

0 Introduction

Various parts of the Adyghe (Circassian < Northwest Caucasian) grammar provide evidence for different types of clausal organization.¹

Non-configurationality

- Free word order & radical pro-drop + polysynthetic verbal indexing
- No Weak Crossover effects
- “Backward” binding

Syntactic ergativity

- A'-extraction
- Case marking and verbal indexing patterns
- Word order restrictions in relative clauses

Syntactic accusativity

- Anaphor binding
- Argument encoding in nominalizations
- Addressee of imperatives

Proposal:

The clause is structured in three distinct strata: accusatively built *v*P, syntactically ergative TP and non-configurational CP. The contradictory argument properties can be resolved via the following configuration:

- VoiceP (projection immediately dominating *v*P) is a phase.
- Ergative is inherent case, assigned by *v*; absolutive is assigned by T.
- Verbal cross-reference markers are pronominal elements, following the Pronominal Argument Hypothesis (Jelinek 1984).

¹This talk is based on data from published sources, as well as data collected in the Republic of Adyghea (Russia) in 2010 and 2014. I am deeply indebted to the speakers of Adyghe for their generous help. I am thankful to all the people who took the time to discuss this topic with me, although they might not necessarily agree with my conclusions, most notably Greg Kobele, Yury Lander, Jason Merchant, Line Mikkelsen, Yakov G. Testeleis, and especially Karlos Arregi. All mistakes and shortcomings are solely mine.

- Following Pensalfini (2004), encyclopedic information (lexical roots) is barred from being realized in argument positions within *v*P. This leads to the dislocation of full non-absolutive DPs.

1 The verb and basic clause structure

1.1 Polysynthesis

All participants cross-referenced on verb, full DPs optional:

- (1) sə- qə- [p- f-] [a- r-] jə- Ɂe- λeɁ^wə -Ɂ
 1SG.ABS- DIR- 2SG.IO- BEN- 3PL.IO- DAT- 3SG.ERG- CAUS- see -PST
 ‘He showed me to them for your sake.’ (Korotkova & Lander 2010)

Templatic morphology:

Argument structure zone (A)					Pre-base elements (B)	
ABS	DIR	APPL	DAT	ERG	DYN / NEG	
1	2	3	4	5	6	

Base (C)				Endings (D)		
CAUS	root	LOC	TAM	PL	DYN	NEG, case
7	8	9	10	11	12	13

Table 1: Simplified verbal template (Arkadiev et al. 2009)

Cross-reference markers behave as **pronominal clitics** (Lander 2012b:145–158):

1. Uniform phonological form, resemble free-standing pronouns (Table 2)
2. Anaphors and relativizers are marked on the head predicate or nominal analogous to personal markers, in the morphological slot designated for the corresponding argument:

- (2) zeç'e çəf-xe-r z-a-λeɁ^wəžə
 all person-PL-ABS **REFL.ABS**-3PL.ERG-see
 ‘All the people see themselves.’ (Letuchiy 2010)

	pronouns	ABS	IO	ERG
1SG	se	sə-		s-
1PL	te	tə-		t-
2SG	we	wə-		w-//p-
2PL	š ^w e	š ^w ə-		š ^w -
3SG	demonstratives	∅	∅	ə-//jə-
3PL		∅		a-

Table 2: Cross-reference markers and pronouns (Arkadiev et al. 2009:45,56)

1.2 Morphological ergativity

Manifests itself in:

1. Verbal cross-reference: designated position for absolutive (intransitive subject and direct object) versus ergative transitive subject (Table 1).

2. Case marking:

- r (ABS) intransitive subject (3a)
direct object (3b)
- m (OBL) transitive agents (3b)
applicatives (3c)
possessors (4)
complements of postpositions (5)

- (3) a. č'ale-**r** ∅-qeše
boy-**ABS** 3SG.ABS-dance.DYN
'The boy is dancing.'
- b. ž^waķ^we-**m** q^wəb^we-**r** ∅-ə-ž^waḅ
plowman-**OBL** field-**ABS** 3SG.ABS-3SG.ERG-plow.PST
'The plowman plowed the field.' (Temirgoy, Arkadiev et al. 2009, 53)
- c. λə-**r** š^wəzə-**m** ∅-[∅-d]-eʔepəʔe
man-**ABS** woman-**OBL** 3SG.ABS-[3SG.IO-COM]-help.DYN
'The husband is helping the wife.' (Arkadiev et al. 2009:53)
- (4) šenəḅe-**m** ∅-jə-mafe
knowledge-**OBL** 3SG.PR-POSS-day
'Knowledge Day (September 1)'

- (5) hač'e-**me** a-paje
guest-**PL.OBL** 3PL.PP-for
'for the guests'²

3. Suffixal number agreement – only with the absolutive argument:

- (6) pjəsmexer ə-txə-ḅe-**x**
letter.PL.ABS 3SG.ERG-write-PST-**PL(ABS)**
'He wrote the letters.'
- (7) k^wa-ḅe-**x**
go-PST-**PL(ABS)**
'They went.'

2 Non-configurationality

The behavior of full DPs suggests non-configurationality.

1. Free word order and radical pro-drop (1):

- (8) a. qeķ^waḅe-m(**SUBJ**) [zeč'e qebar-xe-r](**DO**) amjənet(**IO**)
come.PST-OBL all story-PL-ABS Aminet
qəfjəʔ^wetaḅ
BEN.3SG.ERG.tell.PST
'The one who arrived told Aminet all the stories.' (Lander 2012b:90)
- b. qeķ^waḅem(**SUBJ**) amjənet(**IO**) [zeč'e qebarxer](**DO**) qəfjəʔ^wetaḅ
- c. [zeč'e qebarxer](**DO**) qeķ^waḅem(**SUBJ**) amjənet(**IO**) qəfjəʔ^wetaḅ
- d. [zeč'e qebarxer](**DO**) amjənet(**IO**) qeķ^waḅem(**SUBJ**) qəfjəʔ^wetaḅ
- e. amjənet(**IO**) [zeč'e qebarxer](**DO**) qeķ^waḅem(**SUBJ**) qəfjəʔ^wetaḅ

2. No weak crossover effects

- A'-movement

²-me is a portmanteau morpheme that can optionally replace -xe-m 'PL-OBL'.

- (9) [t_i (ERG) \emptyset_i -jə- $\text{p}^w\text{əne}^w\text{ə-p}^w\text{sə}^w\text{ə-r}$ $\text{ḡ}^w\text{ə}$
3SG.PR-POSS-neighbor-girl-ABS good
 zə_i - $\text{lə}^w\text{ə-r}$] *pro*_i
REL.ERG-see-PST-ABS

‘the one who_i loved his/her_{i/j} neighbor’

- (10) [t_i (ABS) \emptyset_i -j-ate \emptyset_i -ə- $\text{lə}^w\text{ə-r}$] *pro*_i
3SG.PR-POSS-father **3SG.ABS**-3SG.ERG-see-PST-ABS

‘the one whom_i his/her_{i/j} father saw’ (Lander to appear)

• Quantifier raising:

- (11) aslan_i jeg^wəpšəse [$\emptyset_{i/j}$ -jə-č’eleježak^we(SUBJ) [č’eleježaže
Aslan think.DYN **3SG.PR**-POSS-pupil teacher
pepč_j](IO) qə-fe-š^wenew]
each DIR-BEN-dance.MOD
1. ‘Aslan_i thinks that his_i pupil will dance for every teacher_j.’
2. ‘Aslan_i thinks that every teacher_j’s pupil will dance for him_j.’
(Lander, p.c.)

3. Co-referent/bound arguments may be omitted, regardless of position in matrix or embedded clause or syntactic status of embedded clause.³

- (12) a. **pšaše-r_i**(SUBJ) qe- $\text{p}^w\text{ə-r}$ [*pro*_i(IO)
girl-ABS DIR-cry-PST
sə-z- \emptyset_i -de- $\text{g}^w\text{əš}^w\text{ə}^w\text{ə-m}$]
1SG.ABS-REL.TMP-3SG.IO-COM-talk-OBL
‘The girl_i started crying, when I started talking to her_i.’
b. *pro*_i(SUBJ) qe- $\text{p}^w\text{ə-r}$ [**pšaše-m_i**(IO)
DIR-cry-PST girl-OBL
sə-z-de- $\text{g}^w\text{əš}^w\text{ə}^w\text{ə-m}$]
1SG.ABS-REL.TMP-COM-talk-OBL
‘The girl_i started crying, when I started talking to her_i (lit. She_i started crying, when I started talking to the girl_i)’ (Testelelets 2009b:691)

³This is reminiscent of the Backward Raising, argued for Adyghe by Potsdam & Polinsky (2012). Backward Raising is argued to track the ergative argument of transitive verbs and absolutive argument of intransitive verbs; the data presented here suggests that the phenomenon is not restricted to clausal complements or to a single type of argument.

- (13) [$\text{ḡ}^w\text{əhaftən}$ [**sabəj pepč_i**] qə- \emptyset -r-a-tənew] *pro*_i
gift child every DIR-3SG.IO-DAT-3PL.ERG-give.MOD
meg^wəbe
hope.DYN
‘Every boy_i hopes that he_i will receive a gift (lit. that they will give him_i a gift).’ (Testelelets 2009b:697)

Summary:

Adyghe exhibits some traits of a Pronominal Argument language, as suggested by Lander (2012b). PA languages express predicate-argument relations on the predicate, while full DPs display behavior typical of adjuncts (Jelinek 1984; Baker 1996).

3 Syntactic ergativity

Special status of the absolutive argued for by Letuchiy (2010), Lander (2012a), Lander (to appear).

1. **A'-extraction (relativization):** absolutive unmarked, all other participants marked (by prefix identical to reflexive pronoun, i.e. resembles resumption.⁴)

- (14) a. **č’ale-m** apč’ə-r ə-q^wəta- p^w
boy-OBL glass-ABS 3SG.ERG-break-PST
‘The boy broke the glass.’
b. [t_i (ERG) apč’ə-r zə_i -q^wəta- p^w] **č’ale-r_i**
glass-ABS REL.ERG-break-PST boy-ABS
‘the boy that broke the glass’
(15) a. se **txələ-r** s- $\text{p}^w\text{ə-r}$
I book-ABS 1SG.ERG-hold
‘I am holding the book.’
b. [se t_i (ABS) s- $\text{p}^w\text{ə-r}$] **txələ-r_i**
I 1SG.ERG-hold book-ABS
‘the book that I am holding’

⁴Idea suggested by Yuri Lander, p.c.

- (16) a. **š^weferə-r** qek^wa-**r**
driver-ABS come-PST
'The driver came.'
b. [**t_i** qek^wa-**r**e] **š^weferə-r_i**
come-PST driver-ABS
'the driver who came' (Lander to appear)
2. A'-movement of possessors: some dialects allow only for absolutive (Shapsug; Lander to appear); relativization out of other arguments requires restructuring.
- (17) a. [**školə-m** Ø-jə-wənašha](ABS) be məšew
school-OBL 3SG.PR-POSS-roof not long ago
a-beləre
3PL.ERG-color.PST
'They colored the roof of the school not so long ago.'
b. **škol-ew** [[**t_i(POSS)** z-jə-wənašha](ABS) be məšew
school-ADV REL.PR-POSS-roof not long ago
a-beləre-r]
3PL.ERG-color.PST-ABS
'the school whose roof they colored not so long ago'
- (18) a. [**č'eleježak^we-m** Ø-jə-tetrad](IO)
pupil-OBL 3SG.PR-POSS-notebook
s-Ø-**je**-płeštəre
1SG.ABS-**3SG.IO-DAT**-look.IPF
'I was looking at the pupil's copy-book.'
b. **č'eleježak^w-ew** [[**t_i(POSS)** z-jə-tetrad](ABS)
pupil-ADV REL.PR-POSS-notebook
sə-**z-e**-płeštəre-r]
1SG.ABS-**REL.IO-DAT**-look.IPF-ABS
'the pupil at whose copy-book I was looking (lit. the pupil whose copy-book is [what I am looking at])'
3. Word order: in internally headed relative clauses, internal head (marked with *-ew* 'ADV') may not intervene between absolutive argument and predicate.
- (19) xet [[š^we_i]_{IO} [**čəf-čərə^w-ew**] qə-^wə_i-xə-č'ə^we-r]
who you.PL person-famous-ADV DIR-2PL.IO-LOC-leave.PST-ABS
'What famous person comes from your people?' (Lander to appear)
- (20) [[thamate-m_i]_{ERG} [**qəbar-ew**] q-ə_i-^weteš'tə-m]
head-OBL news-ADV DIR-3SG.ERG-tell.FUT-OBL
č'ə^wepsew jəwəna^we qježes'tə^w [...] impatiently POSS.family wait.IPF
'The family waited impatiently for the story the head would tell...'
(Lander to appear)
- (21) a. [[**čəf-ew**] [q^waje-r_i]_{ABS} Ø_i-zə-šxəre-r]
person-ADV cheese-ABS 3SG.ABS-REL.ERG-eat.DYN-ABS
bərezakew š'tət
is content
'The person eating cheese is content'
b. ?? [[q^waje-r_i]_{ABS} [**čəf-ew**] Ø_i-zə-šxəre-r]
cheese-ABS person-ADV 3SG.ABS-REL.ERG-eat.DYN-ABS
bərezakew š'tət
is content
'The person eating cheese is content' (Lander to appear)
- (22) a. [**tə^wak^w-ew**] [dəše-r_i]_{ABS} Ø_i-zə-^wepə-teq^wə^we-r
thief-ADV gold-ABS 3SG.ABS-REL.IO-LOC-spill.PST-ABS
'the thief from whose hands the gold spilled'
b. * [dəše-r_i]_{ABS} [**tə^wak^w-ew**] Ø_i-zə-^wepə-teq^wə^we-r
gold-ABS thief-ADV 3SG.ABS-REL.IO-LOC-spill.PST-ABS
Expected: 'the thief from whose hands the gold spilled' (Lander 2009:624)

Summary:

Restrictions on A'-extraction point towards syntactic ergativity in Polinsky's (in press) terms; may be accounted for by high licensing of absolutive (Coon et al. 2014). High licensing correlates with (leftmost) surface position and case assignment.

Word order restrictions suggest that the absolutive DP forms a constituent with the predicate, to the exclusion of all other arguments.

4 Syntactic accusativity

Accusativity manifests itself in:

1. **Anaphor binding:**

- (23) **z-jə-wəč'ə-ɸ** **ERG>ABS**
REFL.ABS-3SG.ERG-kill-PST
 'He killed himself.'
- (24) **ɸ^wənžemč'e sə-z-e-pləž'ə-ɸ** **ABS>IO**
 mirror.INS 1SG.ABS-**REFL.IO**-DAT-look-PST
 'I looked at myself in the mirror.' (Arkadiev et al. 2009:64)

2. **Argument encoding in nominalizations (Ershova 2015):**

- (25) a. [**pšaše-m jə-leɸe-thač'ə-n**] **ERG→POSS**
 [girl-OBL]_{ERG} POSS-[dish]_{ABS}-wash-NML **ABS→INC**
 sjezeš'əɸ
 1SG.ABS.tire.PST
 'I'm tired of the girl's_{ERG} dish_{ABS}-washing.'
- b. # [**laɸe-me ja-pšeše-thač'ə-n**] ***ABS→POSS**
 [dish-PL.OBL]_{ABS} 3PL.POSS-[girl]_{ERG}-wash-NML ***ERG→INC**
 sjezeš'əɸ
 1SG.ABS.tire.PST
 Expected: 'I'm tired of the girl's_{ERG} dish_{ABS}-washing.' ("Seems as if the dishes_{ERG} are washing the girl_{ABS}.")
- (26) [**pšaše-me ja-č'ele-fe-g^wə.š^wa-č'e**] **ABS→POSS**
 [girl-OBL]_{SUBJ} 3PL.PR+POSS-[boy]_{IO}-BEN-be.happy-NML **IO→INC**
 səg^wə rjehə
 1SG.like.DYN
 'I like how the girls congratulate the boys'.
 *'I like how the boys congratulate the girls'.

3. Addressee of imperatives

- (27) **wə-mə-hə** **ERG>ABS**
2SG.ERG-NEG-carry
 'don't carry it'
- (28) **š^w-ø-je-ž** **mə txələ-m** **ABS>IO**
2PL.ABS-3SG.IO-DAT-read this book-OBL
 'Read this book.' (Kuznetsova 2009:289–290)

Summary: Patterns pointing to accusativity are local: anaphor binding expressed within verb; the nominalized projection is smaller than TP; imperative clauses can be argued to involve a functional head that selects for VoiceP.

5 Summary

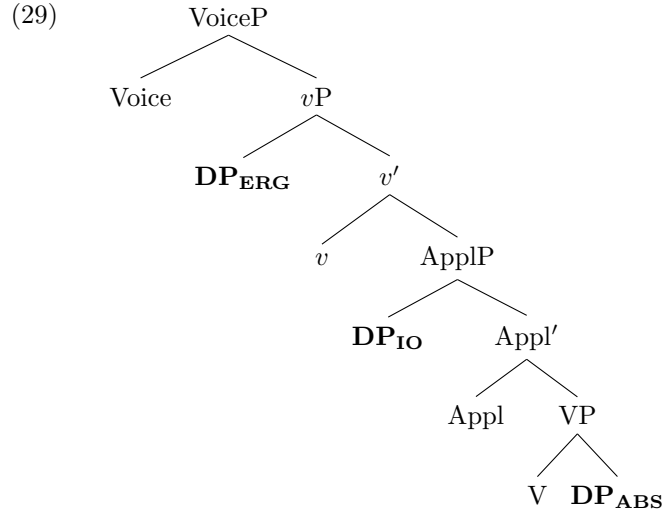
- Polysynthetic verb highly configurational with fixed positions for argument markers, while behavior of full DPs suggests non-configurationality.
- Resumption triggered by relativization of non-absolutive arguments suggests that they are “trapped” within a phase, while the absolutive is not (cf. Coon et al. 2014).
- Word order restrictions in relative clauses suggest that the absolutive DP forms a constituent with the predicate, to the exclusion of other arguments.
- Restrictions on A'-extraction out of non-absolutive arguments point towards their adjoined position.
- Patterns pointing to accusativity are local, possibly restricted to *vP*.

6 Building the clause

6.1 Syntactic accusativity in *vP*

- *vP* is organized based on agentivity: more agentive argument c-commands less agentive (internal) argument. Structure of transitive predicate with applicative in (29).⁵
- VoiceP (projection selecting for *vP*) is a phase; if anaphor binding is analyzed as an Agree relation (Reuland 2011; Antonenko 2012), restriction of binding to phase comes naturally.
- Nominalizations are formed by a nominalizer selecting for *vP*, within which the ergative or absolutive intransitive subject is the highest argument.
- Functional head introducing imperative force (e.g. Jussive in Zanuttini et al. 2012) may merge low, selecting for VoiceP.

⁵It is unclear if Adyghe makes a distinction between low and high applicatives (Pylkkänen 2008); the structures offered here assume that applicatives are merged high, but this question remains open for future research.



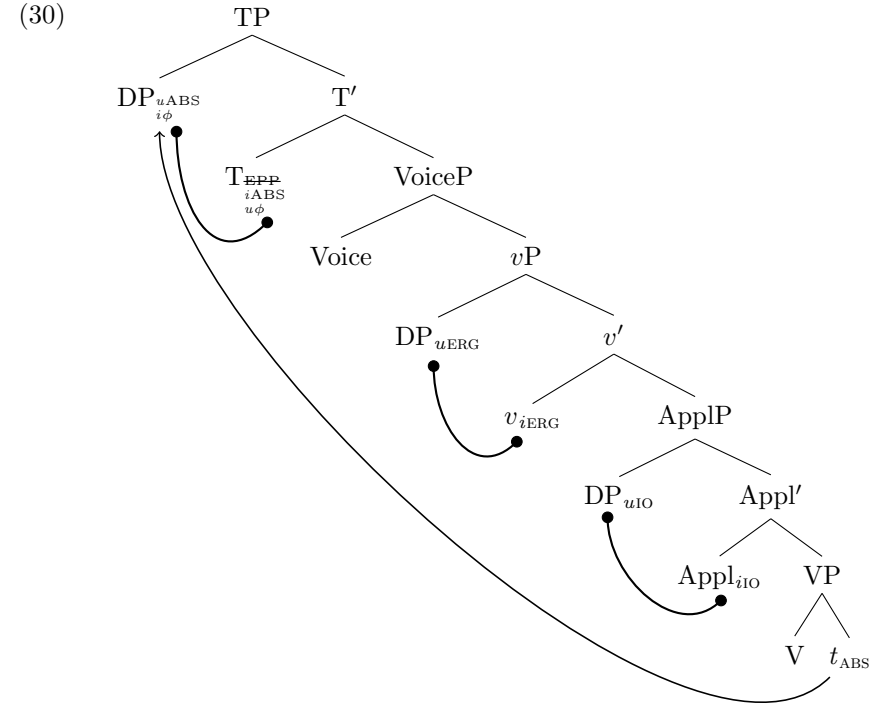
6.2 Deriving syntactic ergativity

6.2.1 Case licensing and high absolutive

- v and Appl assign case to their specifiers (cf. ergative as inherent case in Legate 2008; Coon et al. 2014, etc.). At the time T is merged, the only active DP is the complement of V.
- Direct object raises to Spec,TP to check EPP feature on T; T assigns absolutive case and agrees with DP_{ABS} in number (here marked as ϕ) (30).

6.2.2 Phasehood and restrictions on extraction

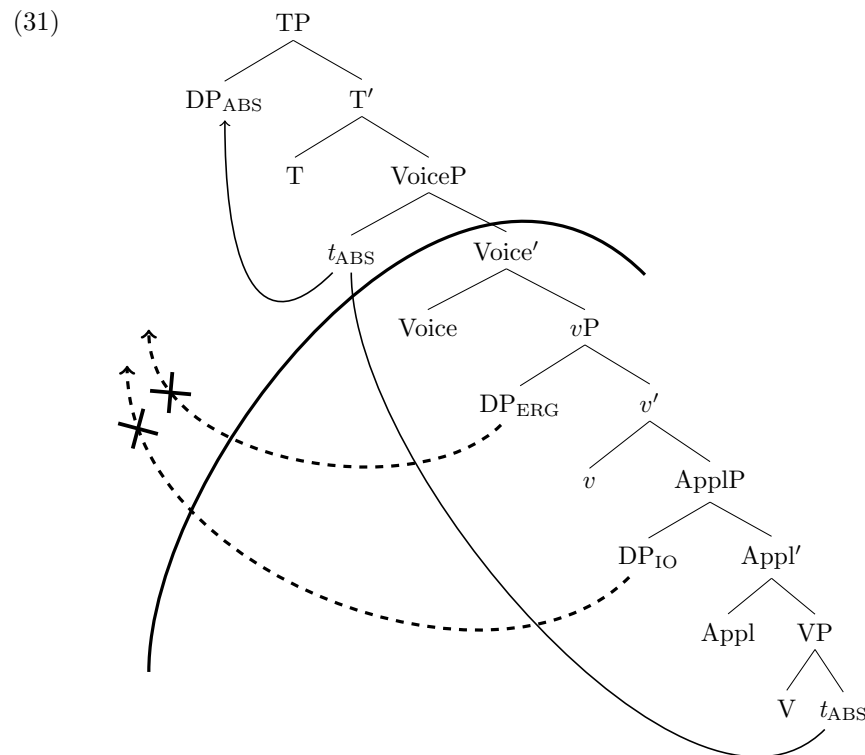
- VoiceP is a phase \Rightarrow for DP_{ABS} to raise to Spec,TP, it must first land in Spec, VoiceP.
- With the specifier of VoiceP occupied, all other arguments are trapped in their positions (31).
- A'-movement of non-absolutive arguments repaired via resumption (i.e. REL=REFL).



6.3 DP dislocation and non-configurationality

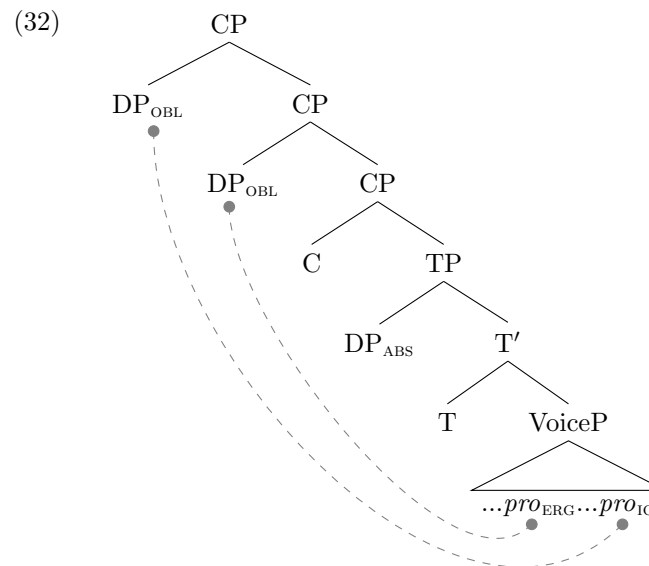
- Adyghe is a language that bans encyclopedic information from being realized in argument positions within vP , based on Pensalfini's (2004) typology of non-configurational languages.
- vP can only host functional features, i.e. pronominal clitics.
- DPs relating to these argument positions are dislocated and adjoined to CP, as proposed for non-configurational languages by Jelinek (1984) and Baker (1996). There they are assigned default case – oblique $-m$ (32).

- **Absolutive is special:** DP_{ABS} in Spec,TP is not necessarily dislocated (but can be subsequently scrambled). In (32) DP_{ABS} forms a constituent with TP to the exclusion of all other arguments; it is also the only DP in an argument position.
- $\Rightarrow DP_{ABS}$ is most accessible for extraction and least flexible in respect to word order.



7 Conclusion

Adyghe argument structure can be derived through a combination of parameters: VoiceP as a phase and binding locality domain, high licensing of the absolutive and a ban on realization of encyclopedic information in argument positions within vP .



References

- Antonenko, Andrei. 2012. *Feature-based binding and Phase Theory*: Stony Brook University dissertation.
- Arkadiyev, P.M., Y.A. Lander, A.B. Letuchiy, N.R. Sumbatova & Y.G. Testeleets. 2009. Vvedeniye. Osnovnyye svedeniya ob adyghejskom jazyke [Introduction: Basic information on Adyghe]. In Testeleets (2009a) 17–120.
- Baker, Mark C. 1996. *The Polysynthesis Parameter*. Oxford/NY: Oxford University Press.
- Coon, Jessica, Mateo Mateo Pedro & Omer Preminger. 2014. The role of case in A-bar extraction asymmetries: Evidence from Mayan. *Linguistic Variation* 14(2). 179–242.
- Ershova, Ksenia. 2015. Non-canonical noun incorporation in Bzhedug Adyghe. In *Proceedings of the 41st Annual Meeting of the Berkeley Linguistics Society*, 99–120. Berkeley Linguistics Society.
- Jelinek, Eloise. 1984. Empty categories, case and configurationality. *Natural Language and Linguistic Theory* 2.1.
- Korotkova, Natalia & Yury Lander. 2010. Deriving affix ordering in polysynthesis: Evidence from Adyghe. *Morphology* 20. 299–319.
- Kuznetsova, Y.L. 2009. Modal'nost' v adyghejskom jazyke [Modality in Adyghe]. In Testeleets (2009a) 287–328.
- Lander, Yury. 2009. Množestvennaja reljativizacija: podlinnaja i mnimaja [Multiple relativization: genuine and imaginary]. In Testeleets (2009a) 612–653.

- Lander, Yury. 2012a. Nominal complexes in Adyghe: between morphology and syntax. Conference handout. Typology, Theory: Caucasus, IFEA, Istanbul, 1 December 2012.
- Lander, Yury. 2012b. *Reljativizacija v polisintetičeskom jazyke: adygejskie otnositel'nye konstrukcii v tipologičeskoj perspektive* [Relativization in a polysynthetic language: Adyghe relative constructions in a typological perspective]: Russian State University for the Humanities dissertation.
- Lander, Yury. to appear. Subject properties of the Adyghe absolutive: Evidence from relatives. In *Volume on ergativity*, Tbilisi State University.
- Legate, Julie Anne. 2008. Morphological and abstract case. *Linguistic Inquiry* 39(1). 55–101.
- Letuchiy, Alexander. 2010. Ergativity in the adyghe system of valency-changing derivations. In Gilles Authier & Katharina Haude (eds.), *Ergativity, Valency and Voice*, 323–353. De Gruyter Mouton.
- Pensalfini, Rob. 2004. Towards a typology of configurationality. *NLLT* 22/2. 359–408.
- Polinsky, Maria. in press. Syntactic ergativity. In *Blackwell Companion to Syntax*, Blackwell Publishing 2nd edn.
- Potsdam, Eric & Maria Polinsky. 2012. Backward raising. *Syntax* 15(1). 75–108.
- Pylkkänen, Liina. 2008. *Introducing Arguments*, vol. 49 Linguistic Inquiry Monographs. MIT Press.
- Reuland, Eric. 2011. *Anaphora and language design*. MIT Press.
- Testeleťs, Y. G. (ed.). 2009a. *Aspekty polisintetizma: Očerki po grammatike adygejskogo jazyka* [Aspects of polysynthesis: Sketches on the grammar of Adyghe]. Moscow: RGGU.
- Testeleťs, Yakov G. 2009b. Nevyražennye aktanty v polipredikativnoj konstrukcii [Unexpressed arguments in a multi-clausal construction]. In Testeleťs (2009a) 654–711.
- Zanuttini, Raffaella, Miok Pak & Paul Portner. 2012. A syntactic analysis of interpretive restrictions on imperative, promissive and exhortative subjects. *NLLT* 30/4. 1231–1274.