



Ossetian Nominalizations and the Problem of Indirect Access

Ekaterina Lyutikova

Sergei Tatevosov

Moscow State University

Workshop on Finiteness and Non-Finiteness

Tallinn, November 25, 2009

[Overview]

- Ossetic: Language, place, people
- Verbs
 - Overview of the verbal system
 - Aspect and actionality
 - Aspectual composition
 - Causative-inchoative alternation
- Nominalizations
 - The problem of indirect access
 - Aspect and actionality
 - Aspectual composition
 - Causative-inchoative alternation
- Functional structure and nominals

[Ossetic: Language, place, people]

- Northeast Iranian, spoken in the Central Caucasus
- About 700,000 ethnic Ossetians
- Endangered: about 40% of ethnic Ossetians in North Ossetia are more fluent in Russian than in Ossetic; no monolingual speakers (Kambolov 2007)

Ossetic: Language, place, people



Ossetic

[Ossetic: Language, place, people]



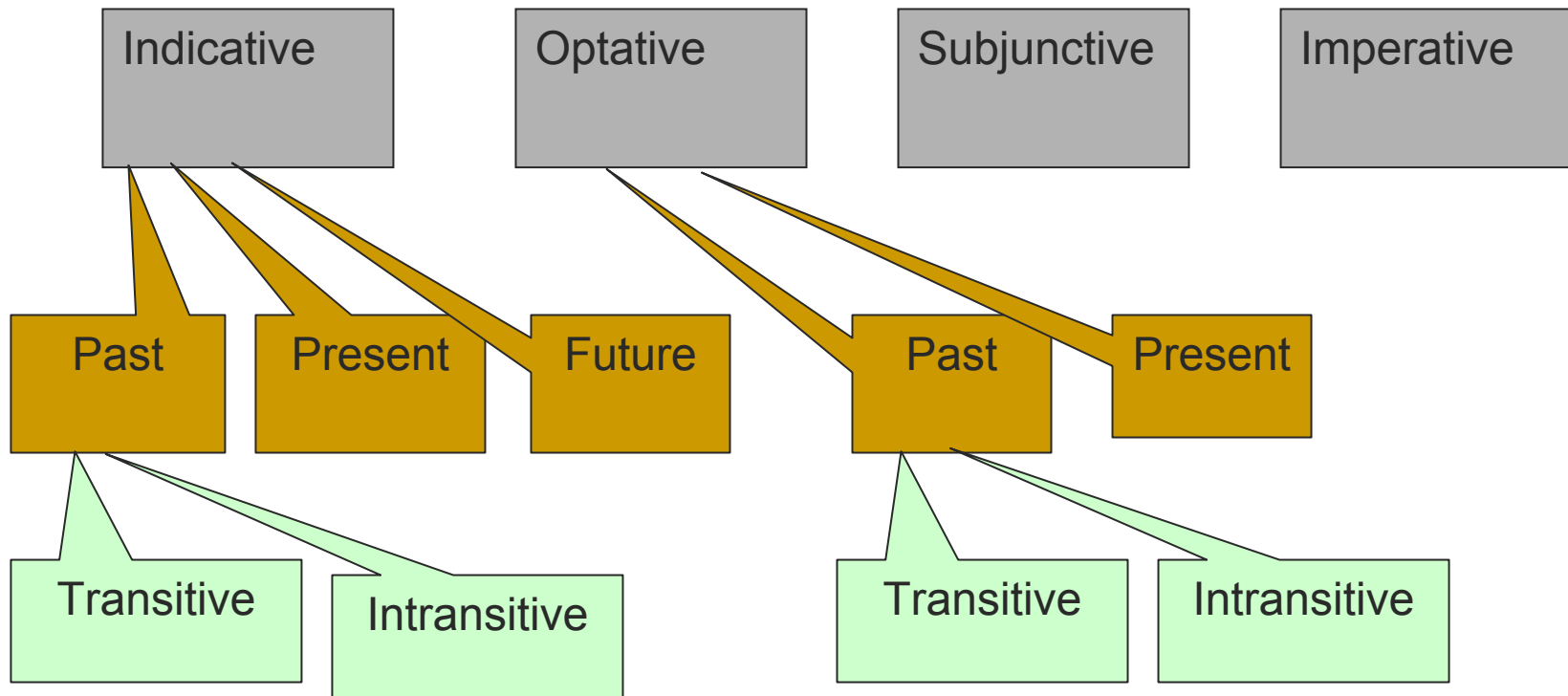
[Ossetic: Language, place, people]



[Verbs]

- Overview of the verbal system
- Aspect and actionality
- Aspectual composition
- Causative-inchoative alternation

Verbs: Overview of the verbal system



Basic non-finite forms: Infinitive, Past Participle, Gerund

[Verbs: Aspect and actionality]

- The vast majority of non-derived verbs produce imperfective clauses
- A small number of non-derived verbs produce perfective clauses
- Prefixation yields derived stems that produce perfective clauses

[Verbs: Aspect and actionality]

Non-derived imperfective

(1) čičg dus-ı qug.

girl milk.PRS-3SG cow

‘The girl is milking the cow.’

‘The girl milks the cow.’

(2) čičg dıx-d-ta qug.

girl milk-PST-TR.3SG cow

‘The girl was milking the cow.’

‘The girl used to milk the cow.’

* ‘The girl milked the cow.’

[Verbs: Aspect and actionality]

Non-derived perfective

(3) alan sɪ žæɣ-ɪ?

A. what say.PRS-3SG

* 'What is Alan saying?'

'What does Alan (regularly) say?'

(4) alan sɪ žax-t-a?

A. what say-ST.PST-TR.3SG

* 'What was Alan saying?'

'What did Alan say?'



[Verbs: Aspect and actionality]

Derived perfective

(5) čıžg ra-dus-ı qug.

girl PRF-milk.PRS-3SG cow

* 'The girl is milking the cow.'

'The girl (regularly) milks the cow.'

(6) čıžg ra-dıx-d-ta qug.

girl PRF-milk-PST-TR.3SG cow

* 'The girl was milking the cow.'

* 'The girl used to milk the cow.'

'The girl milked the cow.'

Verbs: Aspect and actionality

- Non-derived non-prefixed stems create imperfective clauses

(7) a. art fonz minut-ı xušš-ıd-i.
fire 5 minute-GEN die.out-PST-3SG

‘The fire was dying out for 5 minutes.’

b. *art fonz minut-mæ xušš-ıd-i.
fire 5 minute-LAT die.out-PST-3SG

‘The fire was dying out in 5 minutes.’

Verbs: Aspect and actionality

- Prefixed stems create telic and perfective clauses

(8) a. *art fonz minut-ɪ nɪ-xxušš-id-i.
fire 5 minute-GEN PRF-die.out-PST-3SG

'The fire died out for 5 minutes.'

b. art fonz minut-mæ nɪ-xxušš-id-i.
fire 5 minute-LAT PRF-die.out-PST-3SG

'The fire died out in 5 minutes.'

[Verbs: Aspectual composition]

- Aspectual composition in languages like English

(9) John wrote **the letters** in an hour || ??for an hour.

(10) John wrote **letters** for an hour || #in an hour.

[Verbs: Aspectual composition]

■ Aspectual composition in languages like Russian

(11) Vasja **na-pisa-l** pis'm-a...
V. PRF-write-PST.M letter-ACC.PL

1. 'Vasja wrote (all) the letters.'

2. *'Vasja wrote letters.'

(12) ...no osta-l-o-s' ešče neskol'ko.
but remain-PST-N-REFL more a.few

'... but there are a few more (letters to write).'

■ Unique maximal interpretation (Filip 2005)

[Verbs: Aspectual composition]

- Prefixed stems: Slavic type of aspectual composition

(13) alan ba-xor-d-ta fætqui-t-i.

A. PRF-eat-PST-TR.3SG apple-PL-GEN

‘Alan ate up the || *<∅> apples’.

- Non-derived stems: no restrictions

(14) alan xor-d-ta fætqui-t-i.

A. eat-PST-TR.3SG apple-PL-GEN

‘Alan was eating the || <∅> apples’.



Verbs: Causative-inchoative alternation

■ Causative-inchoative alternation

- (15) zaur k'aliu c'æɫ ko-d-ta.
 Z. branch break-PST-TR.3SG
 'Zaur was breaking a branch.'
- (16) k'aliu c'æɫ ko-d-ta.
 branch break-PST-TR.3SG
 'The branch was breaking.'

Verbs: Causative-inchoative alternation

- Causative-inchoative alternation: imperfective only

(17) zaur k'aliu a-c'æl ko-d-ta.
Z. branch PRF-break-PST-TR.3SG

‘Zaur broke a branch.’

(18) *k'aliu a-c'æl ko-d-ta.
branch PRF-break-PST-TR.3SG

‘The branch broke.’

Verbs: Generalizations

- Clauses based on prefixed stems are perfective and telic; clauses based on non-derived stems are imperfective
- Clauses based on prefixed stems require the unique maximal interpretation of the internal incremental argument; clauses based on non-derived stems do not show this restriction
- Clauses based on prefixed stems do not exhibit causative-inchoative alternation; clauses based on non-prefixed stems do exhibit causative-inchoative alternation

[Nominalizations]

- The problem of indirect access
- Aspect and actionality
- Aspectual composition
- Causative-inchoative alternation

Nominalizations: Problem of indirect access

- The above generalizations about fully inflected clauses are only superficially correct, because they face the problem of indirect access.

Nominalizations: Problem of indirect access

■ Kratzer 2003:

“The verbs we see – surrounded by their arguments and with all their inflections tucked on – might not be the verbs that are ultimately fed to the semantic interpretation component... We would have to formulate hypotheses about the meaning of uninflected, tense- and aspectless forms, even though we might never encounter those forms in reality.”

Nominalizations: Problem of indirect access

- More Direct Access Hypothesis

Nominalizations give us an opportunity to see properties of VPs at early stages of syntactic derivation, when (at least some of) the clausal structure is not yet there. In deverbal nominals semantic characteristics of uninflected VPs are more transparently visible.

[Nominalizations: Problem of indirect access]

- If the **More Direct Access Hypothesis** is correct, looking at nominalizations is a promising strategy of discerning properties of uninflected VPs.
- Nominalizations contain at least the same VPs as fully inflected clauses, but possess less (functional) structure above VP.

]

[... [VP [... [VP [...]]]]]

[... [VP [... [VP [...]]]]]

[... [VP [... [VP [...]]]]]

[... [VP [... [VP [...]]]]]

e NMN is a nomi

part of the structure that
complete predications share
with nominalizations

[Nominalizations: Problem of indirect access]

Nominalizations in Ossetic

- Participial
- Infinitival

Nominalizations: Problem of indirect access

Participial nominalization

- (19) [alan-_I a-bad-t]-_I fæštæ zaur a-sid-i.
A.-GEN PRF-sit-PRT-GEN after Z. PRF-go.PST-3SG
'After Alan sat down (lit. after Alan's sitting down), Zaur went away.'
- (20) [čičž-_I qug dīx-d]-_I fæštæ zaur a-sid-i.
girl-GEN cow milk-PRT-GEN after Z. PRF-go.PST-3SG
'After the girl milked the cow, Zaur went away.'

Nominalizations: Problem of indirect access

Infinitival nominalization

- (21) [alan-ı a-bad-ın]-ı fæštæ zaur a-sıd-i.
A.-GEN PRF-sit-INF-GEN after Z. PRF-go.PST-3SG
'After Alan sat down (lit. after Alan's sitting down), Zaur went away.'
- (22) [čıžž-ı qug dus-ın]-ı fæštæ zaur a-sıd-i.
girl-GEN cow milk-INF-GEN after Z. PRF-go.PST-3SG
'After the girl milked the cow, Zaur went away.'

[Nominalizations: Problem of indirect access]

Nominalizations provide the more direct access to

- actional properties of verb stems
- aspectual composition
- restrictions on causative-inchoative alternation

Nominalizations: Aspect and actionality

- (23) [alan-_I fonz bon-mæ mar-d]_{-I} fæštæ ...
A.-GEN five day-LAT die-PRT-GEN after
'After Alan died in five days...'
- (24) *[alan-_I fonz bon-_I mar-d]_{-I} fæštæ ...
A.-GEN five day-GEN die-PRT-GEN after
'After Alan died for five days...'
- mar 'die' : perfective and telic

Nominalizations: Aspect and actionality

(25) [zalina-ji fonz sekund-mæ ændax šqwi-d]-i fæštæ...
Z. five second-LAT thread tear-PRT-GEN after
'After Zalina tore a thread in five seconds...'

(26) [zalina-ji fonz minut-i ændax šqwi-d]-i fæštæ...
Z. five minute-GEN thread tear-PRT-GEN after
'After Zalina tried to tear a thread for five minutes...'

- šqwin 'tear' : perfective and telic in (25)
perfective and atelic in (26); a non-culminating process

]

- (27) [čema-ji fonz minut-mæ niywil-t]-i fəštæ...
boat-GEN five minute-LAT sink-PRT-GEN after
'After the boat sank in five minutes...'
- (28) [čema-ji fonz šaxat-i niywil-t]-i fəštæ...
boat-GEN five hour-GEN sink-PRT-GEN after
'After the boat was in a state of being sunk for five hours...'
- niywil 'sink' : perfective telic in (27)
 stative in (28)

[Nominalizations: Aspect and actionality]

- Some of these interpretations never show up in finite clauses

Nominalizations: Aspect and actionality

Finite clauses:

(29) zalina ændax šqwi-d-ta.
Z. thread tear-PST-TR.3SG
'Zalina was tearing a thread.' **<imperfective>**

(30) zalina fonz sekund-mæ ændax a-šqwi-d-ta.
Z. five second-LAT thread PRF-tear-PST-TR.3SG
'Zalina tore a thread in five seconds.' **<perfective, telic>**

(31) *zalina fonz minut-i ændax a-šqwi-d-ta.
Z. five minute-GEN thread PRF-tear-PRT-GEN
'Zalina tore a thread for five minutes.'
<perfective, atelic process>

Nominalizations: Aspect and actionality

šqwin 'tear' :

- Finite clause:

<**Perfective**: Entry into State (ES);

Imperfective: Process (P)>

- Nominalization:

<**Perfective**: Entry into State (ES), (atelic) Process (P)

Imperfective: Process (P)>

Nominalizations: Aspect and actionality

Finite clauses:

(32) čema nıywıl-t-iš.

boat sink-PST-3SG

‘The boat was sinking.’

(33) čema fonz minut-mæ a-nıywıl-t-iš.

boat five minute-LAT PRF-sink-PST-3SG

‘The boat sank in five minutes.’

(34) *čema fonz šaxat-ı a-nıywıl-t-iš.

boat five hour-GEN PRF-sink-PST-3SG

‘The boat was in a state of being sunk for five hours.’

‘The boat sank for five hours.’

[Nominalizations: Aspect and actionality]

niɣwɪl 'sink' :

- Finite clause:

<**Perfective**: Entry into a State (ES);

Imperfective: Process (P)>

- Nominalization:

<**Perfective**: Entry into a State (ES), (atelic) State (S);

Imperfective: Process (P)>

Nominalizations: Aspect and actionality

- Actional characteristics of nominalizations and finite forms look different

Verb	Nominalization	Finite form
mar 'die'	<ES; P>	<ES; P>
šqwın 'tear'	<ES,P; P>	<ES; P>
nıywıl 'sink'	<ES,S; P>	<ES; P>

Nominalizations: Aspect and actionality

- Cross-linguistic data

Data from Turkic and North-Caucasian languages (Kibrik 1999, Kibrik et al. 2001, Lyutikova et al. 2005, Lyutikova et al. 2006) show that counterparts of verbs like 'die', 'tear' and 'sink' tend to produce exactly the range of actional interpretations we see in Ossetian nominalizations.

Nominalizations: Aspect and actionality

Finite clauses: Balkar Q 'die'

(35) fatima Q-e edi.

F. die-IPFV AUX.PST

'Fatima was dying.'

<imperfective: P>

(36) fatima eki sekunt-xa Q-dU

F. two second-DAT die-PST

Fatima died in two seconds.

<perfective: ES>

(37) *fatima eki minut Q-dU

F. two minute die-PST

'Fatima died for two minutes.'

<perfective: P>

Nominalizations: Aspect and actionality

Finite clauses: Balkar zyrt 'tear'

- (38) fatima xaly-ny zyrt-a edi.
F. thread-ACC tear-IPFV AUX.PST

'Fatima was tearing a thread.' <imperfective: P>

- (39) fatima eki sekunt-xa xaly-ny zyrt-ty.
F. two second-DAT thread-ACC tear-PST

'Fatima tore a thread in two seconds.' <perfective: ES>

- (40) fatima eki minut xaly-ny zyrt-ty.
F. two minute thread-ACC tear-PST

'Fatima tried to tear a thread for two minutes.'

<perfective: P>

Nominalizations: Aspect and actionality

Finite clauses: Balkar bat 'sink'

(41) keme bat-a e-di.

boat sink-IPFV AUX-PST

'The boat was sinking.' <imperfective: P>

(42) keme eki saRat-xa bat-ty.

boat two hour-DAT sink-PST

'The boat sank in two hours.' <perfective: ES>

(43) keme eki saRat bat-ty.

boat two hour sink-PST

'The boat was in a state of being sunk for two hours.'

<perfective: S>

Nominalizations: Aspect and actionality

- Actional characteristics of Ossetian and Balkar verbs are quite the same

Verb	Ossetian nominalization	Balkar finite form
‘die’	<ES; P>	<ES; P>
‘tear a thread’	<ES,P; P>	<ES,P; P>
‘sink’	<ES,S; P>	<ES,S; P>

Nominalizations: Aspect and actionality

- Differences between languages like Balkar and those like Ossetic are created at later stages of syntactic derivations, when clausal functional structure is projected
- When nominalization are built, this structure is not yet there

Nominalizations: Aspectual composition

(44) [alan-ı fætqui-t-ı xor-d]-ı fæštæ....

A.-GEN apple-PL-GEN eat-PRT-GEN after

‘After Alan ate up the apples...’

<quantized argument, telic VP>

‘After Alan ate <∅> apples...’

<cumulative argument, atelic VP>

- cumulativeness of the argument leads to atelicity
- quantization of the argument leads to telicity

→ aspectual composition works in exactly the same way as in English

Nominalizations: Aspectual composition

(45) [alan-_I fætqui-t-_I ba-xor-d]-_I fæštæ....
A.-GEN apple-PL-GEN PRF-eat-PRT-GEN after
'After Alan ate up the || * $\langle \emptyset \rangle$ apples...'

→ prefixed nominalizations exhibit aspectual composition of Slavic type

Nominalizations: Aspectual composition

- At the vP level aspectual composition in languages like English and Ossetic works exactly the same way
- The Slavic type of aspectual composition comes at later stages of syntactic derivation, when functional (specifically, aspectual) structure is projected

Nominalizations: Causative-inchoative alternation

- In fully inflected clauses, prefixation blocks the causative-inchoative alternation

(46) zaur k'aliu a-c'æl ko-d-ta.
Z. branch PRF-break-PST-TR.3SG
‘Zaur broke a branch.’

(47) *k'aliu a-c'æl ko-d-ta.
branch PRF-break-PST-TR.3SG
‘The branch broke.’

Nominalizations: Causative-inchoative alternation

- Nominalizations: the alternation is available despite the presence of the prefix

(48) [zaur-ɪ k'aliu a-c'æl ko-nd]-ɪ fæštæ...
Z.-GEN branch PRF-break-PRT-GEN after
'After Zaur broke a branch...'

(49) [k'aliu a-c'æl ko-nd]-ɪ fæštæ...
branch PRF-break-PRT-GEN after
'After the branch broke...'

]



- 

- 

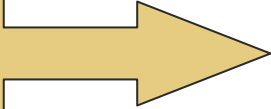
- Rich inventory of actional meanings
- English type of aspectual composition
- Causative-inchoative alternation

Functional structure and nominals

■ Non-prefixed nominalization

[CP ... [FP [FP...Tr [FP ... [FP ... Asp

Nominalizing
morphology



[FP ... [VP ...Root]]]]]]



- Rich inventory of actional meanings
- English type of aspectual composition
- Causative-inchoative alternation

Functional structure and nominals

■ Prefixed nominalization

[CP ... [FP [FP...Tr [FP ... [FP ... Asp [FP ... [VP ...Root]]]]]]]

Nominalizing
morphology

- Limited inventory of actional meanings
- Slavic type of aspectual composition
- Causative-inchoative alternation

A decorative graphic consisting of a thin gold circle on the left and a horizontal bar extending to the right. The bar has a gold-to-white gradient. A large black '[' bracket is on the left, and a gold ']' bracket is on the right.

Thank you!