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SUBJECT AND OBJECT CONTROL: SYNTAX, SEMANTICS, PRAGMATICS

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Since quite early in the development of transformational and posttransformational approaches to syntax, linguists have been intrigued by the interpretation of the reference of the covert subject of infinitives in constructions like (1) and (2):

(1) Otto tried to leave.

(2) Otto persuaded Helga to leave.

In recent generative literature, this problem has come to be known as the control problem. In (1), the covert subject must be interpreted as coreferential with Otto, i.e. it is controlled by the matrix subject, i.e. we have 'subject control'. In (2), the covert subject must be coreferential with <u>Helga</u>, i.e. it is controlled by the matrix object, i.e. we have 'object control'. Most of the mainstream literature has been concerned with sentences of these types in English, but more recently Ruzicka (1983) and Abraham (1983) have also introduced German examples (Ruzicka also examples from Slavic languages) into the discussion - examples which often differ in subtle but telling ways from their English counterparts; in what follows, I have taken a number of German examples from these two sources.

In the literature, there have been three main kinds of solution to the control problem going beyond arbitrary specification, which I shall refer to as syntactic, pragmatic, and semantic. The syntactic approach was introduced by Rosenbaum (1967). Although a number of different formulations have been proposed, all boil down essentially to the claim that in sentences like (2), with an overt object, this object is closer to the embedded subject than is the matrix subject (e.g. in that fewer nodes separate the two noun phrases, or in that a lower node in the tree dominates both the controlling and the controlled noun phrases). This may be referred to as the 'minimal distance principle'. In sentences like (1), where there is no object, the matrix subject is closest to the embedded subject by default. Thus the controller is always the noun phrase closest to the controlled embedded subject.

One major problem for this approach has been the existence of verbs like <u>promise</u> in English, which (for most speakers) take subject control even in the presence of an overt matrix object:

(3) Otto promised Helga to leave.

Sentence (3) is paraphrasable for these speakers as (4), not (5):

- (4) Otto promised Helga that he would leave.
- (5) Otto promised Helga that she would leave.

In favor of the purely syntactic approach, even in the presence of examples like (3), is the fact that many speakers of English do in fact interpret (3) as a paraphrase of (5). Chomsky (1969) notes

that young children characteristically give this interpretation, but this interpretation is in fact by no means restricted to children. If promise and the few other verbs that behave similarly were merely arbitrary exceptions to the general syntactic principle of control, it would be readily understandable why some speakers of English would not have this arbitrary exception. Against the assertion that promise is an arbitrary exception, however, stands the observation that many other languages have almost exactly the same distribution as in English sentences (1)-(3), with the translation equivalent of promise as an exception to the statement of control in terms of the minimal distance principle. Examples (6) and (7) are from German and Russian respectively:

(6) Otto versprach Helga wegzureisen.
(7) Otto obescal Gel'ge uexat'.

The second approach is the pragmatic approach, originally proposed by Postal (1970), adopted in Comrie (forthcoming, of which the present paper is a further development), and extended by Abraham (1983). This approach tries to account for the difference between subject and object control not in terms of formal principles of syntax, but rather in terms of the interaction of the meanings of the matrix verbs in such constructions and real-world possibilities and probabilities. The matrix verb try requires, in order to make sense pragmatically, that its subject have a high degree of agentivity in the situation referred to by the following infinitive, whence subject control. In this case, both the syntactic and the pragmatic principles make the same prediction: the matrix subject will be controller. For sentences with persuade, or more generally sentences conveying reported directives, the felicity conditions on directives require that the recipient of the directive have high agentivity with regard to the situation encoded by the infinitive, whence object control. Thus the pragmatic approach here predicts coreferentiality between matrix object and embedded subject - correctly so, but the prediction is the same as that made by the syntactic approach.

The differences between the two approaches come to the fore in considering verbs of the promise class, where the purely syntactic principle makes an incorrect prediction (object control). The pragmatic approach notes that, in accord with the felicity conditions for promises, the giver of the promise must have high agentivity with regard to the situation expressed by the infinitive construction. Thus the pragmatic expectation is that the verb promise should have coreferentiality between the matrix subject (even in the presence of a matrix object) and the embedded subject, and this prediction is correct.

If this approach is correct, one would make the same prediction for other verbs that are close synonyms of <u>promise</u> (e.g. <u>vow</u>, <u>swear</u>), and for the translation equivalents of <u>promise</u> in other languages with comparable control phenomena. In fact, one can go further than this and predict that certain other verbs should have subject control, even in the presence of an overt object, because of their pragmatics, if the language in question permits an infinitive construction at all. For instance, the felicity conditions for threats specify that the content of the threat must be a situation in which high agentivity is exercised by the giver of the threat, thus predicting subject control. In English, the infinitive is excluded after the verb threaten when there is an overt matrix object, so that it is impossible to test the prediction. In German, however, the infinitive is possible, and the prediction is borne out:

(8) Ich drohe dir, dich alleine zu lassen.

'I threaten you that I will leave you alone.'

(The literal translation of (8) is 'I threaten you to leave you alone'.)

Indeed, the pragmatic approach makes a further prediction, namely that if a given verb can be used to express different speech acts, then both subject and object control may be possible, according to the speech act. English <u>ask</u>, as a verb expressing a polite directive, has object control as predicted:

(9) Otto asked Helga to leave the room.

However, <u>ask</u> can also receive the interpretation 'ask permission to', in which case the pragmatics shifts: in a request for permission, the person who requests the permission is normally asking with reference to his own actions, rather than those of someone else (including the addressee), so one would here expect subject control. For some speakers of English, sentence (9) is in fact ambiguous, with a secondary interpretation paraphrasable as:

(10) Otto asked Helga for permission (for him) to leave the room.

The interpretation possibility becomes much clearer when some overt indication is given of the permission involved:

(11) Otto asked Helga to be allowed to leave the room.

I suspect that both interpretations are in fact latent for all speakers of English even in (9), but that the secondary interpretation tends to be masked unless the context makes it plausible.

The pragmatic approach thus has the advantage of accounting for the crosslinguistic behavior of verbs like <u>promise</u> in a principled way, in addition to making in general the same correct predictions as are made by the syntactic approach. There are, however, especially in English, some other data that might suggest at first blush that the pragmatic approach is not quite so preferable. First, we have the observation that for some speakers of English (12) (= (3)) has only the interpretation where Otto promises Helga that Helga will leave:

(12) Otto promised Helga to leave.

More importantly, English permits a wide range of sentences where

the subject of the embedded infinitive is not, in terms of its most obvious semantic role, an agent, as in the following:

(13) Otto tried to be punished/picked up/X-rayed.

(14) Otto persuaded Helga to be examined by the doctor.

(15) Otto promised (Helga) to receive permission to leave.

In all of (12)-(15), however, the interpretation that is assigned to the sentence is one in which the controlling noun phrase in fact has high agentivity with respect to the situation expressed by the infinitive construction. In (12), for instance, with the interpretation 'Otto promised Helga that she would leave', it has to be the case that Otto has influence over whether or not Helga leaves (e.g. he is keeping her prisoner) - note that this high agentivity holds even though Otto does not appear as an argument of the embedded predicate. In (13), Otto must have influence over whether or not he is punished, picked up, or X-rayed: the version with <u>punished</u> might, for instance, be used in reference to someone who is so guilt-ridden that he believes punishment the only way to rid himself of his sins. In (14), Helga must have influence over whether she is examined by the doctor, and in (15) Otto must have similar influence over whether he receives permission (thus receive has an interpretation like not refuse - imagine that Otto is a political dissident uncertain whether to accept the government's offer of exile).

In English, in terms of the grammaticality of sentences involving control, once one accepts the behavior of the promise class, then the first impression is that syntax rules. The controller can be defined in syntactic terms (with promise etc. as arbitrary exceptions); the controlled noun phrase must be subject of the infinitive: it need not be an agent in the strict sense of a semantic relation between a predicate and one of its arguments; it must be a subject, since a nonsubject is unacceptable as controlled noun phrase even when it is high in agentivity, as in the case of passive agents:

(16) *Otto tried for Helga to be punished (sc. by him).

Once one takes into account observations concerning the interpretation of sentences with control however, it becomes clear that English actually evinces a subtle interplay between syntactic and pragmatic factors: the relation between controller and controlled noun phrase is determined essentially configurationally. However, the interpretation that is assigned to the resulting sentence must be one that makes sense pragmatically in accord with the pragmatic approach to control. And the syntactically exceptional behavior of the promise class remains amenable to <u>explanation</u> only in pragmatic, as opposed to syntactic, terms.

There is one complication with the promise class. If the matrix verb is passivized, for most speakers the resulting sentence is generally ungrammatical:

(17) *Helga was promised (by Otto) to leave.

If, however, an interpretation is forced, then the interpretation is one where Helga, rather than Otto, is understood as subject of <u>leave</u>, even for speakers who do not get this interpretation with the corresponding active sentence <u>Otto promised Helga to leave</u>. Addition of explicit indication that Helga is to benefit from one of her own future actions, rather than one of Otto's, makes the sentence acceptable to more, perhaps all, speakers:

(18) Helga was promised (by Otto) to be allowed to leave.

Within the syntactic approach, this could perhaps be accounted for by the minimal distance principle, since in (18) <u>Helga</u> is subject of an intransitive predicate, and thus the preferred controller for the covert subject of the infinitive. Within the pragmatic approach, however, it remains unclear why the interpretation of active and passive matrix sentences should differ in this way, although it does remain true that both sentences receive interpretations that are pragmatically coherent.

Interestingly, many of the examples which in English seem to provide crucial evidence in favor of the syntactic nature of control are ungrammatical in German and Russian. In particular, sentences where the covert subject of the infinitive is not readily interpretable as high in agentivity (for instance, in that it is subject of a passive verb) are either totally unacceptable or only marginally acceptable, the latter usually where there is greater plausibility to the covert subject being interpreted as having high agentivity. The following examples are adapted from RUZička (1983):

- (19) *Otto versuchte, bestraft zu werden.
 'Otto tried to be punished.'
- (20) ?Otto versuchte, abgeholt zu werden. 'Otto tried to be picked up.'
- (21) (?)Otto versuchte, geröntgt zu werden. 'Otto tried to be X-rayed.'

Likewise, English sentence (14) is ungrammatical in its literal German and Russian translations:

- (22) *Otto überredete Helga, vom Arzt untersucht zu werden.
- (23) *Otto ugovoril Gel'gu byt' osmotrennoj vračom.
 - 'Otto persuaded Helga to be examined by the doctor.'

Finally, English sentence (15) is ungrammatical in its literal German translation:

(24) *Otto versprach, die Erlaubnis abzureisen zu erhalten. 'Otto promised to receive permission to leave.'

On the basis of these observed differences between English on the one hand and German and Russian on the other, one might draw an initial conclusion to the effect that control in English is more syntactic, whereas in German and Russian it is more pragmatic. The difference, of course, would be one of degree - pragmatics is relevant in English, and syntax is relevant in German and Russian - but the difference in degree is nonetheless clear. Towards the end of this paper, I will try to refine this notion and integrate it into a more general characterization of differences between English and German/Russian.

Before continuing with this discussion, however, I want to examine the third approach to control, namely the semantic approach, as introduced by Ruzicka (1983). Ruzicka's approach refers crucially to the semantic (thematic) roles of the controller and the controlled noun phrase. Verbs traditionally described as subject control (including the <u>promise</u> class) are assigned a feature 'thematic identity' (TI), requiring that controller and controlled noun phrase have identical (or at least compatible) semantic roles. Verbs traditionally described as object control are assigned a feature 'thematic distinctness' (TD), requiring that controller and controlled noun phrase have distinct semantic roles. The typical operation of these features can be seen in relation to the following two canonical examples:

(25) Otto promised Helga to leave.(26) Otto persuaded Helga to leave.

The covert subject of <u>leave</u> is an agent. In (25), the TI condition requires that the controller also be an agent, thus selecting <u>Otto</u> rather than <u>Helga</u>. In (26), the TD condition requires that the controller not be an agent, thus excluding <u>Otto</u>, but permitting <u>Helga</u>. So far, the TI/TD distinction might seem to be simply a reformulation of subject versus object control, and certainly the assignment of the features TI and TD is not given any principled basis by Ruzicka (remaining as idiosyncratic as that of subject and object control in the purely syntactic approach). In fact, however, Ruzicka shows that a wide range of data not considered or at least not analyzed satisfactorily by previous accounts fit into place given his account.

First let us examine TI verbs like <u>promise</u>. The TI condition predicts the grammaticality of English examples like (27), since both controller and controlled noun phrase (<u>Helga</u>) are recipients:

(27) Helga was promised (by Otto) to be allowed to leave.

The ungrammaticality of German sentence (28) is explained on the basis that \underline{Otto} is agent of the matrix clause but recipient of the embedded clause:

(28) *Otto versprach, die Erlaubnis abzureisen zu erhalten. 'Otto promised to receive permission to leave.'

The same requirement of thematic identity rules out the following sentence:

(29) *Helga versprach, ins Kino gehen zu dürfen. 'Helga promised to be permitted to go to the cinema.' If an overt object is inserted into the matrix sentence of (29), however, then this object is a potential controller for the covert subject of the infinitive, since both noun phrases are recipients (of a promise in the matrix clause, of permission in the embedded clause):

(30) (?)Helga versprach ihrem Sohn, ins Kino gehen zu dürfen. '(1it.) Helga promised her son to be permitted to go to the cinema.'

Note that (30) refers to Helga's son going to the cinema, not to Helga going there, in the German version. One problem for this approach is that, while it gives a good fit to judgements on the German data, it fits less well to the English data, where sentences (28) and (29) are grammatical (even if requiring contextualization), and (30) has for most speakers only the interpretation 'Helga promised her son that she would be permitted to go to the cinema'. Thus the TI condition fails in general to account for those English data where English is more rigidly syntactic and German more pragmatic.

With TD verbs like persuade, the TD condition predicts the ungrammaticality of examples like German (31):

(31) *Otto d'berredete Helga, vom Arzt untersucht zu werden. 'Otto persuaded Helga to be examined by the doctor.'

The noun phrase <u>Helga</u> receives compatible semantic roles as both controller and controlled noun phrase (nonagent), but the TD condition requires thematic distinctness. Once again, however, there is a problem in extending this analysis to the English data: the English translation to (31) is perfectly acceptable. The great advantage of Ruzicka's contribution has been to ex-

tend the range of data considered. Although this semantic approach does pay due regard to the semantic roles of the noun phrases involved, the features set up are as arbitrary as the purely syntactic notions of subject/object control, and the differences between German and English force the author in his conclusions to return to recourse to pragmatics. In what follows, I am going to assume that the pragmatic approach is essentially correct, although it needs to be supplemented by syntactic principles (many, perhaps all, of which can be viewed as grammaticalizations of pragmatic principles). To the extent that the semantic approach of Ruzička's makes correct predictions, this is because the sets of permissible configurations of semantic roles can be predicted from the pragmatics of the sentences in question. Since the pragmatics plays less of a role in English than in German, one would expect to find more exceptions to the predictions of the thematic identity/distinctness opposition in English than in German (or Russian).

Most of the examples discussed so far where English differs from German and Russian have involved constructions which are possible in English (allowed by the syntax) but impossible in German and Russian (disallowed by the pragmatics). However, there are also some examples where sentences excluded in English are permitted in German and/or Russian, namely where English syntax excludes a certain sentence but pragmatics allows it in the other languages. One example of this has already been presented as (30), repeated below, where in German <u>promise</u> allows object control; inclusion of an expression of receiving permission in the infinitive construction makes it more likely that the situation referred to by this infinitive construction, which by the felicity conditions on promises must be to the advantage of the recipient of the promise, will refer to permission received by the recipient of the promise rather than by the giver of the promise:

(32) (?)Helga versprach ihrem Sohn, ins Kino gehen zu dürfen. 'Helga promised her son that he would be permitted to go to the cinema.'

In German, provided the pragmatics is sufficiently clear, it is even possible to have characteristically object control verbs showing subject control, as in the following example cited by Abraham (1983:234):

(33) Scipio überredete den Senat, frei handeln zu dürfen. 'Scipio persuaded the senate that he should be permitted to have a free hand.'

The literal translation of (33) is 'Scipio persuaded the senate to be permitted to have a free hand'. In English, the syntactic constraint on control permits only the reading, for this infinitive construction, of 'Scipio persuaded the senate that it should be permitted to have a free hand', an interpretation that is barely coherent, requiring that the senate have influence over whether or not it is given permission to have a free hand. The interpretation given in fact to the German sentence (33) is, however, pragmatically entirely coherent: Scipio wants to be given permission to act freely, the senate has the right to give or refuse him this permission, and he therefore persuades the senate to give him this permission. Thus in German, it is possible for pragmatics to override syntax in the assignment of control.

In most discussions of subject and object control, the problem cases have been considered to be instances of subject control in the presence of an overt matrix object. The inverse problem has tended to be neglected, namely that of object control in the absence of an overt matrix object, perhaps because this type is extremely rare in English, at least with infinitives.

I am aware of only one clear instance of this latter phenomenon in English, namely with the matrix verb say, as in (34):

(34) Otto said to come at six o'clock tomorrow.

Moreover, this sentence type is not acceptable for all speakers of English. For those speakers who do find the sentence acceptable, however, the meaning is clearly that Otto told some unspecified person(s) that that/those person(s) should come at six o'clock tomorrow - depending on context, the unspecified person(s) might be the speaker, a group containing the speaker, the addressee, a group containing the addressee, or some third person. Control is thus by an object, but by an object which is not specified overtly in the sentence. Significantly, in this one clear instance of object control without an overt object the control is as predicted by pragmatic principles, given that the sentence expresses a reported directive, in which the expectation is that the recipient of the directive will be coreferential with the person who has to carry out the directive.

It is possible that this class of verbs, in English, also includes the matrix verb <u>help</u>, although the data here are particularly complex. In many instances the subject of <u>help</u> is interpreted as included within the unexpressed subject of the infinitive, as in (35):

(35) I helped (to) exterminate the termites in this house.

A paraphrase of this sentence, on its most natural interpretation, would be:

(36) I, together with others, exterminated all the termites in this house.

Matrix <u>help</u> would thus seem to fit in with other instances of control where the controller is interpretable as included within (rather than strictly coreferential with) the controlled noun phrase, as in (37):

(37) I want to meet at four o'clock.

If this analysis could be generalized, matrix <u>help</u> in the absence of a matrix object would simply be an instance of subject control. This analysis would even seem strengthened by the fact that reflexive pronouns are marginally acceptable in the infinitive construction, coreferential with the matrix subject, to the exclusion of nonreflexive pronouns; contrast (38) and (39), the latter with an overt matrix object blocking the reflexive:

(38) You have helped (to) destroy ?yourself/*you.(39) You have helped your enemies (to) destroy you/*yourself.

However, there are other instances where the subject of <u>help</u> cannot be interpreted as included within the unexpressed subject of the infinitive, as in (40):

(40) This male nurse has helped (to) give birth to hundreds of fine, healthy children.

Such examples seem to be parallel to (34) above with say, i.e. object control in the absence of an overt matrix object.

While this class of matrix verbs is vanishingly small in English, some other languages have a much broader class of verbs allowing coreferential unspecified matrix object and embedded subject, for instance German and Russian, as in (41) and (42):

In general, any verb which takes object control in these languages also allows constructions of this type. For such languages, the correlation between subject/object control and the absence/presence of a matrix object can be at best one-way as a syntactic principle: presence of a matrix object would require or favor object control, but from the absence of a matrix object nothing would be predicted. Of course, other factors might well enable one to make a prediction, as can be seen by comparing Russian sentences (42) and (43):

(43) Predsedatel' xocet vojti v komnatu. 'The chairman wants to enter the room.'

In (43), an object control interpretation is excluded by the fact that the verb <u>xotet'</u> 'to want' in Russian does not allow a matrix object in addition to the infinitive. (Note that Russian lacks the English type <u>I want him to leave</u>.) In (42), however, the pragmatics of the sentence forces an interpretation with covert coreferential matrix object and embedded subject, since a directive only makes sense if that directive is addressed to someone other than the speaker, this other person being the one supposed to carry out the directive in question.

Such examples thus provide another instance where English is more syntactic than the other languages discussed: in English lack of a matrix object predicts subject control, with perhaps a small set of exceptions, whereas in German and Russian it is necessary to look at the pragmatics of such sentences before subject or object control can be assigned as the correct interpretation.

English does, however, have a means of expressing reported directives where there is an unexpressed matrix object and coreferential unexpressed embedded subject. This involves use of the gerund rather than the infinitive. A good minimal pair is provided by (44)-(45):

(44) I propose writing your dissertation on modals.(45) I propose to write your dissertation on modals.

Sentence (45) is rather odd, given the accepted ethics of dissertation writing, since the speaker is proposing that the speaker will write the addressee's dissertation, i.e. we have subject control, as expected in the absence of a matrix object. In (44), however, the interpretation of the subject of the gerund (and thus of the recipient of the proposal) is free, thereby allowing the interpretation consistent with dissertation ethics, i.e. that the speaker is proposing to the addressee that the addressee should write a dissertation on modals (in addition to allowing various unethical interpretations where some other unspecified person writes the dissertation). (For discussion of this gerund construction, see Thompson (1973).)

Interestingly, German and Russian lack a gerund construction comparable to that of English, i.e. in these languages there is no possibility of a distinction between infinitive and gerund constructions, so that for both interpretations there is just the infinitive construction. Compare German examples (46) (= (41)) and (47):

- (46) Die Mutter bat, das Geschirr abzutragen. 'The mother asked [X] to clear away the dishes.'
- (47) Die Mutter bat, sich erholen zu d
 ürfen. 'The mother asked to be permitted to rest.'

The situation in English can therefore be summarized as fol-In the gerund construction, there is no strict control, and lows. any interpretation which makes sense is allowed, the choice of interpretation being often left open to be determined by the context. In the infinitive construction, English has strict control, which is largely syntactic. There seems to be some validity to a purely formal principle, where subject control correlates with absence of matrix object and object control with presence of matrix object. A small set of verbs are systematically exceptional (for most speakers) in that they have subject control even in the presence of a matrix object, e.g. promise. The exceptionality of this small class of verbs has a pragmatic explanation, but apart from the exceptional status of having subject control these verbs behave otherwise almost entirely in accord with other syntactic principles of English, for instance in allowing omission of the embedded subject irrespective of its semantic role.

In the body of this paper, I have noted several times that for the phenomena in question English seems to be more a 'syntactic language', whereas German and Russian are more 'semantic', or perhaps 'pragmatic languages', in that in English control principles are determined syntactically to a greater extent than in the other two languages. Of course, the distinction is one of degree, since English does in some instances allow some loosening of syntactic principles where these are in conflict with pragmatics (e.g. subject control with promise), and German and Russian do have some syntactic constraints (e.g. the coreferential noun phrase in the embedded sentence must be subject of that sentence), but nonetheless it is a marked difference of degree. Clearly, this generalization concerning differences between control in these languages would be more convincing if it can be related to other differences between the two classes of languages. The aim of these final remarks is to establish a more general differentiating parameter of which the control difference is a special case.

Recent work by John A. Hawkins and by Comrie (1981:68-78) has argued that one of the major general syntactic differences between

English on the one hand and German and Russian on the other is that in English the correlation between grammatical (syntactic) relations and semantic roles is quite weak, whereas in German and Russian it is much stronger. Thus in English one finds a much wider range of examples where a given grammatical relation can encode a wide variety of semantic roles than in the other two languages. A few examples will serve to indicate the flavor of the difference between the two language types.

Where English has nonagentive transitive subjects, Russian typically prefers to recast the sentence so that the nonagentive causer is not expressed as a transitive subject, but rather as an instrumental, the verb being impersonal, as in (48):

(48) Tanju ubilo molniej. Tanya-ACCUSATIVE killed-NEUTER lightning-INSTRUMENTAL 'The lightning killed Tanya.'

Where Russian (and German) do allow a given verb to have different semantic roles occupying the same grammatical relation, it is necessary to mark the distinction overtly, for instance by the reflexive in (80) below, whereas English uses the same verb form:

- (49) Tanja otkryla dver'. 'Tanya opened the door.'
 (50) Dver' otkryla-s'.
- 'The door opened.'

Syntactic processes that change grammatical relations, frequent in English, are either nonexistent or more heavily restricted in German and Russian. Russian, for instance, lacks any formal equivalent to English object-to-subject raising (tough-movement):

(51) *Eta problema legka razresit'.
 'This problem is easy to solve.'

Although Russian has a passive, it is used much less frequently than its English counterpart, being primarily an indicator of a formal written style. Thus (52) is possible in Russian, but much less preferred than its English translation:

(52) Ved'ma byla ubita drovosekom.
 'The witch was killed by the woodcutter.'

Moreover, there are heavier restrictions on what passives are possible at all in Russian: in English, a few transitive (or at least apparently transitive) verbs lack a passive, such as <u>have</u>, <u>cost</u>, but in Russian the list is longer, including many verbs that do passivize in English, e.g. <u>ljubit'</u> 'to love'; in particular, the verbs that passivize most readily are those whose direct object in the active is clearly a patient, the undergoer of some action.

The distinction between English on the one hand and German and Russian on the other is one of degree, rather than absolute -Russian and German do have passives, and English does have some transitive verbs that do not passivize - but this difference in degree is quite marked. The difference can also be characterized as one between English as a more syntactic language and German and Russian as more semantic languages, where these terms have the following interpretation: in English, the grammatical relations are more independent from their semantic roles, whereas in German and Russian the grammatical relations are more closely tied to their semantic roles. This generalization now enables us to place the differences in control properties between the two language types in a broader perspective.

Control, in particular the distinction between subject and object control, operates in English primarily on a syntactic basis. The basic syntactic rule is that matrix verbs with an overt object take object control, while those without take subject control. For the majority of verbs this distinction holds absolutely, even where the resulting interpretations are bizarre or completely excluded in the real world. Pragmatics does seem to be at the root of the exceptional behavior of promise (subject control even with an overt object) and say (object control even without an overt object), for those speakers who allow these constructions; yet still the change in control occasioned by the pragmatics here seems to be built into the syntax, so that it again becomes a syntactic subprinciple operating against the direction of the main principle, even where the resulting interpretation is bizarre or excluded in the real world. Thus (53) below is assigned subject control, even though the object control interpretation is much more probable:

(53) Otto promised Helga to be able to leave at six o'clock.

Only in a few instances does pragmatics overrule syntax, as in (54) below, where a number of complicating factors intervene: the fact that the recipient of the promise appears as a subject (and thus, in a sense, is subject of an intransitive matrix predicate) and the presence of the overt modal expression <u>be allowed to</u>, which pushes as the pragmatically more likely interpretation the one where the recipient of the promise is also the recipient of the permission:

(54) Otto was promised to be allowed to leave at six o'clock.

In German and Russian, on the other hand, pragmatic factors play a much greater role in the definition of control properties. Recipients of directives must be readily interpretable as high in agentivity with regard to the situation expressed by the infinitive construction, otherwise the sentence is ungrammatical (rather than nonsensical). The understood subject of the infinitive after promise may be either high in agentivity (in which case it will be interpreted as coreferential with the promiser) - this is the more typical case - or, if it is low in agentivity, it will be interpreted as coreferential with the recipient of the promise. All of these generalizations are consistent with the pragmatics of the corresponding speech acts, in terms of the constellations of semantic roles that are consistent with the definitions of those speech acts.

On the one hand, this can mean that control possibilities are more restricted in German and Russian than in English. Thus English sentence (55) has no literal translation into the other two languages:

- (55) The nurse persuaded the patient to be examined by the doctor.
- (56) *Die Krankenschwester überredete den Kranken, vom Arzt untersucht zu werden.
- (57) *Medsestra ugovorila bol'nogo byt' osmotrennym vračom.

Rather, German and Russian require some overt indication that the noun phrase has a higher degree of agentivity than would be associated with the subject of a passive verb. In German, the most obvious solution is to make this noun phrase subject of the causative verb <u>lassen</u>:

- (58) Die Krankenschwester überredete den Kranken, sich vom Arzt untersuchen zu lassen.
 - 'The nurse persuaded the patient to have himself examined by the doctor.'

In Russian, there is no systematically substitutable alternative, but in this particular example the expression <u>podvergnut' sebja</u> <u>osmotru</u> 'submit oneself to an examination' enables overt expression of higher agentivity:

(59) Medsestra ugovorila bol'nogo podvergnut' sebja osmotru. 'The nurse persuaded the patient to submit himself to an examination.'

In English, sentence (55) satisfies the syntactic requirements of control, and is therefore grammatical, while the relative looseness between grammatical relations and semantic roles enables an interpretation to be constructed where the subject of the passive nonetheless has a high degree of agentivity.

In other instances, control possibilities are more restricted in English than in German or Russian. For instance, the English matrix verb <u>promise</u> requires subject control, whereas the German matrix verb <u>versprechen</u> allows object control where the understood subject of the infinitive is interpreted more readily as nonagentive, as in (60):

(60) Helga versprach Otto, noch einmal einen Sieg zu erleben. 'Helga promised Otto that he would experience victory once again.'

The literal translation is 'Helga promised Otto to experience victory once again'. In English, the only interpretation of this infinitive construction is the pragmatically unlikely one whereby Helga promises to experience another victory. In German, the primary interpretation is where Helga promises Otto that Otto will experience another victory; an added factor is that a promise must be to the advantage of the recipient of the promise, and in this sentence experiencing a victory is more likely to be of advantage to the one who experiences the victory.

The main aim of this paper has been to show that in any comprehensive account of control phenomena, syntactic, semantic, and pragmatic factors must all be taken into account. The interplay among them can be quite complex, for instance in the strict grammaticalization in English of subject control with promise, even though this subject control is itself pragmatically initiated. Moreover, the interplay can be different in different languages, as can be seen in the different details of control in English on the one hand and in German and Russian on the other. A subsidiary aim of the paper has been to try and show that the differences between these two types of language with respect to control can be seen as a special case of a more wide-ranging difference, namely that syntactic phenomena in English are more likely to be purely syntactic, abstracted away from semantic and pragmatic considerations, than are their counterparts in German and Russian, which are in this sense more semantic/pragmatic languages. It should be emphasized once again that this typology presents a difference of degree, rather than an absolute difference: in both language types, all three of syntax, semantic, and pragmatics are important.

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