

1. Introduction

Although information structure (information packaging, functional sentence perspective, discourse pragmatics, or informatics) has been studied for many years and from many angles, it remains a subject of great debate. In recent years researchers have fallen into two principal schools of thought. Under the more semantically oriented approach, information structure (IS) categories, such as focus, are understood as quantificational elements which affect the propositional content of an utterance (Rooth 1992; É. Kiss 1995; Erteschik-Shir 1997, and numerous works cited therein). On the other hand, the “pragmatic” approach deals with how identical propositions receive a different formal expression in accordance with the speaker’s assumptions about the addressee’s state of mind. Understood in the latter way, IS serves to optimize the communication process, but is essentially independent of the truth-conditional aspect of meaning (Chafe 1976; Prince 1981; Reinhart 1982; Gundel 1988a; Vallduví 1992; Lambrecht 1994; McNally 1998, and references therein). This paper intends to provide further evidence for the contention that IS in this second sense is an integral part of grammar, working both in parallel and in competition with its other components (semantics and syntax).

My analysis will raise some fundamental issues about the content of IS and its basic units. I will argue that its commonly assumed binominal partition into topic-focus (theme-rheme, topic-comment, focus-open proposition, or focus-presupposition) may sometimes be insufficient. In particular, I hope to show that the IS relation of secondary topic can help us to describe IS in a more systematic way. Secondary topic, although sometimes used in research on IS, has been subject to rather little attention (for certain notable exceptions see Section 2.2). I will suggest some independent criteria for identifying secondary topic based on its IS role and interaction with other IS relations. Furthermore, I will show how secondary topic correlates with syntax and semantics. It should be mentioned that my notion of secondary topic is functionally similar (though not completely identical, see 2.2) to Vallduví’s ‘tail’ (Vallduví 1992, and other works). However, as noticed by McNally (1998: 177), tail has never been identified with any positive overt marking in languages other than Catalan, on which Vallduví’s original proposal is based. My analysis provides further grammatical evidence for tail/secondary topic, and demonstrates that it receives a systematic syntactic expression in at least one additional language.

I will mainly be referring to optional object agreement in Northern Ostyak.¹ Section 2 outlines the terminology relevant for the paper and the previous research on secondary topic. Section 3 demonstrates the systematic IS difference in Ostyak between the objects that trigger agreement and the objects that do not. The latter bear the focus status and the former have some topical properties. In Section 4 I argue that objects that trigger agreement bear the IS role of secondary topic; secondary topic is defined as an element under the scope of the pragmatic presupposition such that the utterance is construed to be about the relation that holds between it and the primary topic. In Section 5 I discuss some further syntactic and semantic implications of this analysis. Section 6 draws general conclusion.

2. Basic notions

2.1. Information structure

Lambrecht (1994) has proposed that IS mediates between sentence meaning and form by creating a

pragmatically structured proposition. The pragmatic structure of a proposition reflects the speaker's assumptions about an addressee's state of knowledge at the time of an utterance, and also about the representations of discourse referents in the addressee's mind. Assumptions of the first type motivate the structuring of a proposition into pragmatic presupposition and pragmatic assertion. After Kempson (1975), I will understand PRAGMATIC PRESUPPOSITION as a set of propositions which the speaker assumes the addressee knows at the time of the utterance (also Lambrecht 1994; Dryer 1996, and references therein). Two provisos are in order here. First, 'to know' the proposition should be understood in the sense 'to have a mental representation' of it; no judgment is implied as to whether or not the proposition is believed to be true. Second, the pragmatic structuring of the proposition is only relevant for linguistic research if it affects the formal organization of the sentence. In other words, IS is only concerned with those pragmatic presuppositions that have linguistic expression, that is, are evoked in one way or another in the sentence (cf. Lambrecht 1994: 55). PRAGMATIC ASSERTION is defined as the proposition which the addressee is expected to know as a result of hearing the sentence.

The distinction between pragmatic presupposition and pragmatic assertion is crucial because it underlies the definitions of focus and topic adopted in this paper. These notions are not taken here to denote the sentence elements associated with certain formal properties such as, for example, prosodic prominence or linear position. Rather they are understood as RELATIONS that pertain to the organization of the proposition into pragmatic presupposition and assertion. FOCUS is defined as "the semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition (Lambrecht 1994: 213)." Focus indicates that the relation between a referent of a sentence element and the proposition is unpredictable for the addressee and therefore constitutes new information conveyed by a sentence. The corresponding sentence elements will be referred as 'focus' as well, but it should always be borne in mind that, strictly speaking, focality is not a property of a referent as such but rather a relational category.

After Lambrecht (1994), I will further distinguish three types of focus structures, argument-focus, predicate-focus, and sentence-focus. The ARGUMENT-FOCUS (or: narrow focus (Van Valin and LaPolla 1997)) usually extends over one NP constituent. Operationally, it can be identified as a target of a wh-question, for example:

- (1) What is John drinking?
 He is drinking BEER.

The function of the argument-focus is to provide the missing argument (beer) in a presupposed open proposition (John is drinking X). The pragmatic assertion evoked in (1) can be represented as 'X = beer'. The second type of focus articulation, the PREDICATE-FOCUS (or: completive focus in Dik (1989: 277–85)) serves to increase information about the topic referent.

- (2) What is John doing? or: What about John?
 He is drinking BEER.

The predicate-focus adds a predicate to a given argument (John in example (2)). The corresponding pragmatic presupposition can roughly be represented as something like 'John is doing X', while the pragmatic assertion is 'X = is drinking beer'. In this type of utterances focus can extend over several constituents which I will refer to as FOCUS DOMAIN,² for example, over the VP is drinking beer in (2). Since in this type the predicate is by definition part of the focus domain, in my subsequent analysis I will only concentrate on non-predicate focus elements. One of the questions raised in this paper is whether non-predicate constituents that enter the domain of the predicate-focus can be associated with the pragmatic presupposition. Finally, the SENTENCE-FOCUS type (also: 'presentational', 'all-new' or 'thetic' sentences) is pragmatically unstructured in the sense that it lacks a pragmatic presupposition. The focus domain extends over the whole proposition, cf.:

- (3) What happened?

JOHN died.

Following a long tradition (Kuno 1972; Dik 1989; Reinhart 1982; Gundel 1988a; Lambrecht 1994, and others), I define the TOPIC as whatever the proposition is about. This definition is based on the pragmatic relation of ABOUTNESS (Strawson 1964; Reinhart 1982). The aboutness relation holds between the referent of the topic expression and the proposition if the referent is assumed by the speaker to be a center of current interest about which the assertion is made. As follows from this definition, topic falls under the scope of the pragmatic presupposition. It stands in the aboutness relation to the proposition by virtue of being salient enough for the addressee to consider it a potential center of predication, therefore it carries the pragmatic presupposition of saliency (Lambrecht 1994: 54). There is no agreement on the operational definition of topic for languages that do not mark it with a separate coding device. Gundel (1988a) and Reinhart (1982) suggest the ‘what-about’, ‘as-for’ and ‘said-about’ tests for topic-hood in English. Although these tests have been criticized, for example, in Vallduví (1992: 33), they seem to work for at least some material and I will apply them in my further analysis.

Topic, like focus, is a conceptual notion characterized non-linguistically, but it may be associated with a certain linguistic expression. After Lambrecht, I draw a crucial distinction between TOPIC REFERENTS and TOPIC EXPRESSIONS. Topic referents are entities that stand in a topic relation to the proposition; topic expressions are linguistic expressions specialized in designating topic referents. Although a topic expression always denotes a topic (topic referent), the reverse is not true: topic is not necessarily encoded as a topic expression. A major property of topic expressions is that they are referential. As Strawson argues, if the topic is what a statement is assessed to be about, it must have reference in the universe of discourse,³ because if it has no reference the statement cannot be evaluated as true or false. This entails that non-specific NPs cannot function as topic expressions (Strawson 1964, 1974; Schachter 1976; McCawley 1976; Reinhart 1982; Gundel 1988a; Lambrecht 1994: 150–60). In what follows the term ‘topic’ will be used with respect to topic referents.

The definitions of topic and focus given above make the following predictions. First, they imply that topic-focus articulation is universal, except in topicless sentence-focus sentences. This is due to the fact that all utterances express assertion in order to be informative and therefore have a focus, but pragmatic presupposition and, therefore, topic may be absent (cf. Sgall, Hajičová and Panevová 1986: 180; Lambrecht 1994: 236; Vallduví and Engdahl 1996: 9; McNally 1998). Second, since the relation between focus and the proposition is unpredictable, the focus element must be overtly present in a sentence. In contrast, topic as a presuppositional part of the proposition may correspond linguistically to a referential null (null topic expression), although even in this case it is inherently present in its IS interpretation (cf. Gundel 1985, 1988b). Third, topic and focus are two distinct notions and are generally thought unable to correspond to the same element in a given sentence. However, a more reasonable view is that topic and focus cannot be associated with the same sentence constituent only if their domain extends exclusively over this constituent. Lambrecht (1994) has suggested that the focus domain can include some topical elements. This point is of particular importance for my analysis, and will be discussed in more detail later.

I now turn to the second aspect of information structure, namely, the speaker’s assumptions about the representations of discourse referents in the addressee’s mind. Since Chafe (1976) they are often represented in terms of cognitive statuses. After Lambrecht (1994), I will distinguish two relevant statuses, identifiability (or familiarity), and activation, which reflect two different cognitive states: respectively ‘knowing’ the referent, and keeping it activated in consciousness. A referent is IDENTIFIABLE/UNIDENTIFIABLE (or: ‘hearer-old/hearer-new’, in terms of Prince 1992) if the speaker assumes that the addressee has (has not) a mental representation of it at the time of an utterance and therefore is (is not) able to identify it uniquely. A referent is ACTIVATED/INACTIVATED (or: ‘discourse-old/discourse-new’, in terms of Prince 1981, 1992) if the speaker assumes its mental representation is (is not) in the addressee’s current focus of consciousness.⁴ Although activation often correlates with identifiability, this is not necessarily so. An inherently familiar NP, whose referent is identifiable from the general knowledge of the world, like the sun, can be inactivated in the current consciousness of the addressee at the time of an utterance. However, as Gundel, Hedberg, and Zacharski (1993) argue,

activation necessarily implies identifiability.

Since identifiability will play virtually no role in my analysis, I will further concentrate on the activation status and its interaction with the topic-focus articulation. Chafe (1987, 1994) makes a major distinction between three degrees of activation: activated, inactivated, and semi-activated. Activated elements are in a person's current focus of consciousness because they are either mentioned in the preceding discourse or inherently present in the situation of speech (cf. the 'textually evoked' and the 'situationally evoked' of Prince).⁵ An activated concept tends to be realized as an unstressed pronoun, an anaphoric affix, or a zero anaphora (Givón 1983; Ariel 1988; Gundel, Hedberg and Zacharski 1993), although it may be referred to by a lexical NP as well. Inactivated referents have not been mentioned in the previous discourse and cannot be evoked from the situation, therefore are not currently in the consciousness of the interlocutors. An inactivated concept is typically realized as a full NP associated with prosodic prominence (Chafe 1976: 3; Van Valin and LaPolla 1997: 204).⁶

The third activation status is semi-activeness or inferability (Prince 1981, 1992; Gundel, Hedberg and Zacharski 1993), cf. also 'bridging inferences' of Clark and Haviland (1977) and 'indirect anaphors' of Erkö and Gundel (1987). According to Prince, INFERABLES is a category that is technically inactivated, but can be identified by an addressee through its relationship to an activated element or to another inferable. Referents of inferable expressions, although not present in the addressee's current consciousness, are pragmatically accessible and easier to activate than referents of non-inferable inactivated elements. Various types of inferables are discussed in detail in Clark and Haviland (1977) and Prince (1981). Typically, the addressee can infer the discourse existence of the referent of an inferable via some independent logical or culture-based assumptions. Example (4) is taken from Prince (1981).

- (4) They have a house like this ... And usually she lets the door open but she didn't this time.

In (4) the definite article in the door is conditioned by its inferable status. Although the referent of this expression is inactivated, it can be inferred from a previously mentioned element, a house, based on our general knowledge that houses normally have doors.

What is the relationship between the topic-focus partition and the activation status of a sentence element? It has been suggested that the activation and the IS statuses are not completely independent parameters; they interact in a quite predictable way. In particular, the organization of information in an utterance obeys at least one principle based on the activation status, formulated as the 'One Chunk per Clause Principle' (Givón 1984b: 258–63), the 'One New Argument Constraint' (Du Bois 1987), or the 'One New Idea Constraint' (Chafe 1987, 1994: 108–10).⁷ This principle imposes a limitation on the maximum number of new elements that can be introduced per clause based on processing considerations. It basically states that every clause in connected discourse has typically one inactivated participant and it must fall under the scope of assertion, that is, be in focus. Thus, the One New Idea Constraint states the correlation between the inactivated status of the sentence element and its property of bearing the focus relation to the proposition. On the other hand, Dryer (1996) extensively argues that non-focus corresponds to activated propositions, which also involve activated referents.

Thus, the non-focus status implies activation, and inactivation implies focus status. However, this does not preclude a situation when an activated element is in focus. In other words, even if we assume One New Idea Constraint, there is no one-to-one correspondence between the activation status and the focus/non-focus status. The reason is that, as was stated above, topic and focus are informational primitives which express the relation of the referent of a linguistic expression to the proposition. However, they describe not the properties of the referent as such (its being mentioned in the discourse or being in the current consciousness of the interlocutors), but the properties of the corresponding information (its being asserted or presupposed). Although focus is widely believed to be associated with new information, new information is not equated with inactivated referents. This point has been argued by Lambrecht on the basis of examples such as the following (Lambrecht 1994: 211).

- (5) a. Where did you go last night, to the movies or to the restaurant?

b. We went TO THE RESTAURANT.

In (5b), although the referent of the NP the restaurant is unambiguously activated, it bears a focus relation to the proposition. This is because the new information is not the referent of the NP the restaurant itself but the fact that this NP satisfies the variable in the open-proposition we went to X. This indicates that the correlation between the activation and the IS status is not absolute. Although an inactivated referent necessarily involves the focus status of the corresponding constituent, activated elements can be either in focus or not (see also Gundel 1985; Prince 1986; Lambrecht 1994: 262; Dryer 1996: 496).

It is important to observe that the properties of inactivated focus elements differ in argument-focus and predicate-focus structures. Contrary to Lambrecht's account, I believe that in argument-focus structures the focus element is inactivated only if it is contrastive, as in (5). Some studies (Rochemont 1986; Herring 1990; Gundel 1999) have suggested that contrastiveness necessarily involves the focus status of the corresponding element, so that the contrastive focus forms a special subtype of focus. I will follow a different approach here and assume that contrastiveness is an additional feature in the semantico-pragmatic structure of the sentence orthogonal to the topic-focus articulation (cf. Chafe 1976; Givón 1990: 699; Lambrecht 1994; Vallduví and Vilkuna 1998: 86–7). This is supported among other reasons by the fact that topic, defined as above, can be contrastive (Lambrecht 1994: 291–5). Under this approach, contrast is understood either as an operator-like element (Vallduví and Vilkuna), or as an implicature that generates a virtual set of semantically similar alternatives, so that the contrastive element is opposed to these alternatives by virtue of participation in a given proposition (Chafe). Argument-focus can be non-contrastive, as in (1), in which case it is arguably inactivated in accordance with the One New Idea Constraint. However, argument-focus serves to provide a missing argument for an open proposition, and this may happen under contrast. A contrastive element is chosen from an explicit or implicit set of alternatives; therefore it may be activated if the relevant set is activated, as in (5). So if the argument-focus triggers a strong contrastive implicature its activation status is irrelevant; it can be activated, inactivated, or inferable (cf. Chafe 1976, 1994; Rochemont 1986; Givón 1990).⁸

As for predicate-focus, let us consider the following simple piece of discourse.

- (6) Once upon a time there was a little girl. Once she went to the forest. She met an ugly old man there. She talked to him.

Under the approach I take here, all the sentences in (6), except the first, involve the predicate-focus structure; their function is to predicate information about the topic (little girl). The focus domain is the whole sentence minus the topical pronoun she. Although the unaccented pronouns there and him are part of the focus domain, they correspond to activated referents. This suggests that in the predicate-focus structures activated elements can occur within the focus domain (cf. Lambrecht 1994: 250). However, they are never the only elements there. For the utterance to be informative, the focus domain must also include either the predicate alone (talked as in she talked to him) or the predicate and inactivated NPs (met an ugly old man as in she met an ugly old man there).

To sum up, argument-focus can be either inactivated or activated, and in the latter case it is likely to have a contrastive interpretation. Predicate-focus domain may (although it need not) include activated elements. Inactivated elements must be associated with focus in accordance with the One New Idea Constraint.

2.2. The notion of secondary topic

The main problem addressed in this paper is the possibility of multiple topics, topic being defined as an element pragmatically presupposed to be salient enough for the utterance to be construed about it. Some studies that adopt a very similar definition of topic have explicitly argued for topic uniqueness, for example, Reinhart (1982). This seems to follow from Reinhart's understanding of topic as an "address" under which the information is stored or classified in the interlocutor's mental file. She uses the idea of

the context set, that is, the set of propositions taken for granted by the interlocutors at the time of an utterance. The context set is metaphorically described as the file which consists of indexed cards representing existing discourse referents, while utterances are conceived as a set of instructions to an addressee to update the file. Each card has a heading (a topic). New assertions added to the context set are classified by their topics; they enter information pertaining to the relevant topic on the card with the respective heading. Since topic determines under which entry the proposition is entered into the context set, it is indeed tempting to think that each proposition has a unique topic that unambiguously signals its address.

On the other hand, Lambrecht (1994: 150) notices that the topic uniqueness claim is neither justifiable on pragmatic grounds nor supported by grammatical arguments. Nothing in principle prevents an utterance from having several topics that are equally under discussion, so that the utterance simultaneously increases the addressee's knowledge about several referents. As far as I can see, even under the file-card approach there is no a priori reason why new information cannot be added under two (or possibly more) different entries. In fact, Erteschik-Shir explicitly argues that two cards can be licensed as potential topics (Erteschik-Shir 1997: 44). For example, the questions in (7a) ensure that both cards for 'John' and 'Mary' are under discussion ("located on top of the file"). So in (7b) both the subject and the object are available topics.

- (7) a. What is the relationship between John and Mary?
 How does John feel about Mary?
 b. He LOVES her.

The possibility of multiple topics is suggested by a variety of grammatical evidence across languages. It is important to consider that syntactically we may be dealing with two different structures here. First, at least one of the topic expressions may have clause-external status. A clause-external topic expression is not integrated syntactically into the clause structure, and the relation of its referent to the clause is a matter of pragmatic construal only. Syntactic arguments for the extra-clausal status of the external topic are presented in Aissen (1992) for Mayan languages. The external topic is base-generated and adjoined to the maximal clause. Although it may be coindexed with a coreferential pronoun within the clause, this is not necessary because the external topic position is not a landing site for movement. In this it differs from the clause-internal topic which is shown to be in a Spec of C' position and to bind a coindexed trace within a clause. At least for one of the languages she is dealing with, Tz'utujil, Aissen states that it has both external and internal topics, although she does not explain a functional difference between them (if any) and examples of sentences with multiple topics are not cited. Co-occurrence of clause-external and clause-internal topic expressions have long since been argued for in Chinese linguistics. Following the earlier proposal of Huang, Tsao (1987a, 1987b, 1988) adopts the following surface structure of the Chinese clause: [COMP [Topic₁ [Topic₂]]], where topics are assumed to be either adjoined to S or dominated by S', S'', etc. Topic₁ is not a constituent of the maximal clause, while Topic₂ is clause-internal but has a non-canonical position accounted for by the rule of topic-movement. According to Tsao, the Topic₂ position can accommodate fronted objects, the second nominals in a double subject construction, and some preverbal adverbials. The structure in fact allows for more than two topics, cf. the following example from Huang (1998: 62).

- (8) [Zhangsan [neixie ren [lian yige [ta dou bu renshi]]]
 Zhangsan those man every one he all not know
 As for Zhangsan, of those men, he does not know a single one.

Lambrecht (1994: 192–4), referring to spoken English, German, and French, presents further arguments indicating that detached topic NPs are not constituents of the clause.

The external and internal topics often have different functions, as already suggested in Chafe (1976: 50–1). Since Chafe (1976) and Li and Thompson (1976), clause-external topics are characterized as expressions setting “a spatial, temporal or individual framework within which the main predication

holds.” For this reason they tend to correspond to adverbials, cf. the analysis of clause-initial adverbial expressions in English as multiple topics in Culicover (1996). In contrast, clause-internal topics are typically “aboutness” topics in the sense mentioned above. The referent of the “aboutness” topic is indispensable for the conveyed event, therefore the corresponding NP plays an argument role in the proposition. Thus, under the definition of topic adopted in this paper, the co-occurrence of clause-internal and scene-setting clause-external topics does not really contradict Reinhart’s claim on topic uniqueness.

I will therefore turn to the second type of multiple topic constructions, namely, multiple clause-internal (argument) topics, which have received considerably less attention in the literature. The present paper deals only with this type. The term “secondary clausal topic” itself originates, as far as I know, from Givón (1979, 1984a, 1984b: 168–71, 1995: 379). However, Givón’s topicality is very different from the presuppositional approach I employ here. As stated in 2.1, I understand topic as a referent under the scope of pragmatic presupposition. For Givón, topicality is rather a relative property that characterizes all referential NPs within a clause and is “measured” in terms of referential accessibility and thematic importance (Givón 1990: 901–8). Therefore the primary and the secondary topic have essentially the same properties but to different degrees; the primary topic is more important, continuous and recurrent than the secondary topic. Next, in Givón’s conception, the primary topic tends to be encoded cross-linguistically as a subject, while the secondary topic tends to be encoded as a direct object (cf. also Sasse 1984; Croft 1991). In some languages secondary topicalization triggers the promotion, by whatever grammatical means, of arguments other than patient/theme to the direct object role. In this case the secondary topic function is grammaticalized as the grammatical relation of the direct object in the same way as the subject is typically a result of the grammaticalization of the primary topic. Semantic roles have a different accessibility to the direct object (secondary topic) function, which is reflected in the following hierarchy:

- (9) DAT/BEN > P > LOC > INSTR > other

If a language does not have any mechanisms for object-promotion, it does not encode the secondary topic grammatically. Since a sizable number of languages in fact do not, Givón further claims that secondary topic is infrequent in human discourse for processing reasons. Under my approach, this claim, even if it is essentially correct, does not follow from the fact that not all languages have a grammaticalized expression for the secondary topic function. If topicality is defined on referents rather than on linguistic expressions, it is not a priori constrained to be encoded in one particular fashion or another.

A presuppositional account of secondary topic has been suggested for unaccented non-subject pronouns in English (Lambrecht 1994: 148–9; Erteschik-Shir 1997, where the term “subordinate topic” is used instead). Consider (10).

- (10) a. Whatever became of John?
 b. He married Rosa,
 c. but he didn’t really love her. (Lambrecht 1994: 148)

In (10b) the subject is topical, while the object (Rosa) does not carry a pragmatic presupposition and is a part of the focus domain. In (10c) the situation is different: although it is construed primarily as information about John, it also increases the addressee’s knowledge about Rosa, namely, the fact that she was not loved by John. Both Rosa and John are pragmatically presupposed and equally under discussion in (10c), so the corresponding NPs are characterized as topics. This does not preclude the fact that, as hinted by Givón, multiple topics may be ordered with respect to their pragmatic saliency; in (10c) John is clearly a more salient participant than Rosa. Another example of argument secondary topic is the recipient and the causee in double object constructions, as analyzed by Polinsky (1994, 1998). Since, like the primary topic, the secondary topic is under discussion at the time of the utterance, it is expected to carry the pragmatic presupposition of existence. Polinsky extensively argues that the

existence of the recipient/causee argument does not require assertion in the sentence where it appears. This contrasts with prototypical properties of the patient whose existence is not presupposed prior to the event in question. The semantic difference translates into IS asymmetry in that the patient is more likely to be interpreted as focus and the recipient/causee as the secondary topic.

As Lambrecht further argues, argument topics can be expected to stand in a certain relation to each other. “A sentence containing two (or more) topics, in addition to conveying information about the topic referents, conveys information about the relation that holds between them as arguments in the proposition (Lambrecht 1994: 148).” This relation is established before the relevant sentence is uttered, in the example above by (10b), and constitutes a subset of the presupposed information associated with (10c). The new assertion in (10c) is meant to update the addressee’s knowledge about this relation. Such an understanding of secondary topic stands in agreement with Givón’s grammaticalization analysis. The patient/theme argument is notoriously difficult to define in semantic terms; basically it corresponds to the second participant of the event whatever its role in it may be. If the utterance with multiple topics has at least two participants (the primary and the secondary topic) and is construed to be about the relationship that holds between them, the linguistic expression specialized on the encoding of the patient/theme (the direct object) is likely to be grammaticalized as the expression of the secondary topic.

The secondary topic understood as above is somewhat functionally similar to Vallduví’s notion of ‘tail’⁹ (Vallduví 1992; Engdahl and Vallduví 1996). Vallduví basically follows Reinhart’s suggestion that topic (‘link’, in his terms) serves to indicate under which address in the addressee’s knowledge store the new information carried by the sentence is to be entered. The role of link is to establish the locus of updating the information. Tail, on the other hand, indicates a more specific way of how the information is added to the given address. It directs attention to an entry which is already present on the card headed by link. The IS instruction for identifying the tail (X) is ‘Go to entry X under given address’ where the address is specified by the primary topic (link). This ensures that link and tail stand in a certain presupposed relation, just as was argued above for the primary and the secondary topic. The new assertion completes or alters the tail entry, and therefore updates information about the relation between it and the link. For example, in (11) the entry broccoli (the tail) is already present on the card for the boss (the link). The focus, indicated here with square brackets, substitutes for the blank in the boss _____ broccoli relationship.

- (11) How does the boss feel about broccoli?
 L’amo [l’odia], el bròquil
 the.boss it.hates the broccoli
 The boss HATES broccoli. (Vallduví 1992: 74)

Crucially, in Catalan link and tail are strongly associated with linear positions. Tail is syntactically the mirror image of link; link is left detached and tail is right detached. Vallduví argues that both slots are clause-external. All the detached material corresponds either to link or tail, and conversely, in the absence of detached constituents the structure is analyzed as “linkless” and “tailless”. The latter case is illustrated in (12) where the presence of the clitic object pronoun is said to be due to non-informational syntactic requirements.

- (12) How does the boss feel about broccoli?
 pro [l’odia]
 it.hates
 He HATES it. (Vallduví 1992: 74)

This analysis also predicts that the utterance can have several links if they are adjoined to the matrix clause from the left.

- (13) How does the boss feel about broccoli?

De	bròquil	l'amo	[no	en	menja]
of	broccoli	the.boss	no	it	eats

Broccoli the boss doesn't eat. (Vallduví 1992: 50)

There is an important difference between Vallduví's approach and mine. Given the terminological distinction between topic referents and topic expressions drawn in the previous section, it is clear that Vallduví's link corresponds to topic expressions, rather than to topic referents (or simply topics) in my terms. As mentioned above, topic is an IS primitive defined non-linguistically. A topical referent is not necessarily encoded by a grammatically marked topical construction. In fact, an NP that corresponds to topic may be omitted under coreference. The same reasoning applies to tail (secondary topic). So although (12) has no detached constituents and therefore no link or tail in Vallduví's sense, under my approach it has a fully articulated 'topic - secondary topic - focus' structure where the topic (the subject) is a zero pronoun and the secondary topic is expressed by a clitic. Furthermore, I fail to see how (11), (12) and (13) differ in their IS, especially because they are provided with identical contexts. In all three cases the new information conveyed by the utterance is the nature of the relationship between the boss and broccoli, so, defined conceptually, in all these examples the former can be analyzed as the primary topic and the latter as the secondary topic. What varies is their syntactic expression. Although in all three cases the primary topic corresponds to a referential null within the clause and the secondary topic to an object clitic, they are associated with different clause-external elements, as captured in Vallduví's analysis. In (11) the primary topic is expressed by the left detached element (link) and the secondary topic is doubled by the right detached element (tail), while in (13) both detached constituents are on the left periphery of the clause. Thus, under the approach adopted in this paper, the distinction between (11), (12) and (13) should be made in morphosyntactic rather than in informational terms.

This paper heavily relies on Lambrecht's and Polinsky's insights. I will further elaborate on the notion of secondary topic and its interaction with other IS relations, focus and primary topic. This is of special importance since, as mentioned above, the difference between the primary and secondary argument topics has been so far spelled out only in terms of their relative saliency. Another question indirectly addressed in this paper is variation in the grammatical expression of the secondary topic function. As was said above, secondary topic is defined conceptually, but some languages employ specialized grammatical means for secondary topic expressions. In English, the secondary topic can be expressed by unaccented non-subject pronouns. In the Romance languages, as demonstrated by Vallduví's analysis of Catalan and Lambrecht's (1986) analysis of spoken French, secondary topic is encoded by pronominal clitics which may be anaphorically related to clause-external expressions. As I will argue in this paper, Ostyak has a syntactic device that unambiguously marks the secondary topic, object agreement.

3. The information structure status of the object in Ostyak

3.1. Initial data

This section summarizes my previous proposal on Ostyak object agreement (Nikolaeva 1999). In Ostyak transitive verbs may agree with the subject only, as in (14a). The direct object that does not trigger agreement will be referred to as O1. In other cases, the direct object triggers an agreement affix on the verb, as in (14b)–(14d); such objects will be referred to as O2. The object agreement affix precedes the subject agreement affix and indicates the number of the direct object: null for Singular, -ŋil- for Dual, and -l- for Plural objects. Thus, the subject agreement is obligatory and the object agreement is optional. The choice of a subject agreement affix depends upon information from both the subject and the object, for example, the 1SG subject marker is -əm in (1a) and -em or -am in (14b)–(14d). This holds for the whole paradigm. For this reason, I will gloss subject agreement markers on transitive verbs as O1 in the clauses without object agreement and as O2 in the clauses with object agreement. The gloss for the null Singular O2 object will be omitted in subsequent examples.

- (14) a. ma tam kalaŋ we:l-s-əm
 I this reindeer kill-PAST-1SG.O1
 I killed this reindeer.
- b. ma tam kalaŋ we:l-s-∅-e:m
 I this reindeer kill-PAST-SG-1SG.O2
 I killed this reindeer.
- c. ma tam kalaŋ we:l-sə-l-am
 I this reindeer kill-PAST-PL-1SG.O2
 I killed these reindeer.
- d. ma tam kalaŋ we:l-sə-ŋil-am
 I this reindeer kill-PAST-DU-1SG.O2
 I killed these (two) reindeer.

O1 and O2 have a different syntactic status. As shown in Nikolaeva (1999), O2 shares certain syntactic properties with the subject, namely, it controls coreference in the embedded clause and reflexivization, and can trigger quantifier float and topicalization of the possessor. By contrast, O1 is syntactically inert: it does not participate in any of these processes. A number of arguments were also presented showing that O1 and O2 bear an identical argument status to the verb, and that clauses which minimally differ by the presence/absence of object agreement convey an identical propositional content.

Contrary to traditional descriptions of Ostyak, which usually analyze O2 as definite and O1 as indefinite (Honti 1984, and references therein), the notion of definiteness does not account for the facts of object agreement. Indeed, as indicated by the contrast between (14a) and (14b), the definite object modified by a demonstrative pronoun may or may not trigger agreement. Proper nouns and personal pronouns, usually analyzed as definite, do not necessarily trigger agreement either (see examples below). On the other hand, the indefinite object does not necessarily correspond to O1. So at present, we are left with the conclusion that the difference in the syntactic properties of O1 and O2 is not motivated semantically, at least not in any obvious way.

3.2. Arguments for the focus status of O1

There are several arguments for interpreting O1 as a focus object. Most importantly, in questions and answers to the object, object agreement is absent.

- (15) mati kalaŋ we:l-əs / *we:l-s-əlli?
 which reindeer kill-PAST.3SG.O1 / *kill-PAST-SG.3SG.O2
 tam kalaŋ we:l-əs / *we:l-s-əlli
 this reindeer kill-PAST.3SG.O1 / *kill-PAST-SG.3SG.O2
 Which reindeer did he kill? He killed this reindeer.

Objects under the scope of the focus items such as ‘only’ or ‘even’, as well as contrastive objects, never trigger agreement. This immediately qualifies O1 as an argument-focus object.

- (16) a. luw mane:m jir-əs / *jir-s-əlli anta
 he I.ACC tie.down-3SG.O1 / *tie.down-PAST-3SG.O2 no
 naŋe:n
 you.ACC
 He tied me down, not you.
- b. ma tup ij a:n il pa:jət-s-əm / *pa:jət-s-e:m
 I only one cup down drop-PAST-1SG.O1 / *drop-PAST-1SG.O2
 I dropped only one cup.

Next, as has already been shown in Nikolaeva (1999), O1 cannot be omitted from the clause.

The contrast in (17) demonstrates that in transitive clauses without object agreement the object must be overt, while in clauses with object agreement the object may be omitted under coreference.

- (17) a. *ma Ø wa:n-s-ə̃m
 I see-PAST-1SG.O1
 I saw something/it/him.
 b. ma Ø wa:n-s-e:m
 I see-PAST-1SG.O2
 I saw it/him.

I have argued in Section 2.1 that a focus referent stands in an unpredictable relation to a proposition. For this reason a focus expression, unlike a topic expression, must be overtly present in the sentence. The fact that O1 must be overt supports its analysis as focus.

An additional argument for the focus status of O1 comes from word order. There is abundant cross-linguistic evidence that in SOV languages the focus element tends to be immediately preverbal independent of its semantic and grammatical role (Kim 1988; É. Kiss 1995). Ostyak is a fairly rigid SOV language, and this constraint is operative in it as well. It can be most easily illustrated by wh-question words, which are universally known to exhibit a strong syntactic and functional correlation with argument-focus, as well as by the answers to these words. Examples (18) below demonstrate that the wh-question word is always located strictly preverbally regardless of its grammatical function; in (18a) the question word corresponds to the direct object, in (18b) to the locative adjunct, in (18c) to the passive agent adjunct, and in (18d) to the indirect object.

- (18) a. (*mola) ná:wre:m-l-am mola we:r-l-ə̃t?
 what child-PL-1SG what do-PRES-3PL.O1
 What are my children doing?
 b. (*xalśa) ma ja:j-e:m xalśa wu-l-e:m?
 from.where I brother-1SG from.where take-PRES-1SG.O2
 Where shall I take my brother from?
 c. (*xoj-na) tam a:n xoj-na tu:-s-a?
 who-LOC this cup who-LOC take.away-PAST-3SG.PAS
 Who took away this cup?
 d. (*xoj e:liti) tām a:n xoj e:liti ma-s-e:n?
 who to this cup who to give-PAST-2SG.O2
 To whom did you give this cup?

The same applies to answers to wh-questions, as demonstrated by (19) construed as an answer to (18d).

- (19) (*Juwan-a) tam a:n Juwan-a ma-s-e:m
 John-LAT this cup John-LAT give-PAST-1SG.O2
 I gave this cup to John.

Only one constituent can be placed in the focus position. A crucial piece of evidence for this comes from multiple wh-questions, as shown by (37) where one of the wh-question words (xalśa ‘where’) is located in the preverbal focus position, while another (xunsi ‘when’) is clause-initial.

- (20) xunsi naŋ muŋi-luw (*xunsi) xalśa wa:nt-lə̃-l-an?
 when you we-ACC when where see-PRES-PL-2SG.O2
 When will you see us, and where?

Like focus NPs, O1 cannot be separated from the verb, as is illustrated in (21a).¹⁰ On the other hand, (21b) shows that this does not hold for O2.

- (21) a. *Petra mo:jpər u:r-na wa:nt-əs
Peter bear forest-LOC see-PAST.3SG.O1
Peter saw a bear in the forest.
- b. Petra mo:jpər u:r-na wa:n-sə-lli
Peter bear forest-LOC see-PAST.3SG.O2
Peter saw a bear in the forest.

These facts lead to the conclusion that O1 is associated with an argument-focus.

3.3. Arguments for topicality of O2

In the previous section I have argued that O1 can be interpreted as focus. This section intends to show that O2 has some topical properties.

3.3.1. Existential presupposition

Since Strawson (1950, 1964), existential presupposition is associated with an entailment of existence with regard to the referent. To put it differently, the NP that bears the presupposition of existence has a non-empty reference. According to the definition given in Section 2.1, the pragmatic presupposition is a set of propositions about which the speaker and the addressee have some shared knowledge. Combining these approaches we can define the PRAGMATIC PRESUPPOSITION OF EXISTENCE as a proposition which expresses the interlocutors' shared belief that a nominal expression has a referent (cf. Prince 1978). This should not be understood in the sense that the interlocutors actually believe in the existence of a referent in the real world, but rather that they act linguistically as if they have such a belief. What is presupposed by referential expressions is not actual existence, but the existence of the entities that are spoken of, that is, their existence in the universe of discourse (cf. Karttunen 1976; Bonomi 1977; Clark and Marshall 1981; Givón 1984b). The speaker assumes that, whether or not a presupposed referent corresponds to a real entity, it has a representation in the mind of the addressee which can be evoked in a given discourse. Only in this pragmatic sense is this referent assumed to pre-exist.

The pragmatic existential presupposition depends on the pragmatic role an NP plays in the proposition (cf. Lambrecht 1994). Since it is part of the old information conveyed by the proposition, it correlates highly with the non-focus status. As mentioned in 2.1, it is a necessary property of topic expressions.¹¹ Pre-existence of the topic is established through its status as a possible center of interest or matter of concern in the conversation. Strictly speaking, what is presupposed is not the referent of a topic expression but the fact that it plays a certain pragmatic role in the proposition, but this also entails that the referent is presupposed to exist. Crucially, the O2 object is associated with a pragmatic presupposition of existence established at least prior to the time of the utterance in which it appears. This is confirmed, firstly, by the fact that O2 must be specific. Although the exact nature of the phenomenon of specificity has been the subject of some debate (for the relevant discussion see Jackendoff 1972; Ioup 1977; Enç 1991; and Diesing 1992), the important point which seems to be commonly agreed is that a specific NP implies the existence of the discourse referent, whereas a non-specific NP does not. The interlocutors do not assume that the latter has a referent in the universe of discourse, or, more precisely, the speaker does not assume that the addressee has a mental representation of its referent.¹²

In Ostyak, non-specific objects do not trigger agreement, as illustrated by the following examples.

- (22) a. ma li-ti pil xalśa kas-l-əṃ? / *kas-l-e:m
I eat-PART companion how find-PRES-1SG.O1 / find-PRES-1SG.O2
Where shall I find a companion to eat with?
- b. ma mu:tra xalśa u:ś-l-əṃ? / *u:ś-l-e:m?

I miracle how know-PRES-1SG.O1 / know-PRES-1SG.O1
 How may I know a miracle?

Examples (22) represent argument-focus structures where focus is associated with a non-object (*xalša* ‘how’). In 3.2 I have argued that non-verbal focus elements must occupy the immediately preverbal position which accommodates only one constituent. In (22) the objects bear a non-focus status and are located outside the focus position. Crucially, the objects have a non-specific interpretation: their existence in the universe of discourse is not implied. In fact, examples (22) convey the speaker’s belief that a referent of the object NP does not exist. This analysis is supported by the usual specificity tests involving existential and anaphoric contexts. The presence of the existential presupposition is incompatible with the assertion of existence. As specific NPs establish a referent which is presupposed to exist at least prior to the time of the utterance, only non-specifics are generally allowed to occur in existential sentences asserting existence (Heringer 1969; Enç 1991: 14). The existential paraphrase of (22a) is ungrammatical, as shown in (23a). Furthermore, non-specific NPs cannot be referred to by an anaphoric pronoun in a present indicative clause (Karttunen 1976: 366). This is illustrated for Ostyak in (23b).

- (23) a. *ma kas-ti li-ti pil u:-l
 I find-PART eat-PART companion be-3SG
 There is a companion to eat with for me to find.
- b. *ma li-ti pil xalša kas-l-əm?
 I eat-PART companion where find-PAST-1SG.O1
 luw ta:ta ant u:-l
 he here not be-PRES.3SG
 Where shall I find a companion to eat with? He is not here.

Further, non-specific quantified expressions in the object role such as *nobody* or *something* do not trigger object agreement.

- (24) ma mola / ne:məltit an wa:n-s-əm / *wa:n-s-e:m
 I what / nothing NEG see-PAST-1SG.O1 / *see-PAST-1SG.O2
 I saw something / I didn’t see anything.

So non-specific objects in Ostyak are encoded as O1 even if they are non-focus.¹³ In other words, objects that trigger agreement must be specific, that is, they are associated with the pragmatic presupposition of existence.

One might expect to corroborate the presuppositional account for O2 by semantic facts. The lexical semantics of the transitive verbs that co-occur with O1 and O2 correlates with the presupposed/non-presupposed status of the object. It is immediately apparent from the corpus data that O2 co-occurs with a considerably more varied group of verbs than O1. In my corpus (Pápay 1906–8) there are 713 occurrences of an O1 distributed among 96 verbs, while 826 occurrences of O2 are distributed among 220 verbs. The verbs that co-occur with O2 tend to be more complex semantically than the verbs that co-occur with O1. Typically they inherently involve an instrument (for example, *re:sk-* ‘hit’, *e:wə̀t-* ‘cut’, *jo:wə̀lt-* ‘shoot’) or another non-patient valence. Directional or locational valence is frequently expressed by the verbal prefix that further specifies the meaning of the corresponding non-prefixed verb, for example, *wu-* ‘take’ is mostly found with O1, while its prefixed counterparts *kim wu-* ‘take out’ and *nox wu-* ‘take up’ typically co-occur with O2. The range of possible meanings for the verbs that co-occur with O2 varies widely.

On the other hand, the verbs that co-occur most frequently with O1 have less complex semantics and appear to belong mostly to the following groups:

- (i) Creation verbs such as *we:r-* ‘build, make, sew’, *kir-* ‘harness (in the sense ‘create a harness’), *ka:wə̀rt-* ‘cook (a dish)’, *al-* ‘make (a fire), *le:šat-* ‘prepare, arrange’;

- (ii) Verbs of speech such as la:w- ‘say, tell’;
- (iii) Perception verbs and verbs of discovery such as wa:nt- ‘see’, sijal- ‘notice’, xo:l- ‘hear’, u:š- ‘find, learn’, mo:šat- ‘find, meet’;
- (iv) Possession and change of possession and/or location verbs such as taj- ‘have’, ma- ‘give’, tu:- ‘bring’, wu- ‘take’, akət- ‘gather’, kit- ‘send’.

These four groups exhibit a remarkable parallelism with what has been referred to as ‘low content verbs’ in Chafe (1994: 110)¹⁴ or ‘definite-effect verbs’ in Szabolcsi (1986). According to Szabolcsi, a major property of transitive definite-effect verbs is that they have the component EXIST in their semantic interpretation and, under normal discourse conditions, are not compatible with definite objects. This is because a definite noun is usually analyzed as falling under the scope of the existential operator, so the application of the logical predicate of existence to definites would lead to tautology. The verbs in (i) and (ii) are prototypical in this sense because the object does not exist prior to the described event, as follows solely from their lexical semantics. These verbs either describe the physical creation of a new entity (type (i)), or basically ‘create’ a new propositional object (type (ii)). I believe similar reasoning is valid for the verbs in (iii)–(iv) as well, with the proviso that at least for some of them it is reasonable to speak of pragmatic rather than “logical” existence. These verbs typically introduce a new participant into the discourse, although this is a tendency, rather than a strict generalization. For example, in the situations John found a dog and John has a dog, the object a dog exists independently of the described event. However, it is unlikely to be evoked in the previous discourse, and so the interlocutors do not pragmatically presume its independent existence at the time of the utterance.

The semantic difference between the verbs that co-occur with O1 and the verbs that co-occur with O2 is confirmed by the fact that the meaning of some of them depends on the type of object they are combined with. Compare the following pairs.

	with O1	with O2
<u>taj-</u>	‘have’	‘keep, hold’
<u>ka:wərt-</u>	‘cook (create a dish)’	‘boil up, cook (a raw material)’
<u>we:r-</u>	‘make’	‘repair’
<u>wa:nt-</u>	‘see (something new and unexpected)’	‘observe, look at (a known object or situation)’
<u>we:l-</u>	‘kill, catch (while hunting)’	‘kill (a person)’
<u>kir-</u>	‘harness (create a harness)’	‘harness, put in a harness (a reindeer)’
<u>u:š-</u>	‘learn, find’	‘be acquainted, look for’

These pairs illustrate the difference between O1 and O2 with respect to independent existence. The verbs we:r-, ka:wərt- and kir- demonstrate an alternation in meaning similar to what is sometimes referred to as the ‘creation and transformation alternation’ in English (Levin 1993). With O1 they are verbs of creation, while with O2 they describe the transformation of an already existing object. The verbs wa:nt-, taj-, we:l- and u:š- introduce a new participant in the discourse when they co-occur with O1, but their meaning with O2 is such that the object has typically been mentioned in the previous context.

Overall, lexical semantic facts seem to support the idea that O2 is associated with the pragmatic presupposition of existence. Under my approach, this indicates that O2 is a likely topic expression.

3.3.2. Activation

As discussed in 2.1, the concept of topic deals with the relation of the corresponding referent to a proposition, while the activation status of a referent has to do with its temporary representation in the mind of the interlocutors. These parameters are in principle different. However, topic by definition serves as the center of the current interest. In order for the utterance to be assessed about the topic, the latter must have certain activation properties (cf. Lambrecht 1994: 162–5). Activated expressions are the most easily interpreted as topics.

The data presented here show a strong correlation between O2 and activation. Table (25) provides statistics on the activated and inactivated status of objects, based on the study of texts from Pápay (1906–8). The activation status is identified operationally. The object is inactivated if its referent has not been mentioned previously, while the activated status is assigned to an object whose referent has been evoked within the same text or is present in the situation of speech, as in the case of the speaker and the addressee. Generally, this procedure seems to be quite straightforward. Controversy might arise in the following two cases. First, the object NP may denote a referent previously mentioned by a different name. These cases were not studied specifically, since they are not frequent in Ostyak texts. It seems, however, that the activated status requires an identity of sense, independently of the surface expression of a referent. Second, I was treating the direct speech quotations as separate pieces of discourse. Accordingly, the referent mentioned for the first time in direct speech was counted as inactivated, although it might have been mentioned within the same text, but outside the quotation. Object NPs are further differentiated by their formal properties into lexical, pronominal, and null objects. For lexical objects a distinction is also made between objects with reflexive and those with non-reflexive possessive affixes (this distinction will be important later, in Section 5.2). Pronominal NPs and null objects are regarded as inherently activated.

(25)	Activation status of the object				
		O1 (412 clauses)		O2 (677 clauses)	
	direct object	activated	inactivated	activated	inactivated
	possessive				
	non-reflexive	11	23	45	31
	reflexive	12	47	67	60
	non-possessive	16	296	77	25
	personal pronouns	7	0	49	0
	∅ object	0	0	323	0
	total	46	366	561	116
		11%	89%	83%	17%

Table (25) shows that in 89% of clauses O1 is inactivated, and that in 83% of clauses O2 is activated. This percentage is high enough to allow us to conclude that object agreement strongly correlates with the activation status of the object, while inactivated objects do not typically trigger agreement. The apparent exceptions (that is, the remaining 11% and 17%) will be accounted for below, in sections 4.3 and 5.2 respectively. The table also shows that in almost half of the clauses (323 clauses) the verb is marked for object agreement in the absence of an overt object. This follows from the activated status of O2 and from the general consideration that under coreference activated NPs can (and tend to) be dropped (see Section 2.1). The use of lexical NPs as O2 is in fact a marked option and is usually motivated by the need to disambiguate between two or more activated referents.

4. Secondary topic in information structure

In the previous section I have defended the hypothesis that O1 is a focus object while O2 has topical properties. My next step is to show that this translates into the special IS status of O2, that of secondary topic. In 4.1 I argue that the primary topic in Ostyak is encoded as the subject, hence O2 cannot be interpreted as the primary topic. Section 4.2 suggests a definition of the secondary topic and discusses its relationship with the primary topic, while in Section 4.3 I address the interaction of the secondary topic and focus.

4.1. Evidence for the subject primary topic

This section proposes that in Ostyak the topic status (in the sense of the primary topic) is

systematically associated with the grammatical relation of subject. This claim is supported by the following arguments. First, topicalization of an element other than the agent requires passivization. In passive clauses the agent is encoded by the Locative NP, while the topicalized argument bears the grammatical relation of the subject. This relationship is marked by the passive marker *-a(j)* and the subject agreement affixes on the verb. According to the data presented in Kulonen (1989), arguments with different semantic roles can be encoded as the subject of the passive construction: patient, recipient/benefactive, location, goal, and temporal. The examples in (26) demonstrate that the passive construction arises when the topic identified as the element that bears the aboutness relationship to the proposition does not correspond to the semantic role of agent. I assume here that the context ‘What happened to X?’ or ‘What about X?’ is basically sufficient to set the topical status of X in the answer (see Section 2.1). The use of the non-passive construction in (26b) and (26c) in the present context would be strictly ungrammatical, as opposed to English.

- (26)
- a. (luw) Juwan re:sk-əʂ
 he John hit-PAST.3SG.O1
 He hit John.
- b. (luw) Juwan-na re:sk-əʂ-a
 he John-LOC hit-PAST-3SG.PAS
 John hit him.
- c. (luw) Juwan-na ke:si-na ma-s-a
 he John-LOC knife-LOC give-PAST-3SG.PAS
 John gave him a knife.

An additional argument for the topichood of the subject is provided by sentences with a focused agent. Questions to the agent and answers to them require passivization (27a). In a similar way, passivization is obligatory in sentences with a contrastive focus agent (27b).

- (27)
- a. kalaŋ xoj-na we:l-s-a? Juwan-na we:l-s-a
 reindeer who-LOC kill-PAST-3SG.PAS John-LOC kill-PAST-3SG.PAS
 Who killed the/a reindeer? John did.
- b. kalaŋ Juwan-na we:l-s-a anta Pe:traj-na
 reindeer John-LOC kill-PAST-3SG.PAS not Peter-LOC
 It was John who killed the reindeer, not Peter.

The ungrammaticality of the non-passive counterparts of (27) immediately follows from the requirement for the subject to be associated with the topic status and the assumption that focus and topic cannot correspond to the same sentence element. Passivization here is conditioned by the situation where the agent bears the focus and therefore cannot map as the subject.

Finally, topic expressions are referential. In Ostyak, non-specific quantified expressions such as *anybody* or *nobody*, as well as the *wh*-question word *who*, do not occur as subjects of transitive clauses. As (28) demonstrates, when they correspond to the agent-like argument, the clause must be passivized. This again shows that in Ostyak grammar there is a strong correlation between the grammatical relation of subject and the topic.

- (28)
- a. tam xu:j xoj-na an wa:n-s-a
 this man who-LOC not see-PAST-3SG.PAS
 Nobody saw this man.
- b. *xoj tam xu:j an wa:nt-əʂ / wa:nt-əʂ-li
 who this man not see-PAST.3SG.O1 / see-PAST-3SG.O2
 Nobody saw this man.

To conclude, in conformance with the well-known cross-linguistic tendency, topic in Ostyak is encoded as subject. What follows from this analysis is that although O2 is under the scope of the pragmatic presupposition, it cannot be associated with the topic status in the sense of the primary topic.

4.2. O2 as secondary topic

Given the conclusion of the previous section, it is reasonable to assign the referent of O2 the status of SECONDARY TOPIC. The secondary topic is defined as follows.

- (29) SECONDARY TOPIC: an entity such that the utterance is construed to be about the relationship between it and the primary topic.

Like the primary topic, secondary topic is defined on referents, but can be associated with a linguistic expression. In Ostyak the secondary topic is systematically encoded either as an overt object NP or as a referential null in the object position, but in both cases the verb must be marked for object agreement. The following arguments support this claim.

There is a certain asymmetry between the primary and the secondary topic with respect to activation. Inactivated primary topics, although less frequent than activated primary topics, are not ruled out (cf. Reinhart 1982 and Gundel 1988a who argue that specific indefinites can function as topics). On the other hand, secondary topics must be activated. I believe this asymmetry directly follows from the definition of the secondary topic. The primary topic is identified as such only through its pragmatic relation to the respective proposition. Obviously, it must have a certain pragmatic reality for the interlocutors, but does not necessarily have to be active in their consciousness prior to the time of the utterance. Non-activated but accessible referents, whose pragmatic existence is inferred through another element, can be interpreted as primary topics (Lambrecht 1994: 166). On the other hand, the secondary topic status is generated not only through the relationship of a referent to the proposition, but also through its relationship to another referent. The relationship between two topic referents is a part of the pragmatic presupposition established before the sentence is uttered. In order to be under discussion at the time of the utterance, it must be kept in the current focus of consciousness, therefore the secondary topic referent must be activated. Given this, the activated status of O2 (see 3.3.2) supports its secondary topic analysis.

By the same reasoning, in sentences with two topics the primary topic is also activated. The secondary topic is defined as such by virtue of standing in some relation to the primary topic. This relation constitutes a part of the old information conveyed by the sentence and is established at least prior to the time of the utterance. Since the utterance is assessed about this relationship, both referents must carry a certain degree of activation in the consciousness of the interlocutors. Below, in table (30) I give the percentage of lexical, pronominal, and null subjects in clauses with O1, clauses with O2, and intransitive clauses in the studied corpus. Ostyak is a pro-drop language, so most clauses do not contain an overt subject (topic). Subject drop regularly occurs if the subject is a continuous activated topic which can be recovered from the discourse, while inactivated subjects must be expressed as lexical NPs. Contrastive subjects including accented pronominals must be overt.

(40)

	Subject in transitive and intransitive clauses overt subject		
	pronoun (activated, contrastive)	lexical (inactivated)	null subject (activated)
O2 Vtr	17%	5%	78%
O1 Vtr	13%	19%	68%
Vintr	6%	32%	62%

The highest percentage of overt lexical subjects is observed in intransitive clauses due to the use of

intransitives in presentational contexts where the subject is inactivated and must be realized as a full NP.¹⁵ For transitive clauses, overt lexical subjects are considerably less frequent altogether, but there is a clear asymmetry between clauses with an O2 and O1: 5% and 19%, respectively. Transitive clauses with O2 exhibit the highest frequency of subject drop (78%). If they contain an overt subject, it is normally an accented personal pronoun, that is, contrastive. This data demonstrates that the presence of O2 correlates with the presence of the activated primary topic (subject) in the same clause. In clauses with object agreement an inactivated (lexical) subject is avoided, as is expected if agreement is taken to mark the secondary topic status of the object.

This also brings us to the next argument in favor of the secondary topichood of O2. The secondary topic is only licensed in the presence of the primary topic. This is captured in Vallduví's card-file analysis of tail as an entry stored under a given address associated with the primary topic (see Section 2.2). Remarkably, in Ostyak O2 is impossible in topicless sentence-focus structures, cf.:

- (31) a. What happened?
 b. ma tam kalaŋ we:l-s-ə̃m / *we:l-s-e:m
 I this reindeer kill-PAST-1SG.O1 / kill-PAST-1SG.O2
 I killed this reindeer.

In the answer to question (31a) object agreement is absent even if the object is activated. This follows from the very nature of sentence-focus structures such as (31b), which lack a pragmatic presupposition and therefore a topic, so that all elements are arguably equally in focus.¹⁶ By this feature sentence-focus sentences are opposed to topic-focus structures. Since this is their definitional property, it accounts for the fact that objects in sentence-focus sentences behave differently with respect to agreement from objects in topic-focus sentences. The availability of O2 interacts with the presence of the primary topic.

To summarize, the analysis of O2 as secondary topic under the definition given above explains the following facts: the activated status of O2, the consistent lack of object agreement in focus-sentence sentences, and the correlation between object agreement and the activated subject in the same clause.

4.3. Secondary topic and focus

This section analyses different focus structures and the behaviour of the secondary topic in them. I begin with the argument-focus. If it extends over the object alone, secondary topic (at least object secondary topic) is absent. The IS of the sentence is 'topic – focus'. I have shown in Section 3.2 that the object in this case is encoded as O1. It can have different activation statuses, that is, be activated or inactivated, but in neither case does it trigger agreement. This explains the statistics presented in (25): 89% of O1 are inactivated and 11% of O1 are activated. The examples below illustrate activated object argument focus encoded as O1. As argued in 2.1, activated argument-focus is likely to be contrastive.

- (32) a. Whom did John hit?
 luw /Juwan Pe:tra re:sk-ə̃s / *re:sk-ə̃s-li
 he / John Peter hit-PAST.3SG.O1 / *hit-PAST-3SG.O2
 He/John hit Peter.
 b. tu:p luw-e:l wa:n-s-ə̃m / *wa:n-s-e:m
 only he-ACC see-PAST-1SG.O1 / *see-PAST-1SG.O2
 I saw only him.
 c. Juwan man-e:m wa:nt-ə̃s / *wa:nt-ə̃s-li anta naŋ-e:n
 John I-ACC see-PAST.3SG.O1 / *see-PAST-3SG.O2 not you-ACC
 John saw me, not you.

In argument-focus structures where the focus extends over any non-object constituent the object must trigger agreement. Example (33) is an argument-focus structure where focus corresponds

to the non-object element here. The pragmatic presupposition ‘I collect mushrooms in (the place) X’ conveys information about the relation between the primary topic (I) and the secondary topic (mushrooms). The IS is tripartite: topic - secondary topic – focus.

- (33) ma ta:ləx ta:ta a:kət-l-e:m / *a:kət-l-əm
 I mushroom here collect-PRES-1SG.O2 / collect-PRES-1S.O1
 anta to:ta
 not there
 I collect mushrooms here, not there.

In this case the object seems to be always activated; even if it was not evoked in the previous discourse, it must be present in the situation of speech. It is difficult to imagine a context in which (20) would be informative unless mushrooms have been mentioned earlier in the conversation or the utterance is produced in the situation of mushroom hunting.¹⁷

Let us now turn to the predicate-focus. In predicate-focus sentences the secondary topic can occur within the focus domain. This is due to the fact that in such structures focus is associated with the verbal phrase as a whole and the new information provided by the clause is the event denoted by the predicate. But a participant of this event can stand in a presupposed relationship to the subject participant and therefore is activated in the current consciousness. In this case the IS is basically bipartite (topic - focus), but the focus domain includes presuppositional topical elements. Consider example (34).

- (34) What did John do to Peter?
 luw Pe:tra / luw-e:l̥ re:sk-əs-li / *re:sk-əs
 he Peter / he-ACC hit-PAST-3SG.O2 / *hit-PAST.3SG.O1
 He hit Peter/him.

Sentence (34) is a predicate-focus structure that makes a comment about the primary topic (he). The focus domain extends over the whole clause, except for the topical subject. The utterance is construed to be about the relationship between the subject and the object referents. The pragmatic presupposition associated with this clause can roughly be rendered by the following proposition: ‘He did X to Peter’. The referent of the NP Petra/luwel bears the secondary topic status. It is activated and under discussion at the time of the utterance, although it may be less salient than the referent of the primary topic. The pragmatic assertion ‘X = hit’ expresses the relationship that holds between the primary topic (he) and the secondary topic (Peter). The focus domain hit Peter/him contains the secondary topic object NP cross-referenced by the agreement morpheme on the verb.

Notice that inactivated object within the focus domain does not bear the secondary topic status. This can be seen from the contrast between (34) and (35).

- (35) What did John do?
 luw Pe:tra re:sk-əs / *re:sk-əs-li
 he Peter hit-PAST.3SG.O1 / *hit-PAST-3SG.O1
 He hit Peter.

In (35) object agreement is absent because the object is not associated with the secondary topic status. The object participant is inactivated. The utterance is not construed as being about the relationship between two referents but simply as information about what John did.

In other words, in predicate focus structures the secondary topic status of the object is to a large extent a consequence of its activation state: an inactivated object within the focus domain does not bear the secondary topic status and does not trigger agreement in Ostyak. An activated object within the focus domain triggers agreement and is characterized as secondary topic. The general pattern of object agreement is represented in (36).

(36)	IS status of the object	activation status of the object
O1	argument-focus part of predicate-focus domain	inactivated, activated inactivated
O2	secondary topic (non-focus in argument-focus structures) secondary topic (part of predicate-focus domain)	activated activated

The analysis of activated objects within the focus domain of predicate-focus structures as topical is much in line with the proposal of Lambrecht (1994: 128–31, 216–7, 250–1) that topic may be expressed in any syntactic domain capable of expressing a proposition. In particular, the focus domain may contain presupposed topical elements. This claim has been taken as evidence against Lambrecht’s overall conception by Dryer (1996: 516–7) who has noticed that it is inconsistent with the definition of focus as assertion minus presupposition. However, Lambrecht argues that the presuppositions in question are irrelevant for determining the focus domain and do not affect the overall structure of the sentence. Consider the following example given by Lambrecht.

(37) One of his close COLLABORATORS urged Nixon to appoint Carswell.

In (37), one of his close collaborators constitutes a focus domain, but the information that Nixon has close collaborators is pragmatically presupposed. It survives the lie-test: challenging the utterance by saying ‘This is not true’ would not cancel this presupposition. The presupposition is triggered by the pronominal ‘his’ but this does not prevent the whole NP from bearing the focus status marked by prosodic prominence. Similarly, evidence presented in this section for Ostyak object agreement suggests that the relationship between the secondary topic and focus is not mutually exclusive. The argument secondary topic may be present within the focus domain of the predicate-focus, in this case it is marked by object agreement.

5. Secondary topic in grammar

In the examples discussed so far, the secondary topic corresponds to the direct object which bears the semantic role of patient/theme. In Section 5.1 I will provide some evidence that the secondary topic object may be associated with other semantic roles, namely, with the recipient. Section 5.2 deals with another syntactic type of secondary topic in Ostyak, namely, the possessor secondary topic.

5.1. Argument secondary topic

This section analyzes the Ostyak ditransitive constructions that involve three place transitive verbs such as give that take agent, patient and recipient arguments, as well as two place transitive verbs like cook and prepare that take agent, patient and optional benefactive. These two classes are syntactically identical in Ostyak. In what follows, both recipient and benefactive will be referred to as recipient.

Ditransitive verbs allow two alternative constructions that have basically the same truth-conditional meaning but differ in the distribution of semantic roles between grammatical relations.

- (38) a. (ma) a:n Juwan-a ma-s-e:m
I cup John-LAT give-PAST-1SG.O2
I gave the cup to John.
- b. (ma) Juwan-a a:n ma-s-əm
I John-LAT cup give-PAST-1SG.O1
I gave the cup to John.

- (39) (ma) Juwan a:n-na ma-s-e:m / *ma-s-əm
 I John cup-LOC give-PAST-1SG.O2 / give-PAST-1SG.O1
 I gave John a cup.

In (38), the patient is encoded as the direct object, and the recipient as an oblique, marked with the Lative case. In (39), the patient is encoded as an oblique marked with the Locative case, while the recipient bears the grammatical relation of the direct object. Importantly, these constructions differ in terms of object agreement. The patient direct object may be either O2, as in (38a), or O1, as in (38b), that is, the verb is either marked for object agreement or not. The recipient direct object obligatorily triggers agreement, as illustrated in (39).

Alternative ditransitive constructions are associated with different ISs. To demonstrate this, I provide below minimal contexts which allow the IS roles of the patient and the recipient arguments to be identified. According to the approach taken in this paper, the subject is assumed to be the primary topic, the focus element is identified as a target of a wh-question, while the activated non-subject argument bears the secondary topic status.

- (40) a. To whom did John give this cup?
 (luw) (tam a:n) Petra-ja ma-s-li
 he this cup Peter-LAT give-PAST-3SG.O2
 He gave it/this cup to Peter.
- b. What did John give to Peter?
 (luw) (Petra) a:n-na ma-s-li
 he Peter cup-LOC give-PAST-3SG.O2
 He gave him/Peter a cup.
- c. What did John do? or: What happened?
 (luw / Juwan) Petra-ja a:n ma-s
 he Peter-LAT cup give-PAST.3SG.O1
 He/John gave Peter a cup.
- d. John did not sell the cup to Peter but
 (tam a:n) (tu:me:l-a / Pe:tra-ja) ma-s-li
 this cup latter-LAT/Peter-DAT give-PAST-3SG.O2
 gave it/this cup to him/Peter.

Examples (40a) and (40b) represent regular argument-focus sentences where the focus is associated with the recipient and the patient, respectively. Remarkably, in both cases the focus is encoded as an oblique, while the secondary topic is encoded as the direct object. Example (40c) can be interpreted either as a sentence-focus sentence or as a predicate-focus sentence without a secondary topic, so that all non-subject constituents are in focus. In this case the patient corresponds to the direct object. Finally, in (40d) both the patient and the recipient are activated and therefore arguably bear the secondary topic function, while the focus extends only over the verb. In this example, as well as in (40c), the direct object role is associated with the patient. The generalizations on the mapping between IS statuses, semantic roles and grammatical relations are summarized in table (41).

(41) Grammatical relations in ditransitive constructions

IS and semantic roles		grammatical relations		
		R	P	example
a.	R focus, P secondary topic	oblique	O2	(40a)
b.	R secondary topic, P focus	O2	oblique	(40b)
c.	R focus, P focus	oblique	O1	(40c)
d.	R secondary topic, P secondary topic	oblique	O2	(40d)

Table (41) demonstrates that the mapping of semantic roles onto grammatical relations depends

on their IS status. If the recipient and the patient have different statuses in the IS, the direct object role corresponds to the secondary topic (types (40a) and (40b)). If the patient and the recipient have equal IS status, both being in focus as in (40c), or both being associated with the secondary topic as in (40d), the patient takes priority over the recipient and is encoded as the direct object. There is a clear asymmetry between the patient and the recipient in their accessibility to the direct object role. The encoding of the patient as a direct object is a grammatical requirement which can only be overridden by IS considerations, namely, the secondary-topicalization of the other argument, the recipient. The direct object role corresponds to the recipient if and only if its IS status is ‘higher’ than that of the patient; it bears a secondary topic status while the patient is in focus. Under my analysis, this immediately accounts for the fact that the recipient direct object must trigger agreement. This also shows that the encoding of the recipient as a direct object is a strategy to mark its secondary topichood, while for the patient this is not necessarily the case.

Observe that the coding of oblique is more complex morphologically than that of the direct object and is more marked in this sense. Furthermore, constructions with O2 are morphologically more marked than constructions with O1. For the recipient, two coding options are available: O2 as the secondary topic, and oblique in all other cases. For the patient three options are possible: O1 or oblique as the focus and O2 as the secondary topic. Thus, from the point of view of morphological markedness, the unmarked (and also statistically more frequent) option for the recipient is the secondary topic marking (O2), while for the patient it is the focus marking (O1). This follows from the fact that the patient and the recipient differ in their prototypical IS properties. As has been suggested in Polinsky (1998), the recipient usually bears the presupposition of independent existence, so for the recipient the secondary topic is a default role. The same is true with respect to the causee argument, which prototypically carries the presupposition of existence because it is indispensable to the development of the causative event (Polinsky 1994). In Ostyak, the causee argument must be encoded as O2, as shown below.

- (42) muŋ naŋ-e:n mo:jl-əpt-əs-luw / *mo:jl-əpt-əs-uw
 we you-ACC visit-CAUS-PAST-1PL.O2 / *visit-CAUS-PAST-1PL.O1
 We received you (as guests).

By contrast, the prototypical patient is not characterized by an independent existence (Dowty 1991) and is a better candidate for bearing the focus status (Du Bois 1987). This accounts for the fact that the secondary topic role for the patient is a marked option which needs a special morphological coding, namely object agreement.

To summarize, Ostyak demonstrates a strong tendency to map semantic roles onto grammatical relations according to IS considerations. The recipient is encoded as the object if it is associated with the secondary topic status, while for the causee argument, which arguably always bears the secondary topic function, this is the only available coding option. I have some evidence that other non-patient arguments in Ostyak, such as goal and locative, can also be encoded as O2 if they correspond to the secondary topic, but information on this is scarce.¹⁸ It is however clear that (O2-) object-promotion of non-patient arguments is conditioned by their secondary topicalization.

5.2. Possessor secondary topic

This section addresses a related but different type of secondary topic constructions, namely, a possessor secondary topic. The main claim is that under certain conditions it is not the O2 object itself, but its possessor that bears topical properties.

Let us first look at the structure of the possessive construction in Ostyak. The possessive construction is neutrally marked if the possessor is lexical (43a). When the possessor corresponds to a personal pronoun or a zero-pronoun, the possessive relationship is marked on the head by means of person/number affixes which cross-reference the possessor (43b). An activated lexical possessor may be

left-dislocated under topicalization, in which case it is anaphorically referred to by a possessive affix on the possessed noun (43c). Thus, overt possessive marking is only possible with activated possessors.

- (43) a. Juwan xo:t
John house
'John's house'
- b. (luw) xo:t-əl
he house-3SG
'his house'
- c. Juwan ... xo:t-əl
John house-3SG
'as for John, his house ...'

Ostyak lacks distinct reflexive possessive affixes, so that ordinary possessive affixes also serve in a reflexive function. For example, in (43b) the 3rd person possessive affix -əl can be interpreted either as referring to the clausal subject, or not.

In table (25) I have presented the statistical data on the activation status of objects. Only 17% of O2 are inactivated, but these cases remained unexplained up till now. In fact, with the assumption that secondary topic must be activated they contradict my previous claim on the secondary topic function of O2. Remarkably, a closer examination shows that 79% of these object NPs bear a possessive affix. They belong to the following two types. First, the object possessed noun may be relational, that is, express the "part" element in a part-whole relationship. Cross-linguistically and specifically in Ostyak the relationship between a relational noun and its argument is expressed as possessive. In each example in (44) the second clause contains an inactivated O2 object whose referent is introduced for the same into a discourse by that very clause. The objects bear possessive affixes referring to a part-whole possessor. The possessor is either overtly expressed in the same clause (44b) or mentioned in the previous discourse, as in (44a) and (44c).

- (44) a. lo:w-əl wu-s-li pa o:x-əl joxəʂ
horse-3SG take-PAST-3SG.O2 and head-3SG backwards
kir-s-əlli / *kir-əʂ
harness-PAST-3SG.O2 / *harness-PAST.3SG.O1
He took his horse and harnessed its head backwards.
- b. la:pəʂ o:ś-əʂ. śi la:pəʂ u:w-əl pelək
barn find-PAST.3SG.O1 this barn door-3SG half
kat-s-əlli / *kat-əʂ
break-PAST-3SG.O2 / *break-PAST.3SG.O1
He found a barn. He broke the door of this barn.
- c. mola xo:rpi e:wi? we:s-l a:t wa:nt-s-e:m / *wa:nt-s-əʂm
what kind girl face-3SG CONJ see-PAST-1SG.O2 / *see-PAST-1SG.O1
lo:ln
CONJ
What sort of girl [is she]? If [only] I could see her face.

Further, in 52% of inactivated O2 objects the possessive affix refers to the subject of the same clause, that is, it is reflexive. Reflexive objects must be encoded as O2 even when they are inactivated, just as relational nouns. The absence of object agreement in both cases is ungrammatical.

- (45) What did he do?
luw kalaŋ-əl re:sk-əʂ-li / *re:sk-əʂ
he reindeer-3SG hit-PAST-3SG.O2 / *hit-PAST.3SG.O1
He_i hit his_{i/*j} reindeer

Crucially, in both cases the possessor of an O2 object is likely to be activated. This is ensured by the contexts provided in (44) and can also be seen from the fact that O2 here necessarily bears a possessive affix. As mentioned above, possessive affixes are only used to cross-reference activated lexical possessors. For reflexive objects, the possessor is coreferential with the subject, which has been shown to bear a topical status and therefore highly correlates with activation. So although O2 objects are not activated in (44) and (45), their possessors are. I therefore suggest that in these constructions the secondary topic status is associated with the possessor of the object noun rather than with the referent of the object itself, so we are here dealing with a non-argument secondary topic.

According to the definition of the secondary topic suggested in the previous section, the secondary topic referent stands in a presupposed relation to the primary topic referent, and this relationship constitutes a centre of a current relevance for a proposition. Consider (44a) again. In the second sentence the focus domain is the whole clause, while the topic corresponds to a zero subject pronoun. Although the referent of the possessor noun (the horse) does not participate in the event conveyed by the second clause, it is affected by it because it stands in a part-whole relationship to one of its main participants (the head). This is because one cannot refer to something which happens to a part while ignoring the whole. As a result, (44a) is construed as being about the relationship between the subject participant and the horse rather (or at least not less) than about the relationship between the subject participant and the horse's head. This relationship is established in the previous clause and therefore pragmatically presupposed. The referent the horse plays a secondary topic role in the second clause, although it is evoked in it only by means of the possessive affix. A similar reasoning applies to sentences with reflexive objects. They are peculiar because the same referent bears the primary and the secondary topic status, while the referent matches the definition of the secondary topic. The relationship between the secondary topic and the primary topic referents in this case is that of identity. The utterance is construed to be about the topical referent and the fact that it plays a dual role in the event described. This constitutes the presupposed information. The dual role of the topical referent is encoded by two topic expressions, the primary topic expression (the subject) and the secondary topic expression (the null possessor cross-referenced by the possessive affix with a reflexive interpretation).

Notice that in both cases the referent of the secondary topic possessor is salient and even indispensable for the progress of the described event. Unlike the non-part-whole possessive relationship, the part-whole possession entails that the possessor is at least indirectly involved in the situation, if the possessee participates in it. For situations conveyed by clauses with reflexive objects the possessor is indispensable because it is coreferential with the subject participant. On the other hand, non-part-whole non-reflexive possessors obviously are not participants of the situation, and are not analyzed as secondary topics here. With such possessors, the possessed object NP does not trigger agreement, if it is inactivated and belongs to the focus domain, just as is stated in the object agreement pattern (36). This is illustrated by the contrast between (44c) and (46a), and also by the contrast between (45) and (46b). As the latter example shows, object agreement may be the only device that disambiguates between the reflexive and non-reflexive readings of possessive affixes.

- (46) a. mola xo:rpi e:wi? xot-əl a:t
 what kind girl house-3SG CONJ
 wan-s-ə̀m / *wa:nt-s-e:m lo:ln
 see-PAST-1SG.O1 / *see-PAST-1SG.O2 CONJ
 What sort of girl [is she]? If [only] I could see her HOUSE!
- b. What did he do?
 luw kalaŋ-əl re:sk-əs / *re:sk-əs-li
 he reindeer-3SG hit-PAST.3SG.O1 / *hit-PAST-3SG.O2
 He_i hit his_{j/*i} reindeer

An additional argument in favour of the secondary topic analysis of reflexive or relational possessors comes from sentence-focus sentences. As mentioned above, in such structures pragmatic

presupposition and therefore topic is absent. If the possessor is analysed as secondary topic and this somehow correlates with object agreement, we might expect that agreement will be absent in topicless sentence-focus sentences. This prediction turns out to be correct. O2 is unacceptable in sentence-focus structures, that is, even the part-whole or reflexive possessive objects are encoded as O1. Compare example (45) above with (47).

- (47) What happened?
 Juwan kalaŋ-əl re:sk-əs / *re:sk-əs-li
 John reindeer-3SG hit-PAST.3SG.O1 / *hit-PAST-3SG.O2
 John_i hit his_{j/i} reindeer.

The reading of (47) is ambiguous between the reflexive and non-reflexive interpretation of the possessive affix. I have argued that in topic-focus sentences the possessor of the reflexive object bears the secondary topic status and this is encoded by an object agreement morpheme. However a sentence-focus sentence (47), although it also has a reflexive object, does not carry any presupposition of topicality and does not show object agreement. This confirms that the agreement in (45) encodes the topical status of the possessor of the reflexive object.

An important disclaimer is in order here. I do not claim that in such constructions the verb shows agreement with the possessor rather than with the object. This is clearly not the case, since in (number) feature agreement affixes do not match the possessor, but the object. What my account suggests is that the presence of object agreement itself indicates the secondary topic status of the possessor. The syntactic details of this analysis have still to be worked out, and I believe that the constructional approach to grammar may prove to be the most useful here (Goldberg 1995 and others). Notice also that at least part-whole objects in Ostyak can be characterized through the notion of inferability. As discussed in 2.1, inferability indicates that a referent is inactivated but pragmatically accessible through the (argument) relationship with an activated element. The important issue here is that, as Prince argues, inferables, being an intermediate category between activated and inactivated, can pattern with either of these two groups for different purposes and in different languages. For example, in English the inferable status of an NP normally licenses the definite article (the door in example (4) above), so in this sense inferables behave like activated NPs. As the existence of a part may be inferred from the existence of a whole if the latter is already evoked in the discourse, it may be reasonable to analyse part-whole objects in Ostyak as inferables. Since inferable objects must be encoded as O2, even when they enter the domain of the predicate-focus, just as do activated objects, they are interpreted as activated for the purpose of object agreement. This explains most of “exceptions” in table (25), where O2 corresponds to an inactivated possessive object.

6. Concluding remarks

The phenomenon of object agreement in Northern Ostyak is motivated solely by information structure. Although the IS relations discussed here have certain semantic corollaries, they are not reduced to semantic properties. The paper therefore presents evidence for the direct mapping between syntax and IS and indirect mapping between syntax and semantics. Since the traditional information structure functions of topic and focus are not sufficient to describe the facts of Ostyak object agreement, I have suggested identifying one more IS relation, that of secondary topic. After Givón, the term ‘secondary topic’ has repeatedly been used for the “less important” clausal topic. Following a presuppositional approach to IS, I have defined the secondary topic as a referent such that the utterance is construed to be about the relationship between it and the referent of the primary topic. This ensures that the secondary topic falls under the scope of the pragmatic presupposition of existence and saliency, although, as anticipated by Givón, topics may be ordered according to the strength of this presupposition. The existential presupposition carried by the secondary topic NP is generated through its activated status. Another definitional property of the secondary topic is that it is

identified as such only because of its pragmatic association with the activated primary topic. This implies that the secondary topic is not available in topicless ‘thetic’ structures.

The paper has confirmed the observation of Lambrecht (1994: 128–31, 216–7, 250–1) that the focus domain (the comment) may contain presuppositional topical elements. A secondary topic referent may participate in the event described by the focus domain. In this case the event itself is new information, but a participant of this event (the secondary topic referent) stands in a presupposed relation to the primary topic. Observe that not all presupposed elements function as topics. This point was also brought up by Lambrecht (1994: 252), who noticed that non-NP presupposed entities are not topics because they can hardly be interpreted as what the proposition is about. Further, not all non-subject presupposed NPs function as the secondary topic because for some of them their relationship with the subject may not be salient enough to be under discussion. My account differs from Lambrecht’s in that for him any unaccented pronominal in English, including possessive pronouns, immediately signals that the corresponding referent is topical in topic-focus sentences (see his example (37) above). The Ostyak data rather reveals that not all presupposed possessors bear the secondary topic status, but only those whose relationship with the primary topic participant is salient for the progress of the conveyed event and under discussion at the time of the utterance.

My analysis is based on the conceptual definitions of IS relations, relevant for linguistics only inasmuch as they are associated with linguistic expressions. This raises the question of cross-linguistic variation in the grammatical realization of the secondary topic function. Languages differ in the extent to which they allow topical elements within the focus domain. Some languages tend to exclude syntactically presupposed elements from the focus domain and employ various detached constructions. The clause-external secondary topic is especially typical of Romance languages (see Vallduví 1992 for Catalan; Lambrecht 1986, 1994 for spoken French and Italian). Other languages do not have syntactic mechanisms for extracting topical elements from the focus domain, and allow for multiple clause-internal topics. Hence, the results of this paper indicate that multiple topic constructions, suggested in the literature, do not necessarily involve topicalization as (multiple) adjunction when at least one of the topics (the external topic) does not bear a syntactic relation to the clause. Rather the paper argues for the possibility of two clause-internal topics in line with the proposal in Lambrecht (1994), Erteschik-Shir (1997), and Polinsky (1994, 1998).

I have observed two syntactic types of secondary topic constructions in Ostyak, an argument secondary topic and a possessor secondary topic. Sentences with an argument secondary topic are construed about the relationship between two participants as arguments of the same proposition. Secondary topic arguments can be expected to exhibit special morpho-syntactic or prosodic marking and/or position. In Ostyak, they are grammaticalized as direct objects that trigger agreement and can correspond to various semantic roles. Similarly, topicalization triggers optional object agreement in Chicheŵa and possibly other Bantu languages (Bresnan and Mchombo 1986) and Hindi (Mahajan 1991), as well as non-referential object clitics in some Romance languages. As far as I can see, cross-linguistically there are other possible candidates for secondary topic marking of the object: case morphology in Turkish (Enç 1991), the Persian postposition *-râ* (Dabir-Moghaddam 1992), and the Chinese *ba*-construction as analyzed in Hsuen (1987). Finally, secondary topic marking of the object can be realized as positional differences, cf. scrambling phenomena in German, some other Germanic languages, and Korean (de Hoop 1992; Diesing and Jelinek 1993; Choi 1996, and others); Chinese fronted objects that occur between the primary topic and the main verb (Tsao 1987a, 1987b, 1988); as well as Israeli Hebrew, Ute, Tsotsil, Indonesian, and Sherpa double object constructions (Givón 1984a, 1984b).¹⁹

I have further suggested that secondary topic can correspond to the possessor element. Not every presupposed possessive relationship has a topical status, but only one that is relevant for the progress of the described event. In Ostyak the secondary topic function is associated with the possessor of an object NP if the possessor is coreferential with the topical subject or stands in a part-whole relationship with the possessed noun. In the former case the utterance is about the topic participant and the fact that it plays a dual role in the proposition. In the latter case it is about the relationship between the subject and the part-whole possessor of the object participant, at least in some sense. The secondary topic

possessor is encoded by the possessive affix on the object possessed noun, and the corresponding NP triggers object agreement.

One argument in favor of this analysis may come from the mechanism of possessor raising. As mentioned above, some languages demonstrate close matching between syntactic and information structure in that they do not allow topical elements within the focus domain. Extracting topic expressions from the focus domain seems to be a function of possessor raising, usually thought to be triggered by some kind of topicality (Bell 1983: 192–3; Velázquez-Castillo 1996: 171–2, among others). Evidence from Russian and spoken French suggests that possessor raising is typical when the host NP bears the focus relation to the proposition (48a) and is dispreferred or even impossible when it is topical itself (48b). In the latter case the topical possessor occurs within the topical NP, so IS and syntactic structure are isomorphous and the need for raising does not arise. The French examples below are from Lambrecht (1994), and the Russian examples are mine.

- (48) a. What happened?
 FRENCH J'ai ma voiture qui est en panne.
 RUSSIAN U menja slomalas' mašina.
 by me broke.down car
 ? Slomalas' moja mašina
 broke.down my car
 My CAR broke down.
- b. What happened to your car?
 FRENCH (Ma voiture,) elle est en panne.
 RUSSIAN Moja mašina/ona slomalas'.
 my car/it broke.down
 *U menja mašina slomalas'.
 by me car broke.down
 ? Mašina u menja slomalas'.
 car by me broke.down
 It broke DOWN.

In a number of languages (Iroquoian, Northern Pomo, Guaraní, Guugu Yimidhirr) possessor raising, sometimes accompanied by incorporation of the possessed noun, applies only to inalienable possessors, specifically to terms for body parts. I have shown that in Ostyak objects that stand in a part-whole relationship to their possessor, including the body part objects, trigger agreement on the verbs. This contrasts with the behavior of non-part-whole possessors: in Ostyak they do not force the object to trigger agreement and in many possessor-raising languages they fail to raise. In view of the proposal of this paper, it is reasonable to think that possessors of part-whole objects in Ostyak and raised possessors in raising languages are associated with the secondary topic function. The difference lies in its grammatical encoding: Ostyak does not have any raising mechanisms and allows focus-internal topics,²⁰ while possessor raising languages exclude the topical possessor from the focus NP. Notice that the semantic account for possessor raising advocated, for example, in Shibatani (1994) views it as a strategy to integrate the extra-thematic nominal into clausal semantics. In the possessor raising constructions the raised possessor is construed as one of the main participants of the event. Raising applies to that possessor which is the most highly relevant to the scene described, the degree of relevance being defined by its physical proximity and affectedness. The possessor of an inalienably possessed noun is necessarily affected by what happens to its part and is therefore relevant to the event. This suggestion is fully compatible with my IS analysis, but the latter has the advantage that it also explains a number of other grammatical facts.

References:

- Aissen, Judith (1992). Topic and focus in Mayan. Language 68, 43–79.
- Ariel, Mira (1988). Referring and accessibility. Journal of Linguistics 24, 67–87.
- Bell, Sarah J. (1983). Advancements and ascensions in Cebuano. In Studies in Relational Grammar, David Perlmutter (ed.), vol. 1, 143–218. Chicago, London: University of Chicago Press.
- Bonomi, Andrea (1977). Existence, presupposition and anaphoric space. Journal of Philosophical Logic 6, 239–67.
- Bresnan, Joan; and Mchombo, Sam (1987). Topic, pronoun, and agreement in Chichewa. Language 63, 741–83.
- Chafe, Wallace L. (1976). Givenness, contrastiveness, definiteness, subjects, topics, and point of view. In Subject and topic, Charles N. Li (ed.), 22–55. New York: Academic Press.
- _____. (1987). Cognitive constraints and information flow. In Coherence and grounding in discourse, Russel S. Tomlin (ed.), 21–51. Amsterdam: John Benjamins.
- _____. (1994). Discourse, consciousness and time. The Flow and Displacement of Conscious Experience in Speaking and Writing. Chicago, London: The University of Chicago Press.
- Choi, Hye-Won (1996). Optimizing structure in context: scrambling and information structure. Ph.D. diss., Stanford University.
- Clark, Herbert H.; and Haviland, Susan (1977). Comprehension and the given-new contract. In Discourse process: Advances in research and theory. Vol. 1. Discourse production and comprehension, Roy Freedle (ed.), 1–40. Norwood, New York: Ablex.
- Clark, Herbert H.; and Marshall, Catherine R. (1981). Definite reference and mutual knowledge. In Elements of discourse understanding, Aravind K Joshi, Bonnie L. Webber and Ivan A. Sag (eds.), 10–63. Cambridge: Cambridge University Press.
- Croft, William (1991). Syntactic categories and grammatical relations. Chicago: University of Chicago Press.
- Culicover, Peter (1996). On distinguishing A'-Movements. Linguistic Inquiry 27, 445–63.
- Dabir-Moghaddam, Mohammad (1992). On the (In)dependence of syntax and pragmatics: Evidence from the postposition *-fā* in Persian. In Cooperating with written texts: the pragmatics and comprehension of written texts, Dieter Stein (ed.), 549–73. Berlin: Mouton de Gruyter.
- De Hoop, Helen. (1992). Case configuration and noun phrase interpretation. Ph.D. diss., University of Groningen.
- Diesing, Molly (1992). Indefinites. Linguistic Inquiry Monograph 20. Cambridge, Massachusetts: MIT Press.
- Diesing, Molly; and Jelinek, Eloise (1993). The syntax and semantics of object shift. Working papers in Scandinavian syntax 51.
- Dik, Simon C. (1989). The theory of Functional Grammar. Part 1. The structure of the clause. Dordrecht,

Providence: Foris.

Dixon, Robert W. (1989). Subject and object in Universal Grammar. In Dong Arnold, Martin Atkinson, Jacques Durand, Claire Grover, and Louisa Sadler (eds.), Essays on grammatical theory and Universal Grammar, 91–118. Oxford: Clarendon Press.

Dowty, David R. (1991). Thematic proto-roles and argument selection. Language 67, 547–619.

Dryer, Matthew S. (1996). Focus, pragmatic presupposition and activated propositions. Journal of Pragmatics 26, 475–523.

Du Bois, John W. (1987). The discourse basis of ergativity. Language 63, 805–55.

Enç, Mürvet (1991). The semantics of specificity. Linguistic Inquiry 22, 1–25.

Engdahl, Elisabeth; and Vallduví, Enric. (1996). Information packaging in HPSG. In Edinburgh Working Papers in Cognitive Science, Vol.12: Studies in HPSG, C. Grover and Enric Vallduví (eds.), 1–31.

Erkü, Feride; and Gundel, Jeanette K. (1987). The pragmatics of indirect anaphors. In The pragmatic perspective: Selected papers from the 1985 International Pragmatic Conference, Jef Verschueren and Marcella Bertuccelli-Papi (eds.), 533–45. Amsterdam: John Benjamins.

Erteschik-Shir, Nomi (1997). The dynamics of focus structure. Cambridge: Cambridge University Press.

Firbas, Jan (1992). Functional sentence perspective in written and spoken communication. Cambridge: Cambridge University Press.

Givón, Talmy (1979). On understanding grammar. New York: Academic Press.

_____. (1983). Introduction. In Topic continuity in discourse: A quantitative cross-linguistic study, Talmy Givón (ed.), 1–42. Amsterdam: John Benjamins.

_____. (1984a). Direct object and dative shifting: semantic and pragmatic case. In Objects. Towards a theory of grammatical relations, Frans Plank (ed.), 151–82. London, Orlando: Academic Press.

_____. (1984b). Syntax. A functional typological introduction. Vol. 1. Amsterdam, Philadelphia: John Benjamins.

_____. (1989). Mind, code, and context: Essays in pragmatics. Hillsdale, New York: Lawrence Erlbaum Associates.

_____. (1990). Syntax. A functional typological introduction. Vol. 2. Amsterdam, Philadelphia: John Benjamins.

_____. (1995). Functionalism and grammar. Amsterdam, Philadelphia: John Benjamins.

Goldberg, Adele E. (1995). Constructions: A Construction Grammar approach to argument structure. Chicago: University of Chicago Press.

Gundel, Jeanette K. (1985). Shared knowledge and topicality. Journal of Pragmatics 9, 83–107.

- _____. (1988a). The role of topic and comment in linguistic theory. New York, London: Garland.
- _____. (1988b). Universals of topic-comment structure. In Studies in syntactic typology, Michael Hammond, Edith Moravcsik, and Jessica Wirth (eds.), 209–42. Amsterdam: John Benjamins.
- _____. (1999). On different kinds of focus. In Focus. Linguistic, cognitive, and computational perspectives, Peter Bosch and Rob van der Sandt (eds.), 293–305. Cambridge: Cambridge University Press.
- Gundel, Jeanette K., Nancy Hedberg; and Ron Zacharski. 1993. Cognitive status and the form of referring expressions in discourse. Language 69, 274–308.
- Heringer, James T. (1969). Indefinite noun phrase and referential opacity. CLS 5, 89–97.
- Herring, Susan C. (1990). Information structure as a consequence of word order type. BLS 12, 163–74.
- Honti, László (1984). Chrestomathia ostiatica. Budapest: Tankönyvkiadó.
- Hsuen, Feng-Sheng (1987). The ba construction in Mandarin: An integrated approach. Language teaching and linguistic studies 1, 4–22.
- Huang, James C.-T. (1998). Logical relations in Chinese and the theory of grammar. New York, London: Garland.
- Ioup, Georgette (1977). Specificity and the interpretation of quantifiers. Linguistics and Philosophy 1, 233–45.
- Jackendoff, Ray S. (1972). Semantic interpretation in generative grammar. Cambridge, Massachusetts: MIT Press.
- Karttunen, Lauri (1976). Discourse referents. In Syntax and Semantics 7: Notes from the linguistic underground, James D. McCawley (ed.), 363–86. New York: Academic Press.
- Keenan, Edward (1976). Towards a universal definition of "subject". In Subject and topic, Charles N. Li (ed.), 303–33. New York, San Francisco, London: Academic Press.
- Kempson, Ruth (1975). Presupposition and the delimitation of semantics. Cambridge: Cambridge University Press.
- Kim, Alan (1988). Preverbal focus position in type XIII languages. In Studies in syntactic typology, Michael Hammond, Edith Moravcsik, and Jessica Wirth (eds.), 148–171. Amsterdam: John Benjamins.
- É. Kiss, Katalin (1995). (ed.) Discourse configurational languages. New York, Oxford: Oxford University Press.
- Kulonen, Ulla-Maja (1989). The passive in Ob-Ugrian. Helsinki: Finno-Ugrian Society.
- Kuno, Susumo (1972). Functional Sentence Perspective: a case study from Japanese and English. Linguistic Inquiry 3, 269–320.

Lambrecht, Knud (1986). Topic, focus, and the grammar of spoken French. Unpublished doctoral dissertation. University of California, Berkeley.

_____. (1994). Topic, focus, and the mental representations of discourse referents. Cambridge: Cambridge University Press.

Lambrecht, Knud; and Polinsky, Maria (1997). Typological variations in sentence-focus constructions. CLS 33, 189–206.

Levin, Beth (1993). English verb classes and alternations. A preliminary investigation. Chicago, London: The University of Chicago Press.

Li, Charles N.; and Thompson, Sandra A. (1976). Subject and topic: a new typology of languages. In Subject and topic, Charles N. Li (ed.), 457–90. New York, San Francisco, London: Academic Press.

Mahajan, Anoop (1991). Clitic doubling, object agreement and specificity. Proceedings of NELS 21, 263–277.

McCawley, James D. (1976). Grammar and meaning. Papers on syntactic and semantic topics. New York, San Francisco, London: Academic Press.

McNally, Louise (1998). On the linguistic encoding of information packaging instructions. In The limits of Syntax. Syntax and Semantics 20, Peter Culicover and Louise McNally (eds.), 161–84. New York: Academic Press.

Meinunger, André (1998). Topicality and agreement. In Functionalism and formalism in linguistics, Edith Moravcsik, Frederick Newmeyer, Michael Noonan, and Kathleen Wheatley (eds.), vol. 2, 203–19. Studies in language companion 42. Amsterdam: John Benjamins.

Nikolaeva, Irina (1999). Object agreement, grammatical relations, and information structure. Studies in Language 23, 341–86.

Pápay, Jozsef (1906–8). Északi-osztják nyelvtanulmányok. Nyelvtudományi Közlemények 36–8, 345–98; 52–79; 164–95; 258–75; 111–50; 313–29.

Polinsky, Maria (1994). Double objects in causatives: toward a study of coding conflict. Studies in Language 19, 129–221.

_____. (1998). A Non-syntactic account of some asymmetries in the double object construction. In Discourse and Cognition: Bridging the Gap, Jean-Pierre Koenig, (ed.), 403–22. Stanford: CSLI.

Prince, Ellen F. (1978). On the function of existential presupposition in discourse. CLS 14, 363–76.

_____. (1981). Toward a taxonomy of given/new information. In Radical Pragmatics, Peter Cole (ed.), 213–55. New York: Academic Press.

_____. (1986). On the syntactic marking of presupposed open propositions. CLS 22, 208–22.

_____. (1992). Subject, definiteness, and information-status. In Discourse description: Diverse linguistic analysis of a fund-raising text, William C. Mann and Sandra A. Thompson (eds.), 295–325. Amsterdam, Philadelphia: John Benjamins.

- Reinhart, Tanya (1982). Pragmatics and linguistics: An analysis of sentence topics. Philosophica 27, 53–94.
- Rochemont, Michael S. (1986). Focus in generative grammar. Studies in generative linguistic analysis 4. Amsterdam: John Benjamins.
- Rooth, Mats (1992). A theory of focus interpretation. Natural Language Semantics 1, 75–116.
- Sasse, Hans-Jürgen (1984). The pragmatics of noun incorporation in Eastern Cushitic languages. In Objects. Towards a theory of grammatical relations, Frans Plank (ed.), 243–68. London, Orlando: Academic Press.
- Schachter, Paul (1976). The subject in Philippine Languages: Topic, Actor, Actor-Topic, or None of the Above. In Subject and topic, Charles N. Li (ed.), 491–518. New York, San Francisco, London: Academic Press.
- Sgall, Petr; Hajičová, Eva; and Panevová, Jarmila (1986). The meaning of the sentence in its semantic and pragmatic aspects. Dordrecht, Boston: D. Reidel.
- Shibatani, Masayoshi. (1994). An integrational approach to possessor raising, ethical datives, and adversative passives. BLS 20.
- Strawson, Paul F. (1950). On referring. Mind 59, 320–44.
- _____ (1964). Identifying reference and truth-values. In Semantics: An interdisciplinary reader, Danny D. Steinberg and Leon A. Jakobovitz (eds.), 86–99. Cambridge: Cambridge University Press.
- _____ (1974). Subject and predicate in logic and grammar. London: Methuen.
- Szabolcsi, Anna (1986). From the definiteness effect to lexical integrity. In Topic, focus, and configurationality, Werner Abraham and Sjaak de Meij (eds.), 321–48. Amsterdam, Philadelphia: John Benjamins.
- Tsao, Feng-Fu (1987a). On the so-called ‘Verb-Copying’ construction in Chinese. Journal of the Chinese Language Teacher Association 22, 13–43.
- _____. (1987b). Topic-comment approach to the ba construction. Journal of Chinese linguistics 15, 1–54.
- _____. (1988). Topics and clause connectives in Chinese. Bulletin of the Institute of History and Philology Academia Sinica 59, 696–737.
- Vallduví, Enric (1992). The informational component. New York: Garland.
- Vallduví, Enric; and Engdahl, Elizabeth (1996). The linguistic realization of information packaging. Linguistics 34, 459–519.
- Vallduví, Enric; and Vilkuna, Maria (1998). On rheme and contrast. In The limits of syntax. Syntax and Semantics 29, Peter Culicover and Louise McNally (eds.), 79–108. San Diego, London, Boston, New York, Sydney, Tokyo, Toronto: Academic Press.
- Van Valin, Robert D.; and LaPolla, Randy J. (1997). Syntax. Structure, meaning and function.

Cambridge: Cambridge University Press.

Velázquez-Castillo, Maura (1996). The grammar of possession. Inalienability, incorporation and possessor ascension in Guaraní. Studies in language companion series, 33. Amsterdam, Philadelphia: John Benjamins.

Webelhuth, Gert (1992). Principles and parameters of syntactic saturation. New York, NY: Oxford University Press.

Notes:

*I am grateful to Farrell Ackerman, Knud Lambrecht, Maria Polinsky, and the reviewers of Linguistics for their useful comments.

Abbreviations: A - agent, ACC - Accusative, CAUS - causative, CONJ - Conjunctive, DU - Dual, IMP - Imperative, INF - Infinitive, IS - Information Structure, LAT - Lative, LOC - Locative, O - object, P - patient, PART - participle, PAS - passive, PRES - Present, PL - Plural, R - recipient, S - subject, ST - secondary topic, SG - Singular, V - verb, V_{intr} - intransitive verb, V_{tr} - transitive verb.

¹Ostyak (or: Khanty) is a Uralic language spoken in Western Siberia by approximately 13.000 people.

The so-called Northern (or: Western) Ostyak is considerably different from Eastern Ostyak, both in its phonology and grammatical structure. My data on Northern Ostyak come from the analysis of folklore texts in Pápay (1906–8) and from my own field materials. The transcription I have used deviates from the traditional Ostyak transcription: I mark long rather than short vowels.

²Focus domain corresponds to ‘comment’, another notion widely used in research on IS.

³The universe of discourse in its turn is understood as the world constructed in communication between the speaker and the addressee (Givón 1984b: 388–9).

⁴Prince herself does not use the term ‘activation’ but rather speaks of givenness in the sense of saliency (Prince 1981: 228–30).

⁵This leads to a separate question: how long can activation last in a text? This question is a matter for a separate discourse study; for some observations see Chafe (1987, 1994: 72–4), Ariel (1990), and Dryer (1996).

⁶Prince makes a further distinction between ‘unused’, ‘brand-new unanchored’, and ‘brand-new anchored’ inactivated elements. These further subtypes, however, will not be relevant for the

argument developed in this paper.

⁷Conceptually close is Lambrecht's 'Principle of the Separation of Reference and Role' for topic expressions, which states "do not introduce a referent and talk about it at the same time" (Lambrecht 1994: 185).

⁸Non-contrastive and contrastive argument-focus are not clear-cut categories. A number of linguists have argued that contrastiveness is a scalar characteristic which has to do with the degree of counter-expectancy (Givón 1990: 702; É.Kiss 1995: 16; Gundel 1999). The set of relevant candidates may be closed and explicitly defined in the context, in which case the contrast is somewhat "stronger", as with to the movies or to the restaurant in (5a). It may also be open and simply implied, so that a candidate is chosen from the open set of all universally possible concepts, in which case the contrast is "weaker". In fact, as noticed by Gundel (1999: 303), any new information is inherently in contrast with everything else that might be predicated on the given topic. Similarly Chafe (1994: 78) has remarked that all answers to wh-questions are inherently contrastive, but did not elaborate on this subject.

⁹This term has been borrowed from the functional grammar framework (Dik 1989) and basically corresponds to the antitopic of Chafe (1976) and Lambrecht (1986).

¹⁰ The only lexical material that can intervene between the focus constituent and the verb are some grammatical elements or reduced complements of complex predicates, that is, non-referential expressions which exhibit non-compositional semantics with the verb (see Nikolaeva 1999 for syntactic details).

¹¹While Keenan (1976) regards existential presupposition as one of the criteria for subjecthood, for Dowty (1991) it is one of the properties of the agent proto-role. These approaches make similar predictions for languages like Ostyak where a strong tendency to encode topic as the subject is observed (Section 4.1), but this does not necessarily apply for other languages. English, for example, does not show such a strong match between the grammatical relation of subject and the topic and therefore allows non-referential quantified subjects.

¹²On a presuppositional analysis of specificity see Diesing (1992).

¹³ In this sense non-specifics systematically pattern with argument-focus objects. The correlation between non-specific and focus entities is documented cross-linguistically, see the analysis of German data in Webelhuth (1992) and of German and Korean in Choi (1996). These authors argue that non-specifics behave like other focus NPs because they are inherently focused. As should be clear from the definition of focus given in 2.1, for me focus and specificity are independent features. Examples (22) clearly illustrate that non-specific objects do not necessarily bear the focus status.

¹⁴Chafe defines low content verbs in terms of information flow. Low content verbs are semantically light and, as Chafe puts it, “subservient” to the idea expressed by the object. They do not express new information by themselves but only in combination with the object and are opposed by this feature to other verbs which generally express a new idea, so that, given the One New Concept at a Time Constraint, their object does not have to be informationally new. To put it differently, low content verbs tend to co-occur with an object introduced into the discourse for the first time, so its pragmatic existence is not presumed. By this property they are functionally similar to intransitive verbs of appearance and existence that introduce a new subject participant (Firbas 1992). However, as distinct from intransitive verbs, ‘low content’ transitive verbs assert the existence of the object referent not independently, but through the assertion of its relationship with the other participant, that is, the subject.

¹⁵Intransitive verbs are known to be frequently selected by speakers for the purpose of introducing a new participant (Du Bois 1987).

¹⁶The IS status of non-subject constituents within sentence-focus constructions is rather controversial. According to Lambrecht and Polinsky (1997: 190), the focus domain of a sentence-focus construction is the sentence minus any topical non-subject arguments. At the same time, these authors claim that the sentence-focus sentences lack a topicality presupposition altogether. I will follow this second view here.

¹⁷The same is true for sentences where the focus extends over the verb alone. This type of focus structure does not fall under the category of argument-focus or predicate-focus, and little attention has been paid to it in the existing literature. It is observed in yes-no questions and answers to them, in do-support sentences which in Ostyak can (but need not) be expressed by means of a preverbal focusing particle śi, or if the verb is contrastive, cf.:

- a. Juwan a:muj wu:li řu:xəl-s-əlli pa an wel-s-əlli
 John some reindeer reach-PAST-3SG.O2 but not kill-PAST-3SG.O2
 John reached a reindeer, but did not kill it.
- b. kniga śi lutt-əs-li
 book FOCUS buy-PAST-3SG.O2

He did buy a/the book.

The examples above can only be produced if the object referent, or at least a relevant set of entities to which the object referent belongs, is old in the discourse or inherently present in the situation of speech and therefore activated.

¹⁸Givón (1984a: 152) claims that if a language has optional object-promotion of elements other than the recipient/benefactive, it obligatorily encodes this relationship by a special marker on the verb (examples are Kinyarwanda and Nez-Perce). If my evidence on the object-promotion of other semantic roles in Ostyak is confirmed, Ostyak will present a counter-example to this generalization.

¹⁹As suggested by Givón, argument secondary topic tends to be expressed as the direct object. Cross-linguistically, the direct object demonstrates more alternative grammatical encodings than any other major grammatical relation (cf. Dixon 1989: 101). Current syntactic theory recognizes two distinct positions for two types of objects, VP-internal and VP-external. This leads to the difference in morphology, position, and ability to trigger agreement. The asymmetry is usually said to be motivated by the ‘strength’ of the Case feature, which is ultimately semantically driven. However, in a number of languages with alternative encoding of the object the two object types do not have obvious semantic correlates and are likely to be motivated by IS (focus object and secondary topic object). In fact, in his cross-linguistic analysis of variable object marking based on minimalist assumptions Meinunger (1998) suggests that the AGR element on the verb identifies the associated object NP as topical.

²⁰ Possessor topicalization is available in colloquial speech, but it is an infrequent and highly marked option.