

Cliticization of AUX and the Shift from SVO to VSO in the History of Romanian

Gabriela Alboiu, York University, *galboiu@yorku.ca*

&

Virginia Hill, University of New Brunswick, *mota@unb.ca*

1. Empirical Observations:

(i) Old Romanian (OR) shows traces of non-clitic AUX (esp. 16th c.) concurrent with the default setting for clitic AUX (Zamfir 2007; Dragomirescu 2013; Nicolae 2015)^{1,2}

- Non-clitic AUX = not adjacent to V; preverbal
- Clitic AUX = adjacent to V in clitic cluster; pre- or post-verbal

(1) *și nu-l va [numai] proslăvi Dumnezeu pre cela ce*
and not=him will.3SG only bless God DOM the.one that
i-au slujit bine, ce și viața de veaci da-i-va.
to.him=has served well but also life.the of eternity give=to.him=will
'and God will not only bless the one who served him well, but he will also give him
eternal life' (CEV 246)

(ii) Non-clitic AUX coincides with properties absent with clitic AUX (e.g., subject-verb inversion, scrambling to the middle field, & subject reduplication)

2. Proposal:

Change in AUX status, from free morpheme to clitic, triggered:

- the loss of subject-auxiliary inversion (SAI) & emergence of LHM (Rivero 1993)
⇒ *shift in Head movement:*
✓ *from T-to-C/Fin (A-properties) to Asp-to-C/Foc (A-bar properties)*

¹ The timeline for 'Old Romanian' begins with 1521 and ends in 1780 (Chivu et al. 1997); this covers the oldest preserved piece of writing in Romanian (a short letter) up to the founding of the first Enlightenment movement by Romanian intellectuals (Hill & Alboiu 2016). Cross-linguistically, this timeline corresponds to the Early Modern stages of other Romance and South Slavic languages.

² E.g., PO text - 16th century - provides 1340 auxiliaries, out of which only 19 are visibly non-clitic, which amounts to 1.5% non-clitic auxiliaries in the grammar of that translator

- the loss of Spec,TP position for subjects (i.e. from SVO/VSO to exclusive VSO for A-related subjects)
 ⇒ *VSO does not arise from a change in a directionality parameter:*
 ✓ *an epiphenomenon of AUX cliticization*
- the loss of IP medial scrambling



3. Evidence for the non-clitic status of AUX
4. Hierarchical Location for AUX in OR
5. Hierarchical Location for lexical V in OR
6. Linearization options with non-clitic AUX
7. Diachronic Change:
 - a. From SAI to LHM
 - b. SVO/VSO to VSO
8. Conclusions

3. Evidence for the non-clitic status of AUX

(i) non-adjacency to V in a grammar with V-oriented clitics:

(2) *să* *va* *dzice* [*șerbul*] *aceasta* **default: AUX=V**
 if will.3= say slave.the this
 ‘if the slave will say this’ (PO 247)

(3) a. *să* *voiu* [*eu*] *tinde* *afară* *mâna* *mea* **marked: AUX>XP>V**
 if will.1SG= I extend outside hand.the my
 ‘if I extend my hand outside’ (PO 188)

b. *au* [*toate*] *tocmită*
 has everything negotiated
 ‘he has negotiated everything’ (T, 134:9; Zamfir 2007:159)

(ii) possibility of verb deletion:

(4) a. *de* *să* *va* *cunoaște* *carii* *l-au* *rănit* *și* *cine* *nu* *l-au* --
 if REFL.3= will.3SG know who him=has hurt and who not him-has
 ‘if it will be known who has hurt him and who has not’ (Pr.I 168:28/ Zamfir 2007: 163)

b. *De* *voiu* *face* *aceasta* *de* *voe*, *plată* *am*; *iară* *să* *voiu* --
 if will.1SG do this by will pay have.1 but if will.1SG
fară *de* *voe*, *vistiernicie* *mi* *e* *dată*

without by will punishment to.me= is given
‘If I will do this willingly, I have rewards; but if I will (do it) unwillingly, punishment is given to me’ (NTB 231: 23-24/ Zamfir 2007: 320)

- c. *de-l va fi mutat sau de nu-l va fi--*
if=him= will.3SG be moved or if not=him will.3SG be
‘whether he will have moved him or he will have not’ (Prav.1646: 78/ Nicolae 2015:214)

(iii) coordination without repetition of AUX

- (5) a. *au rânduît și tocmît*
has ordered and regulated
‘he has ordered and regulated’ (Lit.Buc. II: 17/ Zamfir 2007: 163)
- b. *va grăi, scrie și faci*
will.3SG speak write and do
‘he will speak, write and do’ (DIR XCCII 183, 8/ Zamfir 2007: 313)
- c. *va fi scos și gonit*
will.3SG be taken.out and chased
‘he will have taken out and chased (him)’ (IL 231: 7/Zamfir 2007: 314)

- Clitic AUX would yield ungrammaticality when separated from the verb (vs 3), with verb deletion (vs 4), and must be repeated under coordination (vs 5).

Note: Dragomirescu & Nicolae (2016) argue for a uniform analysis of constructions with “interpolations” of constituents, which involve either AUX, as in (3) or C-pronominal clitics, as in (6):

- (6) *așa ne [tare] pedepseș<ti>* (FT.1571–5: 3v)
like.this us hard punish.PRES.2PL
‘you punish us hard’

Crucially, we point out that pronominal elements as in (6) fail the tests in (4) and (5), as shown in (7), based on negative evidence:

- (7) a. *_{[CP așa ne [TP tare pedepsești] și [CP așa ne]]}
b. *_{[CP așa ne [TP tare pedepsești] și [TP tare umilești]]}

⇒ Hence, we have to keep the relevant constructions separate.

⇒ the phenomena are distinct: pronominal clitics show instances of C-orientation (versus the default V-orientation), whereas AUX allows for interpolation because it *does not* need a lexical host

4. Hierarchical location for AUX in Old Romanian

- *Voi* ‘want’ and *am* ‘have’ in Agr/T (clitic & non-clitic)
 - in complementary distribution (= same merging site), (8)
 - inflection for phi-features but not for tense (i.e. in the Agr projection of T, Dobrovie-Sorin 1994 a.o.)
 - adjacent/integrated to pronominal clitic cluster (justified by sharing of phi-features)
- (8) [TP have/will [AspP...]]
- Clitic *fi* ‘be’
 - merges in Asp, lower than *voi* ‘want’/*am* ‘have’; co-occurrence
 - is an aspectual/perfect marker (Dobrovie-Sorin 1994)
 - adjacent to V on the right and to clitic clusters on the left
 - no further movement (reside in Infl, as in Romance, Kayne 1991)
 - Non-clitic *fi* ‘be’
 - merges in Asp, lower than *voi* ‘want’/*am* ‘have’; co-occurrence (10)
 - moves to Agr/T (shows contrast in tense inflection 9, 11)
 - discrimination between progressive/perfect aspect (i.e., selection for gerund in 6 but past participle in 9)
- (9) *Era unii den cărtulari aciaa sezându și cugeta* (CEV.1581: 50)
were some of learned those sitting and reflected
‘Some of those learned men were sitting and reflecting’
- (10) *de-ai hi dommiata sârguit să fi până acmu venit* (DIR.1593: XCIII)
if-have.2SG be lordship.your tried SUBJ be.2SG up.to now come
‘If your lordship tried to come before now’
- (11) *Iar acesta ce scrie Marco, patr’înși-lă fusease purtându* (T, 58:14; Zamfir 2007: 201)
and this that writes Marco, he himself had.been carrying
‘And this of which Marco writes, he himself had been carrying’

Conclusions:

- (i) AUXs merge in the TP domain
- (ii) *voi* ‘want’ and *am* ‘have’ are more grammaticalized (i.e., reanalyzed higher in the clause hierarchy; Roberts & Roussou 2003) than *fi* ‘be’.

5. Hierarchical location for lexical verbs

- Criteria: - post-verbal subject in situ (Spec,vP); can be a bare quantifier (11)
 - fronting above vP for information focus with narrow scope over vP

In the presence of non-clitic AUX, there are two possibilities:

(i) **Default:** V-to-I for all AUXs

i.e., V above subject in situ (12) and above XP-info focus with vP scope (13-14)

- (12) *se-au de voe **datu** [_{vP} **elu** pre muncă]* (CEV 88:35) **above Spec, vP**
 REFL.3=has of will given he towards work
 ‘he started to work willingly’
- (13) *să ară amu **fi** [aciia] [_{vP} **Fiul** pacelor]* (C-Tetr.2 139v) **above adjuncts to vP**
 if would now be here Son.the easter.the.GEN.PL
 ‘If the Son of easter could now be here’
- (14) *s-ară **fi** **grăit** [aimintrea] [_{vP} **cineva** pântru noi]*
 if=would.3 be spoke otherwise someone for us
 ‘if someone would have spoken differently for us’ (DIR XLIV, 5,1600)

(ii) **Marked:** V in v for all AUXs

i.e., V lower than subject in situ

- (15) a. *să-i va [_{vP} **cineva** mănia]*
 if=them will someone upset
 ‘if someone will upset them’ (Pr.G. 66:18-19; Zamfir 2007: 304)
- b. *să nu te vei [_{vP} **tu** străjui și păzi]*
 if not REFL.2SG= will.2SG you.SG watch and guard
 ‘if you will not watch out and guard yourself’ (Ps.B. 298: 16-17/Zamfir 2007: 307)
- c. *de va fi [_{vP} **omul** zăcând spre moarte]*
 if will.3 be man.the lying towards death
 ‘if the man will be lying close to his death’ (CPrav.1560–2: 6v/Nicolae 2015: 210)

Conclusions:

- (i) Diachronically, there is a change from Verb in v to V-to-I
 (ii) V-to-I involves head-to-head movement vs vP movement (pace Nicolae 2015)
- vP is not vacated;
 - no interference with XPs scrambled within the TP domain.

6. Word order

Criteria:

- (16) Force > Top > Focus > (TopP) > Fin > Neg > CIP > TP > AspP....
(Rizzi 2004)

6.1. Scrambling

Evidence from word order in declaratives:

- (17) *și nu-l va [AdvP numai] proslăvi Dumnezeu pre cea* (CEV 246)
and not-him will only bless God DOM that.one
'and God will not only bless that one'

- (18) *eu încă am [DP pre el] botezat* (CM.1567: 258r)
I yet have DOM him baptized
'yet I baptized him'

- (19) *ne-au [PP în har] slobozitu*
us=has in happiness freed
'he freed us in happiness' (FT.1571-5: 3r)

- AUX in T: it follows Neg > clitic pronoun (NB: Neg > T in Romance), (17)
- verb in Asp because it precedes the subject in situ, (17)
- *[AdvP numai]* 'only', *[DP pre el]* 'him', *[PP în har]* 'in happiness' are between T and Asp in (17)-(19) => IP middle field
- **Scrambling** position constrained to uniqueness, so likely:
 - A-bar (AdvPs, PPs, DPs selected or non-selected)
 - Specifier, not adjunct => **Spec,AspP**

(20) $[_{CP} C_{DECL} [_{TP} (DP_{su}) AUX [_{AspP} \underline{XP} [_{Asp} V [_{vP} (DP_{su})... <V>...]]]]]$

6.2. SAI, no scrambling:

➤ Interrogatives

Subject-Auxiliary Inversion appears in the presence of short *wh*-movement:

- (21) *Răspunse Faraon: bine-i zău, Domnul cu voi,*
answered Pharaoh well-is PRT Lord.the with you
cum voiu [eu] lăsa pre voi și pre mituteii voștri? (PO, 210)
how will.1SG I leave DOM you and DOM subjects your
'Answered Pharaoh: the Lord is good with you; how will I leave you and your subjects?'

- only the subject may occur between AUX and verb in these contexts
- complementary distribution with Neg
- complementary distribution between IP scrambling and *wh*-movement;
⇒ Spec,AspP confirmed as A-bar due to intervention effects
- subject in Spec, TP (genuine SVO)

- | | |
|---------|--|
| (22) a. | [ForceP/FocP <i>WH</i> [FinP AUX [TP <u>DP_{SU}</u> [T <AUX> [AspP V [vP ...]]]]]] |
| b. | *[ForceP/FocP <i>WH</i> [FinP AUX [TP <u>DP_{SU}</u> [T <AUX> [AspP <u>XP</u> [Asp V [vP ...]]]]]] |

6.3. SAI + Scrambling

➤ SAI may co-occur with Scrambling in:

(i) conditionals, (23a)

(ii) relatives with matching structures (versus raising), (23b)

- (23) a. *nece să arî [cineva] [PP din morți] învie, nu va avea credinți*
not if would someone from dead resurrect not will have faith
'even if someone would come back from the dead they won't have faith'
(Cod Tod 98:6)
- b. *Ținem ce au [Domnul] [PP cu noi] făcut* (PO 221)
hold.1PL what has God with us done
'we hold to what God did with us'

- bare quantifier subject (23a) indicates argumental Spec,TP
- AUX above Spec,TP (in Fin)
- scrambling to Spec,AspP
- clause typing operators trigger SAI

- | | |
|------|--|
| (24) | [ForceP <i>OP_{COND/REL}</i> [FinP AUX [TP <u>DP_{SU}</u> [T <AUX> [AspP <u>XP</u> [Asp V [vP <DP> ...<XP>]]]]]] |
|------|--|

➤ This is unsurprising given the anaphoric chain analysis for operators on Spec,ForceP (versus Spec,FocusP) proposed in Rizzi (1997), as well as the observation in Bhatt & Pancheva (2005) whereby conditionals and free relatives have identical feature content.

In sum:

- SAI required with Interrogatives, Conditionals and Relatives
- Lack of SAI in declaratives (i.e. no clause typing operator), (25)

- (25) a. *că [voi] încă ati [aceasta] cerut* (PO 120)
that you again have this asked
'that you have asked for this again'
- b. *Dumnezeu făgăduitu-ne-au că ne va [pre noi] **asculta***
God promised=to.us=has that us=will DOM us listen
'God promised us that he will listen to us' (CCat, 9v-10r)

- *că* 'that' in Force = no AUX-to-Fin
- subject precedes AUX
- AUX follows clitic pronouns
- AUX in T

Conclusions:

- non-clitic AUX allows for an argumental Spec,TP for subjects
- non-clitic AUX allows for a non-argumental/A-bar Spec between its location (T) and the verb in Asp; this position is exploited for scrambling
- non-clitic AUX moves to C in residual V2 configurations (Rizzi 1996)
- AUX-to-C triggers SAI
- scrambling and wh-movement compete (both create A-bar chains)

7. Diachronic changes

The generalization of clitic AUX + V-oriented clitics resulted in:

- suppression of Spec,AspP for scrambling (obligatory adjacency to V)
→ discourse triggered fronting to CP domain
- replacement of AUX-to-C with V-to-C only
→ onset of Long Head Movement (Rivero 1993)
- loss of Spec,TP as argumental position (generalization of VSO)
→ preverbal subjects are reanalyzed as Topics

Transitional stages in marked and short-lived constructions

(i) Suppression of Spec, AspP is visible in the cliticization of *fi* 'be' in forms with subject-past participle agreement (*fost* resisted cliticization and was eliminated from active past perfect).

- (26) a. *ceia ce vor fi botezați finul*
 those.MASC who will.1PL= be christened.1PL.MASC godson.the
 ‘those who will have christened the godson’ (LP 242/Zamfir 2007: 317)
- b. *neștiindu nimele de înșii, nice de lucrurile lor,
 ce au fost făcuți sau petrecuți în Țara Muntenească*
 not.knowing nobody about them.MASC nor about deeds.the.FEM their
 that have.3 been done.MASC or undergone.MASC in Wallachia
 ‘with nobody knowing of them, nor of their deeds that they have accomplished or
 enterprised in Wallachia’ (DIR LXXXIX 181: 6 apud Zamfir 2007: 165)

In (26) Infl Agr features are redistributed on several heads (i.e. T & participle):

- DM account: Agr node adjunction after Spell-Out (Halle & Marantz 1993, Embick & Noyer 2007) on both T and Asp, with subsequent fission of the gender feature from the latter onto the past participle verb;
- Only possible in the absence of A-bar Spec,AspP
- Resulting V-adjacency helped the learner recategorize ‘fi’ *be* as a clitic

(ii) From SAI to LHM

- Replacement of AUX-to-C with V-to-C: T-to-Fin becomes Asp-to-Focus

In 16th c, V-to-Fin – same environments as AUX-to-Fin (Zafiu 2014; Nicolae 2015):

- (27) a. *[_{FocP} pînă când [_{TopP} păcătoșii [_{FinP} laudă [_{TP} -se?]]]]* (CEV 24)
 until when sinners.the boast -themselves
 ‘until when are the sinners boasting themselves?’
- b. *Dară [_{FocP} cine [_{TopP} amu den bogați [_{FinP} putea [_{TP}-se-va spăsi?]]]]* (CEV 325)
 but who now from rich could =himself=will repent
 ‘But who from the rich men will be able to repent himself?’

In 17th c., V-to-Focus (Alboiu et al 2015); evidence:

- Onset of complementary distribution between *wh*-phrases and V-to-C
- Onset of complementary distribution between fronting to Focus and V-to-C
- Non-clitic AUX moves from Asp (versus T) above clitic AUX

- (28) *Fostu-s-au cersut cazacii să-i lase călări ..*
 be.PST.PRTC-REFL-has beg.PRTC Kazakhs SUBJ-them leave riding
 ‘The Kazakhs had begged them to let them ride their horses.’ (N 381)

→ V-to-C movement changes from A to A' head movement, mimicking availability for XP movement;

- this is in line with the distinction that Roberts (2001, 2010) makes between operator and non-operator heads (though he keeps the labels domain specific: C-Op; Infl-non-Op).

(iii) SVO/VSO to VSO

- Loss of argumental Spec,TP: subject doubling + use of Spec,FinP

Subject doubling: first DP has aboutness reading in conjunction with the second DP (a coreferent non-clitic pronoun) in argumental Spec,TP.

(29) [*Radul-vodă cel Frumos*]_j [*acesta*]_j au făcut mănăstirea ot Tanganul
Radu.the-king the Handsome this has made monastery.the of Tanganul
'King Radu the Handsome has built the monastery of Tanganul' (Frâncu 2009: 340)

See also correlatives in (30):

(30) [*Cine*]_j cearcă, [*el*]_j află... și [*cine*]_j cere [*el*]_j dobândeste
who tries he discovers and who asks he obtains
'the one who tries discovers and the one who asks obtains it' (Prav 1581, 239/ Chivu 162)

→ Gradually, any preverbal subject is directly associated with a topic reading, without the need of further prompting from a resumptive element in Spec,TP.

Mod. Rom. uses Spec,FinP for preverbal bare quantifiers (i.e., above Fin Comp), so A-position (see Cinque 1990), (31):

(31) a. *Cineva_i să stea t_i la ușă.*
someone SUBJ stay.3SG at door.
'Someone should stay at the door.'

b. [*TOPP*Noaptea], [*FOCP*în mod sigur] ***cineva*** se va împiedica de scară.
night.the in way certain someone REFL=will stumble on stair
'It is certain that during the night someone will stumble on the stairs.'

- Spec,FinP as an argumental position = a marked option available cross-linguistically:

- Fin associated with modality (A') and finiteness (A) in Rizzi 1997;
- SubjP in Rizzi & Shlonsky 2007;
- mixed A/A' movement across FinP in Balkan languages - Bošković 2007.

Loss of Spec, TP as the neutral A-position for subjects has led to the following subject positions in MR:

- Spec,vP as the neutral A-position (Dobrovie-Sorin 1994 a.o.);
- Spec,FinP = A-position for quantifiers with wide scope;
- Spec, FocusP above vP for subjects with information focus (Belletti 2008)
- Spec,FocusP in C for contrastively focused subjects (including *wh*-subjects);
- Spec, TopP in C for topicalized subjects (Cornilescu 2000 a.o.);
- Spec,ForceP for relativized subjects.

8. Conclusions

The generalization of clitic AUX snow-balled into a series of parametric changes:

- the switch from SVO/VSO to VSO (from loss of argumental Spec, TP)
- obligatory use of CP field for fronting to quantificational Focus (from loss of Spec,AspP locally related to Asp/V)
- loss of AUX-to-C +/- replacement with V-to-C (loss of residual V2)
- replacement of V/T-to-C (Fin) with Asp/V-to-C (Foc):
 - ✓ switch from A to A' head movement

Implications for Romance linguistics:

- SVO correlates with non-clitic AUX (argumental Spec,TP maintained)
- AUX-to-C and SAI available at various times and to various degrees

Textual References

- CCat Al. Roman-Moraru. 1982. Coresi-Catehism. In Gheție, Ion (ed), *Texte românești din secolul al XVI-lea*. 101-105. București: Editura Academiei.
- CEV Pușcariu, Sextil & Procopovici, Alexie. 1914. *Carte cu învățătură (1581)*. București: Atelierele Grafice Socec & Co.
- CM Drimba, Vladimir. 1998. *Coresi, Tâlcul evangheliilor și molitevnic rumânesc*. București: Editura Academiei.
- Cod Tod Drăgan, Nicolae. 1914. *Două manuscrise vechi: Codicele Todorescu și Codicele Marțian*. București: Editura Academiei (Librăria Socec & Sfetea).
- C-Tetr.2 Dimitrescu, Florica. 1963. *Tetraevangelul tipărit de Coresi. Brașov 1560-1561*. București: Editura Academiei.
- DIR Chivu, Gheorghe et al. 1979. *Documente și însemnări românești din secolul al XVI-lea*. București: Editura Academiei.
- N Iordan, Iorgu. 1955. *Ion Neculce, Letopisețul Țării Moldovei*. Bucharest: Editura de Stat.
- PO Pamfil, Viorica. 1968. *Palia de la Orăștie 1581-1582*. București: Edit. Academiei.

References

- Alboiu, G.; Hill, V; Sitaridou, I. 2015. Discourse-driven V-to-C in Early Modern Romanian. *Natural Language and Linguistic Theory* 33 (4): 1057-1088.
- Bhatt, R. and R. Pancheva. 2006. Conditionals. In *The Blackwell Companion to Syntax* edited by Martin Everaert and Henk van Riemsdijk, v. I, Blackwell, 638-687.
- Belletti, Adriana. 2008. *Structures and Strategies*. New York: Routledge.
- Bošković, Ž. 2007. On the Locality of Motivation of Move and Agree. *Linguistic Inquiry* 38: 589-645.
- Cinque, G. 1990. *Types of A' dependencies*. Cambridge, MA: MIT Press.
- Cornilescu, A. 2000. The Double Subject Construction in Romanian. In *Comparative Studies in Romanian Syntax*, 83-134. Oxford: Elsevier.
- Dobrovie-Sorin, Carmen. 1994. *The syntax of Romanian*. Berlin: Mouton de Gruyter.
- Dragomirescu, Adina. 2013. O schimbare parametrică de la româna veche la româna modernă în sintaxa formelor verbale compuse cu auxiliar. *Limba română* LXII (2): 225–239.
- Dragomirescu, Adina & Alexandru Nicolae. 2016. Interpolation in Old Romanian and Istro-Romanian. Paper presented at LSRL 46, April 3-5, Stony Brook, New York.
- Embick, David and Rolf Noyer. 2007. Distributed Morphology and the Syntax-Morphology Interface. In *The Oxford Handbook of Linguistic Interfaces*, edited by G. Ramchand & C. Reiss, 289-324. Oxford: Oxford University Press.
- Frâncu, Constantin. 2009. *Gramatica limbii române vechi (1521-1780)*. Iași: Demiurg.
- Halle, Morris & Alec Marantz. 1993. Distributed Morphology and Pieces of Inflection. In *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, edited by K. Hale & S. Keyser, 111-176. Cambridge: The MIT Press.
- Hill, Virginia & Gabriela Alboiu. 2016. *Verb movement and clause structure in Old Romanian*. Oxford: Oxford University Press.
- Kayne, Richard. 1991. Romance clitics, verb movement and PRO. *Linguistic Inquiry* 22:647-687.
- Nicolae, Alexandru. 2015. *Ordinea constituenților în limba română: o perspectivă diacronică*. Bucharest: Editura Universității din București.
- Rivero, M. L., 1993. LHM vs V2 and null subjects in Old Romance. *Lingua* 89: 217-245.
- Rizzi, Luigi. 1996. Residual Verb Second and the wh-Criterion. In *Parameters and Functional Heads*, eds. Adriana Belletti and Luigi Rizzi, 63-90. New York: Oxford University Press.
- Rizzi, L. 1997. The fine structure of the left periphery. In *Elements of Grammar*, ed. L. Haegeman, 281-339. Dordrecht: Kluwer.
- Rizzi, L. 2004. Locality and Left Periphery. In *Structures and Beyond. The Cartography of Syntactic Structures*, vol 3., edited by A. Belletti, 223-51. New York: OUP.
- Rizzi, L. & U. Shlonsky. 2007. Strategies of subject extraction. In *Interfaces + Recursion = Language? Chomsky's Minimalism and the View from Syntax-Semantics*, ed. H. M. Gärtner & U. Sauerland, 115-160. Berlin: Mouton de Gruyter.
- Roberts, Ian. 2001. Head Movement. In *The Handbook of Contemporary Syntactic Theory*, eds. Mark Baltin and Chris Collins, 113-147. Oxford: Blackwell.
- Roberts, I. 2010. *Agreement and Head Movement: Clitics, Incorporation, and Defective Goals*. Cambridge, MA: MIT Press.
- Roberts, I. & A. Roussous. 2003. *Syntactic Change*. Cambridge: Cambridge University Press.
- Zamfir, D. 2007. *Morfologia verbului în daco-româna veche*. Bucharest: Edit. Academiei Rom.