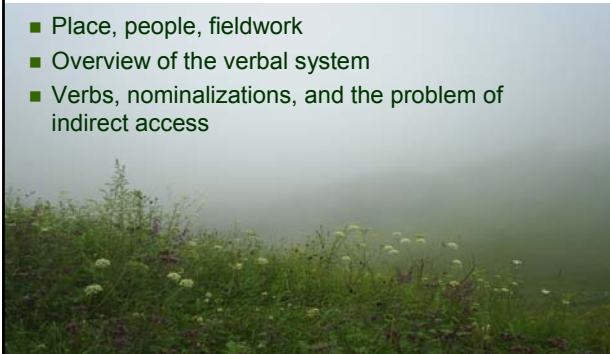
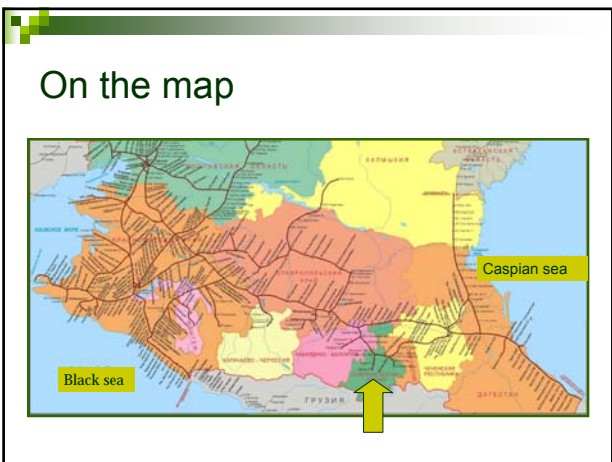


Ossetian

Verbs, Nominalizations, and the Problem of Indirect Access


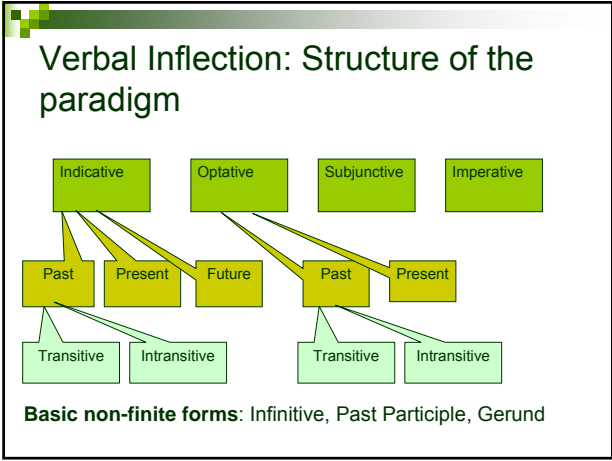
Ossetian

- Place, people, fieldwork
- Overview of the verbal system
- Verbs, nominalizations, and the problem of indirect access

Overview of the verbal system

- Verbal inflection
- Grammatical aspect
- Prefixation
- Complex predicates
- Causativization

Verbal inflection

Indicative: Present

| | |
|-------------------|-------------------|
| SG | PL |
| 1 dom-yn | dom-əm |
| demand.ST:PRS-1SG | demand.ST:PRS-1PL |
| 2 dom-yš | dom-yt |
| demand.ST:PRS-2SG | demand.ST:PRS-2PL |
| 3 dom-y | dom-yns |
| demand.ST:PRS-3SG | demand.ST:PRS-3PL |

Verbal inflection

Indicative: Future

| SG | PL |
|---|--------------------------------------|
| 1 dom-zyn-ən demand.ST:PRS-FUT-1SG | dom-z-yštəm demand.ST:PRS-FUT-1PL |
| 2 dom-zyn-ə demand.ST:PRS-FUT-2SG | dom-z-yštut demand.ST:PRS-FUT-2PL |
| 3 dom-zyn-ə/i/iš demand.ST:PRS-FUT-3SG | dom-z-yšty demand.ST:PRS-FUT-3PL |

Verbal inflection

Indicative: Past Intransitive

| SG | PL |
|----------------------------------|---------------------------------|
| 1 qaž-yd-tən play-ST:PST-1SG | qaž-yd-yštəm play-ST:PST-1PL |
| 2 qaž-yd-tə play-ST:PST-2SG | qaž-yd-yštut play-ST:PST-2PL |
| 3 qaž-yd-i/iš play-ST:PST-3SG | qaž-yd-yšty play-ST:PST-3PL |

Verbal inflection

Indicative: Past Transitive

| SG | PL |
|-------------------------------------|------------------------------------|
| 1 dom-d-ton demand-ST:PST-TR.1SG | dom-d-t-am demand-ST:PST-TR.1PL |
| 2 dom-d-taj demand-ST:PST-TR.2SG | dom-d-tat demand.ST:PST-TR.2PL |
| 3 dom-d-ta demand-ST:PST-TR.3SG | dom-d-toj demand-ST:PST-TR.3PL |

Verbal inflection

Stem formation: present vs. past

| CLASS | PRS | PST | |
|-------|-------|-------|------------|
| 1. | daš- | dašt- | 'mow' |
| 2. | kən- | kod- | 'do, make' |
| 3. | urom- | urəd- | 'stop' |
| | ... | ... | |
| 25. | | ... | |

Verbal inflection

Verbs are complementarily distributed as to whether they take transitive or intransitive inflection in the past

- (1) alan bad-t-i.
A. sit-ST:PST-3SG
Alan was sitting.
- (2) *alan bat-ta.
A. sit.ST:PST-TR.3SG
Alan was sitting.

Verbal inflection

Verbs are complementarily distributed as to whether they take transitive or intransitive inflection in the past

- (3) alan zaur-y mar-d-ta.
A. Z.-ACC kill-ST:PST-TR.3SG
Alan was killing Zaur.
- (4) *alan zaur-y mar-d-i.
A. Z.-ACC kill-ST:PST-3SG
Alan was killing Zaur.

Grammatical aspect

Non-derived verbs: grammatical aspect

- The vast majority of non-derived verbs produce imperfective clauses

(5) čyžg dus-y qug.
girl milk.PRS-3SG cow
The girl is milking the cow.
The girl milks the cow.

(6) čyžg dyx-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.*

Grammatical aspect

Non-derived verbs: grammatical aspect

- The vast majority of non-derived verbs produce imperfective clauses

(7) alan ləu-y don-y bəd.
A. stand.PRS-3SG river-GEN at
Alan is standing at the bank of the river.
Alan (regularly) stands at the bank of the river.

(8) alan ləu-yd-i don-y bəd.
A. stand-ST.PST-3SG river-GEN at
Alan was standing at the bank of the river.
Alan used to stand regularly at the bank of the river.
**Alan stood/ assumed a standing position at the bank of the river.*

Grammatical aspect

Non-derived verbs: grammatical aspect

- A small number of non-derived verbs produce perfective clauses (žayyn 'say', rattyn 'give')

(9) alan sy žay-y?
A. what say.PRS-3SG
**What is Alan saying?*
What does Alan (regularly) say?

(10) alan sy žax-t-a?
A. what say-ST.PST-TR.3SG
**What was Alan saying?*
What did Alan say?

Prefixation

- a-
- ba-
- əɾ-
- əɾba-
- ra-
- ny-
- (i)š-
- sə-
- fə-

Prefixation

Perfectivization

(11) alan zaur-y mar-d-ta.
A. Z.-ACC kill-ST:PST-TR.3SG
Alan was killing Zaur.

(12) alan zaur-y a-mar-d-ta.
A. Z.-ACC PRF-kill-ST:PST-TR.3SG
Alan killed Zaur.

Prefixation

Spatial meanings of prefixes

(13) čyžg a-sy-d-i gorət-mə.
girl A-go-PST-3SG city-LAT
The girl went to the city.

(14) čyžg ba-sy-d-i xəzar-mə.
girl BA-go-PST-3SG house-LAT
The girl came home.

(15) čyžg ra-sy-d-i xəzar-əj.
girl RA-go-PST-3SG house-ABL
The girl exited the building.

Prefixation

Spatial meanings of prefixes

- (16) čyžg **ny**-ssy-d-i xox-əj.
girl **NY**-go-PST-3SG mountain-ABL
The girl went down from the mountain.
- (17) čyžg **iš**-sy-d-i xəzar-mə.
girl **IS**-go-PST-3SG mountain-ABL
The girl ascended to the house.

Prefixation

- The vast majority of verb stems can combine with more than one prefix.
- Among prefixed stems, there are normally
 - exactly one stem where the only semantic contribution of a prefix is the perfective grammatical aspect
 - one or more stems where a prefix yields additional spatial and/or qualitative implications

Prefixation

Pure perfectivizing prefixes create perfective and telic verbal predicates:

- (18) art xušš-y.
fire die.out.PRS-3SG
The fire is dying out.
- (19) art fonz minut-mə ny-xxušš-yd-i.
fire five minute-LAT die.out-PST-3SG
The fire died out in five minutes.

Prefixation

Other perfectivizing prefixes create perfective and telic verbal predicates, too:

- (20) art fonz minut-mə ny-xxušš-yd-i.
fire five minute-LAT go.out-PST-3SG
The fire went out in five minutes.
- (21) art fonz minut-mə ər-xušš-yd-i.
fire five minute-LAT go.out-PST-3SG
The fire decreased in five minutes.

Complex predicates

Complex predicates: kən-yn 'make' plus adjective

| | | | |
|----------|---|----------|----------|
| ədas | → | ədas | kən-yn |
| safe.ADJ | | safe.ADJ | make-INF |
| 'safe' | | 'secure' | |
| əndər | → | əndər | kən-yn |
| other | | other | make-INF |
| 'other' | | 'change' | |

Complex predicates

Complex predicates: kən-yn plus participle

| | | | |
|-------------|---|-------------|----------|
| zon-gə | → | zon-gə | kən-yn |
| know-PRS.PT | | know-PRS.PT | make-INF |
| 'familiar' | | 'introduce' | |
| c'aryštyg-d | → | c'aryštyg-d | kən-yn |
| fleece-PP | | fleece-PP | make-INF |
| 'fleece' | | 'rob' | |

Complex predicates

Complex predicates: kən-yn plus noun

| | | | |
|-----------------|---|-----------------------|----------|
| Žiwəg | → | Žiwəg | kən-yn |
| laziness | | laziness | make-INF |
| 'laziness' | | 'idle' | |
| kələn | → | kələn | kən-yn |
| witchcraft | | witchcraft | make-INF |
| 'witchcraft' | | 'practice witchcraft' | |
| bəz-bəz | → | bəz-bəz | kən-yn |
| buzz | | buzz | make-INF |
| 'buzzing sound' | | 'buzz' | |

Complex predicates

Complex predicates: kən-yn plus noun/adjective

| | | | |
|---------------------|---|----------------|----------|
| gom | → | gom | kən-yn |
| gap.N/open.ADJ | | gap.N/open.ADJ | make-INF |
| 'gap'/'open' | | 'open' | |
| bəzžyn | → | bəzžyn | kən-yn |
| thick.ADJ/N | | thick.ADJ/N | make-INF |
| 'thick'/'thickness' | | 'thicken' | |

Causativization

Causative

| | | | |
|----------|---|------------------|----------|
| bad-yn | → | bad-yn | kən-yn |
| sit-INF | | sit-INF | make-INF |
| 'sit' | | 'make sit' | |
| xər-yn | → | xər-yn | kən-yn |
| eat-INF | | eat-INF | make-INF |
| 'eat' | | 'feed, make eat' | |
| kən-yn | → | kən-yn | kən-yn |
| make-INF | | make-INF | make-INF |
| 'make' | | 'cause to make' | |

Causativization

Monoeventive causative

Imperfective

(24) alan zaur-ən žyn-yn kən-y činyg.
A. Z.-DAT be.visible-INF make.PRS-3SG book

Alan is showing a book to Zaur.

Perfective

(25) alan fonz minut-mə zaur-ən
A. five minute-LAT Z.-DAT
a-žyn-yn ko-d-ta činyg.
PRF-be.visible-INF make-PST-TR.3SG book

Alan showed the book to Zaur in five minutes.

*Alan did something in five minutes so that the book became visible to Zaur.

*Alan did something so that the book became visible to Zaur in five minutes.

Causativization

Bi-eventive causative

Imperfective

(26) mad čyzž-y qug dus-yn kən-y.
mother girl-GEN cow milk-INF make.PRS-3SG

Mother is making the girl milk the cow.

Perfective

(27) mad fonz minut-mə čyzž-y qug
mother five minute-LAT girl-GEN cow
ra-dus-yn ko-d-ta.
PRF-milk-INF make-PST-TR.3SG

In five minutes, mother made the girl milk the cow.

What mother did in five minutes was make the girl milk the cow.

What mother did was make the girl milk the cow in five minutes.

Causativization

Perfective bi-eventive causative

The perfectivizing operator takes scope over both events. Neither event can be conceived of as not reaching the culmination

(28) *mad fonz minut-y čyzž-y qug
mother five minute-GEN girl-GEN cow
ra-dus-yn ko-d-ta.
PRF-milk-INF make-PST-TR.3SG

For five minutes, mother made the girl milk the cow.

Mother spent five minutes trying to make the girl milk the cow (the causing event does not culminate).

Mother made the girl milk the cow for (only) five minutes (the caused event does not culminate).

Causative-inchoative alternation

■ Causative-inchoative alternation

- (29) a. mit taj-y.
snow melt-PRS.3SG
The snow is melting.
- b. xur mit taj-y.
sun snow melt-PRS.3SG
The sun is melting the snow.

Causative-inchoative alternation

■ Causative-inchoative alternation in complex predicates

- (30) a. zaur k'aliu c'əl ko-d-ta.
Z. branch broken make-PST-TR.3SG
Zaur was breaking a branch.
- b. k'aliu c'əl ko-d-ta.
branch broken make-PST-TR.3SG
The branch was breaking.

Causative-inchoative alternation

■ Causative-inchoative alternation: imperfective forms only

- (31) a. mit ba-ta-d-i.
snow PRF-melt-PST-3SG
The snow melted.
- b. *xur mit ba-ta-d-ta.
sun snow PRF-melt-PST-TR.3SG
The sun melted snow.

Causative-inchoative alternation

■ Causative-inchoative alternation: imperfective forms only

- (32) a. zaur k'aliu a-c'əl ko-d-ta.
Z. branch PRF-broken make-PST-TR.3SG
Zaur broke a branch.
- b. *k'aliu c'əl ko-d-ta.
branch broken make-PST-TR.3SG
The branch broke.

Verbs: Generalizations

■ Aspect:

- Imperfective forms refer to (ongoing) processes; the running time of the event includes the reference time
 - Perfective forms refer to culminating eventualities; the running time is included in the reference time
- ▶ Actional class is not transparently visible

Verbs: Generalizations

■ Indirect causatives

- Perfectivizing morphology enforces culmination on both causing and caused events

Verbs: Generalizations

- Causative-inchoative alternation:
 - Perfectivizing morphology blocks causative-inchoative alternation

Verbs, nominalizations, and the problem of indirect access



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

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.”

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.

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.

Problem of indirect access

Finite clause: [... [TenseP [... [AspectP [... [VP [... [VP [...]]]]]]]]]]]

Nominalization: [... [NP [... [N' NMN [... [VP [... [VP [...]]]]]]]]]]]

where NMN is a nominalizing morpheme.

part of structure that complete predications share with nominalizations

Nominalization in Ossetian

- Nominalization
- Participial
- Infinitival

Nominalization

Participial nominalization

(33) [alan-y a-bad-t]-y fəštə zaur a-syd-i.
 A.-GEN PRF-sit-NMN-GEN after Z. PRF-go.PST-3SG
After Alan sat down (lit. after Alan's sitting down), Zaur went away.

(34) [čyzž-y qug dyx-d]-y fəštə zaur a-syd-i.
 girl-GEN cow milk-PRT-GEN after Z. PRF-go.PST-3SG
After the girl milked the cow, Zaur went away.

Nominalization

Infinitival nominalization

(33) [alan-y a-bad-yn]-y fəštə zaur a-syd-i.
 A.-GEN PRF-sit-INF-GEN after Z. PRF-go.PST-3SG
After Alan sat down (lit. Alan's sitting down), Zaur went away.

(34) [čyzž-y qug dys-yn]-y fəštə zaur a-syd-i.
 girl-GEN cow milk-INF-GEN after Z. PRF-go.PST-3SG
After the girl milked the cow, Zaur went away.

Nominalization

Nominalizations provide the more direct access to

- actional properties of verb stems
- event structure of indirect causatives
- restrictions on causative-inchoative alternation

Nominalization: Actionality

Actionality: Ossetian vs. Balkar

Finite clauses: Balkar

- (35) aslan 0l-e edi.
 A. die-IPFV AUX-PST
Aslan was dying. <imperfective>
- (36) aslan eki kUn-ge 0l-dU.
 A. two day-DAT die-PST
Aslan died in two days. <perfective, telic>
- (37) *aslan eki kUn 0l-dU.
 A. two day die-PST
Aslan died for two days. <perfective, atelic>

Nominalization: Actionality

Actionality: Ossetian vs. Balkar

Finite clauses: Ossetian

- (38) alan mar-d-iš.
A. die-PST-3SG
Alan was dying. <imperfective>
- (39) alan fonz bon-mə a-mar-d-iš.
A. five day-LAT PRF-die-PST-3SG
Alan died in five days. <perfective, telic>
- (40) *alan fonz bon-y a-mar-d-iš.
A. five day-GEN PRF-die-PST-3SG
Alan died for five days. <perfective, atelic>

> Balkar <ES; P>; Ossetian <ES; P>

Nominalization: Actionality

Actionality: Ossetian vs. Balkar

Finite clauses: Balkar

- (41) fatima xaly-ny zyrt-a edi.
F. thread-ACC tear-IPFV AUX.PST
Fatima was tearing a thread. <imperfective>
- (42) fatima eki sekunt-xa xaly-ny zyrt-ty.
F. two second-DAT thread-ACC tear-PST
Fatima tore a thread in two seconds. <perfective, telic>
- (43) fatima eki minut xaly-ny zyrt-ty.
F. two minute thread-ACC tear-PST
Fatima tried to tear a thread for two minutes. <perfective, atelic>

Nominalization: Actionality

Actionality: Ossetian vs. Balkar

Finite clauses: Ossetian

- (44) zalina əndax šqwy-d-ta.
Z. thread tear-PST-TR.3SG
Zalina was tearing a thread. <imperfective>
- (45) zalina fonz sekund-mə əndax a-šqwy-d-ta.
Z. five second-LAT thread PRF-tear-PST-TR.3SG
Zalina tore a thread in five seconds. <perfective, telic>
- (46) *zalina fonz minut-y əndax a-šqwy-d-ta.
Z. five minute thread PRF-tear-PST-TR.3SG
Zalina tore a thread for five minutes. <perfective, atelic>

> Balkar <ES,P; P>; Ossetian <ES; P>

Nominalization: Actionality

Actionality: Ossetian vs. Balkar

Finite clauses: Balkar

- (47) aslan alma aša-j edi.
A. apple eat-IPFV AUX.PST
Aslan was eating an apple. <imperfective>
- (48) aslan eki minut-xa alma aša-dy.
A. two minute-DAT apple eat-PST
Aslan ate an apple in two minutes. <perfective, telic>
- (49) *aslan eki minut alma aša-dy.
A. two minute apple eat-PST
Aslan was involved in eating an apple for two minutes. <perfective, atelic>

Nominalization: Actionality

Actionality: Ossetian vs. Balkar

Finite clauses: Ossetian

- (50) alan xor-d-ta fətqwy.
A. eat-PST-TR.3SG apple
Alan was eating an apple. <perfective, atelic>
- (51) alan fonz minut-mə ba-xor-d-ta fətqwy.
A. five minute-LAT PRF-eat-PST-TR.3SG apple
Alan ate an apple in five minutes. <perfective, atelic>
- (52) *alan fonz minut-y ba-xor-d-ta fətqwy.
A. five minute-GEN PRF-eat-PST-TR.3SG apple
Alan ate an apple for five minutes. <perfective, atelic>

> Balkar <ES,P; P>; Ossetian <ES; P>

Nominalization: Actionality

Actionality: Ossetian vs. Balkar

Finite clauses: Balkar

- (53) keme bat-a e-di.
boat sink-IPFV AUX-PST
The boat was sinking.
- (54) keme eki saRat-xa bat-dy.
boat two hour-DAT sink-PST
The boat sank in two hours.
- (55) keme eki saRat bat-dy.
boat two hour sink-PST
The boat was in a state of being sunk for two hours.

Nominalization: Actionality

Actionality: Ossetian vs. Balkar

Finite clauses: Ossetian

(56) čema nyywyl-t-iš.

boat sink-PST-3SG

The boat was sinking.

(57) čema fonz minut-mə a-nyywyl-t-iš.

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

The boat sank in five minutes.

(58) *čema fonz šaxat-y a-nyywyl-t-iš.

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

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

> Balkar <ES,S; P>; Ossetian <ES; P>

Nominalization: Actionality

- Actional characteristics of Ossetian and Balkar verbs look completely different

Balkar

<ES; P>

<ES,P; P>

<ES,S; P>

Ossetian

<ES; P>

<ES; P>

<ES; P>

- > Take nominalizations into account

Nominalization: Actionality

(59) [alan-y fonz bon-mə mar-d]-y fəštə...

A.-GEN five day-LAT die-PRT-GEN after

After Alan died in five days...

(60) *[alan-y fonz bon-y mar-d]-y fəštə...

A.-GEN five day-GEN die-PRT-GEN after

After Alan died for five days...

Nominalization: Actionality

(61) [zalina-jy fonz sekund-mə əndax šqwy-d]-y fəštə

Z. five second-LAT thread tear-PRT-GEN after

After Zalina tore a thread in five seconds...

(62) ^{OK}[zalina-jy fonz minut-y əndax šqwy-d]-y fəštə

Z.-GEN five second-GEN thread tear-PRT-GEN after

After Zalina tried to tore a thread for five minutes...

Nominalization: Actionality

(63) [čema-jy fonz minut-mə nyRwyl-t]-y fəštə ...

boat-GEN five minute-LAT sink-PRT-GEN after

After the boat sank in five minutes...

(64) [čema-jy fonz šaxat-y nyRwyl-t]-y fəštə ...

boat-GEN five hour-GEN sink-PRT-GEN after

After the boat was in a state of being sunk for five minutes...

Nominalization: Actionality

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

Verb

Balkar

Ossetian

'die'

<ES; P>

<ES; P>

'tear a thread', 'eat and apple'

<ES,P; P>

<ES,P; P>

'sink'

<ES,S; P>

<ES,S; P>

- > Differences between languages like Balkar and those like Ossetian are created at later stages of syntactic derivations, when clausal functional structure is projected.

- > When nominalizations occur, the structure is not yet there

Nominalization: Indirect causative

Structure and interpretation of indirect causatives

Fully projected clause:

(65) mad fonz minut-mə čyzž-y qug
mother five minute-LAT girl-GEN cow
ra-dus-yn ko-d-ta.
PRF-milk-INF make-PST-TR.3SG

In five minutes, mother made the girl milk the cow.

What mother did in five minutes is make the girl milk the cow.

What mother did is make the girl milk the cow in five minutes.

Nominalization: Indirect causative

Structure and interpretation of indirect causatives

Fully projected clause:

(66) *mad fonz minut-y čyzž-y qug
mother five minute-GEN girl-GEN cow
ra-dus-yn ko-d-ta.
PRF-milk-INF make-PST-TR.3SG

For five minutes, mother made the girl milk the cow.

Mother spent five minutes trying to make the girl milk the cow (the causing subevent does not culminate).

Mother made the girl milk the cow for (only) five minutes (the caused event does not culminate).

Nominalization: Indirect causative

Nominalizations

(67) mad-y fonz minut-y čyzž-y qug
mother-GEN five minute girl-GEN cow
ra-dus-yn kon-d-y fəštə...
PRF-milk-INF make-PP-GEN after

^{OK} *After mother spent five minutes trying to make the girl milk the cow... (the causing subevent does not culminate).*

^{*}*After mother made the girl milk the cow for (only) five minutes... (the caused event does not culminate)*

➤ Within nominalizations, the perfective operator obligatorily takes scope over the caused event, not over the causing event.

Nominalization: Causative-inchoative alternation

■ Prefixation blocks the causative-inchoative alternation

(68) a. mit ba-ta-d-i.
snow PRF-melt-PST-3SG
The snow melted.

b. *xur mit ba-ta-d-ta.
sun snow PRF-melt-PST-TR.3SG
The sun melted snow.

Nominalization: Causative-inchoative alternation

■ Prefixation blocks the causative-inchoative alternation

(69) a. zaur k'aliu a-c'əl ko-d-ta.
Z. branch PRF-broken make-PST-TR.3SG
Zaur broke a branch.

b. *k'aliu c'əl ko-d-ta.
branch broken make-PST-TR.3SG
The branch broke.

Nominalization: Causative-inchoative alternation

■ Nominalization: the alternation is available despite the presence of the prefix

(70) mit ba-ta-d-y fəštə...
snow PRF-melt-PP-GEN after
After the snow melted...

(71) xur mit ba-ta-d-y fəštə...
sun snow PRF-melt-PP-GEN after
After the sun melted snow...

Nominalization: Causative- inchoative alternation

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

(72) zaur k'aliu a-c'əl kon-d-y fəštə...
Z. branch PRF-broken make-PP-GEN after
After Zaur broke a branch...

(73) k'aliu a-c'əl kon-d-y fəštə...
branch PRF-brokenmake-PP-GEN after
After the branch broke...