposes seem to be based on the great variety of
ways the putative category would be realized morphologically, for, as he
says, "the means of its expression are too variegated; however, uncontro-
vertible for me are the attempts of Russian to have a special stative
category, which is worked out in various ways, but has not yet, and perhaps
never will, receive a general mark." He concludes that "formally the sta-
tive category would have to be defined in this way: words in construction
with the copula, but which are neither full adjectives nor the nominative
case of nouns; they are expressed either with an invariant form, or in the
form of a noun with a preposition, or by means of forms with gender endings
– zero for masculine, -a for feminine, -o, -e for neuter – or by means of
the instrumental case form of nouns (which then loses its normal, i.e.
instrumental, meaning)."

What emerges most strongly from Ščerba's discussion are his underlying
assumptions that the phenomena he is discussing must be treated in
categorial terms, and that in order for something to be a valid category in
a language it should have some "general mark," presumably a morphological
one. On the morphological level, his "stative category" is a heterogeneous
grab-bag. Semantic considerations are apparently relevant as well. Miss-
ing from Ščerba's discussion is a clear recognition of:

(35) a. the distinction between categorial and relational notions

    b. The notion 'predicate' as a syntactic and relational notion,
i.e. as a grammatical relation[16]

If the notion 'predicate' is construed as a grammatical relation, as pro-
posed here, then what appeared as difficulties and contradictions to Ščerba
disappear. On the morphological level, one distinguishes various
categories such as verbs, adjectives, nouns, prepositions, etc. The
invariant Inversion predicates constitute a separate morphological
category. What verbs, adjectives, nominals, and the invariant Inversion
predicates have in common is the ability to head P-arcs in RNs. This
approach makes it possible to account both for the ways these different
types of elements differ and for the ways they are alike. Morphological
differences are accounted for by rules accounting for the morphology of
verbs, adjectives, etc. and by the assignment of the various types of ele-
ments to their respective morphological categories. The ways the various
different types of elements behave alike are accounted for in the syntax by
means of the fact that they all head P-arcs in RNs, and by having the
relevant syntactic rules refer to elements heading P-arcs. Once the notion
'predicate' is recognized as a grammatical relation, different in kind from
the notion of membership in one or another grammatical category, the
apparent difficulties and contradictions disappear. Some properties of
lexical items are due to their category membership, while others are due to
the grammatical relation(s) they bear in clauses. In this respect, predi-
cates are no different from nominals, some of whose properties in particu-
lar instances are due to their being nominals, while others are due to the
grammatical relation(s) (subject, direct object, predicate, etc.) they bear
to particular clauses.

5. Conclusions

    I have argued here that the notion 'predicate' is to be construed as a
grammatical relation, arguing that the notion is independent of category
membership and therefore relational rather than categorial in nature. The
arguments have shown independence of category membership by showing that
verbs, adjectives, and predicate nominals all behave like predicates in

particular instances. The arguments have been brief, illustrating some kinds of phenomena that provide evidence for the Predicate relation. Future research should yield evidence from additional languages that bears on this issue.

Footnotes

1. The basics of the representation of clause structure in terms of RNs are given in Perlmutter and Postal (1977, to appear a) and Perlmutter (to appear c).

2. The simplified RNs given here ignore tense, agreement, auxiliaries, linear precedence relations, and everything else that is not directly relevant to the point(s) at issue.

3. On the notion 'basic clause node,' cf. Perlmutter and Postal (to appear a) and Johnson and Postal (to appear).

4. Participial forms in many languages, which are often taken to be adjectival forms of verbs, raise questions of category membership which need not concern us here.

5.   For example, a nominal that is direct object of a clause at one level
and   subject at another is a crucial element of the universal characteriza-
tion of Passive clauses proposed in Perlmutter and Postal (1977). Nominals
that bear more than one grammatical relation at the same level are recog-
nized under the Multiattachment Hypothesis.   Relevant references include
Hubbard (1979), Perlmutter (to appear b), Perlmutter and Postal (to appear
c), Postal (to appear), and Williamson (1979).

6.   In more precise terms only hinted at here, the node heading a P-arc
(an arc with R-sign 'P') is a nominal node, not a noun node, since predi-
cate nominals may have complex internal structure (including quantifiers,
adjectives, relative clauses, etc.).

     Throughout this paper, I ignore auxiliaries. Thus, examples such as
(4b-c) are discussed as though the auxiliary is did not exist. In a more
complete analysis, such auxiliaries would be treated as predicates taking
(initially unaccusative) complement clauses, and the associated RNs would
involve Raising and perhaps also Clause Union of the type discussed in
Aissen and Perlmutter (1976) Under the name 'Clause Reduction.' But discus-
sion of these matters is beyond the scope of the present paper.

7.   Lakoff shows various ways that adjectives and verbs behave alike, and
concludes that they are therefore members of the same grammatical category.
His solution would not account for the phenomena cited in this paper, with
respect to which predicate nominals behave like verbs and adjectives.
Lakoff attempted to handle in categorial terms what is argued here to be a
relational notion.

8.   I ignore here the possibility that this is an initially unaccusative
clause in the sense of Perlmutter and Postal (to appear b) and Perlmutter
(1978).

9.   I am indebted to William Davies for the Choctaw data cited here.

10.   I use this term loosely. It would be more precise to speak of the
rules referring to arcs in RNs, etc., but I use the looser terminology
freely throughout this paper.

11.   All of the Palauan data cited here is taken from Josephs (1975).

12.   The fact that the verb bo 'become' occurs in the hypothetical form kbo
in this example suggests that (19b) is biclausal in structure, probably
involving Raising of the final subject of the complement. Thus, the first
person nominal would be final subject of both the complement and the matrix
clause, causing the hypothetical form of the first person singular pronoun
to appear on the predicates of both clauses. If pushed to its conse-
quences, this would lead to analyses of certain Palauan constructions that
are different from those proposed by Josephs – in particular, to the
analysis of what he calls 'Passive' as a type of Topicalization, as sug-
gested by Richard Waters. But these matters are beyond the scope of this
paper.

13.   Some examples of Japanese also involve additional complications, e.g.
shared subject Clause Union of the type discussed in Aissen and Perlmutter
(1976) under the name of "Clause Reduction" and/or merger of predicates
into a single phonological word.

14.   The copula does not appear overtly in the present tense.

There is a construction in which verbs co-occur with the copula, e.g.
On govoril byl 'He was about to speak,' but the existence of this construc-
tion should not obscure the basic difference between verbs and adjectives
mentioned here.

There are numerous other differences between verbs and adjectives in Russian, e.g. the adjectives' distinction between 'short form' and 'long form' morphology, their ability to be attributive as well as predicative, and the fact that they are inflected for case.

15. Cf. Perlmutter (to appear d).

16. Ščerba comes closest to recognizing this when, in rejecting the classification of invariant Inversion predicates as adverbs, he says, "in the last analysis this does not give rise to practical inconveniences from a lexicographical point of view, if it is admitted that they are used with the copula and function as the predicate of impersonal sentences" [emphasis mine — DMP]. But he does not develop this idea further.

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