

Long-Distance Agreement in Tsez

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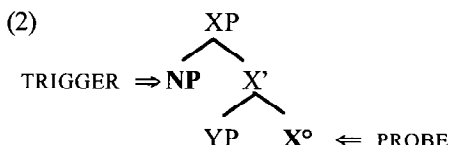
1 Introduction

In the Principles & Parameters Theory and early versions of the Minimalist Program, agreement between a head and an argument reflects a particular local relationship: the head and the agreeing phrase are in a specifier-head configuration at some point in the derivation (Chomsky 1986, Mahajan 1989, Koopman and Sportiche 1991, Chomsky and Lasnik 1993):

- (1) *Specifier-Head Agreement Hypothesis (SHAH)*
an agreement probe must be in a head-specifier configuration with an agreement trigger at some point in the derivation

As shown in (2) for a right-headed projection, the SHAH requires that an agreeing head, the PROBE, be in a head-specifier relationship with an agreeing phrase, the TRIGGER, in order for agreement to take place. An important consequence of the SHAH is that the probe and the trigger are in the same clause (clausemates) at some level of representation.

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In this paper, we describe and analyze an unusual pattern of agreement which we call Long-Distance Agreement (LDA). LDA poses a challenge to the SHAH because the agreement trigger is superficially not in the same clause as the probe. Section 2 presents the LDA paradigm as observed in Tsez, a language of the northeast Caucasus. In Section 3 we demonstrate that analyses of Tsez LDA that attempt to maintain the SHAH are untenable. We argue that a less local agreement configuration is required to account for the phenomenon. Crucial to our own analysis of LDA is the generalization that the agreement trigger in LDA must be a topic within its clause (Section 4). In Section 5 we develop our analysis: the LDA agreement trigger moves covertly to an A-bar topic position, where it forms a local agreement configuration with the verb most closely resembling head government. Section 6 summarizes the consequences of the analysis.

2 Long-Distance Agreement

Tsez is spoken by seven thousand people in the mountains of the northeast Caucasus and adjacent lowlands. It belongs to the Nakh-Daghestanian language family (see Comrie, Polinsky, and Rajabov to appear).

Tsez is a head-final language and basic word order is SOV. It is morphologically ergative: transitive subjects appear in the ergative case and intransitive subjects and transitive objects appear in the absolutive case. Verbs obligatorily show agreement in noun class with their absolutive argument via the prefixes in (3). Representative examples of absolutive agreement are given in (4)¹.

(3)	SINGULAR	PLURAL	
CLASS I	Ø-	b-	male human
CLASS II	y-	r-	female human and some inanimates
CLASS III	b-	r-	animals and some inanimates
CLASS IV	r-	r-	inanimates including abstract concepts and clauses

¹ Abbreviations: I-IV -- nominal class, ABS -- absolutive, COMP -- complementizer, DAT -- dative, ERG -- ergative, FOC -- focus, NMLZ -- nominalizer, PL -- plural, REFL -- reflexive, TOP -- topic.

- (4) a. baru y-ik'is c. bix r-ik'is
 wife.**II**.ABS **II**-went grass.**IV** **IV**-went
 'The girl went.'
 b. 'omoy b-ik'is d. aho-bi b-ik'is
 donkey.**III** **III**-went shepherd.**I-PL** **I.PL**-went
 'The donkey went.' 'The shepherds went.'

Clausal arguments are expected to trigger class IV agreement because they are interpreted as abstract nouns. The actual facts are richer, however, because clausal arguments allow two agreement patterns (Polinsky 1999):

- (5) *Local Agreement*
 enir [už-ā magalu b-āc'ru-ḥi] **r-iyxo**
 mother [boy-ERG bread.**III**.ABS **III**-ate-NMLZ]**IV** **IV**-knows
 'The mother knows the boy ate the bread.'
- (6) *Long-Distance Agreement (LDA)*
 enir [už-ā magalu b-āc'ru-ḥi] **b-iyxo**
 mother [boy-ERG bread.**III**.ABS **III**-ate-NMLZ] **III**-knows
 'The mother knows the boy ate the bread.'

Under Local Agreement, (5), the entire class IV absolutive argument clause 'the boy ate the bread' is the trigger and the matrix verb 'know' shows class IV agreement with the clause. We show agreement by boldfacing the agreement features of the trigger and the probe.

In the unusual Long-Distance Agreement case, (6), the class III absolutive argument *magalu* 'bread' inside the argument clause is the agreement trigger and the probe shows agreement with it in class III. On the surface, LDA is problematic to the Spec-Head Agreement Hypothesis because the clausemate requirement seems to be violated: the agreement trigger and the probe are in different clauses. In the following section we demonstrate that any analysis of LDA which attempts to maintain the SHAH is indeed untenable.

3 The SHAH Analysis

In order to maintain the Spec-Head Agreement Hypothesis for Tsez LDA, the embedded absolutive agreement trigger must have a syntactic representation in the same clause as the agreeing verb at some point in the syntactic derivation. Under Minimalist assumptions (Chomsky 1995), the only level of representation at which syntactic principles can hold is L(ogical) F(orm), the covert syntactic representation which interfaces with the system of se-

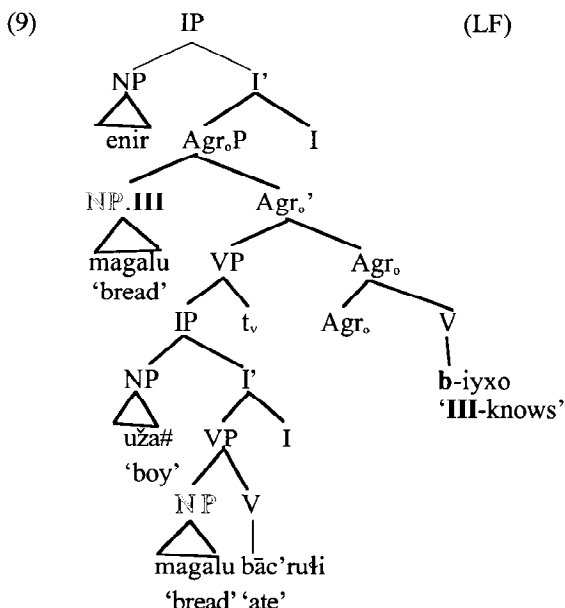
mantic interpretation. An analysis of LDA that respects the SHAH must therefore incorporate (7).

(7) *SHAH Analysis of LDA*

a syntactic representation of the embedded absolutive argument is in the probe's clause by LF

This can be accomplished either by movement of the absolutive trigger into the probe's clause or via a base-generated, coindexed null argument. Under such an analysis, the LDA example repeated in (8) has the LF in (9).

- (8) enir [uža magalu bāc'ruṭi] b-iyxo
 mother [boy bread.Ⅲ ate] Ⅲ-knows
 'The mother knows the boy ate the bread.'



In the LF structure, there are two representations of the embedded absolutive: the EMBEDDED REPRESENTATION in the complement clause and the PROXY REPRESENTATION, the higher shadowed NP in the probe's clause. The two are related either via a movement chain or a base-generated chain of two independent arguments. Crucially, by LF both representations are syntactically present. In the remainder of this section we present three arguments against such an analysis.

The first argument concerns the possibility of LDA across multiple clause boundaries. If there is a proxy representation of the absolutive trigger

in the probe's clause, it should be able to serve as the agreement trigger for LDA on a still higher verb, permitting what will look like cyclic LDA. (10) is a schematic of such a configuration.

- (10) [_{IP1} father [_{IP2} mother [_{IP3} boy bread_i ate] NP_i² know] NP_i¹ know]

Consider the intermediate clause IP₂. This verb will show LDA since it may agree with the proxy representation NP_i² which is coindexed with the embedded absolutive *bread* in IP₃. This constituent in turn can serve as the embedded representation for a still higher verb by being coindexed with the proxy NP_i¹ in the main clause IP₁. The end result is that the embedded absolutive *bread* triggers agreement on the intermediate verb and the higher verb. The example in (11) shows that such cyclic LDA is impossible. The intermediate verb can show LDA, hence the class III agreement prefix, but the highest verb cannot. It must show local class IV agreement with its clausal complement. The SHAH analysis thus makes an incorrect prediction.

- (11) obir [enir [užā magalu b-āc'ru-ḥi]
 father [mother [boy bread.III.ABS III-ate-NMLZ]
 b-iyxosi-ḥi]] r/*b-iyxo
 III-knows-NMLZ]].IV IV/*III-knows
 'The father knows [the mother knows [the boy ate bread]].'

A second argument against the SHAH analysis comes from scope phenomena. If there is a proxy representation of the embedded absolutive, this constituent should scopally interact with clausemate elements.

Tsez examples with quantified NPs behave like their English counterparts. In a monoclausal construction, an absolutive object may, but need not, be interpreted as taking scope over the subject ($X > Y$ means that X has scope over Y):

- (12) a. uyra γ^wayā sis k'et'u begirsi
 four dogs one cat chased
 'Four dogs chased a cat.' (ambiguous)
 b. Four dogs chased some cat or other. 4 dogs > a cat
 c. A particular cat was chased by four dogs. a cat > 4 dogs

(12a), like its English translation, is ambiguous, with two interpretations given in (12b,c). We can account for this ambiguity by assuming that there is an LF operation of Quantifier Raising (QR) that targets quantified NPs,

moving them to a higher structural position to represent the scope relations (May 1985).

As noted by numerous researchers, QR is clause-bound. Quantified NPs cannot take scope outside of their own clause. The Tsez example in (13a) is unambiguous like its English translation because the scope domain of the embedded universal quantifier is restricted to its own, bracketed clause.

- (13) a. sis učitelər [IP kinnaw užibi bik'ixosi-ti] r-iyxo
 one teacher all boys going-NMLZ IV-knows
 'Some teacher knows that every boy is going.' (unambiguous)
 b. Some teacher is such that he knows that every boy is going.
 $\exists > \forall$
 c. *Every boy is such that some teacher knows he is going.
 $*\forall > \exists$

(13a) can only mean (13b): some particular teacher is such that s/he knows that every boy is going, in which *some teacher* has wide scope. It cannot mean (13c): every boy is such that some teacher or other knows that he is going, with a wide scope reading of the embedded subject *every boy*.

Returning to agreement, if the embedded absolutive has a proxy representation in the main clause when there is LDA, we expect the LDA version of (13a) to be ambiguous. (14a) shows that this is incorrect; the example is still unambiguous.

- (14) a. sis učitelər [IP kinnaw užibi bik'ixosi-ti] **b**-iyxo
 one teacher all boys **IPL** going-NMLZ **IPL**-knows
 'Some teacher knows that every boy is going.' (unambiguous)
 b. *[IP NP_i [IP some teacher [VP [IP every boy_i goes] [t_i knows]]]

This is unexpected under the SHAH analysis because the unavailable reading with the universal embedded absolutive *kinnaw užibi* 'all boys' taking wide scope has the LF in (14b). The proxy representation which is coindexed with the embedded subject *all boys* can undergo QR and take scope over the matrix subject since the two are in the same clause. Thus the SHAH makes a second incorrect prediction.

The third argument against the SHAH analysis comes from reflexivization. (15) demonstrates that an absolutive argument can license a clause-mate reflexive in a more oblique argument. The antecedent for the genitive reflexive in (15) is the absolutive object *Ali*.

- (15) ^ʕagaraw-zā nesā nesiz ʔ'utkā ^ʕali žek'si
 relative-ERG.PL his.REFL in.house Ali.ABS hit
 'The relatives hit Ali_i in his_i house.'

In an LDA example, the proxy representation should also be able to license a similar reflexive, giving the appearance that the embedded absolutive is licensing a reflexive outside its clause. A licit representation under the SHAH analysis is (16a) in which the proxy representation antecedes the reflexive possessive in the adjunct *nesā nesiz ʔ'utkā* 'in his house'. As (16b) shows however, this is impossible. In the example, the embedded absolutive *Ali* cannot trigger reflexivization in a matrix argument.

- (16) a. *mother [in his_i house] [Ali_i was leaving] NP_i found-out
 b. *enir [nesā nesiz ʔ'utkā] [^ʕali ø-ik'ixosi-ŋi] ø/r-iyisi
 mother his.REFL in.house Ali.I I-goes-NMLZ I/IV-knew
 'The mother found out in his_i house that Ali_i was leaving.'

The primary conclusion that we draw from these facts is that there should not be a representation of the embedded absolutive trigger in the probe's clause in LDA examples. Hypothesizing such a element leads to a number of incorrect empirical results. However, if a proxy representation is not present, then the Spec-Head Agreement Hypothesis is not adequate for Tsez LDA.

4 LDA as a Topic-Marking Strategy

We believe that the key to a better understanding of Long-Distance Agreement is an unusual condition on its use state in (17) (Polinsky 1999). LDA is a topic marking strategy and it occurs if and only if the referent of the embedded clause absolutive NP is a topic of its clause. In this section we provide evidence for this claim. Section 5 shows how it leads to an alternative analysis of LDA.

- (17) *LDA Topic Condition*
 LDA occurs if and only if the referent of the embedded absolutive NP is a topic of its clause

If (17) is correct, it makes two predictions about the availability of LDA. First, LDA will be obligatory when the embedded absolutive is forced to be a topic. Second, LDA will be impossible when the embedded absolutive cannot be a topic. We confirm each of these predictions in turn.

4.1 Embedded Absolutive Must be a Topic

Tsez has a particle *-gon* which is used to mark topics (Polinsky and Potsdam 1999). When *-gon* appears on an embedded absolutive, LDA is required. (18a) repeats a representative example with the two agreement options. In (18b) the embedded absolutive is marked with *-gon* and LDA is the only grammatical option.

- (18) a. enir [užā t'ek tetrāsi yāłrułi] r/b-iyxo
 mother [boy book.II reading be].IV IV/II-knows
 b. enir [užā t'ek-gon tetrāsi yāłrułi] *r/b-iyxo
 mother [boy book.II-TOP reading be].IV *IV/II-knows
 'The mother knows the boy is reading the book.'

These facts follow from the LDA Topic Condition in (17) because the particle forces the embedded absolutive to be interpreted as a topic.

4.2 Embedded Absolutive Cannot be a Topic

Tsez has a second particle, *-kin*, which is used to mark a focus interpretation (Polinsky and Potsdam 1999). In contrast to the above case, LDA is impossible if the embedded absolutive is marked as a focussed element. In (19), the class II embedded absolutive *t'ek* 'book' is suffixed with *-kin* and LDA is ungrammatical. Only Local Agreement is allowed.

- (19) enir [t'ek-kin yigu yāłrułi] r/*y-iyxo
 mother [book.II-FOC good be].IV IV/*II-knows
 'The mother knows the BOOK is good.'

Under the reasonable assumption that a constituent cannot simultaneously be a topic and a focus (Bach 1971, Lambrecht 1994), the contrast in (19) again follows from the LDA Topic Condition. The focus particle will exclude the required topic interpretation.

Polinsky 1999 and Polinsky and Potsdam 1999 present further arguments that the LDA Topic Condition correctly restricts the distribution of the two agreement options, and in what follows we adopt (17) as crucial for a more adequate analysis.

5 Covert Topicalization Analysis

An analysis of LDA must account for two central facets of the phenomenon:

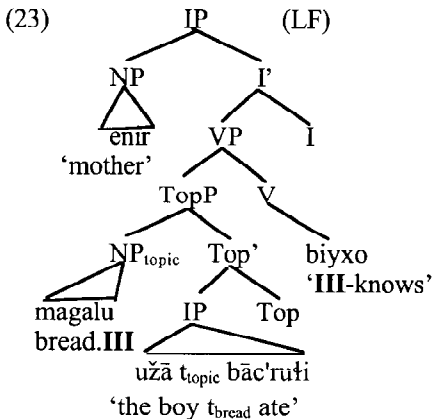
- (20) i. an intermediate degree of agreement locality
 ii. the LDA Topic Condition, (17)

We propose that LDA is the result of a structurally local configuration created by covert Topicalization of the embedded absolutive. By Topicalization we mean a syntactic operation which places a constituent in a left-peripheral topic position, presumably the specifier of a topic phrase TopP (following Culicover 1991, Müller and Sternefeld 1993, Rizzi 1997, and others):

- (21) *Topicalization*
 $[_{\text{TopP}} \text{topic} [_{\text{Top}'} [_{\text{IP}} \text{S O V}] \text{Top}^\circ]]$

Our analysis of the LDA example repeated in (22) is represented by the LF in (23).

- (22) enir [užā magalu bāc'ruḥi] b-iyxo
 mother [boy bread.Ⅲ ate] Ⅲ-know
 'The mother knows the boy ate the bread.'



In (23), the matrix verb takes a clausal TopP complement. The embedded absolutive topic trigger has moved to the specifier of the TopP. In this position, it is in a local configuration with the verb in which agreement can reasonably take place. The relationship most closely resembles head government defined in (24).

- (24) *Head Government* (Rizzi 1990)
 X head-governs Y iff
- i. X is a zero-level category
 - ii. X m-commands Y
 - iii. no barrier intervenes
 - iv. Relativized Minimality is respected

The analysis captures the two properties of LDA in (20). First, the configuration required for agreement between a probe and a trigger is head government. Head government is less local than the specifier-head configuration in two important ways: the relationship between the probe and the trigger is not clause-bound and the trigger can be structurally lower than the probe. Second, since LDA is parasitic on covert Topicalization, the LDA Topic Condition in (17) is entailed.

It should be apparent that the analysis does not face any of the problems of the earlier account because the embedded absolutive topic is never represented in the higher clause. Furthermore, we show immediately below that two central aspects of our analysis, covert Topicalization and an agreement relation resembling head government, are independently motivated.

5.1 Evidence for LF Movement of Topics

If topics move at LF, then they should not be able to appear inside islands, which block movement out of them. This is the case for Tsez topics and we demonstrate it for one island, coordinate structures—although it holds for others as well.

The examples in (25b,c) demonstrate that the topic particle *-gon* cannot appear on a coordinated constituent—compare the ungrammatical (25b,c) with the well-formed (25a). The ungrammaticality follows because covert Topicalization would require illicit movement out of the bracketed coordinate structure, a violation of the Coordinate Structure Constraint.

- (25) a. užā t'ek-no tetrad-no rissi
 boy book-and notebook-and bought
 'The boy bought a book and a notebook.'
 b. *užā[t'ek-no-gon tetrad-no] rissi
 boy book-and-TOP notebook-and bought
 c. *užā [t'ek-gon-no tetrad-no] rissi
 boy book-TOP-and notebook-and bought

In Polinsky and Potsdam 1999, we present further evidence for the existence of covert Topicalization. If this claim is correct, then covert movement required for LDA is independently needed.²

5.2 Blocking Effects

Invoking head government explains a number of interesting blocking effects which we claim follow from the locality clauses in the definition of head government, (24iii,iv).

Three configurations block LDA. The matrix verb cannot agree with an embedded absolutive in the presence of a *wh*-phrase, complementizer, or fronted topic in the embedded clause:

(26) *Embedded Elements that Block LDA*

- i. *wh*-phrase
- ii. complementizer
- iii. fronted topic

The data in (27) through (29) illustrate these restrictions. (27) demonstrates that LDA is unavailable when there is a *wh*-phrase in the embedded clause. Only Local Agreement with the class IV complement clause is possible. This restriction holds independently of the argument/adjunct status of the *wh*-phrase.

- (27) a. enir [ʔu micxir bok'āk'ruʔi] r/*b-iyxo
 mother [who money.III stole].IV IV/*III-knows
 'The mother knows who stole the money.'
- b. enir [nā c'oʔorā micxir bok'āk'ruʔi]
 mother [when thief money.III stole].IV
 r/*b-iyxo
 IV/*III-knows
 'The mother knows when the thief stole the money.'

In (28), LDA is ungrammatical if the embedded clause is marked with an overt complementizer. The example is grammatical if there is Local Agreement or the embedded clause contains only the nominalizer suffix (see (22)).

² In the conference presentation, we argued for covert Topicalization based on the observation that in-situ topics induce weak crossover (WCO) effects, another diagnostic for covert movement. We now believe that the observed effect is a result of the contrastiveness associated with the topic particle *-gon*. A second Tsez topic particle, *-no*, which is not contrastive, does not induce WCO although it still cannot appear inside islands. The dissociation between topic and WCO is consistent with the observation that Topicalization does not in fact induce WCO (Lasnik and Stowell 1991). We are grateful to an anonymous member of the WCCFL audience who reminded us of that paper.

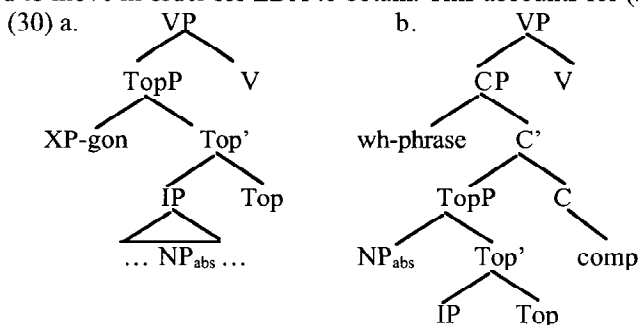
- (28) *enir* [užā magalu bāc'ru-ŕin] *r/*b-iyxo*
 mother [boy bread.III ate-COMP].IV IV/*III-knows
 'The mother knows that the boy ate bread.'

Lastly, a fronted non-absolutive topic in the embedded clause blocks LDA. (29a) is a baseline example with both agreement options. In (29b), the adverbial *iškola* 'at school' has been fronted and marked as a topic with the particle *-gon*. Only Local Agreement is now possible.

- (29) a. *enir* [užā t'ek iškola tetra-xosiŕi] *r/y-iyxo*
 mother [boy book.II at.school reads].IV IV/II-knows
 'The mother knows the boy reads books at school.'
 b. *enir* [iškola-gon užā t'ek tetra-xosiŕi] *r/*y-iyxo*
 mother[at.school-TOP boy book.II reads].IV IV/*II-knows
 'The mother knows that at school, the boy reads books.'

We propose that these blocking restrictions have a unitary explanation: the elements in (26) all prevent the verb from governing and hence agreeing with the absolutive in the specifier of TopP. This rules out the LDA option. The details of the account are as follows.

In the case of an overtly fronted topic, an XP in spec,TopP with the topic particle *-gon*, the LF is (30a). In this configuration, the verb cannot agree with the absolutive because it is too far away. The non-absolutive topic has usurped the topic position to which the absolutive topic would need to move in order for LDA to obtain. This accounts for (26iii).



In the case of a wh-phrase or a complementizer, the relevant LF is (30b) in which a CP has been projected between V and TopP to house the com-

plementizer or wh-phrases.³ In this configuration, agreement between the verb and the absolutive trigger in the specifier of TopP is also not possible. The CP projection blocks government of spec,TopP by V°, either because C° is a closer governor or because TopP is a barrier. This accounts for (26i,ii). The existence and straightforward account of these blocking restrictions thus provides interesting support for our analysis.

6 Conclusion

In conclusion, we have presented an empirically and theoretically interesting Long-Distance Agreement construction in which the agreement trigger and the agreeing probe are never in the same clause. The Tsez data suggest that agreement cannot be restricted to occurring solely in a clausemate specifier-head configuration as required by the Specifier-Head Agreement Hypothesis. Such a conclusion has been reached by a number of other researchers on independent grounds (Benmamoun 1992, Bobaljik 1995, van Gelderen 1997, Chomsky 1998, Chung 1998).

We have proposed head government as an alternative agreement relationship that must exist between a probe and trigger. Most generally, the agreement configuration must include i) the ability of a probe to look 'downward' in its c-command domain for an agreement trigger and ii) a locality condition so that it cannot look too far down. One proposal in the recent literature which seems to us to also capture the relevant properties is the Agree operation in Chomsky 1998.

References

- Bach, E. 1971. Questions. *Linguistic Inquiry* 2:153-166.
 Benmamoun, E. 1992. Structural Conditions on Agreement. *The Proceedings of the North East Linguistic Society* 22, 17-32. Amherst, Ma.: GLSA, University of Massachusetts at Amherst.
 Bobaljik, J. 1995. Morphosyntax: The Syntax of Verbal Inflection. Doctoral dissertation, MIT.
 Chomsky, N. 1986. *Barriers*. Cambridge, Ma.: MIT Press.
 Chomsky, N. 1995. *The Minimalist Program*. Cambridge, Ma.: MIT Press.
 Chomsky, N. 1998. Minimalist Inquiries: The Framework. Manuscript, MIT.
 Chung, S. 1998. *The Design of Agreement*. Chicago: Univ. of Chicago Press.

³ The example in (i) provides evidence that CP and TopP are ordered as shown with CP above TopP. A fronted wh-phrase must precede a fronted topic.

- (i) a. sidā elude-r-gon ža nexetxānu
 why wc-DAT-TOP he not.able.approach
 [_{CP} sidā [_{TopP} eludergon [_{IP} ža nexetxānu]]]
 'Why won't he be able to approach us?'
 b. *elude-r-gon sidā ža nexetxānu
 wc-DAT-TOP why he not.able.approach

- Chomsky, N. and H. Lasnik. 1993. The Theory of Principles and Parameters. *Syntax: An International Handbook of Contemporary Research*, eds. J. Jacobs, A. von Stechow, W. Sternefeld, and T. Vennemann, 506-569. Berlin: Mouton de Gruyter.
- Comrie, B., M. Polinsky, and R. Rajabov. to appear. Tsezian Languages. *Languages of the Caucasus, Vol. III*, eds. A. Harris and R. Smeets. Edinburgh: University of Edinburgh Press.
- Culicover, P. 1991. Topicalization, Inversion, and Complementizers in English. *Going Romance and Beyond*, eds. D. Delfitto, M. Everaert, A. Evers, and F. Stuurman. University of Utrecht: OTS Working Papers.
- van Gelderen, E. 1997. *Verbal Agreement and the Grammar behind its Break-down: Minimalist Feature Checking*. Tübingen: Max Niemeyer Verlag.
- Koopman, H. and D. Sportiche. 1991. The Position of Subjects. *Lingua* 85:211-258.
- Lambrecht, K. 1994. *Information Structure and Sentence Form*. Cambridge: Cambridge University Press.
- Lasnik, H. and T. Stowell. 1991. Weakest Crossover. *Linguistic Inquiry* 22:687-720.
- Mahajan, A. 1989. Agreement and Agreement Phrases. *MIT Working Papers in Linguistics 10*, eds. I. Laka and A. Mahajan, 217-252. Cambridge, Ma.: MIT Department of Linguistics and Philosophy.
- May, R. 1985. *Logical Form*. Cambridge, Ma.: MIT Press.
- Müller, G. and W. Sternefeld. 1993. Improper Movement and Unambiguous Binding. *Linguistic Inquiry* 24:461-507.
- Polinsky, M. 1999. Variation in Complementation Constructions: Long-Distance Agreement in Tsez. *Complementation*, ed. K. Horie. Amsterdam: John Benjamins.
- Polinsky, M. and E. Potsdam. 1999. The Syntax of Topic and Long-Distance Agreement in Tsez. Manuscript, UC San Diego and Yale University.
- Rizzi, L. 1990. *Relativized Minimality*. Cambridge, Ma.: MIT Press.
- Rizzi, L. 1997. The Fine Structure of the Left Periphery. *Elements of Grammar: Handbook of Generative Syntax*, ed. L. Haegeman, 281-337. Dordrecht: Kluwer Academic Publishers.