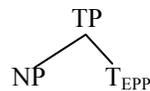


Subjects of Different Heights*

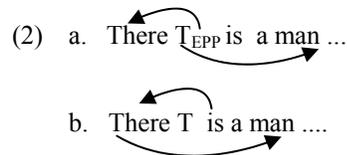
Edwin Williams
Princeton University

The EPP feature began life as an annotation on other features—‘feature strength’—in work of the 90’s. If Tense was strong, then it forced movement to SpecTP; so understood, (1) is an appropriate notation: EPP is an annotation on Tense.

(1)



But in work of the 00’s, the EPP feature took on a life of its own, in that it could be satisfied independent of the satisfaction of the feature annotated; for example, in the analysis of existential sentences in Chomsky 2001, the dissociated EPP feature is satisfied by *there*, whereas the Tense feature itself is satisfied by its relation to the ‘associate’, as diagrammed in (2a). In such an analysis, the EPP feature has a behavior not tied to the behavior of its supposed host feature, and so the notation in (2a) is at least misleading:



In Williams (1994, forthcoming) I argue that the syntactic relations of existential sentences is that given in (2b), rather than (2a). Specifically, the expletive is the thematic subject of the associate, and the associate itself is a predicative nominal. So “there is a man” has the same thematic structure as “John is a man”. If this conclusion is correct, then there is no argument from this construction type for an EPP dissociated from the feature it controls—T relates to the expletive both with regard to the business of T (Nominative case assignment) and to the requirements of the EPP; and the relation to the associate is only indirect, via the subject-predicate relation between the expletive and the associate.

* Thanks to Len Babby, Julia Belopolsky, Elena Chernishenko, and James Lavine for extensive discussion, to Andrew Nevins and Celine Rodrigues for helpful email correspondence; and to the audience at FASL-14 for valuable reaction.

So, the EPP can be seen to control how the T feature is satisfied, and cannot be satisfied on its own.

But in Lavine (2000), Bailyn (2004), and Babyonyshev (1996) there is a different, powerful argument for the dissociation of the EPP from the Tense feature. Lavine and Bailyn in particular argue that in a range of impersonal and other constructions, that the appearance of non-agreeing non-nominative NPs in preverbal position is evidence of EPP dissociation:

- (3) a. “Bad Health” verbs
 [_{TP} Borisa [_{VP} tošnilo]]
 Boris_{ACC} feels-nauseous
- b. Adversity Impersonals
 [_{TP} Rabočego [_{VP} ubilo oskolkom plity]]
 worker_{ACC} killed shard concrete_{INST}
- c. Dative-Nominative verbs
 [_{TP} Saše nravitsja Boris]
 Sasha_{DAT} likes Boris_{NOM}
- d. Nominative-Accusative Inversions
 [_{TP} ètu knigu čitaet Boris]
 this book_{ACC} reads Boris_{NOM}

In each of these, Lavine (2000) and Bailyn (2004) argue that the preverbal NP satisfies the EPP feature of T by moving to the Spec of TP, whereas the postverbal Nominative satisfies T itself (in (3c-d)).

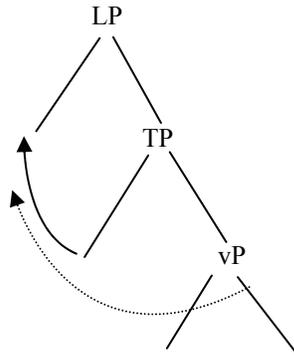
Following a suggestion in Williams (2003), I will argue instead that there is a projection above T, which I have called “Logical Phrase” (“LP”) which hosts the non-agreeing subjects:

- (4) [_{LP} Rabočego [_{TP} [_{VP} ubilo *t* oskolkom plity]]] (3b)

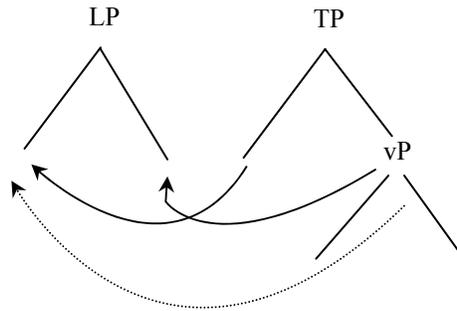
In Russian, LP has the EPP property, and TP does not; in English, the reverse holds.

I will consider two implementations of the idea. In the more standard implementation, LP is simply a functional projection above TP (5a). But I will also consider an implementation in the spirit of “Representation Theory” (Williams (2003)). In RT different levels of clause structure are independent little trees, with “early” trees (e.g. Theta Structure) mapped into “later” trees (Case Structure, Topic Structure, etc.) as isomorphically as possible (5b). For most of the considerations here either implementation will do, but for an argument based on Control, and for an analysis of the “Nom-Acc” inversion case in (3d) above, the RT implementation has an advantage.

(5) a. Standard Theory



b. Representation Theory



In both these representations the solid lines represent the canonical mappings, and the dotted lines the noncanonical.

The account offered here differs in empirical detail and in conception from other accounts of the EPP in Russian. In Bailyn (2004), and in Lavine (2000) (see also Lavine and Freidin (2002)), as already mentioned, T and EPP are separately satisfiable features of TP, and the preverbal NPs in (3a-d) map to SpecTP, and so both are different from the present account. Bailyn differs from Lavine in including the Nom-Acc inversion cases (3d) under the EPP regime, and in this I follow Bailyn. For both Bailyn and Lavine, SpecTP is an A-position. Babyonyshev (1996), following Branigan (1992), suggests that the T and EPP belong to two separate nodes, T (an A-position) and above it, π (an A-bar position); the preverbal NPs in (3a-d) map to Spec π P. The account offered here is different in that the EPP property is not a feature with its own projection, but is rather a geometric requirement of potentially any level. Furthermore, The SpecLP is, in the spirit of RT, rather mid-way between an A-position and an A-bar position. One of the distinctive features of RT is that it parameterizes the A/A' distinction by Functional Structure, with an A, A', A".....Aⁿ series of possibilities. The higher the target of movement, the more "Aⁿ-like" the movement is. Aⁱ movements reconstruct for all A^j relations for j<i; for other differences see Williams (2003) chapter 3.

1 A/A-bar Status of SpecLP

Bailyn (2004), Lavine (2000), and Lavine and Freidin (2002) argue that the non-agreeing subjects are in an A-position, which they reason to be SpecTP. I will presume the correctness of my hypothesis and refer to the position of these subjects as “SpecLP”. Bailyn differs from Lavine in including the Inversion cases (3d) in the list of such cases. The arguments presented are based on Binding Theory—if the SpecLP is filled by an A-movement, then that position should act like a basic, underived position for the purposes of the Binding Theory. The results of checking the relevant set of cases is quite mixed. For Weak Crossover and for Condition C, it appears that SpecLP is an A-position; but for conditions A and B, it is hard to draw conclusions, as the examples that are supposed to be grammatical are doubtful.

Examples in (6) show that SpecLP does act like an A position:

- (6) WCO, Adversity Impersonal
- a. [Každym novym sapogom]_i natiraet nogu ego_i nositelja
every new boot_{INST} rubs [foot_{ACC} of-its wearer] *t*_{INSTR}
Pure Inversion
- b. [Každuju devočku]_k ljubit ee_k sobaka *t*_k
every girl_{ACC} loves her dog_{NOM} *t*
‘Every girl is loved by her dog.’ (Lavine and Freidin, Bailyn)
- c. *[Každuju devočku]_k ee_k sobaka *t*_k ljubit
every girl_{ACC} her dog_{NOM} loves *t*
‘Every girl is loved by her dog.’ (Bailyn)

In (6a), the filling of SpecLP does not create a weak crossover violation, suggesting that it is an A-position. (6b) shows the same thing for the Inversion cases. (6c) shows that fronting the direct object over the subject does create a weak crossover violation, suggesting that the accusative in (6c) occupies an A-bar position different from, and higher than, SpecLP, compared to the accusative in (6b), which occupies SpecLP, an A-position. From this we conclude, as Bailyn does, that the inversion structure is not simply the result of generalized scrambling, for generalized scrambling would presumably give (6b) and (6c) the same status. Examples in (7) show the same thing but using condition C:

- (7) BT-C, Possessor Inversion
- a. Znakomye Ivana_i žili u nego_i
friends_{NOM} of-Ivan lived at him
‘Friends of Ivan_i’s lived at his_i house.’
- b. *U nego_i žili znakomye Ivana_i.
at him lived friends_{NOM} of-Ivan’s (Bailyn)
‘At his_i house lived friends of Ivan_i’s.’

(7a) is a base structure, and (7b) is an inversion structure; the latter form does show Condition C effects, suggesting that the preverbal position is an A-position.

So both WCO and Condition C agree on the status of the non-agreeing subject position. But Conditions A and B are less clear. (8) shows examples relevant to Condition A:

- (8) BT-A:
- a. *Svoi podčinennye volnujut Ivana (Inversion)
 [self's subordinates]_{NOM} worry Ivan_{ACC}
 'Self's subordinates worry Ivan.'
 - b. ?Ivana volnujut svoi podčinennye (Inversion)
 Ivan_{ACC} worry [self's subordinates]_{NOM}
 'Ivan is worried by his subordinates.' (Bailyn)

(8a) is a base structure, and is expectedly ungrammatical. But the inverted structure is only somewhat better, by Bailyn's report. Likewise, for condition B:

- (9) BT-B:
- a. *Ivan_i ljubit ego_i druzej.
 Ivan_{NOM} loves [his friends]_{ACC}
 'Ivan_i loves his friends_i.'
 - b. ??Ego_i druzej ljubit Ivan_i (inversion)
 [his friends]_{ACC} loves Ivan_{NOM}
 'His_i friends are loved by Ivan_i.'
 - c. *Ego_i druzej, my xotim, čtoby Ivan_i poljubil
 [his friends]_{ACC} we want that Ivan_{NOM} loved
 'His_i friends, we want Ivan_i to love.' (Bailyn)

Again (9a) is the base order, expectedly ungrammatical (assuming a slight difference from English, where such examples are grammatical). Again, the inverted structure is only somewhat better, making it hard to draw conclusions about the nature of SpecLP. Importantly, the topicalization structure in (9c) is fully as bad as (9a); this at least shows that the topicalization structure is unambiguously an A-bar position, leaving the inverted subject in (9b) in an indeterminate status.

I think the mixed results might have to do with the basis of the binding theory, and the A/A' distinction itself. In Williams (2003) I suggested that the A/A-bar position needs to be parameterized (A, A', A'', etc), and functional structure provided the set of parameters. One feature of the A/A' distinction is that A-bar movements (e.g. WH-movement) reconstruct for A-relations (e.g. reflexive binding); this same relation holds also for the parameterized distinction.

Given that there is a scale of A/A'-ness, it is no longer correct to ask whether a given rule or position is an A or A' rule or position; rather, one

must ask, which level of structure is the rule associated with. Saying, for example, that Reflexive binding is a rule of type “vP” on the A/A'/A"/... scale is the same as saying that it applies in the structure vP, which is then mapped to a TP structure, etc., and since WH applies later than vP structure, WH will appear to “reconstruct” for Reflexive binding. In fact, reflexives themselves are a mixed bag across languages, having different locality conditions; this is modeled by assigning them to different RT levels (Williams 2003, ch. 4).

Assuming a range of values for the A/A' distinction, there is no longer any necessity for the binding theory to apply all at one level. And in fact I think that the mixed results obtained by applying the familiar tests to SpecLP probably reflect this. We might imagine, for example, that the assignment of binding theory rules to functional levels, at least for Russian, was something like the following:

(10) Generalized A/A':

ThetaP<-- SpecvP<-- SpecTP <-- SpecLP <-- SpecCP
 A B WCO, C

That is, WCO and Condition C take SpecLP subjects as basic and undervived, but A and B only take SpecvP and SpecTP subjects, respectively, as basic and undervived. Such an assignment is fully consistent with the A-like character of SpecLP shown by WCO and Condition C tests. And the funny results for A and B could well be due to the fact that Condition A in Russian really requires an antecedent in SpecvP, but that Specs of later structures simply get worse and worse as antecedents. In the impersonal cases, the SpecLP subject is not a SpecTP or SpecvP subject, and so gives a degraded result, but an antecedent that is not a “subject” until SpecCP (as in the topicalization case (9c)) gives a completely unacceptable result.

2 Properties of LP

We may now state in a preliminary way the properties of LP and TP.

1. LP is smaller than CP:

- (11) a. Ja sprosíl, počemu ego ubilo oskolkom plity
 I asked why he_{ACC} killed shard_{INST} of-concrete
 b. Ja sprosíl, začem ètu knigu čitaet Boris
 I asked why this book_{ACC} read Boris_{NOM}

The examples (11) show that the position occupied by non-agreeing subjects is lower than CP, since CP structure is not excluded by their presence.

2. LP, like TP, can have the EPP property. We will suppose that in Russian LP has it and TP not, and the reverse in English. The EPP is a geometrical property of structures, roughly:

(12) for head H, is [H ...] allowed apart from [XP [H...]]?

3. LP is intermediate between TP and CP with respect to the A/A' distinction.

4. General XP can fill SpecLP; we know this from the possessor inversion structures:

(13) U nas rodilas' dočka
at us was-born daughter_{NOM} (Bailyn)

5. LP is a Verb-second structure (6b vs c).

3 Properties of TP

The properties of TP are somewhat simplified, due to the existence of LP.

1. Since LP is the position in which non-agreeing subjects appear, TP can host exclusively agreeing subjects. In fact, TP must be restricted to agreeing subjects, to keep non-agreeing subjects from moving there.

2. TP need not be restricted to NPs. It is sometimes concluded from examples like (14a-b) that TP must admit other categories than NP:

(14) Locus of Nominative case, subject-agreement

Is TP restricted to NPs?

- a. Down the hill was rolling the ball
- b. * Was down the hill rolling the ball?
- c. Down the hill and over the dale was/*were rolling the ball.
- d. In the basement was an umbrella stand
- e. In the basement was a good place to hide.
- f. * Was in the basement an umbrella stand?
- g. Was in the basement a good place to hide?
- h. * In the basements were good places to hide
- i. In the basement and in the septic tank were good places to hide
- j. In the basement and in the septic tank were good
- k. Down the hill were rolling the balls

In the present model this is a correct conclusion, but wrong reasoning. The preverbal PP in such cases is non-agreeing, as (14c) shows. Furthermore, such PPs cannot undergo Subject-Auxiliary Inversion.

On the other hand, PP subjects like (14e) are truly in SpecTP.

Actually (14e) is ambiguous. On one reading, it says of “in the basement” that it is a good place to hide; on the other, it says that in the basement there is a good place to hide; in only the first reading is the PP in SpecTP. Only in the first reading is there a “thematic predication” relation between the preverbal XP and the VP itself. Only on that reading is Subject Auxiliary Inversion grammatical, as the grammaticality and unambiguity of (14g) shows. On the “thematic predication” reading, even agreement holds. Of course the agreement cannot be registered on the NP in the PP, since the NP is not the head of the PP (14h), but if the subject is coordinated PPs, the plural agreement holds. The agreement in (14i) is with the subject, not the postcopular NP, as (j) shows, where the agreement still holds, but there is no postcopular NP. Finally, when the preverbal XP is not agreeing, agreement holds between the VP and the postverbal NP; we presume that the postverbal NP is in SpecTP, as SpecTP is obligatorily filled in English, and that Verb Movement from T to L has taken place.

The conclusions we may draw from this are manifold:

- (15) a. Neither SpecLP nor SpecTP is restricted to NPs
- b. Agreement is obligatory for SpecTP
- c. Only the thematic* subject of vP can target SpecTP¹
- d. Both TP and LP have the form XP V ...
- e. NP is not the head of PP.

We assume that for a given language, either SpecTP or SpecLP can have the EPP property; so, under the analyses given so far, we need the following assignments for English, Russian, and Icelandic (discussion to follow):

- (16) Variation:
 - a. Russian TP: -EPP
 - b. Russian LP: +EPP
 - c. English TP: +EPP
 - d. English LP: ?
 - e. Icelandic TP: +EPP
 - f. Icelandic LP: -EPP

4 Control

An argument for the conclusions in (15) and (16) can be derived from the behavior of Control in Russian. The argument depends on a feature of the Representation model (Williams (2003)), which I called “The Level

¹ This means that passive and raising target SpecvP first, a conclusion I have long thought reasonable independently.

Embedding Conjecture” (LEC). According to that hypothesis, sentential embedding can be embedding of any level of functional structure (i.e. VP, vP, TP, LP, CP), and the embedding takes place at the (first) level at which the relevant functional structure is defined. So, for example, TP complements are embedded at the TP level, and so are embedded earlier than CP complements, since CP complements are “larger” and therefore “later”.

If we assume that obligatory argument control (OC) (that is, control of the subject of a verb's complement clause by another argument of the verb) takes place by, for example, the TP level (or possibly earlier), then we predict that the controlled clause itself can only be of size TP, and not, in particular, LP or CP; under such an assumption, (17a) is the structure of the OC construction. The construction itself is assembled at the TP level, as indicated in (17).

- (17) a. I want [PRO to leave]_{TP}
 b. TP: [I want]_{TP}, [PRO to leave]_{TP}, ----> [I want [PRO to leave]_{TP}]_{TP}
 c. I wonder [_{CP} who [PRO to talk to]]
 d. I wonder [_{CP} who [PRO to give oneself up to]]
 e. *I want [_{TP} to give oneself up to]]
 f. I bought a book [OP_i[to read t_i]] (adjunct)
 g. i. *I want [OP_i[PRO to talk to t_i]] (argumental control)
 ii. *I want [who Bill talked to]

These assumptions predict limits on the occurrence of OC; in particular, they predict that OC will be impossible in the presence of overt CP material in the controlled clause. (17c) is a potential case, but as is well known, the subject of an infinitival question is assigned “arbitrary” control, as shown in the contrast between (17d) and (17e). The reason for this restriction is that the infinitival question is not embeddable until the CP level, by which time it is too late for OC.

The LEC also predicts that there cannot be “CP-mediated” OC; that is, there cannot be cases of argument OC in which a PRO-like element is moved to CP and controlled in that position by an argument of the embedding verb. The examples in (17g) are attempts to construct such cases in English, and they are ungrammatical. Of course in particular cases the failure can be ascribed to the properties of particular verbs (e.g. *want* does not take a CP complement), but the prediction is really about the complete absence of such cases. Their absence is all the more striking in light of the existence of CP-mediated control for adjunct modification (17f). If the mechanism is present anyway as (17f) shows it is, then why is it not used for OC? LEC says why.

Nevins (p.c.) has brought to my attention the fact that Brazilian Portuguese has OC clauses with complementizers. At first glance these look like counterexamples to the LEC prediction, but a closer look shows

them not to be:

- (18) a. O Joao esqueceu [que PRO comeu]
the John forgot that ate
'John forgot that he ate.'
- b. Que que o Joao esqueceu [que PRO comeu t]
what COMP the John forgot that ate
'What was it that John forgot that he ate.'
- c. *O Joao esqueceu [o que comeu]
the John forgot the what ate
'John forgot what he ate.'
- d. O Joao esqueceu [quando comeu]
the John forgot when ate
'John forgot when he ate.'
- (examples from Rodrigues (2004))

(18a) illustrates finite control with a complementizer, suggesting that OC occurs with CP structure, contrary to the predictions of LEC. I will suggest instead that *que* here is not a C, but something comparable to infinitival *to* in English, and so the embedded clause is not a CP. (18b) shows that WH-extraction from the embedded clause is grammatical, but WH movement to the beginning of the clause is ungrammatical. This is expected, if the controlled clause is a "small clause" entirely lacking CP structure, as the LEC requires. But (18d), which has an adjunct WH word at the head of the OC clause, draws that into doubt again, suggesting that CP structure can be present in OC clauses, at least when the WH word is an adjunct.

However, there is an important difference between (18c) and (18d): in (18d), movement is not necessary to generate the structure, whereas for (18c), movement is necessary. If CP structure is necessary for WH movement, we could imagine then that CP is present in (18e), but not in (18d). The adjunct in (18d) is actually a prefix operator, not evidence of WH movement. Convincing evidence for this view comes from the fact that in cases where movement is necessarily involved, as when it is long-distance, the result is ungrammatical even if the WH word is an adjunct:

- (19) *[O Joao_i esqueceu [quando [e_{i/*j} disse que [a Maria saiu t]]]]
the Joao forgot when said that the Maria left
'Joao forgot when he said that Mary left.' (Rodrigues, p.c.)

In this example, the adjunct modifies the embedded verb, entailing actual movement, entailing CP structure; the LEC then correctly predicts that OC is ungrammatical for such a case.

The difference between (19) and (18d) is paralleled by the following difference between English tensed adjuncts and "small clause" adjuncts:

- (20) a. John left when [he said [he would *t*]]
 b. John left when [saying he would]

(20a) is ambiguous, between a reading where the *when* comes from the complement of *said*, and another in which it comes from the matrix of the adjunct. (20b) has only the latter reading; the reason is that gerunds lack CP structure and therefore do not support movement. For (20b), *when* must be an operator prefixed to the gerund, rather than evidence of full CP structure. The intricate predictions that the LEC makes about Portuguese, in particular the difference between (19) and (18d), provide strong evidence of the power of the LEC in this domain.

Russian has OC, as well as “arbitrary” control for infinitival questions, just like English:

- (21) a. Ja xoču čitat' ètu knigu.
 'I want to read this book.'
 b. Ja sprosil, kogda čitat' ètu knigu.
 'I asked when to read this book.'

However, impersonal ‘subjects’ cannot be the target of OC:

- (22) a. *Ja ne xoču tošnit'.
 'I don't want to feel nauseous.'
 b. *Ja ne xoču ubit' oskolkom plity.
 I NEG want to-kill shard_{INST} of-concrete
 'I don't want to be killed with a shard of concrete.'
 c. *Saša xočet nravit'sja deti.
 Sasha_{NOM} wants to-like children_{NOM}
 'Sasha wants to like the children.'
 d. ??Deti xotjat Saše nravit'sja. (Pereltsvaig, p.c.)
 children_{NOM} want Sasha_{DAT} to-like

These limitations on control follow from the LEC, as already applied to English and Portuguese. There are several ways to state the generalization, but they all come down to the fact that the LEC says that OC clauses cannot be bigger than TP; since the impersonal subjects are in LP (larger than TP), they are not available at the time that OC applies. OC clauses could well be smaller still (vP, for example), but I will assume TP for the following discussion. Since TP is the locus of agreement, one way to state the generalization is that only agreeing subjects can be the target of control. Another possible way to state the generalization is to say that only “thematic” subject of vP (SpecvP) can be the target of control; given that the “thematic” subject of vP² always maps to SpecTP,

² This assumes that in raising and passive structures that the raised NP passes through SpecvP, an assumption independently attractive.

the result will be the same.

A telling “exception” to the above generalization occurs with the Dative-Nominative constructions; although control of the Dative, which is normally mapped to SpecLP, is blocked, control of what appears to be the Nominative Theme object is allowed:

- (23) Deti xotjat nraivit'sja Saše.
children_{NOM} want to-like Sasha_{DAT}
'The children want Sasha to like them.'

But this is in line with the generalization as stated; the Nominative Theme object enters into agreement with T, and is therefore plausibly mapped to SpecTP, at least as an option. In that position, it can be targeted by OC control.

When we ask what other reason there could be for the failure of control in the impersonal cases, obvious answers fail us:

- (24) a. Menja perestalo tošnit'.
'I stopped feeling nauseous.' (Babby 2004)
b. I want [PRO to seem to be there].
c. Ona poprosila ego samomu peredat' pis'mo.
she asked him_{ACC} [PRO_{DAT} himself_{DAT} to-give letter_{ACC}]
'She asked him to pass the letter himself.' (Babby 2004)

(24a) shows that the impersonal verbs do have infinitive forms, so that cannot be the answer, even for the subset of cases for which it would be possible. (24b) shows that control does not require that the controlled element be a thematic argument of the matrix verb of the controlled clause; so, although several of the impersonal cases would fall under such a requirement, that cannot be the answer. And finally, Babby (2004) has given extensive arguments that the subject of infinitives bears case (Dative, to be specific), so the answer cannot be that arguments associated with case are immune to OC. In the light of these failures, the LEC becomes an attractive solution.

Control in Icelandic works very differently. Icelandic has non-agreeing non-nominative subjects as well, but these subjects can be targeted by OC.

- (25) a. Mer syndist alfur.
me_{DAT} thought-sawelf_{NOM} (Andrews 1982: 465)
b. Hanna virthist vanta peninga.
her_{ACC} seems to-lack money_{ACC} (Andrews 1982: 465)
c. Eg vonast til ath PRO_i vanta ekki efni i ritgerthina
I hope to-lacknot material for the-thesis
(Andrews 1982: 465)

(25a) shows that *syndist* takes a non-Nominative non-agreeing subject, and Nominative object. (25b) is an example of an Accusative non-agreeing subject. In (25c), the Accusative subject argument is controlled in an OC context.

To square this with the different behavior of Russian SpecLP subjects, we must suppose that these subjects occupy SpecTP (at the highest); then the control facts are expected. The two obvious questions are, first, how can we implement this distinction, and second, is the distinction between Russian and Icelandic arbitrary.

The implementation will be to specify that SpecTP must be filled in Icelandic, unlike Russian; that is, in Icelandic, TP has the EPP property. SpecTP will always be filled with the thematic subject of vP, where that designation includes the external argument of transitive and unergative verbs, and arguments derived by raising, etc., through the SpecvP position.

This difference reflects a difference between Russian and Icelandic impersonals: in Icelandic, the impersonal subject is always the designated thematic subject of vP, whereas in Russian, it is drawn from a broader class of elements; this reflects the difference between vP/TP and LP. The difference is the same difference we saw in English between “In the basement is a good place to hide” and “Down the hill rolled the ball”.

The failure of agreement with the relevant class of Icelandic subjects must be due to a different cause from the failure of Russian impersonal subjects. In Russian, agreement fails because the relevant element never occupies SpecTP. In Icelandic, by hypothesis, the non-agreeing subjects do occupy SpecTP.

Andrews (1982) showed that the “quirky” subjects in Icelandic had not only their own case³, but also a “structural” case; the evidence was that the quirky subjects could only occupy positions where structural case is assigned. We might thus imagine that the quirky subjects are complex, having an outer layer of structural case, and an internal layer of quirky case. If this is so, then the explanation is that the head relation is necessarily interrupted at this juncture, and no agreement can be transmitted to the head.

- (26) a. [_{TP} [Hanna]_{ACC}]_{NOM} T ...]
 b. [[grandstand]_N]_V + -ed *--> grandstood
 c. * In the basements were good places to hide
 d. ? [[_{TP} [Hanna]_{ACC} og [Oskar]_{ACC}]_{NOM} T_{PL} ...]

In (26a), however, T relates to the Nominative, it has no access to the

³ Williams (1994) reinterpreted Andrews (1982) grammatical relations account for an account in terms of theta roles and case; here, I use the reinterpreted version.

internal accusative NP, because of the broken head relation. It is equivalent to the well known case of denominal verbs—the past tense has no access to the verb “stand” inside the noun “grandstand”, because of the broken head relation. Most relevantly, it is parallel to the already discussed lack of agreement with PP subjects in English. In fact, I would expect, on these grounds, that coordinated non-agreeing NPs in Icelandic would register plural agreement, just as was found with the English PP subject cases, as sketched in (26d); the question mark on (26d) means I do not know whether such cases are grammatical.

A potential problem arises in the case of raising; we have seen that impersonal subjects in Russian cannot be controlled, but they do appear to raise, as (27a) shows:

- (27) a. Menja perestalo tošnit' (Babby 2004)
 I_{ACC} stopped to-feel-nauseous
 'I stopped feeling nauseous.'
 b. [_{LP} Menja [_{TP} perestalo [_{LP} *t* tošnit' *t*]]]
 c. [_{LP} Menja [_{TP} perestalo [_{VP} tošnit' *t*]]]

If *perestalo* is treated as a raising verb taking a sentential complement, then it is hard to avoid the conclusion that that complement is at least the size LP, as indicated in (27b); however, there is no reason to think that the complement of raising verbs is any bigger than the complement to OC verbs; for example, both exclude CP structure, in that there are no raising verbs taking indirect question complements. But there is another view of these constructions—the modal view. Modals differ from raising verbs in not taking a new sentence structure as complement; rather, modals are spell-outs of functional elements in a single functional structure, as indicated in (27c). I have chosen TP as the point at which the modal is spelled out, but arbitrarily; in fact, L is a more intriguing possibility. The principal issue here is whether there should be these two different ways to instantiate raising elements, modal and raising, a delicate but important issue well beyond the scope of this paper.

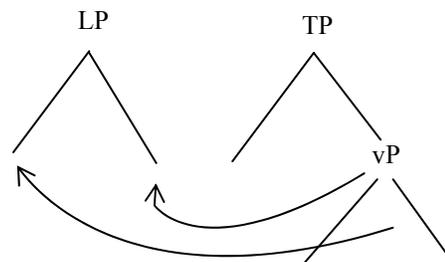
5 Mismatching to LP

I have ignored so far the issue of “Normal Focus”. Babyonyshev (1996) and Lavine (2000) in fact used the notion of Normal Focus to delimit the evidence relevant to establishing the behavior of the EPP. They reasoned that because the Nom-Acc inversion cases did not show Normal Focus, but rather Narrow Focus, that they were not relevant to the mechanism which implements the EPP. As a consequence, in their view, the Nom-Acc inversion case was not analyzed as involving EPP, but the conclusion was arbitrary, as there was no theory of why the EPP should yield only Normal Focus structures, only a methodology. Bailyn (2004)

included Acc-Nom Inversion among the cases in which EPP motivated movement was implicated, largely ignoring Focus issues. His demonstration, already discussed, that “Acc V Nom” structures are systematically like the impersonal constructs with respect to WCO and Condition C, whereas “Acc Nom V” structures are systematically like WH-movement-derived structures, is the single indication that Acc V Nom is EPP-driven. Given this conclusion, which we will follow here, the question then becomes, what is the relation between the EPP and Focus?

Representation Theory has a built-in answer. Generally one functional level maps to the next, isomorphically, as illustrated by the solid arrows in (5b). But non-isomorphic mapping, or *mismatching*, as illustrated in (28), is possible as well. However, one mismatching must be compensated by achieving a true mapping elsewhere in the derivation; that is, there must be some *compensation* for a mismatching.

(28)



In Williams (2003, ch. 2) the relation between scrambling and focus is detailed in this light. Scrambling is a mismatching between one level and another, and scrambling is tolerated because it gives rise to representations that are true maps of Focus Structure. The same type of analysis can be applied to the impersonal constructions.

The syntactic given is that SpecLP must be filled. In the “normal” case, the filling is done isomorphically:

$$(29) [XP L']_{LP} \sim [XP T']_{TP} \sim [XP v']_{vP}$$

The subject (XP) corresponds across the three levels, as do the successive constituents L', T', and v'. But in the case of the impersonals and the Acc-Nom Inversions, some kind of mismatching has taken place. In the case of the impersonals, there is no constituent in SpecvP that is mapped across all the levels; rather, something must be moved out of vP in order to fill the obligatory position in SpecLP:

(30) $[XP L']_{LP} \leftarrow [[\dots XP \dots]_{TP}]_{TP} \leftarrow [[\dots XP \dots]_{v'}]_{vP}$

The “least distorting” mismapping must be used. Or at least, if a more distorting mismapping than is necessary is used, there must be some compensation for that.

We face here the familiar problem of defining a “distance” based economy. I do not have a precise proposal, but will give some guidelines for developing one. At a minimum, we need to distinguish the Acc-Nom Inversion from the impersonal constructions. The Acc-Nom Inversion construction strongly has a narrow focusing commitment:

- (31) a. Boris čital ètu knigu
 Boris_{NOM} read this book_{ACC}
 b. Ètu knigu čital **Boris**
 This book_{ACC} read Boris_{NOM}
 1. answer to: Who read the book?
 2. not answer to: What happened?
 c. [_{vP}Boris [_{v'}čital ètu knigu]]
 d. [_{LP}XP L']

(31a) can be used in a presuppositionless environment, such as an answer to “What happened?”. (31b), on the other hand, can only be used in a context which calls for narrow focus on *Boris*. This is the central fact to explain. We assume that both (31a) and (31b) have a vP (and perhaps TP) structure that looks like (31c). In both cases, (31c) is mapped to (31d). The obvious isomorphic map takes *Boris* to XP and v' to L'; that is how (31a) is derived. Since the map is isomorphic, it is free, and in particular, no special focus is entailed. In the case of (31b), on the other hand, a phrase internal to vP is mapped to XP, obviously not an isomorphic map, so there must be compensation. In this case, the compensation is that the mismap permits an isomorphic map to a Focus structure:

(32) Focus Structure: [XP ...[...FocusP]]

The characteristic of canonical focus is that it occupies final position. So, mismapping (31a) to (31d) in such a way as to give (31b), permits an isomorphic map between (31b) and (32), and so the mismap ((31a) to (31b)) is compensated by a true map ((31b) to (32)), otherwise unavailable.

This kind of analysis permits us to keep the Acc-Nom Inversion cases under the rubric of the EPP. The special narrow focusing properties of the construction arise from the mismapping involved.

Now we return to the impersonal cases. Consider as representative the adversity impersonal; we assume that both (33a) and (33b) below have vP as in (33c) and are mapped to LP (33d)

- (33) a. Rabočego ubilo oskolkom plity.
 worker_{ACC} killed shard_{INST} of-concrete
 1. answer to: What happened?
- b. Oskolkom plity ubilo rabočego.
 shard_{INST} of-concrete_{inst} killed worker_{ACC}
 1. answer to: Who did the shard of concrete kill?
 2. ?answer to: What happened?⁴
- c. [_{VP} [_V ubilo rabočego oskolkom plity]]
 d. [_{LP} XP L']

In this case, both (33a) and (33b) are mismaps—neither has a constituent that correspond to the XP in (33d). The question then becomes, which is the least mismatch, so to speak. The fact of the matter is, moving the Accusative to SpecLP is the least mismatch, as shown by the fact that broad focus is thereby obtained; mapping the Instrumental yields special focus. So the result we want is that the Accusative is “closer” to SpecLP than the Instrumental. For the definition of “closer” a range of possibilities are available, and I will not choose among them; for example, the Accusative and the Instrumental could be in the kind of cascade structure of Pesetsky (1995), in which the Accusative c-commands the Instrumental, and is therefore closer in a hierarchical sense to SpecLP. Or some other scheme. Using c-command works for the Acc-Nom inversion case—the SpecvP in (31c) obviously c-commands the direct object, and so is the closest to SpecLP. We in fact would like to get a finer result: the Acc-Nom Inversion is perceived as much stronger in its exaggeration of Narrow focus—native speakers disagree about whether (33b) forces narrow focus or not, but there is no such disagreement on (31b). It would be nice if this followed from the greater degree of distortion of the structure. But that must await a more concrete characterization of mismatching.

Of particular interest are the Dative-Nominative impersonals:

- (34) a. Saše ne nraivitsja Boris.
 Sasha_{DAT} NEG likes Boris_{NOM}
 1. answer to: Do you foresee any problems with our group trip?
- b. Boris_{NOM} ne nraivitsja Saše_{DAT}
 1. not answer to: Do you foresee any problems with our group trip?
 2. answer to: Who likes Boris?
- c. Saše podaril Boris ètu knigu.
 Sasha_{DAT} gave Boris_{NOM} this book_{ACC}
 1. not answer to: What happened?

⁴ (33b) should not be allowed to be the answer to (33b-2), but some native speakers report that it can be.

- d. 1. [_{VP} nraivitsja NOM DAT] (DAT->SpecLP canonical)
 2. [_{VP} NOM [_{VP} podaril ACC DAT]] (DAT->SpecLP noncanonical)

The Focus-neutral order is (34a), with Dative in SpecLP. We must conclude from this that the Dative is “closer” to SpecLP than the Nominative; why the Dative should be closer (as the Accusative was in the adversity impersonal) is again a question we can only Spec-L-ate about. Importantly, Dative movement to SpecLP is *not* the unmarked possibility in an ordinary di-transitive, as (34c) shows—the presence of *Boris* in SpecvP, c-commanding everything in VP—trumps all other possibilities (34d).

Recall though that only the Nominative of Dative Experiencer verbs can be controlled (23), the Dative cannot. One form of the generalization about control that I defended in the previous section is that only an agreeing argument can be controlled:

- (35) a. *Saša xočet nraivit'sja deti.
 Sasha_{NOM} wants to-like children_{NOM}
 b. Deti xotjat nraivit'sja Saše.
 children_{NOM} want to-like Sasha_{DAT}
 ‘The children want to be liked by Sasha.’

We have then the following situation: Dative experiencer verbs have two VP internal arguments—a (potentially) Nominative and a Dative. In an LP structure, the Dative is closest to SpecLP, and moves there to satisfy the EPP of LP. But in a TP structure (we assume that OC infinitives are no larger than TP) only the Nominative can move to SpecTP, and if it does so, it can be controlled there.

This presents a puzzle for economy of the type called “Local”. In the present scheme, we cannot assume that TP (always) has the EPP feature. If it did, then it would always attract the Nominative direct object, and then that argument would always then be the argument to be moved in the unmarked case to SpecLP, for it would occupy the same position as the Nominative subject of ordinary transitives, which, as the Acc-Nom Inversion cases show, is the unmarked filler of SpecLP.

- (36) a. [_{LP} [_{TP} [_{VP} [_V NP_{Nom}] NP_{dat}]]] (base)
 b. [_{LP} NP_{dat} [_{TP} [_{VP} [_V NP_{Nom}] t]]] (canonical map to LP of *dative*)
 c. [_{LP} NP_{Nom} [_{TP} (t) [_{VP} [_V] NP_{dat}]]] (Noncanonical map to LP of Nom object)
 d. want [_{TP} NP [_{VP} [_V t] NP_{dat}]]] (no map to LP; *only* map to TP)

Another way to look at the problem is derivationally: at the TP level in any derivation, if the Nominative direct object *can* move to SpecTP, then why does it not have to? And if it does, why does it not always block the movement of the Dative to SpecLP in derivations that include LP? If the situation is like I have described it, the decision about what the

“best” derivation will be cannot be made in a local way—whether to fill TP will depend on whether that TP is embedded in an LP or not. Of course, this non-locality can be encoded with features; for example, “TP has the EPP feature only when it is not embedded under LP”, but this does not remove the non-locality of the calculation, it only implements it, perhaps not in the most revealing way.

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