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Author(s): Johanna Nichols

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Secondary Predicates *

Johanna Nichols
University of California, Berkeley

Relational grammar has brought about a new interest in the exploration and description of particular syntactic relations. We can by now identify and talk about, if not completely define, the relations of subject, *chômeur*, and first object or first complement (second term). The present paper extends relational analysis to a class of nominals that has not been systematically examined. It departs from the bulk of relational-grammar inquiry in two respects. First, it is concerned with identifying the nominals in question, rather than deriving, explaining, or even substantively characterizing them. Second, its method is avowedly structuralist. To identify some syntactic relation is to determine its identity or non-identity to some other; thus the basic theoretical tools for the study are contrast, co-occurrence, and complementary distribution. These are tested through commutation in classic fashion. Once the syntactic relation has been circumscribed and subclassified, substantive characteristics — primarily semantic and pragmatic properties — are explored. This approach may be described as paradigmatic, rather than syntagmatic, in its orientation (the distinction is from Pettit 1975, ultimately from Saussure). That is, it is concerned with giving a contrastive analysis, enumerating types as nearly completely as possible, and delimiting them vis-à-vis other construction types. The syntagmatic analysis of the same constructions (Nichols 1978) emphasizes their surface connections with other elements of the texts in which they occur, and their generative derivations, but not their full range.

The constructions in question will be generically termed secondary predicates (they have also been labeled adjuncts, adverbials of various types, attributes, predicate nominals, predicate modifiers, postnominal and postverbal adjectives, copredicates, and types of nexus). 1) Most of the examples below are from Russian and English. In spite of the considerable typological divergence between these two languages, secondary predicates are identical syntactically, semantically, and pragmatically. The same claim can be made for Georgian and Finnish. Secondary predicates in all these languages differ only in morphological treatment and restrictions on the formation of one or another type.

Examples of secondary predicates, from English and Russian: 2)

1	(1)	he works <u>as an engineer</u>	on rabotaet <u>inženerom</u>
	(2)	rocks serve them <u>as support</u>	kamni im služat <u>oporoi</u>
	(3)	adjective functions <u>as sub-</u>
<u>ject</u>	prilagatel'noe vystupaet
<u>podležaščim</u>
	(4)	he played <u>goalkeeper</u>	on igral <u>vratarem</u>
	(5)	they elected him <u>president</u>	ego vybrali <u>prezidentom</u>
	(6)	this herb they use <u>as</u>
<u>medicine</u>	ëtu travu upotrebljajut <u>kak</u>
<u>lekarstvo</u>
	(7)	we interpret this text <u>as</u>
<u>a forgery</u>	ëtot tekst interpretiruem <u>kak</u>
<u>poddelku</u>
2	(8)	he walked along <u>happy</u>	on šel <u>veselyj</u>
	(9)	he came back <u>drunk</u>	on vernulsja <u>p'janyj</u>

(10)	he sat there <u>sad</u>	on sidel <u>grustnyj</u>
(11)	the police brought him home
<u>drunk</u>	milicija privela ego domoj
<u>p'janogo</u>
(12)	he returned <u>a hero</u>	on vernulsja <u>geroem</u>
(13)	he was born <u>blind</u>	on rodilsja <u>slepym</u>
(14)	he died <u>young</u>	on umer <u>molodym</u>
3 (15)	the trilobite fossilized
<u>curled up</u>	trilobit okamenel { <u>svernutym</u>
<u>v svernutom</u>
(16)	first they weigh the
truck <u>empty</u>	snačala mašinu
vzvešivajut <u>pustuju</u>
(17)	he drank the tea <u>cold</u>	on vypil čaj <u>kolodnym</u>
(18)	present your pass <u>unfolded</u>	pred"javljajte propusk <u>v raz-</u>
<u>vernutom vide</u>
4 (19)	<u>as a child</u> he lived in Paris	<u>rebenkom</u> on žil v Pariže
(20)	I knew him <u>young</u>	ja znal ego <u>molodym</u>
(21)	even <u>dead</u> I won't forget	ja i <u>mertvyj</u> ne zabudu
(22)	this tea isn't good <u>cold</u>	<u>sladkij</u> ètot čaj nevkusnyj
(23)	I can't work <u>hungry</u>	<u>golodnyj</u> ja ne mogu rabotat'

I will argue for the unity of the generic relation of secondary predicate, and for the reality of the numbered subtypes above. Note the variety of morphological devices used: in English, nouns with or without the conjunction as, and adjectives without conjunction; in Russian, nouns and adjectives agreeing in case with the controller, nouns and adjectives in the instrumental case, nouns with the conjunction kak 'as', and various prepositional phrases. These morphological devices are for the most part in complementary distribution, determined e.g. by the main verb and/or by the part of speech or lexical content of the secondary predicate. Especially in Russian, the choice of morphological device may have subtle semantic consequences (much has been written on the question of instrumental vs. agreement). But nowhere is the choice of morphological device itself syntactically contrastive. The syntactic relations will be identified in what follows on purely syntactic grounds. 3)

Contrastive properties. The four groups of constructions above reflect the distinction of term and non-term. The underlined nouns in group 1 are terms, specifically first or second objects; in traditional terminology they are governed by the main verbs. The English verbs work, serve, function, play, elect, use, and interpret all govern an object of this type, and all but play and elect require as. Russian rabotat' 'work', služit' 'serve', vystupat' 'appear, function', igrat' 'play', vybirat' 'elect' require instrumental complements; upotrebljat' 'use', interpretirovat' 'interpret' govern complements with the conjunction kak.

Group 2 includes predicate nouns and adjectives which, while not governed by the main verbs, nonetheless form with them fixed constructions or construction types. The first several examples represent a productive construction type: verbs of motion or position, including corresponding transitives, with adjectives of quality (ordinarily the quality is a perceptible, especially visible, one; or it is a physiological or psychological state). The last examples show fixed expression types whose lexical means are more limited: they are restricted to particular verbs and a smaller class of nouns or adjectives (thus

return plus nouns such as hero, victor; die plus rich, young, happy, and a few others; be born plus adjectives such as rich, blind or nouns such as genius). This difference in lexical fixedness is one of degree only, and of little theoretical importance. The force of the entire group of constructions is to tell what condition (state, etc.) the controller was in when the verbal action took place.

Constructions of group 3 likewise tell what condition the controller was in when the action took place. They differ from group 2 only in not representing stable construction types. Virtually any verb designating an action or event, and virtually any adjective designating a concrete, real-world state or condition may enter into such constructions.

Group 4 is distinctive. As with group 3, there is no verbal government and there are no stable construction types. The class of main verbs is virtually without limit: even stative verbs (know) and adjectives (good, cold) are eligible. Constructions of type 4 do not tell what condition the controller is in when the action takes place; rather, they state that the action takes place when, if, or although the controller is in such-and-such a state. This distinction emerges more clearly in their paraphrases. Constructions of type 3 have paraphrases with subordinate clauses of time, in which the original secondary predicate appears as predicate of the main clause. Thus (17)

(17) he drank the tea cold

has the paraphrase

(17') the tea was cold (had gotten cold) when he drank it

Constructions of type 2 have the same paraphrase pattern:

(14) he died young

(14') he was young when he died

Construction type 4, in contrast, has a paraphrase with the original secondary predicate as predicate of the subordinate clause:

(23) I can't work hungry

(23') I can't work when I'm hungry; when I'm hungry I can't work

Constructions of type 1 have no paraphrases of this kind. However, most of them have near-synonyms in which the original secondary predicate appears as predicate of the main clause:

(4) he played goalkeeper

(4') he was goalkeeper for that game

(1) he works as an engineer

(1') he is an engineer by profession

In summary, type 4 is distinctive in permitting a paraphrase in which the original secondary predicate appears in a subordinate clause. All other types have paraphrases or, in the case of type 1, synonyms or near-synonyms, in which the original secondary predicate appears as predicate of the main clause. For each group the paraphrase of the other type is inappropriate. Thus, corresponding to the above (the asterisk marks a non-paraphrase rather than ungrammaticality): 4)

- (17") *he drank the tea when it was cold;
 *when the tea was cold, he drank it
 (14") *he died when he was young;
 *when he was young, he died
 (23") *when I can't work, I'm hungry;
 *I'm hungry when I can't work

This contrast in paraphrases will be restated as one of entailment below. For now, suffice it to note that it is a contrastive property setting type 4 apart from the others. 5)

Group 4 is further distinctive in subdividing into three groups corresponding to traditional circumstantial types: temporal ((19), (20)), concessive ((21)), conditional ((22), (23)). Types 1-3 lack these specific circumstantial meanings.

We can now establish contrast and non-contrast among groups 1-4 on the basis of the structuralist principles mentioned above.

Types 1-3 are in complementary distribution: type 1 consists of the collocation of main verb and its governed complement; type 2, of main verb and secondary predicate in a stable construction type; type 3, of main verbs not lexically marked as entering into governed or other stable constructions, and adjectives of a broad class. The three groups, in other words, are determined by lexical properties of the main verbs. Since a given verb determines a given construction type, overlap and thus contrast is impossible.

However, type 4 contrasts with 1-3. This can be shown by commutation, in the minimal pair: 6)

- (24) he worked in this town as a teacher (type 1)
 (25) he worked in this town as a young man (type 4)

and by co-occurrence. As is well known, a clause may contain no more than one representative of a given syntactic relation type. 7) A single relation may be represented by conjoined NP's, but there can be no more than one non-conjoined NP of a given type per clause. The following examples show multiple secondary predicates, those of type 4 co-occurring with those of types 1-3.

- (26) as a student [type 4] he worked as a waiter [1]
 (27) as a student [4] he often came home from classes drunk [2]
 (28) even as larvae [4], butterflies tend not to fossilize
curled up [3]

Types 1-3 do not co-occur with each other. They have already been shown to be in complementary distribution, determined by lexical properties of the verb. In principle they cannot co-occur.

In summary, type 4 is again shown to contrast with types 1-3. Within type 4, however, the separate subtypes can co-occur.

- (29) even rich [concessive], I'll work better hungry [conditional]
 (30) as a child [temporal] I couldn't work hungry [conditional]
 (31) as a student [temporal] she always helped her friends even
tired [concessive]

These are awkward in English. In Russian, however, with its freer word order and unambiguous morphology, they are entirely acceptable:

- (32) daže medvežonkom on ranenij stanovitsja opasnym
'even as a cub it becomes dangerous (when) wounded'
- (33) ešče studentkoj ona daže ustalaja pomagala druž'jam
'(when) still a student she would help her friends even tired
- (34) daže bogatym emu lučše rabotalos' golodnym
'even rich he worked better hungry'

In summary, the subtypes of group 4 co-occur and therefore contrast. In this respect they behave like the corresponding types of circumstantials, which easily co-occur both as clauses and as NP's. On the other hand, they pattern as a group in contrasting with types 1-3.

We can now turn to respects in which all types function as a group. First, all are initial predicates. All the examples given would be derived by equi from structures in which the main verb and the secondary predicate appeared in separate clauses, each as predicate of its own clause. This structure is reflected more transparently in the paraphrases (17'), (14'), (23'). This amounts to saying, in the terminology of a few years ago, that the controller is the cyclic subject of the secondary predicate. In a structuralist surface analysis this would be described as semantic dependency between secondary predicate and controller (this analysis is explained in Nichols 1978). It accounts for the contrast with manner adverbials, shown in the minimal pair:

- (8) he walked along happy [secondary predicate]
(35) he walked along happily [manner adverbial]
- (8) entails that the individual was in fact happy; (35) does not. Thus the acceptability of (36) vs. the contradiction of (37):
- (36) he walked along happily, but he wasn't really happy
(37) *he walked along happy, but he wasn't really happy

The same facts hold for Russian:

- (8') on šel veselyj (*no ne byl veselym)
'he walked along happy (*but wasn't happy)'
- (38) on šel veselo (no ne byl veselym)
'he walked along happily (but wasn't happy)'

In summary, secondary predicates contrast with manner adverbials in being semantically dependent on their controllers, while manner adverbials are semantically related only to the main verb.

Secondary predicates contrast with nominals which depend only on the controller and not on the verb. Such nominals include adnominal modifiers such as reduced relatives. Compare the secondary predicate of (39) with the reduced relative of (40).

- (39) this trilobite died curled up
(40) here's a trilobite curled up

(The full version of (40) is (41):

- (41) here's a trilobite which is curled up.)

In (39), curled up is dependent on the verb died; in (40) it is not dependent on a verb. In (40) a trilobite curled up is a noun phrase,

while trilobite curled up of (39) is not a noun phrase. Compare the analogous relationship between the secondary predicate of (42) and the adnominal modifier of (43):

- (42) the artist painted this portrait as a young man
 (43) portrait of the artist as a young man

In summary, secondary predicates contrast with adnominal modifiers in that the latter are dependent only on the controller, while secondary predicates are dependent on the verb. (The same fact distinguishes secondary predicates from appositives, which are also adnominal.) This dependency is strictly syntactic (see again Nichols 1978).

The preceding paragraphs have shown how secondary predicates contrast with some of the most closely related syntactic relations. We can now compare them to predicate nominals, i.e. complements of copulas and of the corresponding transitives.

(44) he is <u>sick</u>	on <u>bolen</u>
(45) he was a <u>teacher</u>	on byl <u>učitelem</u>
(46) he became <u>sad</u>	on stal <u>grustnym</u>
(47) he remained <u>gloomy</u>	on ostalsja <u>mračnym</u>
(48) he seemed <u>young</u>	on kazalsja <u>molodym</u>
(49) his illness has made him <u>pale</u>	bolezn' sdelala ego <u>blednym</u>
(50) they consider him a <u>genius</u>	ego sčitajut <u>geniem</u>
(51) he turned out (to be) <u>right</u>	on okazalsja <u>prav</u>
(52) the parents named their son <u>Sergei</u>	roditeli nazvali syna <u>Sergeem</u>

Predicate nominals are in complementary distribution with secondary predicates, by the criterion used above: these verbs govern predicate nominals, which therefore cannot contrast with the nominals of types 1-4. Predicate nominals differ from secondary predicates of type 1 only in their syntactic derivation. Constructions of type 1 are derived by equi from separate clauses. Predicate nominals are not derived by equi. Most start out as complements of their main verbs in structures closely paralleled by the surface syntax. A few ((49)-(51)) are derived by raising. Predicate nominals are unusual among complements of verbs in being semantically (and, in Russian, morphologically) dependent on their controllers. In short, predicate nominals and secondary predicates are non-contrastive and share essential properties. They may be grouped under a single generic category which is probably best called predicate nominal, and which they exhaust.

There are at least three minor types of secondary predicates. One is the resultative construction of Germanic, Finnish, and Georgian

- (53) wash it clean
 (54) laugh yourself sick
 (55) eat yourself thin
 (56) sand it smooth
 (57) pound it flat

These are presumably of type 3, unless the verb class is sufficiently restricted to make them type 2. Another is equi-derived participial complementation with verbs of perception:

- (58) I saw him running away

- (59) we found him working
 (60) we heard him singing
 (61) the watchdogs smelled us coming

This is an identifiable type with a specific verb class, thus of type 2. A third type, formally but not syntactically identical to the second, is raising-derived participial complementation with verbs of perception and cognition. Old Russian and Greek used participles in an analog to the raising-derived accusative-infinitive construction. An Old Russian example (from Nichols, in press):

- (62) Pečenězi že mněša knjazja prišedsa
 Pechenegs particle thought prince (acc.) returned (ppl., acc.)
 'the Pechenegs thought the Prince had returned',
 lit. '...thought the Prince having returned'

This is another type 2 construction.

Secondary predicates, then, have a variety of syntactic sources. In fact any syntactic process which reduces structure and inserts an underlying predicate nominal (most examples are complements of be and become) into another clause will provide another source of secondary predicates.

Substantive properties. The preceding section has established the existence of secondary predicates as a distinct group and as a set of contrastive subtypes. In addition, several positive properties have been established in connection with the contrastive analysis. Secondary predicates are semantically and morphologically dependent on the controller, but syntactically dependent on the verb. 8) All are initial predicates; secondary predicate is a surface relation. They are derived by equi or perhaps, in the case of type 4, by other processes of clause reduction. The force of types 1-3 is to state what condition the controller is in when the verbal action takes place; the force of type 4 is to state that the verbal action takes place when, if, or although the controller is in some state. Type 4 is circumstantial in semantic force, and subdivides into temporal, conditional, and concessive types. Types 1-4 form a scale of decreasing lexical government.

The examples given throughout this paper display a universal property of secondary predicates: their possibilities of formation are restricted by the accessibility hierarchy, usually to subject and direct object. Among the languages I have investigated (in addition to those already mentioned, Lithuanian, Latvian, the remaining Slavic languages, Estonian and minor West Finnic languages), Finnish is apparently unique in regularly permitting controllers to be much lower on the hierarchy. Thus oblique or indirect objects in (63)-(64), possessor in (65), object of comparative conjunction in (66) (controllers are doubly underlined):

- (63) hänelle maksettiin hyvin opettajana
 to him was paid well teacher
 'he was well paid as a teacher' (impersonal passive, lit.
 'him was well paid as a teacher')
 (64) lahettimme hänelle rahaa lapsena
 we sent to him money child
 'we sent him money as a child (when he was a child)'

- (65) vanhempani asuvat hän naapurinaan lapsena
 my parents lived his in neighborhood child
 'my parents lived in his neighborhood as a child (when he
 was a child)'
- (66) ~~tämä~~ puu oli suurempi kuin minä lapsena
 this tree was bigger than I child
 'this tree was bigger than me as a child'

This exhausts the relevant semantic and syntactic properties of secondary predicates. The following sections explore pragmatic and morphological properties.

Pragmatic factors. Types 3 and 4 illustrate a distinction in what may be called pragmatic dependency on the verb vs. independence from the verb. As has been stated, (17) states that the tea was cold when he drank it, rather than that he drank it when it was cold; and (67) asserts that it was when he (or I) was a child that I knew him, not that he was young when I knew him (see again note 4).

- (17) he drank the tea cold
 (67) I knew him as a child

In (17) the verb drank has its own, independent time reference and modal properties. The secondary predicate cold does not have independent time reference and modality. Thus the sentence cannot be taken as asserting that the tea was cold (although it certainly implies this); it asserts only that it was drunk. Negation of the sentence yields ambiguity as to whether the tea was actually cold; thus the two possible continuations of (68):

- (68) he didn't drink the tea cold
 (a) ...he drank it hot
 (b) ...he left it there

The negated (68) does not necessarily entail that the tea was cold.

In contrast, in (67) it is the secondary predicate as a child that has independent time and modal properties. The sentence entails that there was a time when he (or I) was a child, and that was when I knew him; the time reference of knew is determined by that of as a child. This entailment is not affected by negation: (69) still entails that he (or I) was a child at the time in question.

- (69) I didn't know him as a child

The secondary predicates of types 1 and 2 pattern like those of 3 in being pragmatically dependent on the verb. 9) In summary, for types 1-3 the pragmatic properties of the main verb determine those of the secondary predicate; for 4 it is just the reverse.

Although the distinction in pragmatic dependency parallels the distinction in paraphrase types given in section 1, note that the paraphrases themselves do not constitute statements of the entailment patterns. The paraphrase for type 4 puts what is entailed in a subordinate clause. That for type 3 puts the secondary predicate in the main clause, the usual position of assertion, although as secondary predicate it is not asserted.

Related to pragmatics is the role of secondary predicates as focus. For types 1-3 — for pragmatically dependent secondary

predicates — the neutral reading of the sentence out of context is one in which the secondary predicate is focus in a focus-presupposition construction. 10) Thus (1) is preferably taken as an answer to (70) or (71), i.e. it newly communicates the content of engineer and presupposes the rest.

- (1) he works as an engineer
 (70) what does he work as?
 (71) does he work as an engineer (or as a doctor)?

Similarly, (72) communicates cold as requested or new information, and presupposes the rest.

- (72) he drank the tea cold

Constructions of type 4, however their pragmatic organization is to be described, are not obviously simple focus-presupposition structures. (73) could be taken to answer (74), i.e. as presupposing the secondary predicate.

- (73) as a child he lived in Paris
 (74) where did he live as a child?

It does not answer (75).

- (75) when did he live in Paris?

When the secondary predicate is sentence-final

- (76) he lived in Paris as a child

the sentence can be taken to answer (75), but this reading requires special context or intonation to indicate that the answer wished is not a date but a stage in the individual's life. In summary, pragmatically dependent secondary predicates (types 1-3) tend naturally to be focus; pragmatically independent types do not. Impressionistically speaking, the pragmatically independent type splits the focus, and thus the new information, between the verb (with or without its complements) and the secondary predicate.

Morphological factors. The English examples given so far do not exhibit morphological and lexical unity. The variety of simple noun or adjective, preposition, and conjunction could have been extended with more examples. In Russian, on the other hand, although again there is considerable morphological variety, still one device is conspicuous: the predicate instrumental, widespread in Baltic and Slavic. In this section I will give examples of secondary predicates in two more languages, with primary emphasis on morphological devices. For both languages the syntactic and semantic facts, and apparently also the pragmatic facts, are as described above for English and Russian.

Georgian uses the case variously called adverbial and transformative in secondary predicates of types 1-3 (type 4 is virtually non-existent in Georgian). The case ending is -ad,

- (77) is masqavleblad mušaobs
 he teacher works
 'he works as a teacher'

- (78) is qmirađ moqvda
 he hero died
 'he died a hero'

- (79) me sačukrad puli mivaʸs
 I gift money got
 'I got money as a gift'

Georgian also uses agreement, primarily in adjectives, and (less often) postpositions and conjunctions. 11)

Finnish makes conspicuous use of two cases, the essive and the translative, in secondary predicates. The translative (in -ksi) is used when there is implicit change of state associated with the secondary predicate (in syntactic derivations, when the lower clause contains become, turn into, or the like rather than be):

- (80) lumi sulii vedeksi
 snow melted water
 'snow melted into water'
- (81) auto pestiin puhtaaksi
 car washed clean
 'the car was washed clean'

The essive (-na, -nä) is used where the implicit predicate is be:

- (82) hän lähti hiljaisena huoneesta
 he left quiet from room
 'he went quiet out of the room'
- (83) hän on siellä opettajana 12)
 he is there teacher
 'he is a teacher there', 'he is there as a teacher'
- (84) hän oli syntynyt sokeana
 he was born blind
 'he was born blind'
- (85) tunsin hänet lapsena
 I knew him child
 'I knew him as a child'

The same cases also appear in predicate nominals, where they are governed by verbs. The translative is used with verbs of becoming, staying, seeming and considering, and naming; the essive is occasionally found in predicate nominals with be. 13) In addition, a group of verbs of seeming takes the ablative (see Eliseev 1959:92ff.).

The secondary predicates so far discussed have been nouns and adjectives for the most part. Verbs may also function as secondary predicates. Verbal secondary predicates are normally nonfinite, usually participial forms. Agreeing participles were used in the Russian and Old Russian minor types ((58-9), (62)). More productively in types 2 and 3, English uses the -ing form, and Russian the verbal adverb or adverbial participle (in Russian, deepričastie). Parallel to the adjectival secondary predicate of (86) we have the verbal form of (87).

- (86) he slept dressed on spal odetyj
 (87) he slept sitting (up) on spal sidja

The distribution of verbal secondary predicates will not be explored here. (58ff.) and (87) suffice to show that they exist, and that

their syntactic and semantic properties are identical to those of the corresponding nominal and adjectival secondary predicates. 14)

Finally, a variety of prepositional phrases can be classed as secondary predicates. Parallel to (86) we have

(87) he slept in his boots on spal v sapogax

That the prepositional phrase of (87) and the adjective of (86) can be coordinated is proof of their syntactic identity:

(88) he slept dressed and in on spal odetyj i v sapogax
his boots

Parallel to (90) is the nearly synonymous (91):

(90) sweet this tea isn't good sladki.j ètot čaj nevkusnyj
(91) with sugar this tea isn't good s saxarom ètot čaj nevkusnyj

(Cf. also Jespersen 1924:123-4.)

We may conclude that there is no one-to-one correlation between the syntactic relation of secondary predicate and any given morphological device. (A partial exception is provided by Russian, which reserves a special nonfinite form for verbal secondary predicates.) In some languages, though, there may be morphological devices whose use in secondary predicates is frequent and conspicuous. Examples are the predicate instrumental of Russian, the transformative of Georgian, the essive and translative of Finnish. Each of these languages has the option of using, in at least some constructions, agreement in case with the controller. The factors determining the choice of agreement vs. non-agreeing case are subtle and primarily semantic rather than syntactic. 15) For Russian they include the tense-aspect force of the verb; whether the passage is narrative or descriptive; whether the verb is negated; word order; gender; part of speech of secondary predicate; case of controller. For Georgian they include tense-aspect; part of speech of secondary predicate; lexical transitivity of main verb. For the most part these factors are language-specific. There are intriguing cross-linguistic consistencies, however: all languages investigated are sensitive to part of speech of secondary predicate, tense-aspect parameters (often covert), case of controller and/or lexical transitivity of main verb, and lexical class of main verb.

This excursus into morphology is intended only to distinguish morphological problems from the syntactic analysis of the construction. While morphology may be sensitive to syntactic factors, the question of morphological device is entirely independent of the description of secondary predicates as a syntactic relation. Again, this is very much Jespersen's position.

Conclusion. Secondary predicates may be grouped together, and predicate nominals with them, if initial relations are taken as the basis for determining syntactic relations. They may also be classed together on the evidence of their semantic and morphological, but not syntactic, dependency on the controller. They may be divided into syntactic subtypes according as they are terms or non-terms; into pragmatic subtypes according to dependency on vs. independence from the verb; and into semantic subtypes according to traditional circumstantial classes. They may also be subclassified by morphological

device, although that is not the purpose of this paper.

This analysis of secondary predicates has given us information about peripheral elements of sentences in general. It has presented methodological issues in the description of syntactic relations, and it has raised some theoretical questions. Are we, for instance, to consider secondary predicates a single grammatical relation, a generic class (Mel'čuk 1975b suggests the term syntagmeme for such a notion), or distinct relations? (Recall that their defining criteria mix syntactic, semantic, and morphological facts.) What is the primary basis for classifying surface syntactic relations? (If we were first to ask whether a nominal is a term or a non-term, we would regard type 1 as entirely different from 2-4. Essentially this position is taken in Mrázek 1964, Mel'čuk 1974, Mel'čuk & Percov 1975. If we ask whether the controller is subject or object, we will have subdivisions within all four types. This position is taken in Jespersen 1974, Mel'čuk 1974, Mel'čuk & Percov 1975. If we ask whether the lower verb is be or become we will have a classification recalling the morphological distinction between the Finnish essive and translative cases. This kind of approach characterizes the Slavic grammatical tradition; see Ivić 1954 and to a lesser extent Mrázek 1964, Fraenkel 1925.) What universal patterns can be detected in the morphological treatment of secondary predicates? What are universal predicate-like properties on the basis of which we could begin a functional study of secondary predicates? And finally, do peripheral and predicate-like relations have as much significance for linguistic typology as subjects and terms have?

Footnotes

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1 Space limitations make impossible a survey of the literature on these constructions. For partial surveys see Fraenkel 1925, Ivić 1954:147-58, Mrázek 1964:207-48. The best pre-generative typology of constructions is Jespersen 1924:122ff.

2 Here and below, English examples also translate corresponding Russian examples. These translations are syntactically literal (except occasionally for word order), although the morphology of secondary predicates may not coincide. The secondary predicate is underlined. Numbers in parentheses are reference numbers for examples; unparenthesized numbers refer to construction types.

3 This is analogous to regarding the nominative case as merely one of several subject-like properties, rather than using it as the defining property for subjects. It is an approach much like that of Jespersen (1924:122ff.).

4 Sentences like (17"), (14") are in fact often real-world implications of the original secondary predicate constructions. This is because the main and secondary predicates coincide or at

least overlap in real-time reference — a point made in most of the Slavic grammatical literature — and sentences such as (14"), (17") simply assert the temporal coincidence. The discussion here is limited to strictly grammatical paraphrases and (below) implications.

5 The use of paraphrases (or transformations in the early sense of the term) to establish contrast is not new. They were so used in the works of Z. S. Harris, an approach developed in Worth 1958, 1963.

6 The minimal contrast is the grammatical opposition of types 1 and 4; the lexical difference merely facilitates it. In fact, (25) is actually ambiguous: the more likely reading is that intended here, 'worked when a young man'; less likely is type 1, 'worked in the capacity of young man' (as though young man were a job title). The word order he worked as a teacher in this town is more natural for (24), in contrast to *he worked as a young man in this town for (25) (on the reading as type 4). This fact provides further evidence of contrast.

7 Fillmore 1968:22 (stated with reference to semantic relations), Mel'čuk 1975a:36ff.

8 The immediate syntactic dependency of type 4 is less evident. Impressionistically, type 4 NP's are immediately dependent not on the verb but on the entire S or (perhaps) the VP (or the verb plus its complements). I.e., the constituency of (i) is schematically as in (ii) (slashes represent equi and subsequent processes):

(i) he lived in Paris as a child

(ii) [he lived in Paris] ~~he was~~ a child

This question will not be pursued here.

9 Although a distinction analogous to pragmatic dependency vs. independence distinguishes type 1 from predicate nominals proper. See Nichols, MS.

10 As Chomsky originally defined these terms (1969) they were applied to English cleft constructions. I am using them to refer also to the questioned element or the answer to it (focus) vs. the rest of the sentence (presupposition) in questions to parts of sentences (in Bally's terms (1932:41-2), partial modal and partial dictal questions).

11 For details see Nichols 1977 (with a slightly different syntactic classification).

12 The construction be + locative adjunct + noun of status or occupation, with the force 'be in (place) as (position, status)' is a stable type to be classed with group 2, if not indeed group 1. The verb is one of location and not a copula. Although in the languages examined here existential-locative be and the copula are homophonous, a case could be made for the lexical independence of the existential verb, and thus for the construction being governed by the verb.

13 This is the copula, not the existential verb. Examples:

(i) hän on Suomenkielen opettajana

he is Finnish lg. teacher

'he is a teacher of Finnish'

(ii) ?isäni on opettajana

my Fa is teacher

'my father is a teacher'

(ii) is unacceptable to speakers, although a similar sentence appears

in Eliot 1890:157.

14 The various Finnish infinitives merit investigation along these lines. A glance at any grammar reveals several infinitive types used as secondary predicates.

15 Again, see Nichols MS and 1977 for details on Russian and Georgian respectively.

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