0 Introduction

Event-oriented nominalizations in Adyghe (Circassian < Northwest Caucasian)¹:

- Action nominal formed with suffix -n

  (1) a. haˇ c.ˇ e-me guest-PL.OBL 1SG.ABS-3PL.IO+DAT-wait
      'I’m waiting for guests'.
  b. [haˇ c.’e-xe-m] ja-je-ˇ ze-guest-PL.OBL POSS-DAT-wait-NML Zarina POSS-job
      'Waiting for guests is Zarina’s task.'

- Manner nominal formed with suffix -ˇ c.'e

  (2) a. weˇ s’ paj se laue s-thaˇ c.’e
      you.OBL for I dish 1SG.ERG-wash-PST
      'I washed the plate for you.'
  b. [pišaš-e-m] ja-je-ˇ ze-ˇ c.’e
      girl-OBL POSS-dish-wash-NML I like.PRS
      'I like how the girl washes the dishes.'

Nominalizations involve remapping of the argument structure from verbal to nominal; restrictions on this process and verbal morphology in nominalizations provide clues towards the underlying architecture of vP.

Main Claim: Patterns of argument encoding point towards a hierarchical argument structure based on agentivity. Nominalizer selects for vP and acts as a de-transitivizing operator, i.e. nominalizations lack an external argument. Morphology that surfaces within nominalizations is necessarily generated lower than v: applicatives and low aspect.

¹The data was collected in Aul Neshukay (Teuchezhsky District, Republic of Adygea, Russia) in July 2014. The majority of the examples are in the Bzhedug dialect. I am grateful to the speakers of Adyghe for their generous help, Greg Kobele, Maria Polinsky, Yury Lander and especially Karlos Arregi for discussion, comments and criticism. All mistakes are mine.


Roadmap:
1. Adyghe clause structure
2. Nominalizations as a mixed category
3. Argument encoding in nominalizations
4. Analysis
5. Conclusion

1 Adyghe clause structure

1.1 Polysynthesis

- All participants cross-referenced on verb, full NPs optional

  (3) [sw]-q@-[t-de]-[p-fo]-[2-r]-[a]-naˇ ges’t@a
      [1SG.ABS]-DIR-[1PL.IO-COM]-[2SG.IO-BEN]-[3SG.IO-DAT]-[3PL.ERG]-CAUS.read.IPF
      'They were making me read it to you together with us' (Temirgoy; Letuchiy 2012)

- Templatic morphology

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<th>Argument structure zone (A)</th>
<th>Pre-base elements (B)</th>
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Table 1: Simplified verbal template (Arkadiiev et al., 2009)

- Scopal interactions in suffixal domain

  (4) Simulative & habitilitve

    a. wasˇ e-em ˇ e-m qatjesx@-[s]-[s]e
      sky.OBL star 1SG.ERG.take-HBL-SML
      'It seems that I can take a star from the sky.'
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1.2 Ergativity

- Verbal cross-reference (Table 1); case marking: absolutive (-r) for intransitive subject (7a) & direct object (7b), oblique (-m) for transitive agents (7b), applicatives (7c), possessors (8) and complements of postpositions (9).

(5) -n: resultative / preterite

a. \(\text{c'}\text{ale-m pce-r qa-?w-ja-xa-ux}\)
   boy-OB dinner ABS DIR-LOC-3SG.ERG-open-PST
   ‘The boy opened the door.’

b. \(\text{pcer} \quad ?\text{w}x\text{a}-\text{xa}-\text{x}\)
   door-ABS open-PST-INC
   ‘The door is already open’

c. \(\text{saqpek}\text{em pce} \quad ?\text{w}x\text{a}-\text{xe-xa-ux}\)
   when I came door open-PST-INC-PST
   ‘When I came, the door was already open’ (Arkadiev 2014)

(6) TAM markers

a. \(k\text{w}e-\text{he-n}\) (faje)
   go-PST-POT must
   ‘He probably went.’ (Lit. ‘It should be [that he went].’)

b. \(k\text{w}e-\text{ma-he}\)
   go-POT-PST
   ‘He would go.’ (Lit. ‘It was so [that he should go].’) (Korotkova & Lander 2010)

(10) a. \(\text{c'}\text{ale-m apc'a-r a-qwota-ux}\)
   boy-OB glass-ABS 3SG.ERG-break-PST
   ‘The boy broke the glass.’

b. \([apc'a-r \quad z\text{a-qwota-ie}] \quad \text{c'}\text{ale-r}\)
   glass-ABS REL.ERG-break-PST boy-ABS
   ‘the boy that broke the glass’

(11) a. se \(\text{txa\textalpha-r}\) s-tura
   I book-ABS 1SG.ERG-hold
   ‘I am holding the book.’

b. \([se\ s-tura]\ \text{txa\textalpha-r}\)
   I 1SG.ERG-hold book-ABS
   ‘the book that I am holding’

(12) a. \(\text{swefero-r qekw'a-ux}\)
   driver-ABS come-PST
   ‘The driver came.’

b. \([qekw'a-ue] \quad \text{swefero-r}\)
   come-PST driver-ABS
   ‘the driver who came’ (Lander to appear)

- A' extraction (relativization): absolutive unmarked, all other participants marked

(8) \(\text{jenare-m} \quad z\text{-ja-mafe}\)
knowledge-ABS 3SG.PR-POSS-day
‘Knowledge Day (September 1)’

(9) haq'e-me a-paje
guest-PL.OBL 3PL.PP-for
‘for the guests’

- Word order: in internally headed relative clauses, internal head may not intervene between absolutive argument and predicate
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1. no ergative/absolutive personal marking

2. adjectives, not adverbs

[17] a. se jə̄c'as $[psoč`-ew sə-ćenew]$ 1SG.lik-PRES fast-ADV 1SG.lik-PRES.inf
   'I like to run fast.'

b. * se jə̄c'as $[psoč`-ew ce-na-r]$ 1SG.lik-PRES fast-ADV run-NML-ABS
   Expected: 'I like to run fast.'

c. se jə̄c'as $[psanč'e-će-na-r]$ 1SG.lik-PRES fast-run-NML-ABS
   'I like to run fast.'

3. case, non-argument positions

[18] se stol $[lese-aw'as'aj'az'ao-m pają]$ 1SG.erg doe.PST dish-dry-NML-OBL
   'I set the table for dish-drying.'

[19] $[lese-thač'a-ć'e-mće]$ zanja agw 3SG.abs.fut.INS nobody.OBL 3SG.abs.fut.neg
   'With such a manner of dish-washing, no one will like you.' [Cherny-
   shev 2014]

4. relative clauses

[20] $[qes'aw-č'c-e']$ se $[dir-dance-NML-ADV 1SG.ABS-3PL.ERG-teach.PST-OBL] 1SG.ERG+know.OBL
   gęz'aj'ac 1SG.abs.very differ.PL
   'The manner of dancing which you were taught and the one I know are
   very different.'

5. demonstratives

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The absolutive argument has a special status in the clausal structure: it is most accessible to A' movement and has a restricted position in relative clauses. **Proposal:** absolutive full NPs are licensed by T; all other full NPs are dislocated following Baker’s (1996) Polysynthesis Parameter.
2.2 Verbal features

1. “Specifying” suffixes (terminology from Korotkova & Lander (2010)): refactive -ז’a, simulative -ש’a, etc.

23. ze’c’e jezex [צ’a-כל-מק] ja-qeq’w-e-ז’a-n
all wait.pl boy-pl-obl 3pl.poss-go-re-NML
‘Everyone is waiting for the boys’ return.’

24. se sjez’es’an wjo-wered-qa?e-w-ז’a-ה-מ
I 1sg.abs-tire.pst 2sg.poss-song-sing-sml-nml-obl
‘I am tired of your bad singing.’

2. Applicatives & personal markers

25. sag’w-rjeha [ו-_nr-כ-ש] ד’a-כ’e
1sg.like.prs 2sg.poss-song-dir-[1sg.1o-ben]-say-nml
‘I like how you sing for me’.

26. sjeaqeq’e-z’a-em qawel?e[w-are-m pep’
1sg.abs-3sg.erg-worry.prs 2sg.1o.ask.prs-obl every
[wjo-ag’d-s-e-[ja]-כ’e]
2sg.poss-money-[3pl.1o+dat]-give-nml
‘I am worried about your manner of giving money to everyone who asks you’.

3. Agent-demoting operators

27. a. se somajxew lae s-q’ata-ne
I 1sg.abs.neg.know.adv dish 1sg.erg-break-pst
‘I accidentally broke the plate.’

b. se [s-7eq’e]-q’ata-ha-ו
I [1sg.1o-inadv]-break-loc-pst
‘I accidentally broke the plate.’

c. se sjez’es’ar [leue-7eq’e-q’ata-ha-ה-ו]
I 1sg.abs-tire.pst dish-inadv-break-loc-nml-obl
‘I am tired of accidentally breaking dishes.’

4. No high aspect / tense, but low aspect – yes

28. a. * k’w-e-te-c’e
go-fut-nml

b. * k’w-e-na-c’e
go-pot-nml (Chernyshev 2014)

-נל (PST) possible only with transitive verbs: resultative, not preterite

29. a. * k’w-e-na-c’e
go-pot-nml

b. a’s’ ja-tha’c’-ה-ע-כ’e se sag’w rjeha
that.obl poss-wash-pst-nml I like
‘I like his manner of always being washed (clean)’ (Chernyshev 2014)

c. sjaqeq’e-z’a-em [leue-tha’c’-ע-֘-ר] sag’w rjeha
by my return dish-wash-pst-nml-abs 1sg.like.prs
‘I like for the dishes to be already washed by my return.’

Summary:

- Nominalizations do not contain licensors for absolutive and ergative, but do for applicatives → applicatives are licensed lower than ergative/absolutive.
- Low aspect contained in nominalizations, but not high aspect or tense: cutoff in between.

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3 Argument encoding in nominalizations

3.1 Diagnostics for incorporation

1. Phonological alternation in penultimate syllable of stem:

\[(30) \quad e \rightarrow a \quad \text{Ce}_C\]

\[(31) \quad \text{a. } \text{se } s\text{g}^w \text{a } \text{rjeha } [\text{šek}^w e] \quad \text{ša-k}^w \text{enew } (< \text{šek}^w e)\]

\[I \quad 1 \text{SG.like.PRS } \text{hunt } 1 \text{SG.ABS-go.INF}\]

‘I like to go hunting.’

\[b. \quad \text{se } s\text{g}^w \text{a } \text{rjeha } [\text{šek}^w e-k^w e-na-r]\]

\[I \quad 1 \text{SG.like.PRS } \text{hunt-go-NML-ABS}\]

‘I like to go hunting.’

2. Incorporated root can be embedded in morphology relating to full nominalized form:

\[(32) \quad \text{š'uretož' } [\text{wja-} \text{leue-} \text{a-fe-thač'q-o-ĉ'e}]

\[\text{stop.IMV } 2 \text{SG.POSS-dish-3PL.IO-BEN-wash-NML}\]

‘Stop washing other people’s dishes!’

3.2 Unrestricted noun incorporation

1. Any argument may be incorporated: direct object\(^{[32]}\), unergative\(^{[36]}\), or unaccusative\(^{[33]}\) subject, applicative\(^{[34]}\) and even ergative subject\(^{[35]}\).

\[(33) \quad \text{se } \text{stol } \text{išaše } [\text{leue-} \text{r}^w \text{aš}^z \text{q-o-na-m } \text{paj}]

\[1 \text{SG.GERG.do.PST } \text{table } [\text{dish}]_{\text{SUBJ}}-\text{dry.INTR-NML-OBL}\]

‘I set the table for dish-drying.’

\[(34) \quad \text{se } \text{sg}^w \text{a } \text{rjeha } [\text{w}^w \text{šehe-tje-ta-na-r}]

\[I \quad 1 \text{SG.like.PRS } [\text{hill}]_{\text{IO-LOC-stand-NML-ABS}}\]

‘I like standing on a hill.’

\[(35) \quad [\text{beš'č-e-zo-thač'q-o-ĉ'e-r}]\]

\[\text{č'etaw-zo-thač'q-e-m } \text{fed } [\text{fox}]_{\text{SUBJ}}-\text{REFL-ABS-wash-NML-ABS}\]

‘The fox’s manner of washing itself is similar to the cat’s.’

2. Some speakers allow incorporation of more than one argument:

\[(36) \quad [\text{pšaše-leure-} \text{thač'q-o-ĉ'e-r}] \quad \text{sg}^w \text{a } \text{rjeha}

\[\text{[girl]_{SUBJ}}-\text{[dish]}_{\text{OBJ}}-\text{wash-NML-ABS } 1 \text{SG.like.PRS}\]

‘I like the girls’ way of washing the dishes (as if there’s a girls’ type of dish-washing.’

3. Multiple manifestations of same theta-role:

\[(37) \quad [\text{wja-beš'č-e-š'apč'q-o-ĉ'e}]

\[2 \text{SG.POSS}_{\text{SUBJ}}-\text{[fox]}_{\text{SUBJ}}-\text{smile-NML-s-ja-urehatarep}

\[1 \text{SG.ABS}-3 \text{SG.ERG-calm.PRS.NEG}\]

‘You SUBJ fox-like SUBJ grin disturbs me.’

\[(38) \quad [\text{pšaše-m } \text{ja-č'q-e-š'e-š'a-ć'e}] \quad \text{ačešwen}\]

\[\text{[girl-OBL]_{SUBJ}} \text{POSS-} \text{[boy]_{SUBJ}}-\text{dance-NML interesting}\]

‘It’s interesting when the girl does a male dance.’

3.3 Argument encoding in nominalizations is nominal

1. Morphosyntactic position: incorporated nouns attach to the left of all verbal morphology

<table>
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<tr>
<th>POSS</th>
<th>incorporated argument(s)</th>
<th>verbal prefixes</th>
<th>verbal root</th>
<th>verbal suffixes</th>
<th>nominalizer</th>
<th>nominal suffixes &amp; endings</th>
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\[(39) \quad \text{se } s\text{g}^w \text{a } \text{rjeha } [\text{adaye-pšeše}-\text{[qe]}_{\text{2}}-\text{š'w e-na-r}]

\[I \quad 1 \text{SG.like.PRS } [\text{Adyghe-girl}]_{\text{SUBJ}}-\text{DIR-dance-NML-ABS}\]

‘I like how Adyghe girls dance.’

\[(40) \quad \text{š'uretož' } [\text{wja-}[\text{leue-}]_{\text{a-fe}}-\text{thač'q-o-ĉ'e}]

\[\text{stop.IMV } 2 \text{SG.POSS-dish-3PL.IO-BEN-wash-NML}\]

‘Stop washing other people’s dishes!’

2. Parallels to nominal modification

(a) Closest incorporee in inherently possessed nouns is the nominal argument (inherent possessor):

\[(41) \quad \text{ja-aneš}

\[\text{POSS-[mother]-brother}\]

‘his uncle (mother’s brother)’ (Temirgoy; Lander 2015)
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3.4 Incorporation driven by argument structure

**Incorporation hierarchy**: The position closest to the verbal stem is restricted to the less agentive (internal) argument.

1. In a two-place predicate, the less agentive argument must be incorporated first.
   (a) ERG > ABS
   (45) a. \[\text{pšaše-m jà-leure-thàc'õ-n} \quad \text{s-jezeš'âr} \]
   `[girl-OBL]SUBJ POSS-[dish]OBJ-wash-NML 1SG.ABS-try.PST`
   ‘I’m tired of the girl’sSUBJ dishOBJ-washing.’

   b. \#[laure-me jà-pšeš-teć'ã-n] \[\text{mafeqes sà-ř} \]
   `[dish-PL.OBL]OBJ 3PL.POSS-wash-NML 1SG.ABS-tire.PST`
   Expected: ‘I’m tired of the girlsSUBJ dishOBJ-washing.’
   (‘Seems as if the dishessUBJ are washing the girlOBJ.’)

   (b) ABS > APPL

2. One of the arguments can be dropped, including the lower one; the more agentive one is necessarily expressed as possessor, cannot be incorporated \[48\]:
   (46) \[\text{pšaše-me jà-č'ele-fe-g"øs"a-č'e} \]
   `[girl-OBL]SUBJ 3PL.POSS-[boy]IO-BEN-be.happy-NML sag"a rjeho 1SG.like.PRS`
   ‘I like how the girlsSUBJ congratulate the boysIO.’
   *I like how the boysSUBJ congratulate the girlsIO.’

   (c) APPL > ABS (‘inverse’ verbs)
   (47) \[\text{čale-me jà-nene-s'ù-n*apša-č'e} \]
   `[boy-PL.OBL]OBJ 3PL.POSS-[grandmother]TH-LOC-forget-NML sag"a rjeho 1SG.like.NEG`
   ‘I don’t like how childrenEXP forget their grandmothersTH.’
   *I don’t like how grandmothersEXP forget their childrenTH.’

3. External arguments may be incorporated to the left of internal argument, to be interpreted as a generic agent \( 36 \) or adjective of manner \( 38 \).

4. Possessors do not necessarily denote one of the arguments \( 52 \), i.e. are not restricted by argument structure.

4 Analysis

4.1 Structure of nominalization

- Closest incorporate must be the internal argument. Outer incorporate / possessor freely interpreted and not restricted to specific argument role → structure
analogous to relational nominals with one internal argument (Figure 1).

![Figure 1: Parallel strutures of relational nouns and nominalizations](image1)

- Ergative/unergative subject & applicative in inverse predicates are generated external to VP and higher than applicatives. Nominalizer selects for vP and strips v of argument-licensing power. Structure of three-place predicate in Figure 2.

![Figure 2: Basic transitive clause structure](image2)

- Inverse predicates include a de-transitivizing applicative head above v. Nominalizer selects for higher vappl. Structure of inverse predicate in Figure 3.

![Figure 3: Structure of inverse predicates](image3)

- Position of IO applicative below v supported by possibility of IO personal markers in nominalizations (25), (26), but not ergative/absolutive.

- Noun incorporation is movement of NP from internal-argument position to left edge of verbal form (Figure 4).

![Figure 4: Movement of internal argument to incorporee position](image4)

- Outer incorporees and other modifiers attach as adjuncts to NP: Figure 5 for (49).
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Figure 5: Structure of nominalized transitive predicate with outer incorporee

- Possessive phrases attach to NP and are assigned a loose possessive semantics (“free $R$” reading), which is then determined by context (Partee 1996). Pragmatically most salient — as unexpressed agent of nominalized predicate (Figure 6), but not necessarily (49), (52).
- Incorporee immediately adjacent to nominalizer must be the internal argument: intervention effect (NP in path of incorporee raising). Figure 7 for (50).

(49) \( p\tilde{\text{se}}-\text{le}-\text{tha}^{-\text{a}}-\text{c}^{-\text{e}} \)
[girl]SURJ [dish]OBJ wash -NML
‘girls’ way of washing dishes’

Figure 6: Structure of nominalized transitive predicate with possessor

- [Landau 2013]: clausal structures headed by DP are associated with non-obligatory control (NOC).

(51) John finally realized that [PRO $_{i+1}$ hurting each other] really bothered Sue. (Landau, 2013, 231)

NOC is structurally relatively unrestricted, but not as much as the conditions on coreference with implicit agent in Adyghe nominalizations.

(52) [sja-\text{c}^{-\text{a}}\text{-ale-me}]
mafeqes $\sigma$-\text{pa}$\lambda$
day.every 1SG.ABS-try
‘Every day I wash the necks of my boys.’ (Lit. ‘I try [my boys’ [PRO$_i$ neck-washing]]’)

4.2 Discussion of PRO and non-obligatory control

- In some languages there is evidence for the structural presence of the agent, e.g. Hebrew (Sichel 2009). For Adyghe, it is hard to make the case in either direction.

(53) a. John attempted [PRO$_i$ washing his hands]  
b. *John attempted [Sue’s [PRO$_i$ washing her hands]]
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5 Conclusion

- Articulated structure of $vP$, in which the arguments are organized hierarchically based on agentivity, and which contains lower aspect, e.g. resultative morphology, and applicatives (Figure 8). Can be translated into complex $vP$ approach by Ramchand (2008) and Sleeman & Brito (2010).

![Figure 7: Intervention in incorporee raising](image)

- Reflexives/reciprocals can appear in nominalizations, but as bound morphemes. Contrast in (54) suggests reinterpretation from pronominal to incorporated lexical root with reciprocal/reflexive semantics.

(54) a. tag$^w$ rjeha to-q[a-[ze-de]-š*ene-]w
   1PL.like 1PL.ABS-DIR-REC.IO-COM-dance-INF
   ‘We like to dance together.’

b. tag$^w$ rjeha qa-[ze-de]-š*ene-na-r
   1PL.like DIR-REC.IO-COM-dance-NML-ABS
   ‘We like partner dance.’

![Figure 8: Articulated structure of $vP$](image)

References


It is yet to be definitively proven that the external argument is absent in Adyghe nominalizations. The evidence at hand, however, suggests that, if there is a PRO, its behavior in respect to control and movement (of the internal argument) is unorthodox and thus hard to capture theoretically.


