

Experiencer non-verb predicates in Russian

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This paper outlines the properties of Russian non-verb predicates which take an Experiencer role (\approx psych predicates). Aside from verbs, the set of Experiencer predicates in Russian includes morphologically adjectival stems and various calcified predicate chunks (mostly do-nominal stems). Their exact case-assigning properties are presented.¹

This paper is organized as follows: Section 1 discusses briefly how Experiencer predicates are linked to the problem of information structure. I then define “Experiencer” in section 2. Section 3 gives an overview of what possible argument structures are attested for Experiencer predicates in Russian. Finally, in section 4 syntactic models to account for the various non-verb Experiencer predicates are proposed.

1. Relevance of Experiencer predicates to information structure

The various predicates in this paper below seem to constitute exceptions to typical constituent orders of Russian. The project of which this study is a part² seeks to establish the following three claims: First, information structure can be derived from argument structure (as stored in the lexical entry of predicates). That is, the neutral constituent order of a Russian sentence will reflect the unaltered mapping of arguments to syntactic structures. Next, only the neutral word order allows both neutral and narrow-focus interpretations. Finally, the neutral constituent order allows the speaker to imply which argument can be interpreted as topic. The present paper attempts to deal with the first of these claims: A neutral word order (with unmarked intonation) exists for each predicate; this order reflects the argument structure of that predicate as stored in the lexicon.

It has often been observed that DAT Experiencers in Russian appear first in a clause; see, for example, Schoorlemmer (1995:67). This paper looks at a subset of DAT Experiencers in Russian—those that accompany non-verb predicates. This paper does not deal conclusively with whether DAT Experiencers are initial due specifically to their having an Experiencer role.³ Such an analysis is not as easy to do with adjectives, because their Experiencer arguments appear only in the DAT case, and non-Experiencer arguments

¹ This paper has benefited from comments from U. Junghanns, M. Schoorlemmer, L. Szucsich G. Zybatow, as well as from the other participants at the Arbeitstagung „Informationsstrukturierung“ (Berlin; January, 1997). Any shortcomings of this work are, however, nobody’s fault but my own.

² The project, *Argumentstruktur und Wortstellung als Mittel der Informationsstrukturierung im Russischen* ‘Argument structure as a means of determining the information structure of Russian’, is funded by the Deutsche Forschungsgemeinschaft and is supervised by G. Zybatow.

³ See Billings (*to appear*), which compares Experiencer and non-Experiencer *verbs* with regard to whether DAT Experiencers in fact must go first. The findings to be reported there suggest that DAT Experiencers tend to be initial because they are usually expressed by means of personal pronouns (referring to humans). Once pronoun-hood and discourse factors are accounted for, that study reports, it is not the case that a nominal expression is initial solely because it has either DAT case or an Experiencer thematic role. Of the four verbs known to subcategorize for a DAT Experiencer—*dosaždat* ‘annoy’, *nadoedat* ‘bother’, *naskučivat* ‘bore’, and *nravit’sja* ‘be pleasing’—only the last of these shows any tendency toward positioning DAT Experiencers first (and not even with every informant).

of adjectives invariably appear in non-DAT cases. Thus, it's impossible to compare minimally different examples.

2. What is an Experiencer?

Experiencer predicates are often referred to as “psych” predicates in the generative-syntactic literature. I refer specifically to Experiencers because of some predicates in Russian which are accompanied by a nominal with Experiencer-like semantics but which would not usually be referred to as psych predicates in other languages. Indeed, in certain constructions there is no overt predicate which licenses the Experiencer semantics.

What, then, is an Experiencer? Many studies simply assume that the definition of “Experiencer” is understood. For example, two works which deal extensively with this term, Grimshaw (1990:8) and King (1994:115), begin using it without any definition. Belletti & Rizzi (1988:291) define Experiencer simply as follows: “the individual expressing the mental state” represented by the verb. This is perhaps because these works are limited to so-called inner-state verbs. When it comes to non-verb predicates, however, there appear to be instances of a nominal expression which seem very close to being Experiencers. Chvany (1974), in the course of her discussion of certain adjectival stems in Russian, suggests a few minimal prerequisites for Experiencerhood: First, “it must have an animate referent that can experience a feeling” (p. 96). Additionally, an Experiencer must be “aware” of a feeling (p. 98). Certainly other prerequisites exist. In the course of this paper I will show that even these two criteria—feeling and awareness—are too restrictive to account for each type of predicate in Russian which takes an Experiencer nominal. Still, I will use Chvany’s criteria as a starting point for defining this term.

The following semantic types of predicates are considered in this paper:

- Inner states (e.g., *grustno* ‘sad’, *ljubit* ‘love’, *nravit'sja* ‘be pleasing’)
- Perception—specifically, potential sensation (e.g., *vidno* ‘visible’)
- Modal:
 - Deontic
 - Permission
 - Ability
- Involuntary (usually adversed) reactions (e.g., *tošnit* ‘nauseate’)

Examples of each of these can, arguably, be considered Experiencer predicates in Russian; such an interpretation has been ascribed to them in the literature. One might argue that only the inner states are really Experiencer predicates, as Belletti & Rizzi’s definition above seems to imply. This might turn out to be true. I would prefer, however, to err on the side of casting the net too widely; if any of these others turn out not to have Experiencer arguments, the description of these predicates remains the same.

3. Overview of the argument-structure variation of various Experiencer predicates

This section shows examples of each kind of predicate (known to me) that can take an Experiencer. These come in four types: verbs, clauses, nouns, and adjectives.

3.1 Verbs

The various verb classes with Experiencer arguments are merely outlined in this subsection just in order to show the various possibilities. King (1994) discusses the three verb classes in (1):

(1)	Experiencer realized as:	Theme realized as:
a.	NOM	ACC
b.	DAT	NOM
c.	ACC	NOM

The combinations of cases and roles in (1a-c) are exemplified in (2a-c), respectively.

(2) a.	Ja	ljublju	novuju	muzyku.	
	I	love	new	music	
	NOM	1.SG	ACC.SG		'I love new music.'
b.	Mne	nравится	novaja	muzyka.	
	me	likes	new	music	
	DAT	3.SG	NOM.SG		'I like new music.'
c.	Mamu	interesuet	novaja	muzyka.	
	mom	interest	new	music	
	ACC	3.SG	NOM.SG		'New music interests (my) mom.'

(The constituent orders in (2) are not the only possible orders. With personal pronouns expressing the Experiencer role, this argument tends to be initial; see discussion below.)

Using Chvany's criteria above in section 2 it is arguably possible to dispute the Experiencerhood of the NOM argument in (1a) and (2a). It is possible, indeed common, to say the following in Russian, with an inanimate NOM argument: *Cvety ljubjat solnce*. 'Plants love sun(shine).' Are there two verbs /ljubi-/ in the language, or is one derived from the other? Belletti & Rizzi (1988:298-299) discuss verbs like *colpire* 'strike' in Italian sentences like *Giani mi ha colpito per la sua protenzza*. 'Gianni struck me by virtue of his quickness.' Contrary to their literal meaning, such verbs "admit a derivative psychological interpretation," they argue: "the subject is a Theme [...] and the object is the Experiencer." It is unclear to me how "derivative psychological derivation" is achieved—by separate lexical storage or by some morpho-lexical operation. I leave this issue unresolved. Suffice it to say that an Experiencer *interpretation* can be added.

Additionally, there are several more classes of verbs in which the Experiencer appears in the NOM and the Theme is in some oblique case or prepositional case.

(3) a.	Ja	soboleznuju	Oksane.	
	I	commiserate	Oksana	
	NOM	1.SG	DAT	'I commiserate with Oksana.'
b.	Ja	pugajus'	Oksany.	
	I	be-scared-of	Oksana	
	NOM	1.SG	GEN	'I am scared of Oksana.'

- c. Ja interesujus' Oksanoj.
 I be-interested-in Oksana
 NOM 1.SG INST 'I am interested in Oksana.'
- d. Ja seržus' na Oksanu.
 I be-angry at Oksana
 NOM 1.SG ACC 'I am angry at Oksana.'
- e. Ja preklonjajus' pered Oksanoj.
 I revere before Oksana
 NOM 1.SG INST 'I revere Oksana.'
- f. Ja sožaleju ob Oksane.
 I pity about Oksana
 NOM 1.SG PREP 'I feel sorry for Oksana.'
- g. Ja razočarovyvajus' v Oksane.
 I become-disillusioned in Oksana
 NOM 1.SG PREP 'I am disappointed with Oksana.'

The data in (2) and (3) are discussed in more detail in Billings (*to appear*).

There is one more type of verb that might be interpreted as having an Experiencer argument.⁴ These are the involuntary-reaction verbs (listed in the diagram in section 2 above). One example, from Schoorlemmer (1995:55) is shown in (4):

- (4) Mašu tošnilo ot gribov.
 M. sickened from mushrooms
 ACC [-agr] GEN 'Maša was sick from mushrooms.'

This class of verbs subcategorizes an ACC-case argument to express the entity that undergoes (experiences?) the nausea. The argument expressing the source of the nausea is (unlike in one possible English gloss, *Mushrooms sickened Maša*) not expressed using the NOM case; instead, a prepositional phrase (headed by *ot* 'from') is used. There is no overt NOM-case subject, and the verb takes either 3.SG or NEUT.SG agreement, depending on the tense. Under the verb in (4) I've written [-agr], meaning "non-agreeing", instead of NEUT.SG (as traditional accounts usually do). Schoorlemmer (1995:55-56) refers to this small class as "lexical adversity-impersonal" verbs and discusses their syntactic properties briefly. It is not clear at all to me whether the entity undergoing the nausea is an Experiencer. Using Chvany's tests (mentioned in section 1 above) it appears that nominals like *comatose patient* (i.e., one unable to feel) can be used with such verbs. For a definitive answer, this issue awaits further research. Note that this verb, like the other verbs discussed in this subsection, each subcategorize for exactly two arguments.⁵

I discuss none of these verbs further in this paper. I list them merely to show the diversity of case-assignment possibilities in the verbal system and allow a comparison

⁴ Indeed, since presenting this material I have become aware of another such analysis: Harves (1996) reports that some speakers allow the ACC nominal to bind a reflexive in the PP headed by *ot*.

⁵ This verb class's other argument (expressed with the PP headed by *ot*) appears to be consistent with the role of Causer, as defined by Pesetsky (1995). In this sense these verbs fit other Experiencer verbs.

with the non-verb predicates. The remainder of section 3 discusses non-verbal predicates that take Experiencers. These are calcified, non-inflecting predicates (§3.2) and adjectives (§3.3). In the following section (§4) I present a syntactically more appealing way to slice the non-verb Experiencers—according to which type of complement the predicates take.

3.2 Non-inflecting states

Russian has several predicates formed etymologically from various phrases or parts of speech. They function in the modern language as predicates which do not inflect. Some of these are referred to in the traditional accounts of Russian as a separate part of speech: *kategorija sostojanija* ‘category of state’. The ones discussed in this subsection each allow a DAT-case Experiencer. The example in (5a) is a particularly colorful example.⁶

- (5) a. Mne èto daže kak-to ne k licu!
 me this even somehow not toward face
 DAT NOM.SG ACC.SG DAT.SG
 ‘This somehow doesn’t really suit me!’
- a. Mne èto bylo daže kak-to ne k licu!
 me this was even somehow not toward face
 DAT NOM.SG [–agr] ACC.SG DAT.SG
 ‘This somehow didn’t really suit me!’

The predicate in (5) *ne k licu* does not inflect. It is best analyzed as a lexical entry distinct from the sum of its parts. In the past tense, such predicates take the [–agr] *bylo* ‘was’, which indicates that there is no clausal agreement. I also attempted to determine whether the nominal *èto* ‘this’ in (5a-b) is an argument of the predicate *ne k licu*. It is apparently impossible to substitute a non-pronominal expression like *èto delo* ‘this affair’.⁷

A few more of these non-inflecting predicates are etymologically nouns.⁸ As in (5), the ones in (6a-c) each take a DAT Experiencer.

- (6) a. Mne bylo **pora** uxodit'.
 me was time leave
 DAT.SG [–agr] INFIN ‘It was time for me to leave.’

⁶ The transliteration used in this paper is a hybrid of the forms typically used in North America and Europe: *è* is used instead of *ê* because stress is indicated in some forms below and the acute accent is often interpreted as secondary stress. Instead of the diagraph *ch*, *x* is used to render the voiceless velar continuant.

⁷ Nor was it possible to ascertain if (5a-b) can undergo the GEN-of-negation test (cf. §3.3 below).

⁸ Perhaps by coincidence, all of the de-nominal predicates I know of come from FEM nouns. Of these, *pora* is used extremely rarely in the modern language as a noun, meaning ‘time’. Two examples of this kind were encountered in Bulgakov’s *Master i Margarita*: *Nastavala pora dejstvovat’* (literally: came.FEM.SG time.NOM act.INFIN) ‘It was time to act.’ In both examples the same verb is used: *nastavat’* ‘(of a time, a season, etc.) to come’. Certain fixed expressions from this noun also remain in the modern language: *do six por* (literally: until these times) ‘until now’. If *pora* in (6) were a noun, it would be in the NOM, but the copula has [–agr], not FEM.SG, inflection. Unlike *pora*, (*ne*)*oxota* ‘hunt(ing)’, *len’* ‘laziness’ and *žal’* ‘pity’ continue to be used commonly as nouns in the language. However, as predicates, as (6) and (7) show, the copula nonetheless bears [–agr] inflection. These de-nominal predicates should therefore be lexified separately from the respective nouns from which they were derived etymologically.

- b. Mne bylo **len'** vstavat'.
 me was laziness get-up
 DAT.SG [-agr] INFIN 'I felt too lazy to get up.'
- c. Mne bylo **neoxota** uxodit'.
 me was NEG.hunt leave
 DAT.SG [-agr] INFIN 'I didn't feel like leaving.'

All the predicates so far in this subsection select a DAT-case Experiencer and an infinitival complement. The predicate in (7) likewise selects a DAT Experiencer and can take an infinitival complement, as shown in (7a). See also its near equivalent in (10a-c) below.⁹

- (7) a. Mne bylo **žal'** uxodit'.
 me was pity leave
 DAT.SG [-agr] INFIN 'I felt sorry that I had to leave.'
- b. Mne bylo **žal'** kurtki.
 me was pity jacket
 DAT.SG [-agr] GEN.SG 'I felt sorry about losing (my) jacket.'
- c. Mne bylo **žal'** mamu.
 me was pity mom
 DAT.SG [-agr] ACC.SG 'I felt sorry for mom.'

Unlike the preceding examples in this subsection, *žal'* can take a nominal complement instead of the infinitival, as exemplified in (7b-c). In the meaning of 'feel sorry about (or feel sad about what happened to) something' it takes GEN case, shown in (7b). In the meaning 'feel sorry for' this predicate takes an ACC argument, as shown in (7c).¹⁰ This is the first of several predicates to assign ACC case, a property relevant to the interpretation of the DAT Experiencer's morphosyntactic status; see especially (12) below.

One last group of non-inflecting predicates which take a DAT-case Experiencer are shown in (8a-c). These function as modals and take an infinitival as well.¹¹

- (8) a. Mne **nado** bylo uxodit'.
 me need was leave
 DAT.SG [-agr] INFIN 'I had to leave.'

⁹ The GEN-case assigning construction in (7b) is more common with *žalko*, as shown in (10b) below.

¹⁰ I also attempted to test whether the GEN of negation (cf. §5.3) is possible with (7c) or (10c). Unfortunately, it was impossible to determine conclusively if a sentence like *Mne ne žal'/žalko mamy* [= (7c) or (10c)], but with *ne* NEG added and new case on GEN.SG *mamy* 'mom'] meant 'I didn't feel sorry for mom' or 'I didn't feel sorry about mom' (or 'I didn't feel sad about what happened to mom'). That is, due to the existence of a slightly different predicate that takes a GEN case argument even without negation, shown in (7b) and (10b), it is difficult to exclude this interpretation, especially for younger speakers who hardly ever use the GEN of negation any more. Cf. Timberlake (1974/1986) re the diachronic wane of this phenomenon. The other adjectival predicates discussed below clearly allow GEN of negation.

¹¹ It could be argued that the predicate in (8b) is adjectival. This may be true etymologically, but there is no form of this stem in the modern language that functions as a modifier or inflects like a predicate (short-form) adjective. There is a similar stem, /vozmož#n-/ 'possible', which functions as an adjective. Cf. (10a-c), where there is a corresponding adjective

- b. Mne **možno** bylo uxodit'.
 me can was leave
 DAT.SG [-agr] INFIN 'I could leave.'
- c. Mne **nel'zja** bylo uxodit'.
 me NEG.can was leave
 DAT.SG [-agr] INFIN 'I couldn't leave.'

Note, as Kondrashova (1994) and Schoorlemmer (1995:62 fn. 61) both do, that whereas the copula in the preceding examples can precede the predicate, the copula in (8a-c) is not allowed to precede the predicate:¹² **Mne bylo {nado/možno/nel'zja} uxodit'*.¹³

Until relatively recently, *nado* was like (7c) in being able to take an ACC-case nominal. Bulaxovskij (1954/1976) lists the following examples of *nado* and the synonymous (but by now obsolete) predicate *nadobno*, all of them from the 1800s.

- (9) a. Inuju slavu **nado** mne!
 different glory need me
 ACC.SG [-agr] DAT.SG 'I need a different kind of glory!'
- b. **nadobno** eščë tret'ju merku
 need yet third yardstick
 [-agr] ACC.SG 'yet a third yardstick is needed'

Whereas ACC-assigning predicates such as (7c) are still used, others, like (9a-b) are not.

To summarize this subsection, DAT-case Experiencers accompany various non-inflecting predicates in Russian. Some take an infinitival complement, while others take additional nominal arguments, while yet others take both types of complements. None of these predicates, however, can take both an infinitival and a nominal simultaneously.

3.3 Adjectival stems

In this subsection I survey the various morphologically adjectival stems that select an Experiencer. With the exception of participles, which can take a NOM-case Experiencer, the Experiencer with adjectival predicates is invariably in the DAT case.

Like the non-inflecting predicate *žal'* 'pity' in the preceding subsection, certain adjectival stems can take multiple arguments in specific cases. Moreover, adjectival predicates can also take nominative subjects. This subsection sketches the various possible realizations of thematic roles and cases with several adjectives in Russian.

The adjectival predicate in (10a-c) shares the same root with the one in (7a-b).

¹² Moreover, if (8a) is negated, the NEG particle *ne* immediately precedes *nado*. The predicates in (8b-c) are a suppletive pair; whereas *nado* in (8a) is negated as *ne nado* (literally: NEG should), the predicate in (8b) cannot be negated by preposing *ne*. Instead, the separate stem *nel'zja* is used.

¹³ A construction very similar to those in (8a-c) is discussed in Schoorlemmer (1995:65-66): *Kuda nam bylo postavit' étot jaščik?* (literally: where us.DAT install.INFIN this box.ACC) 'Where could we put down this box?' She argues for "a null predicate comparable to other modal predicates like *nado*" in (8a). This approach appears to work inasmuch as the DAT-case nominal is licensed uniformly.

- (10) a. Mne bylo **žalko** uxodit'.
 me was wretched leave
 DAT.SG [-agr] INFIN 'I felt sorry that I had to leave.'
- b. Mne bylo **žalko** kurtki.
 me was wretched jacket
 DAT.SG [-agr] GEN.SG 'I felt sorry about losing (my) jacket.'
- c. Mne bylo **žalko** mamu.
 me was wretched mom
 DAT.SG [-agr] ACC.SG 'I felt sorry for mom.'

In practice, *žalko* is an informal-register equivalent of *žal'*, with identical case-assignment.

I assume that the GEN case assigned in (7b) and (10b) is quirky, a property specified idiosyncratically in the lexicon for this predicate.¹⁴ The GEN case here does not appear to be partitive—a common use of the GEN in Russian. Furthermore, as the glosses of these examples are intended to show, the GEN-assigning use of *žal'* and *žalko* constitutes a separate lexical entry from the others which use this stem, (7a, c) and (10a, c).¹⁵

The adjectival stem in (10a-c), at first blush, might appear to be an argument *against* slicing the data as I have done in the preceding subsection and this one (i.e., non-inflecting vs. adjectival predicates). As the following data shows, however, several types of predicates—all of which could be argued to take Experiencers—share various inflectional properties. For this reason, I present the data based on the predicates' inflectional properties. I re-sort the data as to syntactic properties of the predicates in section 4 below.

Truly predicative adjectives do not show case. These are the so-called short form, which agrees with the clausal subject in gender and number, but not in case. Long forms are attributive, and agree with the noun in gender/number as well as case. In some sentences the only overt word of the predicate is a long-form adjective, which I assume to agree with an inaudible noun in N°. Long forms are not discussed in much detail here.

Many of the adjectival stems that take multiple arguments are (morphologically adjectival) modals. For this reason, linguists are generally skeptical about their ability to actually subcategorize for an Experiencer. Some works in the generative framework have admitted that the DAT-case nominals co-occurring with modal adjectives have Experiencer semantics: Chvany (1974), Kondrashova (1994) and Schoorlemmer (1995:62 fn. 41).

This subsection sorts through the details of these adjectival predicates, showing the following: First, adjectives can take up to three arguments (NOM, ACC and DAT), quite similarly to how ditransitive verbs do. I show below that adjectives quite clearly have direct objects (i.e., they assign structural ACC to their complements). Next, also like the

¹⁴ More than one work on such predicates has overlooked the GEN-assigning version of *žalko* (or *žal'*). The following datum is attested in a corpus search (of Bulgakov's *Master i Margarita*): *Užasno emu ne xotelos' vozvraščat'sja, no šljapy bylo žalko*. 'He really didn't fee like returning, but he felt sorry about losing his hat.' I have not determined exactly when ACC and GEN case is assigned. The latter seems to be restricted to inanimate objects, but this does not mean that inanimates nominals cannot be the ACC-case complement; cf. the following example in Schoorlemmer (1995:67 fn. 66): *Detjam bylo žalko ix rabotu* (literally: children.DAT was.[-agr] sorry their work.ACC.SG) 'The children were sorry about their work.'

¹⁵ One other non-verb predicate which appears to assign quirky case is *zavidno* 'envious', as in the following example: *Mne bylo zavidno Vase* (literally: me.DAT was.[-agr] envious.[-agr] Vasja.DAT.SG) 'I envied Vasja.' This example, from Kondrashova (1994:256), is especially interesting in that it shows two DAT-case nominals in the same clause, which is fully expected if one of these is quirky DAT case.

other Experiencer predicates exemplified above, if an adjective subcategorizes for an Experiencer, it selects exactly one other argument. Finally, unlike verbs, if an adjective subcategorizes for an Experiencer, this argument is invariably realized in the DAT. This discussion will venture a bit beyond Experiencer-taking predicates, strictly speaking. This foray will show, however, that defining “Experiencer” is extremely difficult.

Because of this subsection’s widely varying data, I have organized the presentation beginning with the adjectival predicates that exhibits the greatest complexity of arguments and end with those which take just one argument (the Experiencer). This *a tergo* presentation is necessitated by the detailed discussion of the most complex of the adjectival predicates in Chvany (1974), which I use as a baseline for further discussion.

3.3.1 Ditransitive adjectives: Chvany (1974) is an early-generative treatment of the adjectival stem /dolž#n-/,¹⁶ which variously means ‘must’, in either the obligative or inferential sense; ‘expected’ or ‘supposed’, without obligative or inferential modalities; or ‘owe’, in which case it has both direct and indirect objects.¹⁷ Beginning with the last of these meanings, this adjective, in the meaning of ‘owe’, is exemplified in (11a):

- (11) a. On dolžen-Ø ej marku.
 he obliged her mark
 NOM.SG MASC.SG DAT.SG ACC.SG
 ‘He owes her a mark.’
- b. On ne dolžen-Ø ej (ni odnoĵ) marki.
 he not obliged her (nary single) mark
 NOM.SG MASC.SG DAT.SG GEN.SG GEN.SG
 ‘He doesn’t owe her a (single) mark.’

That *on* is the sentential subject is clear; *on* ‘he’ is NOM and the predicate shows (MASC.SG) agreement with it. That the ACC-case argument behaves like the direct object of a verb is also clear, diagnosed by the GEN-of-negation test. The GEN of negation is a relatively well known phenomenon of Russian whereby (otherwise-NOM) subjects of so-called unaccusative intransitive verbs, certain adjuncts (those which otherwise appear in the ACC case), and direct objects of transitive verbs **can** appear in the GEN if there is sentential negation. This is exemplified for this predicate in (11b).

Alas, none of the arguments in (11a-b) seems to be an Experiencer. Chvany (1974:98) writes that there is no evidence that the NOM-case nominal is an Experiencer, since the subject (*on* ‘he’) may owe money without being aware of it. That is, the subject does not necessarily Experience any feeling (of indebtedness) in order for (11a-b) to be true. Nor does the presence of *two* other arguments resemble verbs which subcategorize for an Experiencer. None of the verbs above (in §3.1) takes more than one other argument aside from the Experiencer. Pesetsky (1995), who distinguishes three types of roles which accompany the Experiencer in psych verbs—Causer, Target, and Subject Matter—shows

¹⁶ The symbol # is shorthand for a position where a vowel appears if the inflection is null, as in (11a).

¹⁷ Unlike the [-agr] form *bylo* ‘was’ in the preceding subsection, the form that accompanies subject-agreeing /dolž#n-/ shows gender/number agreement in the past tense (and person/number in the future). In (11a) the copula would be MASC.SG *byl*. None of Chvany’s /dolž#n-/ data in the meaning ‘owe’ contains a copula. She does mention, however (1974:80) that the ‘owe’ meaning tends to place the copula before /dolž#n-/, while in the other uses the copula is postposed.

that none of these other argument types can co-exist. Furthermore, whereas the DAT-case nominal in (12a-b) is clearly a Goal, it is difficult to pinpoint which of these three roles the ACC-case nominal bears. For these reasons I agree with Chvany that the ‘owe’ meaning of /dolž#n-/ does not assign an Experiencer role to its NOM-case subject.

Still, these examples are opportune because they show that two widely held maxims of syntax cannot be true. The first is that non-verb predicates can take direct objects. The GEN-of-negation test in (11b) suggest that the amount-owed nominal is an internal argument. Next, as Schoorlemmer (1995:50) observes, data like these are a violation of Burzio’s Generalization, shown in (12), which is her paraphrase of Burzio (1981).

(12) If a predicate assigns case to its object, then it assigns a θ -role to its subject.

Schoorlemmer (1995:56-57) discusses a class of adjectival predicates quite similar to the one in (11a-b). These are morphologically adjectival predicates of perceivability, in which the perceived item can be in either NOM or ACC case, as shown in (13a-b), respectively:

- (13) a. Mne doroga byla vidna.
 me road was visible
 DAT.SG NOM.SG FEM.SG FEM.SG ‘The road was visible to me.’
- b. Mne dorogu bylo vidno.
 me road was visible
 DAT.SG ACC.SG [–agr] [–agr] ‘The road was visible to me.’

(These constituent orders are not necessarily the most neutral. Usually, the ACC-case nominal follows the copula and predicate.) Aside from /vid#n-/ ‘visible’, the two other adjectives with the same properties are /slyš#n-/ ‘audible’ and /zamet#n-/ ‘noticeable’.

Showing that the version in (13b), with an accusative object, can undergo GEN of negation,¹⁸ Schoorlemmer (1995:57) considers two possibilities to be worth pursuing: First, the ACC case assigned by adjectives is not the same and therefore does not constitute counter-evidence to Burzio. In my view tests like the GEN of negation show quite clearly that the ACC is the same as the ACC assigned by transitive verbs. Second, “the dative NP in these sentences is in fact an external argument.” That is, while the predicate in (13) assigns structural ACC case, it only *seems* not to take an external argument. I pursue this possibility in my treatment of *nužno* below, as well as in Billings (*to appear*).

When I presented the talk that preceded this paper I suggested that the predicate in (13) might also take an Experiencer. The DAT nominal in (13) fails Chvany’s tests, listed in section 2 above. Sensory perception does not necessarily involve a feeling; this suggests that the DAT nominal is not an Experiencer. Still, what role would the DAT-case nominal in (13a-b) bear if not Experiencer? I leave this issue unresolved here.

In conclusion, the data so far have shown that adjectives have very extensive properties in subcategorizing for various cases. Neither of the preceding adjective types—/dolž#n-/ ‘owe’ or the perceivability class—conclusively involves an Experiencer role.

¹⁸ This would result in *Nam dorogi ne bylo vidno*. ‘The road.GEN.SG wasn’t visible.[–agr] to us.’

3.3.2 *Adjectives with DAT-case Experiencers*: In the other meanings of the /dolž#n-/ stem—‘must’ (in either the obligative or inferential sense) or ‘expected’/‘supposed’ (without obligative or inferential modalities)—potential Experiencer nominals are attested.

With non-‘owe’ meanings, /dolž#n-/ can take infinitive complements, as in (14a-d). In these the NOM-case subject implies an obligation of some sort.

- | | | | |
|---------|-----------------------------------|----|--------------------------------|
| (14) a. | On-Ø dólžen-Ø rabotat'. | b. | Ona dolžná rabotat'. |
| | he must work | | she must work |
| | NOM.SG MASC.SG INFIN | | NOM.SG FEM.SG INFIN |
| c. | Ono dolžnó rabotat'. | d. | Oni dolžný rabotat'. |
| | it must work | | they must work |
| | NOM.SG NEUT.SG INFIN | | NOM.PL PL INFIN |

A so-called impersonal form is also possible. It is homonymous with the NEUT.SG form *dolžnó* in (14c) and (15a), but has stress on the first syllable, *dólžno*, in (15b).

- | | |
|---------|--|
| (15) a. | Ěto ponjatie ne dolžnó otoždestvljat'sja s tem. |
| | this concept not must equate with that |
| | NOM.SG NOM.SG NEUT.SG INFIN+REFL NEUT.INST.SG |
| | ‘This concept must not be equated with that one.’ |
| b. | Ěto ponjatie ne dólžno otoždestvljat' s tem. |
| | this concept not must equate with that |
| | ACC.SG ACC.SG [–agr] INFIN NEUT.INST.SG |
| | ‘{One must not/It is wrong to} equate this concept with that one.’ |

The two sentences in (15a-b), which are for the most part synonymous, are deceptively similar syntactically as well. On the surface they differ only in two ways: In (15a) an (etymologically reflexive) morpheme *-sja* appears on the verb which indicates the passive.¹⁹ Chvany glosses (15a-b) alike, as shown under (15a), but I’ve added a different gloss for (15b). The hidden fundamental difference is the case assigned to the initial nominal expression in each. It so happens that the NEUT.SG exhibits syncretism between the NOM and ACC cases. With another declensional class, this illusion is erased, as in (16):

- | | |
|---------|---|
| (16) a. | Ěta ideja ne dolžná otoždestvljat'sja s toj. |
| | this idea not must equate with that |
| | NOM.SG NOM.SG FEM.SG INFIN+REFL FEM.INST.SG |
| | ‘This idea must not be equated with that one.’ |
| b. | Ětu ideju ne dólžno otoždestvljat' s toj. |
| | this idea not must equate with that |
| | ACC.SG ACC.SG [–agr] INFIN FEM.INST.SG |
| | ‘{One must not/It is wrong to} equate this idea with that one.’ |

¹⁹ Imperfective verbs (of which *otoždestvljat'* is one) are passivized using *-sja*, while perfective stems are passivized with *-n-* (or its allomorph *-t-*).

As in (13a-b), the constituent orders in (16a-b) aren't necessarily the most neutral ones.²⁰

At this point I should clarify, as Chvany does, that the following data no longer hold of Russian: DAT Experiencers with /dolž#n-/ were relatively well documented in the early 1800s but this phenomenon has reached the point of extinction today. I might also add that the [-agr] form *dólžno* has itself all but ceased to exist in the modern language. It now being some quarter of a century since Chvany's paper was written, this fact is not surprising. These phenomena are nonetheless worth pursuing in an investigation of the modern language because Chvany's observations carry over to other adjective predicates as well (namely, *nužno* 'need'), where DAT Experiencers continue to be well attested.

That said, it is possible to render near-equivalents of the sentences in (14), with one major modification: Instead of the NOM-case subject there is a DAT-case Experiencer. Because is no overt NOM subject; the predicate in (17a-d) shows the [-agr] form *dólžno*.²¹

- | | |
|---|--|
| (17) a. Emu <i>dólžno</i> <i>rabotat'</i> .
him must work
DAT.SG [-agr] INFIN
'He must work.' | b. Ej <i>dólžno</i> <i>rabotat'</i> .
her must work
DAT.SG [-agr] INFIN
'She must work.' |
| c. Emu <i>dólžno</i> <i>rabotat'</i> .
it must work
DAT.SG [-agr] INFIN
'It must work.' | d. Im <i>dólžno</i> <i>rabotat'</i> .
them must work
DAT.PL [-agr] INFIN
'They must work.' |

Chvany (1974:93-94) is very explicit about the thematic-role differences between the data in (14a-d) and their seeming counterparts in (17a-d): The DAT nominal in the modern language "still seems to be potentially selectable: native speakers do understand sentences like [(17a-d)] and often report that a surface subject of [(14a-d)] feels an 'inner duty' to do something — a connotation that may be due to the potential subcategorization for a dative NP interpreted as Experiencer, even though such an argument is no longer freely selected in contemporary usage."²² Chvany (1974:116 n. 19) goes on to describe this diachronic situation in more detail:

It is interesting to identify just what the historical change consists in. It is not simply that an Experiencer lost its case marking and became nominative: the nominative with [in (14a-d)] is not an Experiencer, and is not necessarily animate, cf. [(15a) and (16a)]. In this respect, dolž#n- differs from its glosses nužno and objazan, which require animate NPs:

²⁰ The predicate forms in (16a-b) are more homophonous than they appear. Because of vowel-reduction (in Standard Russian), unstressed /o/ is realized as [a]. In (16a) it is [dalžnà], while in (16b) it is [dólžna]. (Some phoneticians indicate the final vowel in the latter form with a carat or schwa.) Still all five forms differ from each other phonetically (if not orthographically in texts unmarked for stress). Chvany emphasizes (and I have confirmed) that despite the archaicity of the [-agr] forms, modern speakers nonetheless have distinct intuitions about how, say, the predicates in (14a-b) should be stressed in reading.

²¹ The homophony of (17a, c) is due to morphological syncretism of the MASC.SG and NEUT.SG personal words in the DAT. I should add that (14c) and (17c) are pragmatically quite strange, because NEUT nouns are almost always non-human. There is at least one exception: *podmaster'e* 'apprentice' is NEUT.SG.

²² Cf., however, the following example in Kondrashova (1994:266): *Mne dolžno uiti* (literally: 'me.DAT must.[-agr] leave.INFIN') 'I must leave.' My informants find such sentences downright obsolete.

- (18) a. Pivo dolžnó byt' poxolodnee.
 beer must be colder
 NOM.SG NEUT.SG INFIN COMPARATIVE[–agr]
 'The beer ought to be colder.'
- b. * Pivo objazano byt' poxolodnee.
 beer required be colder
 NOM.SG NEUT.SG INFIN COMPARATIVE[–agr]
- c. * Pivu nužno byt' poxolodnee.
 beer need be colder
 DAT.SG [–agr] INFIN COMPARATIVE[–agr]

I discuss /objazan-/ and /nuž#n-/ in more detail below. For the present purposes, /objazan-/ 'required' is subcategorized for a NOM subject, while /nuž#n-/ 'need(ed)' – specifically its [–agr] form *nužno* – takes a DAT Experiencer; both take infinitivals.

Chvany's point in (18a-c) is that an inanimate noun like (NEUT) *pivo*, which cannot be in the NOM position in (18b) or the DAT position in (18c), can nonetheless be the NOM subject of (18a), because /dolž#n-/ does not require a human subject; and [+human] is a necessary (although not sufficient) condition on being an Experiencer. I am compelled to dispute Chvany's [±human] criterion, based on the following example, which I elicited:

- (19) Čtoby perenesti surovuju sibirskuju zimu, ...
 'In.order.to survive (the) rough Siberian winter, ...
- ... ètim jablonjam nužno byt' kak možno krepče.
 these apple.trees must be as sturdy as possible
 DAT.PL [–agr] INFIN
- ... these apple trees must be as sturdy as possible.'

In a sense, however, *ètim jablonjam* 'these apple trees' is an Experiencer in that it "undergoes" something, as do the involuntary-action verbs exemplified above in (4). But trees certainly do not feel any necessity and are definitely not aware in any sense. As above, I refrain from defining this thematic role more precisely in this paper.

Nor I will go into the slight subcategorization differences between the three non-'owe' meanings of /dolž#n-/ here. These are discussed at length in Chvany (1974). It is sufficient to say that there are two quite distinct predicates, as it were, sharing the same morphological stem.²³ One means 'owe' and has the same arguments (cases and roles) as

²³ In a valiant attempt to provide a unified analysis of all versions of /dolž#n-/, Chvany (1974:99-100) proposes that even the 'owe' meaning of this predicate takes a clausal complement, similar to the infinitival(-clausal) complements of non-'owe' versions. With 'owe' the clause is headed by an abstract ditransitive predicate with the feature [+ transfer]. Using this and other clausal complements of /dolž#n-/, Chvany argues for a raising analysis of the lower subject to the subject of the /dolž#n-/ clause. The fact that the DAT argument with 'owe' is a Goal, while with non-'owe' it's an Experiencer is a problem, as Chvany (1974:98) admits; that problem is addressed below in my discussion of so-called modal-infinitives. As ingenious as this proposal is, I can't accept it for the following reason: There isn't an impersonal form of the 'owe' variant. That is, even if an experiencer-DAT is excluded if a Goal-DAT argument is present, why isn't the predicate form *dólžno* (discussed immediately below) attested with 'owe'? I conclude then that 'owe' is lexically distinct. (Cf. Dziwirek 1993 for another apparent double-DAT restriction in Slavic.)

a ditransitive verb (like *dat* 'give'). The other predicate means 'must' (and the like) and takes either a NOM subject (with which /dolž#n-/ agrees syntactically) or takes no NOM subject (requiring the [-agr] form of the predicate, *dólžno*); until the last century or so this form could take a DAT-case Experiencer. In the agreeing version, the NOM argument is not an Experiencer. Additionally, the [-agr] form itself is quite archaic to my informants.²⁴

Before proceeding to the remaining adjectival predicates, I should address (18b). Cf. a grammatical example of the same predicate: *Student objazan byt' smelee*. (literally: student.NOM required.MASC.SG be.INFIN bolder.COMPARATIVE) 'The student is required to be more self-confident.' Recall that I characterized all non-verbal predicates as taking Experiencer arguments only in the DAT case. In (18b) the argument which Chvany calls an Experiencer is in the NOM case. This is because *objazan(o)* is a verbal form, the so-called past passive participle of the perfective verb /objaz-a-/ 'bind' (as in 'lay someone under an obligation'). Passivized perfective verbs take this /-(e)n/ suffix. As Babby (1993:26) shows, however, such participles form near-minimal pairs with adjectives which have semantic content not fully derivable from the verb: *načitan* 'read in great quantity' (describing the printed material) or 'well-read' (describing the reader). The first gloss reflects the passive of /načit-aj-/ 'read (a quantity of something)', while the second is from the independently lexified adjective /načitann-/ 'well-read'. As Babby points out, these two forms are homophonous in the MASC.SG (short form) but differ in vowel-final forms such as the FEM.SG: *načitana* 'read in great quantity' but *načitanna* 'well-read', with a geminate *nn*.²⁵ Such pairs also of passive participles and adjectives exhibit an additional type of homophony, again only in the MASC.SG form: *odarěn*, *odarená* 'endowed'; *odarěn*, *odarěnná* 'gifted'; in this pair the stems differ in stress as well. I have not been able to detect any evidence that the predicate in (18b) is any other than the passive form of the transitive, perfective verb /objaz-a-/, which apparently requires its internal argument to be [+human]. Furthermore, this [+human] nominal is an Experiencer, with a external argument bearing the Theme role—or, as defined in Pesetsky (1995), the Causer role. In any event, this predicate in (18b) is verbal and beyond the scope of this paper.

The other predicate mentioned in (18), *nužno*, is quite similar to /dolž#n-/. The two predicates are similar in both having [+agr] forms, cf. (14a-d) above with (20a-d) :

- | | |
|--|--|
| <p>(20) a. On-Ø mne núžen-Ø.
 he me need
 NOM.SG DAT.SG MASC.SG
 'I need him.'</p> | <p>b. Ona mne nužná.
 she me need
 NOM.SG DAT.SG FEM.SG
 'I need her.'</p> |
| <p>c. Ono mne núžno.
 it me need
 NOM.SG DAT.SG NEUT.SG
 'I need it.'</p> | <p>d. Oni mne nužný.
 they me need
 NOM.PL DAT.SG PL
 'I need them.'</p> |

²⁴ Because the [-agr] form of /dolž#n-/ is so archaic, it was difficult for my informants to determine whether the GEN of negation is possible in lieu of the initial ACC nominal in (15b) or (16b).

²⁵ As the underlying representation of the adjectives show, the stem contains a *nn*. The passive forms invariably have just a single *n*. According to Babby (1993:26 fn. 16), in the MASC.SG short form a phonetic rule deletes the second *n* because a geminate (i.e., *nn*) can occur only in prevocalic position.

(21) Mne núžno rabotat'.
me need work
DAT.SG [-agr] INFIN 'I need to work.'

Unlike /dolž#n-/, with the /nuž#n-/ stem the DAT-case nominal continues to be used freely. The DAT-case Experiencer appears in both [+agr] and [-agr] forms.

(22) Mne ne nužno tvoix voprosov.
me not need your questions
DAT.SG [-agr] GEN.PL 'I don't need your questions.'

I return to a portion of Chvany's (1974:116 fn. 19) extended quote above, preceding example (18): "It is not simply that an Experiencer lost its case marking and became nominative." There is additional evidence that Chvany is right. As the data above in (7c), (9a-b), (10c), (11a) and (13b) show, quite a number of non-verb predicates assign or, until recently, have assigned ACC case. The same is true of /nuž#n-/. Bulaxovskij (1954/1976) lists the following example of /nuž#n-/ from the 1800s with both DAT and ACC nominals:²⁷

It appears that /nuž#n-/, at least in the 1800s, resembled the predicate in (13a-b) above, in which the a nominal can be in either the NOM (in which case the predicate agrees with it)

²⁷ Example (23) involves two conjoined ACC-case nominals. The first of these shows unmistakable ACC case, while the second (die to syncretism of the NOM.SG and ACC.SG forms in that declension) does not. Still, the predicate and copula exhibit [–agr], and not PL agreement, suggesting that *prostor* is ACC too.

or the ACC (which then results in a [-agr] form of the predicate).²⁸ And, since the DAT-case nominal co-occurs in the same clause with the ACC-case nominal, this strongly suggests that in the modern language the NOM and DAT nominals are not mere variants of each other. Alas, this issue is moot in the modern language; DAT use is now obsolete.

One last predicate that takes a DAT-case Experiencer is exemplified in (24a-b):

- (24) a. Mne bylo ból'no dyšat'.
 me was painful breathe
 DAT.SG [-agr] [-agr] INFIN 'It was painful for me to breathe.'
- b. Mne bylo ból'no ruku.
 me was painful breathe
 DAT.SG [-agr] [-agr] ACC.SG 'My arm hurt.'

These are modified from Schoorlemmer (1995:56 fn. 56), who points out that this predicate resembles the predicates of perceivability shown above in (13) with two differences: /bol'#n-/ has no counterpart to (13a), with a NOM subject (instead of an ACC nominal), but can take an infinitival complement, as in (24b). In Schoorlemmer (1991:120) she points out yet another property of this predicate; compare (25a-b):

- (25) a. Èto mesto očēn' bol'nó.
 this place very painful
 NEUT.NOM.SG NOM.SG NEUT.SG 'This spot is very painful.'
- b. Mne bylo ból'no v rukax.
 me was painful in arms
 DAT.SG [-agr] [-agr] PREP.PL 'My arms hurt.'

Like the forms *dolžnó* and *dólžno* in (15a-b) above, this predicate has distinct NEUT.SG and [-agr] forms. The use of this form in (25a) appears to be archaic to my informants, who would not use it personally. This is primarily because younger speakers tend to use a long-form adjective (*bol'nóe* 'painful.NEUT.SG') in place of short-form *bol'nó*. Furthermore, the stem in (24) and (25) is homophonous with the adjective meaning 'sick' (said of the entire person).²⁹ The form in (25b), with a prepositional-phrase adjunct instead of a NOM/ACC nominal as in (24a-b) is still attested in the modern language.

This concludes the enumeration of adjectival stems which take some other nominal argument in addition to a DAT-case Experiencer nominal. That other nominal never co-occurs with an infinitival, suggesting that the infinitival is itself in an argument position.

3.3.3 Ordinary adjectives: The remainder of the data are adjectives which assign an Experiencer role to their lone argument. That is, within nominal expressions, such an adjective modifies a noun to indicate that the noun experiences some feeling, as in (26).

²⁸ M. Schoorlemmer (p.c.) reports forms in the modern language like *Mne nužno vrača*. (literally: me.DAT need.[-agr] physician.ACC) 'I need a doctor.' Bulaxovskij stops short of saying they are extinct.

²⁹ Due to these complications, I was unable to determine other characteristics of this form (i.e., whether GEN of negation is possible or the position where a past- or future-tense copula would appear).

- (26) a. grustnyj brat b. grustnaja sestra c. grustnye roditeli
sad brother sad sister sad parents
MASC.NOM.SG NOM.SG FEM.NOM.SG NOM.SG NOM.PL NOM.PL

Adjectives can also be used predicatively, as in (27a-b). It is also possible to express a nearly equivalent clause using a DAT Experiencer and a [-agr] adjective, in (27c):

- (27) a. Brat grustnyj.
brother sad
NOM.SG MASC.NOM.SG 'My brother is a sad person.'
- b. Brat grusten.
NOM.SG MASC.SG[–case] 'My brother is sad.'
- c. Bratu grustno.
DAT.SG [–agr] 'My brother is feeling sad.'

Such predicates do not require an Experiencer; examples with identical syntax are interpreted as having non-Experiencers if the noun is [-human], as in (28a-c) and (29a-b):

- (28) a. grustnyj rasskaz b. grustnaja povest' c. grustnye pesni
sad story sad tale sad songs
MASC.NOM.SG NOM.SG FEM.NOM.SG NOM.SG NOM.PL NOM.PL

These examples do not convey Experiencer semantics. The same holds for such adjectives as clausal predicates; in (29a) the adjective merely describes the nominal.³⁰

- (29) a. Rasskaz grustnyj.
story sad
NOM.SG MASC.NOM.SG ‘The story is (a) sad (one).’
b. *Rasskaz grusten.
c. *Rasskazu grustno.

Crucially, the counterpart of (25c), with a DAT-case Experiencer, as (29c) shows.

Babby (1993:20) discusses a similar situation, in which passive participial form of verbs can be homophonous with derived adjective stems in some forms; cf. my discussion in connection with the predicate in (18b) above: “departicipial adjectives ... have external theta-roles that are different from the internal argument of the corresponding verb, e.g., *U nee ispugannye glaza* ‘She has **frightened** eyes [expressing fear]’ ...; *Maša ispugana*

30 The short form is ruled out in (27b) for pragmatic reasons. As the glosses in (25a-b) suggest, only long-form adjectives denote an inherent property. Since stories tend to be *inherently* sad, (27b) is odd. This long/short distinction is becoming lost with younger speakers, who increasingly use long forms even for temporary states. Schoorlemmer (1995:61 fn. 59) assumes that data very similar to (27a, c) “contain different but systematically related predicates.” (She actually uses an INST.SG long-form adjective, which adds a meaning that the person is no longer sad.) What Scoorlemmer might have had in mind was environments like those in (32a-b); /grust#n-/ can alternate between [–agr] *grustno* and INST.SG *grustnym* in (32a), or in (32b) if it were the predicate there, but *stydno* ‘ashamed’ cannot resort to any corresponding morphologically agreeing forms. (Such agreeing forms exist, /styd#n-/ , but means ‘shameful’, not ‘ashamed’.) It is unclear to me whether these are morphological blocking effects or separate lexical entries.

'Maša has been frightened' ... vs. *Maša ispuganna* 'Maša is scared' (a de-participial adjective); cf. **Ee glaza ispugany* {'Her eyes have been frightened'} vs. *Ee glaza ispuganny* {'Her eyes were frightened/expressed fear.'}." If de-participial adjectives can differ in their thematic subcategorization, by the same reasoning, homophonous non-verbal adjectives can co-exist and assign distinct sets of thematic roles.

Like many of the predicates which have both [+agr] and [-agr] forms, there exists a systematic relationship between the agreeing form, in which the NOM-case subject does not have Experiencer semantics, and the non-agreeing form, in which there is a DAT-case Experiencer. This is exemplified opportunely in (30a-b), from Kondrashova (1994:275).

- (30) a. Maša byla xolodna.
M. was cold
DAT.SG [-agr] FEM.SG 'Maša was cold.'
- b. Mne nado bylo uxodit'.
me need was leave
DAT.SG [-agr] INFIN 'Maša was cold.'

Whereas (30a) can be paraphrased as either 'Maša was cold to the touch' or 'Maša was cold in her manner' (i.e., non-Experiencer interpretations), (30b) can mean only 'Maša experienced being cold'; these constructions' interpretations are mutually exclusive.

This class of adjectives is quite distinct syntactically from the modals in (8a-c) and (19) through (23) above. Such adjectives can be followed by infinitivals, with the copula on either side of the adjective, as (31a-b) show.³¹ However, as Kondrashova (1994:267) and Schoorlemmer (1995:61-62) point out, whereas modals require a copula (if present) to precede the modal, this is not true for adjectives like /grust#n-/, as (31c-d) show.

- (31) a. Mne **grustno** bylo uxodit'.
me sad was leave
DAT.SG [-agr] INFIN 'I felt sad to leave.'
- b. Mne **bylo grustno** uxodit'. 'I felt sad to leave.'
- c. Mne **nado** bylo uxodit'.
me need was leave
DAT.SG [-agr] INFIN 'I had to leave.' [= (8a) above]
- d. *Mne **bylo nado** uxodit'.

As (32a-b) show, /grust#n-/ class can be in copula-infinitivals with raising predicates.

- (32) a. Mne moglo byt' **grustno**.
me could be sad
DAT.SG PAST[-agr] INFIN [-agr] 'I could have been sad.'

³¹ The constituent order in (28b) is more neutral in the sense that (28a) requires a marked pitch accent on *grustno*. Not even this marked prosodic contour can make (28d) acceptable, however.

- b. Mne perestalo byt' **stydno**.
 me stopped be ashamed
 DAT.SG PAST[–agr] INFIN [–agr] 'I stopped feeling ashamed.'

As I discuss in section 4 below, this strongly suggests that stems of the /grust#n-/ class are the primary predicate of the clause, and not a mere functional category within the predicate's extended projection.³² If so, then it follows that the status of the infinitival in (31a-b) is that of complement of the adjective head. I assume this without further ado.

This class of adjectives is quite large; I will not exhaustively list its members. In the next section I return to the issue of how the external argument of an attributive adjective, as in (26a-c) appears as the NOM-case subject of clauses like (27a-b), but as the DAT-case in Experiencer in clauses like (27c). I also discuss the structure of infinitives in section 4.

To summarize section 3, I have presented the data according to how/whether the predicate stem inflects. The verbs (§3.1) allow Experiencers to appear in three different cases, depending on the verb class: NOM, DAT, or ACC. Several stems, etymologically derived from nouns or groups of words, do not show inflection (§3.2); if they take an Experiencer, then it must be in the DAT case. Finally, various morphologically adjectival predicates (§3.3) also require an Experiencer (if there is one) to be in the DAT case.

4. Proposals about the structures of non-verb Experiencer predicates

I now outline preliminary structural requirements of the various non-verb Experiencer predicates discussed (in §3.1 and §3.2) above. In this section the data are sliced differently—this time according to their position in the syntactic structure. Specifically, I distinguish modals (functional projections within an extended verbal projection), from predicates which head their own extended projections. In a later paper I plan to support these proposals with the results of a corpus search.

My primary assumption is that the copula, if there is one—in the past or future tenses only; the copula is null in the present—is located in the tense head (T). I further assume, following Kondrashova (1994) and Schoorlemmer (1991; 1995:66), that a functional modality phrase (MP) is headed by modal predicates like *nado*. MP is situated below the subject-agreement projection (AgrS). These authors have differing proposals about exactly where the DAT-case nominal appears in the Experiencer predicates discussed above (SpecAgrSP or SpecMP, respectively). I follow the SpecAgrSP model here.

Some of the predicates mentioned above **exclude** a NOM-case subject. A strong feature [–agr] in M°—checked by specifier-head agreement, as well as no subject-agreement features in the nominal expression (that would be checked in SpecAgrSP)—is what requires this the DAT-case nominal to move to SpecMP and no further. These predicates (in the contemporary language) are the de-nominals like *pora* 'time' (6a-c) and *žal'* 'pity' (7), the modals like *nado* 'need' (8a-c), and the adjectival stems *žalko* 'pitiful' (10) and *stydno* 'ashamed' (32b). With these predicates no NOM-case subject is possible.

Note that this class still mixes predicates which require infinitivals—i.e., the modals in (8a-c)—and all the others, which either optionally take infinitivals or at least allow nominal complements. Note as well that the modals have one other distinguishing characteristic: The copula, if there is one, must follow the modal, while with the other

³²

See Schoorlemmer (1991; 1995:59-66) for more details (e.g., binding facts) about this class.

predicates the copula precedes the predicate (with neutral prosody, but **can** follow the predicate with marked intonation). The structure I have in mind is shown in (33):

(33) [AgrSP AgrS° [MP M° [TP T° [XP L°]]]]

Modals are in M°, which implies that some lexical category L (i.e., L = V) must head the predicate head's extended projection. The other predicates are in L° (where L = A[djective] or some other category). The position of the copula, in T°, follows from this: The copula must follow the modal but usually precedes the other predicates.

Modals are subcategorized for an external argument, base-generated in SpecMP. This position is not, however, θ -marked, meaning that any nominal expression in this position is θ -licensed by the subject position of the infinitival (SpecVP). With non-modals the Experiencer is base-generated in the specifier of XP, and raises to SpecMP.

Moving now to the predicates which **allow** a NOM-case subject, it must be possible for a DAT-case Experiencer and a NOM-case subject to appear simultaneously in SpecMP and SpecAgrSP, respectively. This is necessary to account for predicates like /nuž#n-/ 'need'; cf. (20) above. (The fact that the movement of NOM leapfrogs MP might be handled in terms of relativized minimality.) Recall that /nuž#n-/ can always take a DAT Experiencer, but either an infinitival or a NOM-case subject. This subject is an internal argument, as the GEN-of-negation test in (22) above shows. The infinitival with /nuž#n-/ occupies the position of the nominal and there is nothing that moves to SpecAgrSP; this therefore results in the [-agr] form of this predicate: *nužno*. Thus /nuž#n-/ need not be a modal at all. Additional evidence for this is the position of copulas: Whereas with the *nado* class in (8a-c) the copuls **must** follow the modal, with /nuž#n-/ the copula can either precede or follow the predicate.³³ Another group of predicates which allow simultaneous DAT Experiencer and NOM subject are the perceivability class: /vid#n-/ 'visible', /slyš#n-/ 'audible' and /zmet#n-/ 'noticeable', exemplified above in (13a). Like /nuž#n-/ 'need', these three predicates take a DAT Experiencer and an internal argument, realized in NOM, ACC, or (with sentential negation) GEN case.³⁴ The only difference is that the perceivability predicates don't take an infinitival. This difference can be quite unproblematically accounted for by means of lexical encoding for each predicate.

These assumptions are minimal. Other tests, such as the position of sentential and constituent negation, discussed by Kondrashova (1994), further specify the structure. The minimally specified structure in (33) is however sufficient for the purposes of exploring information-structure properties of these predicates, the next step in the current project.

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³³ As M. Schoorlemmer has pointed out to me, the copula in sentences with /nuž#n-/ and an infinitival more strictly require the copula to appear between the /nuž#n-/ predicate and the infinitive verb. This strongly suggests that /nuž#n-/ + infinitival is a modal, while /nuž#n-/ + nominal is a lexical predicate.

³⁴ Unlike the perceptibility predicates, /nuž#n-/ no longer assigns ACC case; but cf. 1800s-era (23).

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