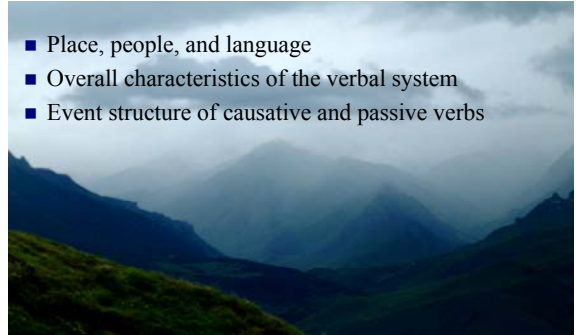


Karachay-Balkar:

Event Structure of Causative and Passive Verbs

Karachay-Balkar

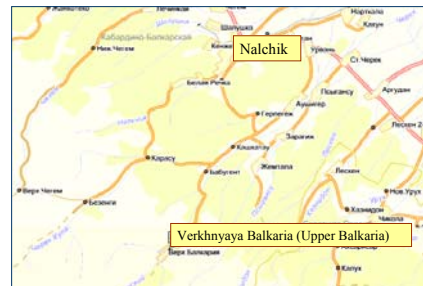
- Place, people, and language
- Overall characteristics of the verbal system
- Event structure of causative and passive verbs



On the map



Field trip site



Karachay-Balkar

- Spoken in Russia
- Region: Kabardino-Balkaria, Karachay-Cherkessia
- Number of speakers: about 400,000
- Genetic affiliation: Altaic
 - Turkic
 - Кыпчак
 - Кыпчак-Cuman
- Writing system: Cyrillic alphabet

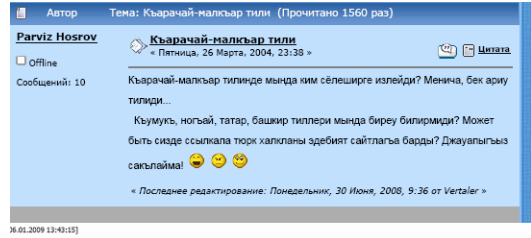
Modern Karachay-Balkar alphabet

А а Б б В в Г г Гъ гъ Д д Дж дж Е е
Ё ё Ж ж З з И и Й й К к Къ къ Л л
М м Н н Нг нг Нь нь О о П п Р р С с
Т т У у Ў ў Ё ё Ф ф Х х Ц ц Ч ч Ш ш
Щ щ Ъ ъ Ы ы Ь ь Э э Ю ю Я я

Press in Karachay-Balkar



Karachay-Balkar on the web



Dialects

- Two dialects
- Karachay: /tʃ/ and /z/
- Balkar: /ts/ and /z/
- Ex:
- Kar. *cyq* – Balk. *cyq* ‘go out’
- Kar. *zyr* – Balk. *zyr* ‘song’

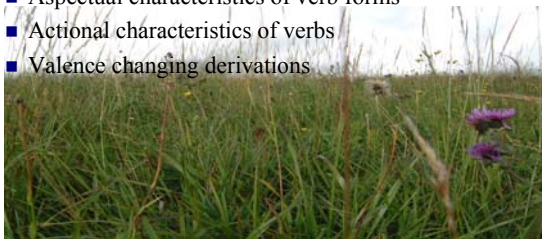


Karachay-Balkar

- basic word order: SOV, “left-branching”
- morphologically and syntactically accusative
- differential case marking of the DO: ACC/unmarked (=NOM)
- pro-drop possible
- no prefixation; suffixation only
- vowel harmony (\pm back, \pm round)

Verbal system: an overview

- Basic verb forms
- Aspectual characteristics of verb forms
- Actional characteristics of verbs
- Valence changing derivations



Structure of verb forms

Stem – Negation – Tense/Aspect/Mood – Agreement

bar-Ran-byz	‘(we) went’
go-PFCT-1PL	
qaza-r-sa	‘(you)’ll dig’
dig-FUT-2SG	
ac-ma-dy-la	‘(they) didn’t
open-NEG-PST-3PL	open’



Three stems

root	past stem	present stem	future stem
bar 'go'	bar	bar- a	bar
qaz 'dig'	qaz	qaz- a	qaz- a
boja 'colour'	boja	boja- j	boja

Two sets of person/number markers

	Long set (LS)	Short set (SS)
1SG	-mA	-m
2SG	-sA	-N
3SG	-dI	-∅
1PL	-bIz	-q
2PL	-sIz	-RIz
3PL	-dI-IA	-IA

Building verb forms

past stem	-dI	+SS	imperative
	-gAn	+LS	preterit
	-gAn	+SS	perfect
	edi	+SS	pluperfect
	-(U)wCU	+LS	habitual
present stem	edi	+LS	present
		+SS	imperfect
future stem	(I)r	+LS	future
	(I)r	gA	infinitive

Building verb forms: the verb *bar* 'go', 1SG

past stem <i>bar</i>	dI	+SS	imperative	<i>bar</i>
	gAn	+LS	preterite	<i>bar-dy-m</i>
	gAn	+SS	perfect	<i>bar-kan-ma</i>
	edi	+SS	pluperfect	<i>bar-kan-edi-m</i>
	(U)wCU	+LS	habitual	<i>bar-uwcu-ma</i>
present stem <i>bara</i>	edi	+LS	present	<i>bara-ma</i>
		+SS	imperfect	<i>bara-edi-m</i>
future stem <i>bar</i>	(I)r	+LS	future	<i>bar-yr-ma</i>
	(I)r gA		infinitive	<i>bar-yr-ka</i>

Basic verb forms (agreement left out)

	bar 'go'	kel 'come'	qaz 'dig'	teš 'take off clothes'	oqu 'read'	isle 'work'
Present	bar-a go-IPFV	kel-e	qaz-a dig-ST.IPFV	teš-e	oqu-j read-ST.IPFV	isle-j
Habitual	bar-uw-cu go-NMN-HAB	kel-lw-cl	qaz-uw-cu dig-NMN-HAB	teš-lw-cl	oqu-w-cu read-NMN-HAB	isle-w-cl
Preterite	bar-dy go-PST	kel-di	qaz-dy dig-PST	teš-ti	oqu-du read-PST	isle-di
Perfect	bar-kan go-PART.PFCT	kel-gen	qaz-kan dig-PART.PFCT	teš-xen	oqu-kan read-PART.PFCT	isle-gen
Imperfect	bar-a-edi go-IPFV COP	kel-e-edi	qaz-a-edi dig-ST.IPFV COP	teš-e-edi	oqu-j-edi read-ST.IPFV COP	isle-j-edi
Pluperfect	bar-kan-edi go-PART.PFCT COP	kel-gen-edi	qaz-kan-edi dig-PART.PFCT COP	teš-xen-edi	oqu-kan-edi read-PART.PFCT COP	isle-gen-edi
Future	bar-yr go-POT.FUT1	kel-ir	qaz-ar dig-POT.FUT1	teš-e-r	oqu-r read-POT.FUT1	isle-r

Aspectual characteristics of verb forms

Preterite

(1) alim	kel-gen-de	kerim	qaŷyt	zas-ty
	Alim come-PFCT-TEMP	Kerim	letter	write-PST.3SG
	<i>When Alim came, Kerim wrote a letter.</i>			perfective
	<i>Everytime Alim came, Kerim used to write a letter.</i>			habitual
	<i>*When Alim came, Kerim was writing a letter.</i>			progressive

Imperfect

(2) alim	kel-gen-de	kerim	qaŷyt	zaza	edi
	Alim come-PFCT-TEMP	Kerim	letter	write.IPFV	COP.3SG
	<i>*When Alim came, Kerim wrote a letter.</i>			perfective	
	<i>Everytime Alim came, Kerim used to be writing a letter.</i>			habitual	
	<i>When Alim came, Kerim was writing a letter.</i>			progressive	

Aspectual characteristics of verbal forms

	Progressive	Habitual	Perfective
Present	+	+	—
Imperfect	+	+	—
Habitual	—	+	—
Preterite	—	+	+
Perfect	—	+	+
Pluperfect	—	—	+
Future	—	—	+

Grammatical aspect vs. actionality

- Conceptual distinction between grammatical aspect and actionality (a.k.a. lexical aspect, Aktionsart, aspectual class, eventuality type, situation type, ...)
- Actionality is identified by a set of meaning labels assigned to basic aspectual forms of a verb
- All arguments of a verb are represented in the syntax; whenever possible arguments are quantized (e.g., singular or plural definite) NPs

Actional characteristics of verbs

Set of actional meanings

- **State (S)**
Johnson is ill; Johnson weighed 9 lbs. 6 oz.; Johnson lived in Edinburgh.
- **Process (P)**
Johnson was running; Johnson wrote letters for two hours.
- **Multiplicative process (MP)**
Johnson coughed for 5 minutes; Johnson is coughing.
- **Entry into a state (ES)**
Johnson died; Johnson saw a snake; Johnson wrote a letter; Johnson coughed (once).
- **Entry into a process (EP)**
The water started boiling; Johnson started singing.

Actional characteristics of the verb *Ol* 'die' – preterite and present

Preterite:

(3) *alim* 0l-dU.
Alim die-PST.3SG
Alim died. Entry into a state

Present:

(4) *alim* 0l-e-di.
Alim die-IPFV-3SG
Alim is dying. Process

Ol 'die': <Preterite: Entry into a state; Present: Process>

Actional characteristics of the verb *Ol* 'die' – other perfective forms

Perfect:

(5) *alim* 0l-gen-di.
Alim die-PFCT-3SG
Alim died. Entry into a state

Pluperfect:

(6) *alim* 0l-gen edi.
Alim die-PFCT COP.3SG
Alim had died. Entry into a state

Future:

(7) *alim* 0le-r-di.
Alim die-FUT-3SG
Alim will die. Entry into a state

Ol 'die': <Perfective: Entry into a state; Present: Process>

Actional characteristics of the verb *Ol* 'die' – other progressive forms

Imperfect

(8) *alim* 0l-e edi.
Alim die-IPFV COP.3SG
Alim was dying. Process

Ol 'die':

<Perfective: Entry into a state; Progressive: Process>

Ol 'die': <Perfective: ES; Progressive: P>

Ol 'die': <ES; P>

More complex verb: *zat* 'lie, lie down'

Preterite

- (9) **alim** **zat-ty**
 Alim lie-PST.3SG
 1. *Alim lied down.* ES
 2. *Alim was lying (for some time).* S
 3. *Alim was lying down (for some time).* P

Present

- (10) **alim** **zat-a-dy**
 Alim lie-IPFV-3SG
 1. *Alim is lying.* S
 2. *Alim is lying down.* P

zat 'lie, lie down' <ES,S,P; S,P>

Actional classification

- Balkar: an average Turkic system of actional classes.



Basic actional classes

1. Telic verbs

1.1. Strong telic verbs: <ES; P>.

al 'take', *cyq* 'go out', *kij* 'put on (clothes)', *kir* 'enter', *kir bol* 'get dirty', *ol* 'die', *sal* 'put', *syn* 'break_intr', *zet* 'reach'.

1.1.a. Punctual verbs: <ES; ->.

tap 'find'

1.2. Weak telic verbs: <ES,P; P>.

ac 'open', *acy* 'go sour', *ajt* 'say', *al* 'buy', *aša* 'eat', *biš* 'ripen', *boja* 'colour', *em* 'suck', *eri* 'melt_intr', *oqu* 'read'....

Basic actional classes (ctnd)

2. Process verbs

2.1. Atelic verbs: <P; P>.

izle 'look for', *oqu* 'study', *qyina* 'torture', *saqla* 'wait', *syla* 'caress', *tUrt* 'push', *zawa* 'rain'.

2.2. Ingressive atelic verbs: <EP,P; P>.

atla 'march', *bar* 'go', *cap* 'run', *zUz* 'swim', *qysta* 'chase', *soz* 'pull', *uc* 'fly', *kUl* 'laugh', *zyla* 'cry'....

Basic actional classes (ctnd)

3. Stative verbs

3.1. States: <S; S>.

zaša 'live', *este tut* 'remember'

3.2. Inceptive stative verbs: <ES,S; S>.

awru 'ache', *bil* 'know', *blUšUre* 'like', *ešt* 'hear', *kOr* 'see', *qorq* 'be afraid', *slj* 'love', *uša* 'resemble', *ynan* 'believe'....

Basic actional classes (ctnd)

4. Complex verbs

- <ES, S; P> *ary* 'get tired', *bol* 'become', *qal* 'stay', *tas bol* 'get lost'

- <ES, P, S; P> *ašar* 'whiten', *bat* 'sink', *unut* 'forget', *zabyš* 'stik, glue'

- <ES, P, S; P, S> *bux* 'hide', *buzla* 'freeze', *oltur* 'sit', *sljel* 'stand', *tur* 'stay', *tut* 'keep, catch', *zat* 'lie, lie down', *zuqla* 'sleep'

Basic actional classes (ctnd)

5. Multiplicative verbs

5.1. Pure multiplicative verbs <ES,MP; MP>.

alʁ 'drop', *bulka* 'wave', *cajqa* 'rock', *cyjyrda* 'creak', *qaq* 'knock', *sekir* 'jump', *z0tel et* 'cough'...

5.2. Multiplicative-process verbs

<ES,MP,P; MP,P>.

syzʁyr 'whistle', *uppa et* 'kiss', *qab* 'bite', *tUbe* 'meet'.

Valence changing derivations

- An average Turkic system: 4 types of derivational affixes



Valency changing derivations

- **causative**: fully productive

(11)a. *butaq syn-dy*

branch break_intr-PST.3SG

'The branch broke'.

b. *alim butaq-ny syn-dyr-dy*

Alim branch-ACC break_intr-CAUS-PST.3SG

'Alim broke the branch'.

Valency changing derivations

- **passive**: fully productive

(12) a. *alim qaʁyt-ny zas-ty*

Alim letter-ACC write-PST.3SG

'Alim wrote the letter'.

b. *qaʁyt alim-ni kUcU ble zaz-yl-dy*

letter Alim-GEN by write-PASS-PST.3SG

'The letter was written by Alim'.

Valency changing derivations

- **reflexive**: less productive, lexically restricted

(13) a. *ana-sy madina-ny tara-j-dy*

mother-3 Madina-ACC comb-IPFV-3SG

'The mother is combing Madina's hair'.

b. *madina tara-n-a-dy*

Madina comb-REFL-IPFV-3SG

'Madina is combing her hair'.

Valency changing derivations

- **reciprocal**: less productive, lexically restricted

(14)a. *alim lejla-ny uppa et-e-di*

Alim Leila-ACC kiss-IPFV-3SG

'Alim is kissing Leila'.

b. *alim ble lejla bla uppa et-iS-e-di-le*

Alim and Leila and kiss-REC-IPFV-3-PL

'Alim and Leila are kissing'.

In this talk

- causative
 - ✓ direct
 - ✓ indirect
- passive
 - ✓ promotional
 - ✓ “causal”
 - ✓ anticausative



Causative: direct/indirect

- Semantic difference:
 - manipulative / directive causation
 - causer / causee controlled action
 - cf. *feed* (direct) vs. *make eat* (indirect)
- Relevant phenomenon:
 - ambiguity of adverbials combined with indirect causatives cf. *feed quickly* (unambiguous) vs. *make eat quickly* (ambiguous)

Passive morpheme

- Promotional passive
 - (15) ešik alim-ni kUcU ble ac-ŷ-dy.
 - door Alim-GEN by open-PASS-PST.3SG
 - ‘The door was opened by Alim.’
- Anticausative
 - (16) ešik (kesi) ac-ŷ-dy.
 - door (by_itself) open-PASS-PST.3SG
 - ‘The door opened (by itself).’
- Causal passive

Passive morpheme: causal passive

- (17) a. illew (*alim-ni kUcU ble) syn-dy.
- toy.NOM Alim-GEN by break-PST.3SG
- ‘The toy broke (*by Alim).’
- b. illew alim-ni kUcU ble syn-ŷ-dy.
- toy.NOM Alim-GEN by break-PASS-PST.3SG
- ‘The toy was broken by Alim.’

Methodology

Derivational database:

- 171 non-derived verbal roots

Information collected:

- transitivity
- case frame
- valence changing derivations
- availability of recursive derivations



Database: nested form

Database: verb form

For every verb (non-derived or derived by causative and passive affixes):

- transitivity
- case frame
- actional class:
 - ✓ actional interpretations of perfective forms (perfect / preterite)
 - ✓ actional interpretations of progressive forms (present)

Database: verb form

A screenshot of a software interface for verb analysis. The interface is divided into several sections. Callouts point to various parts: 'Verb' points to the top section; 'Perfective zone' points to a section on the left; 'Progressive zone' points to a section below it; 'Derivational information' points to a top-right section; 'Syntactic information' points to a section on the right; 'Telic interpretation' and 'Atelic interpretation' point to sections on the right; and 'Actional meanings' points to a bottom-right section.

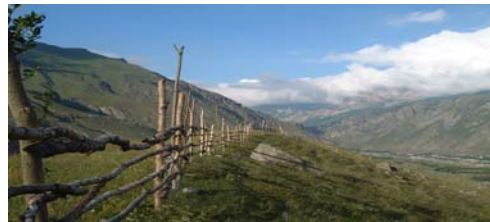
Database: Special case

Verb forms refer to more than one situation:
indirect causatives

- (18) a. ata-sy alim-ge terk baxca-sy-n sŭr-dŭr-dŭ.
father-3 Alim-DAT quickly garden-3-ACC plough-CAUS-PST.3SG
'The father made Alim plough the vegetable garden quickly (i.e., ploughing occurred quickly).'
- b. ata-sy terk alim-ge baxca-sy-n sŭr-dŭr-dŭ.
father-3 quickly Alim-DAT garden-3-ACC plough-CAUS-PST.3SG
'The father quickly caused Alim to plough the vegetable garden (i.e., both causing and ploughing occurred quickly).'

Database: Decision

Actional characteristics of the causing and caused events are identified independently.

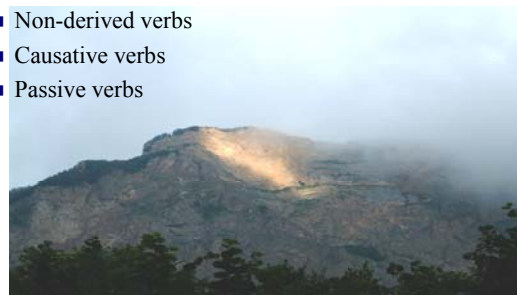


Database: "bi-situational" form

A screenshot of a software interface for verb analysis. Callouts point to four specific areas: 'Perfective: Causing situation' points to a top-left section; 'Perfective: Caused situation' points to a top-right section; 'Progressive: Causing situation' points to a bottom-left section; and 'Progressive: Caused situation' points to a bottom-right section.

Event Structure of Causative and Passive Verbs

- Non-derived verbs
- Causative verbs
- Passive verbs



Non-derived verbs



Non-derived verbs

Parameters

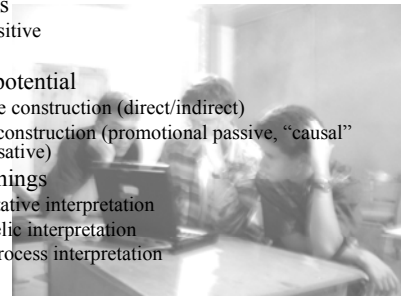
- [± dynamic]
- [± transitive]
- [± external argument]
- [± manner specification]
- [± result state specification]

Non-derived verbs

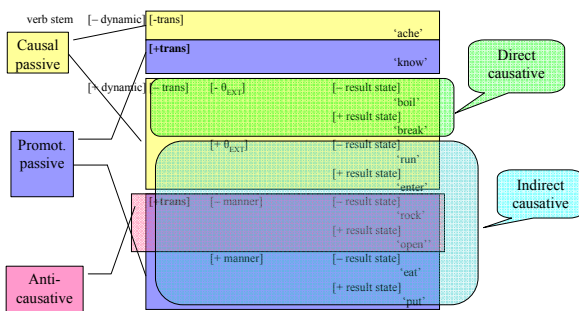
verb stem	[- dynamic]	[-trans]	
		[+trans]	<i>awru</i> 'ache', <i>zaša</i> 'live'
			<i>bil</i> 'know', <i>slj</i> 'love'
	[+ dynamic]	[- trans]	[- result state] <i>cygryda</i> 'creak', <i>qajna</i> 'boil'
			[+ result state] <i>syn</i> 'break', <i>tol</i> 'fill'
		[+ θ _{EXT}]	[- result state] <i>cap</i> 'run', <i>ulu</i> 'howl'
			[+ result state] <i>kir</i> 'enter', <i>qajt</i> 'return'
		[+trans]	[- result state] <i>cajqa</i> 'rock', <i>bur</i> 'turn'
			[+ result state] <i>ac</i> 'open', <i>zyrt</i> 'tear'
		[+ manner]	[- result state] <i>aša</i> 'eat', <i>slr</i> 'plough'
			[+ result state] <i>al</i> 'buy', <i>sal</i> 'put'

Characteristics to be determined

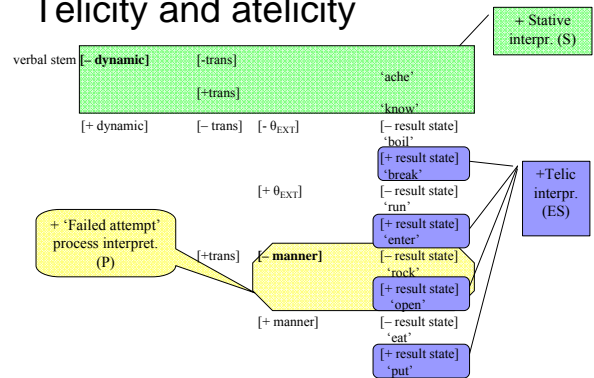
- Syntactic class
 - ☞ transitive/intransitive
 - ☞ agentivity
- Derivational potential
 - ☞ type of causative construction (direct/indirect)
 - ☞ type of passive construction (promotional passive, "causal" passive, anticausative)
- Actional meanings
 - ☞ availability of stative interpretation
 - ☞ availability of telic interpretation
 - ☞ availability of process interpretation



Causatives and passives



Telicity and atelicity



In this talk: four most significant classes

- [+ dynamic] [- trans] [- 0_{EXT}] [+ result state] (henceforth **unaccusatives**)
- [+ dynamic] [- trans] [+ 0_{EXT}] [- result state] (henceforth **unergatives**)
- [+ dynamic] [+ trans] [- manner] [+ result state] (henceforth **result verbs**)
- [+ dynamic] [+ trans] [+ manner] [- result state] (henceforth **manner verbs**)

Unaccusatives

- *tol* ‘fill.intr’, *syn* ‘break.intr’, *ol* ‘die’, *eri* ‘melt’, *zuqla* ‘fall asleep’

(19) *cojun* *tol-du.*
 pot *fill.intr-PST.3SG*
 ‘The pot filled.’

Unergatives

- *cap* ‘run’, *sekir* ‘jump’, *atla* ‘march’, *ulu* ‘howl’, *qycyr* ‘shout’

(20) *alim cap-ty.*
 Alim run-PST.3SG
 ‘Alim ran.’

Manner verbs

- *sŭr* ‘plough’, *aša* ‘eat’, *maxta* ‘praise’, *zaz* ‘write’, *oqu* ‘read’

(21) *fatima alma-ny aša-dy.*
 Fatima apple-ACC eat-PST.3SG
 ‘Fatima ate an/the apple.’

Result verbs

- *ac* ‘open.tr’, *oj* ‘destroy’, *zap* ‘close.tr’, *zyrt* ‘tear.tr’, *ujat* ‘wake’

(22) *alim || zel ešik-ni ac-ty.*
 Alim || wind door-ACC open-PST.3SG
 ‘Alim || the wind opened a/the door.’

Evidence for subevental structure

scope of *zaNydan* ‘again’

- Unaccusatives: *zaNydan* ‘again’ takes scope over the whole change of state event (23.1) or over the result state only (23.2)

(23) *cojun zaNydan tol-du.*
 pot again fill.intr-PST.3SG
 1. *The pot filled again (the pot filled twice).*
 2. *The pot got filled again (the pot was full twice).*

Evidence for subevental structure

- Unergatives: *zaNydan* ‘again’ takes scope over the whole event:

(24) alim zaNydan cap-ty.
 Alim again run-PST.3SG
Alim ran again.

Evidence for subevental structure

- Manner verbs: *zaNydan* ‘again’ takes scope over the whole event or over the process undergone by the patient only:

(25) alim baxca-sy-n zaNydan stir-dU.
 Alim garden-3-ACC again plough-PST.3SG
1. Alim ploughed the vegetable garden again (the vegetable garden has been ploughed twice).
2. Again, Alim ploughed the vegetable garden (Alim ploughed the vegetable garden twice).

Evidence for subevental structure

- Result verbs: *zaNydan* ‘again’ can take scope over the result state, over the result state plus change of state or over the whole event:

(26) alim eSik-ni zaNydan ac-ty.
 Alim door-ACC again open-PST.3SG
1. Alim opened the door again (the door was open twice).
2. Alim opened the door again (the door opened twice).
3. Again, Alim opened the door (Alim opened the door twice).

Causatives



Causatives: Morphology

- Two regular and fully productive causative markers *-t-* and *-tyr-*.
- Distribution conditioned phonologically:
 - t-* attaches after vowel and multisyllabic sonorant stems,
 - tyr-* occurs after consonant and monosyllabic sonorant stems.
- *-t-* and *-tyr-* are morphological exponents of the same morpheme.

Causatives: Morphology

Double or triple causatives are built with *-t-tyr-t...* or *-tyr-t-tyr...* accordingly:

cap ‘run’ → *cap-tyr* ‘cause to run’ → *cap-tyr-t* ‘make cause to run’

eri ‘melt.intr’ → *eri-t* ‘melt.tr’ → *eri-t-tir* ‘cause to melt’ → *eri-t-tir-t* ‘make cause to melt’...

Causatives: Selection

Any verb, be it unaccusative, unergative, transitive or bitransitive, can be causativized by *-tyr-*.

Unaccusatives

- (27) alim cojun-nu tol-dur-du.
Alim pot-ACC fill.intr-CAUS-PST.3SG
Alim filled the pot.

Unergatives

- (28) ustaz alim-ni cap-tyr-dy.
teacher Alim-ACC run-CAUS-PST.3SG
The teacher made Alim run.

Causatives: Selection

Manner verbs

- (29) ana-sy alim-ge baxca-sy-n sür-dür-dü.
mother-3 Alim-DAT veg.garden-3-ACC plough-CAUS-PST.3SG
The mother made Alim plough the vegetable garden.

Result verbs

- (30) ustaz alim-ge eSik-ni ac-tyr-dy.
teacher Alim-DAT door-ACC open.tr-CAUS-PST.3SG
The teacher made Alim open the door.

Causative: recursive

Double causatives and even triple causatives are readily available:

- (31) direktor ustaz-dan alim-ge
director teacher-ABL Alim-DAT
eSik-ni ac-tyr-t-ty.
door-ACC open.tr-CAUS-CAUS-PST.3SG
The director caused the teacher to make Alim open the door.
- (32) fatima ana-sy-dan madina-İa et-ni
Fatima mother-3-ABL Madina-DAT meat-ACC
eri-t-tir-t-ti.
melt-CAUS-CAUS-CAUS-PST.3SG
Fatima caused her mother to make Madina unfreeze the meat.

Causatives: Voice-bundling

- (33) a. alim Uj-e-n zan-dyr-dy.
Alim house-3-ACC burn.intr-CAUS-PST.3SG
1. *Alim burnt his house.*
2. **Alim's house burnt on him. <intended adversity reading>*
- b. alim-ni zyrla-t-a-dy(-la).
Alim-ACC sing-CAUS-PRS-3(-PL)
1. *They make Alim sing.*
2. **Alim feels like singing. <intended desiderative reading>*

Causatives: Case assignment

Case assignment obeys Comrie's (1976) descriptive generalization: when the Causer is introduced, gaining a subject position, the Causee, ex-subject, is demoted to the highest available position at the hierarchy of grammatical relations:

(34) Comrie's Paradigm Case

S	>	DO	>	IO	>	OBL
NOM		ACC		DAT		ABL

Causatives: Case assignment

The case assigned to Causee does not reflect its θ -role, cf. (35) with the causative of the unergative verb *cap* 'run':

- (35) ustaz alim-ni||*alim-ge cap-tyr-dy.
teacher Alim-ACC|| Alim-DAT run-CAUS-PST.3SG
The teacher made Alim run.

Causatives: Evidence for event structure

- adverbial zaŋydan ‘again’
- time-span adverbials
- manner adverbials
- agent-oriented adverbials
- binding phenomena



Causatives: Scope of ‘again’

Causatives of unaccusatives pattern with result verbs:

- (36) alim cojun-nu zaŋydan tol-dur-du.
 Alim pot-ACC again fill.intr-CAUS-PST.3SG
1. Alim filled the pot again (the pot was full twice).
 2. Alim filled the pot again (the pot filled twice).
 3. Again, Alim filled the pot (Alim filled the pot twice).

Causatives: Scope of ‘again’

Causatives of unaccusatives

- narrow scope (over result state) ☺
- intermediate scope (over change of state+result state) ☺
- wide scope (over activity+change of state+result state) ☺

Causatives: Scope of ‘again’

Causatives of unergatives have the same scope possibilities as non-derived unergatives plus the widest scope over a causing event:

- (37) ustaz alim-ni zaŋydan cap-tyr-dy.
 teacher Alim-ACC again run-CAUS-PST.3SG
1. The teacher made Alim run again (Alim ran twice).
 2. Again, the teacher made Alim run (the teacher made Alim run twice).

Causatives: Scope of ‘again’

Causatives of unergatives

- narrow scope (over caused event) ☺
- wide scope (over causing event + caused event) ☺

Causatives: Scope of ‘again’

Causatives of transitives have the same scope possibilities as non-derived transitives plus the widest scope over a causing event:

- (38) ata-sy alim-ge baxca-syn zaŋydan sūr-dūr-dū.
 father-3 Alim-DAT garden-3-ACC again plough-CAUS-PST.3SG
1. Father made Alim plough the vegetable garden again (the vegetable garden has been ploughed twice).
 2. Father made Alim plough the vegetable garden again (Alim ploughed the vegetable garden twice).
 3. Again, father made Alim plough the vegetable garden (the father made Alim plough the vegetable garden twice).

Causatives: Scope of 'again'

Causatives of transitives

- narrow scope (over change of state) ☹
- intermediate scope (over activity+ change of state) ☹
- wide scope (over causing event + caused event) ☹

Causatives: Event structure

	Unaccusatives	Unergatives	Transitives (result/ manner)	Causatives of unaccusatives	Causatives of unergatives	Causatives of transitives (result/ manner)
Subevental structure: scope of zaNydan 'again'	2	1	3/2	3	2	4/3

Causatives: Scope of time-span adverbials

Causatives of unaccusatives: no scope ambiguity

- (39) alim be\$ minut-xa cojun-nu tol-dur-du.
Alim five minute-DAT pot-ACC fill.intr-CAUS-PST.3SG
1. Alim filled the pot in five minutes.
2. *Alim caused the pot [to fill in five minutes].

- narrow scope (over result state) ☹
- intermediate scope (over process+result state) ☹
- wide scope (over activity+process+result state) ☹

Causatives: Scope of time-span adverbials

Causatives of unergatives/transitives: time-span adverbials modify either the caused event or the causing *and* the caused event:

- (40) ata-sy alim-ge be\$ sa\$at-xa baxca-sy-n sŭr-dŭr-dŭ.
father-3 Alim-DAT five hour-DAT garden-3-ACC plough-CAUS-PST.3SG
1. The father made Alim plough the vegetable garden in five hours (i.e., ploughing event took five hours).
2. In five hours, the father made Alim plough the vegetable garden (i.e., both causing and ploughing took five hours).

Causatives: Scope of time-span adverbials

Causatives of unergatives/transitives

- narrow scope (over ch-of-state part of a caused event) ☹
- intermediate scope (over caused event) ☹
- wide scope (over causing event + the caused event) ☹

Causatives: Event structure

	Unaccusatives	Unergatives	Transitives (result/ manner)	Causatives of unaccusatives	Causatives of unergatives	Causatives of transitives (result/ manner)
Subevental structure: scope of 'again'	2	1	3/2	3	2	4/3
Interpretation of time- span adverbials	1	1	1	1	2	2

Causatives: Scope of manner adverbials

Causatives of unaccusatives: no scope ambiguity

- (41) *alim terk cojun-nu tol-dur-du.*
 Alim quickly pot-ACC fill.intr-CAUS-PST.3SG
 1. *Alim filled the pot quickly.*
 2. **Alim caused the pot [to fill quickly].*
- narrow scope (over result state) ☹
 - intermediate scope (over process+result state) ☹
 - wide scope (over activity+process+result state) ☹

Causatives: Scope of manner adverbials

Causatives of unergatives/transitives: manner adverbials modify either the caused event or the causing *and* the caused event:

- (42) *ata-sy alim-ge terk baxca-syn sür-dür-dü.*
 father-3 Alim-DAT quickly garden-3-ACC plough-CAUS-PST.3SG
 1. *The father made Alim plough the vegetable garden quickly (i.e., ploughing event occurred quickly).*
 2. *The father quickly caused Alim to plough the vegetable garden (i.e., both causing and ploughing occurred quickly).*

Causatives: Scope of manner adverbials

Causatives of unergatives/transitives

- narrow scope (over ch-of-state part of a caused event) ☹
- intermediate scope (over caused event) ☹
- wide scope (over causing event + the caused event) ☹

Causatives: Event structure

	Unaccusatives	Unergatives	Transitives (result/manner)	Causatives of unaccusatives	Causatives of unergatives	Causatives of transitives (result/manner)
Subevental structure: scope of 'again'	2	1	3/2	3	2	4/3
Interpretation of time-span adverbials	1	1	1	1	2	2
Interpretation of manner adverbials	1	1	1	1	2	2

Causatives: Agent-oriented adverbials

Two interpretations with causatives of unergatives/transitives, a single interpretation with causatives of unaccusatives:

- Causatives of unaccusatives
- (43) *fatima lejla-**ra** acuu**ra** butaq-ny syn-dyr-dy.*
 Fatima Leila-DAT to spite branch-ACC break.intr-CAUS-PST.3SG
Fatima broke the branch to spite Leila.
- Causatives of unergatives
- (44) *ustaz lejla-**ra** acuu**ra** fatima-ny cap-tyr-dy.*
 teacher Leila-DAT to spite Fatima-ACC run-CAUS-PST.3SG
 1. *The teacher let Fatima run to spite Leila.*
 2. *To spite Leila, the teacher made Fatima run.*

Causatives: Event structure

	Unaccusatives	Unergatives	Transitives (result/manner)	Causatives of unaccusatives	Causatives of unergatives	Causatives of transitives (result/manner)
Subevental structure: scope of 'again'	2	1	3/2	3	2	4/3
Interpretation of time-span adverbials	1	1	1	1	2	2
Interpretation of manner adverbials	1	1	1	1	2	2
Interpretation of agent-or. adverbials	-	1	1	1	2	2

Binding phenomena

Karachay-Balkar possesses a compound reflexive pronoun *kesi-kesi-n* ('self.3-self.3-ACC'). The first component has a fixed form, the second receives case marking.

- *kesi-kesi-n* is locally bound:

(45) *ustaz_i madina-Ra_j [PRO_j kesi-kesi-n_{i,j} maxta-rRa]*
 teacher Madina-DAT self-self-ACC praise-INF

bujruq ber-di.
 permission give-PST.3SG

*The teacher let Madina praise herself // *him.*

Binding phenomena

- *kesi-kesi-n* is subject oriented:

(46) *ustaz_i madina-Ra_j kesi-kesi-ni_{i,j} UsUnden sor-du.*
 teacher Madina-DAT self-self-GEN about ask-PST.3SG
*The teacher asked Madina about himself // *herself.*

(47) *ustaz_i alim-ni_j kesi-kesi-ni_{i,j} Uj-e-nde izle-di.*
 teacher Alim-ACC self-self-GEN house-3-LOC look.for-PST.3SG
The teacher_i looked for Alim_j in his_{i,j} own house.

Binding phenomena

- Causatives of unaccusatives: one antecedent available

(48) *aman adam_i alim-ni_j kesi-kesi-ni_{i,j}*
 bad man Alim-ACC self-self-GEN
Uj-e-nde Ol-dUr-dU.

house-3-LOC die-CAUS-PST.3SG

The criminal_i killed Alim_j in his_{i,j} own house.

Binding phenomena

- Causatives of unergatives: two antecedents available

(49) *aman adam_i alim-ni_j kesi-kesi-ni_{i,j}*
 bad man Alim-ACC self-self-GEN
Uj-e-ne cap-tyr-dy.

house-3-DAT run-CAUS-PST.3SG

The criminal_i made Alim_j run to his_{i,j} own house.

Binding phenomena

- Causatives of transitives: two antecedents available

(50) *ustaz_i madina-Ra_j kesi-kesi-n_{i,j} maxta-t-ty.*
 teacher Madina-DAT self-self-ACC praise-CAUS-PST.3SG

The teacher made Madina praise him // herself.

Binding phenomena

- Possible antecedents of *kesi-kesin*

	unaccusative	unergative	transitive	causative of an unaccusative	causative of an unergative	causative of a transitive
Subject (Causer)	⊙	⊙	⊙	⊙	⊙	⊙
Causee	n/a	n/a	n/a	⊙	⊙	⊙

Causatives: Event structure

	Unaccusatives	Unergatives	Transitives (result/ manner)	Causatives of unaccusatives	Causatives of unergatives	Causatives of transitives (result/ manner)
Subevental structure: scope of 'again'	2	1	3/2	3	2	4/3
Interpretation of time-span adverbials	1	1	1	1	2	2
Interpretation of manner adverbials	1	1	1	1	2	2
Interpretation of agent-or. adverbials	-	1	1	1	2	2
Binding of the compound reflexive	1S, 1BD	1S, 1BD	1S, 1BD	1S, 1BD	2S, 1BD	2S, 1BD

Causativization: Semantics

- Semantics of causative relation is different for causatives of unaccusatives and causatives of transitives/unergatives.
 - Causatives of unaccusatives: direct causation (no intermediate causes),
 - Causatives of transitives / unergatives: indirect causation (intermediate causes).

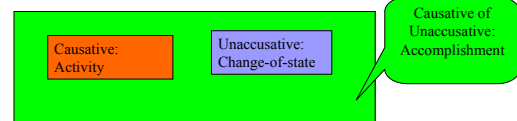
Causatives: Event structure

	Unaccusatives	Unergatives	Transitives (result/ manner)	Causatives of unaccusatives	Causatives of unergatives	Causatives of transitives (result/ manner)
Subevental structure: scope of 'again'	2	1	3/2	3	2	4/3
Interpretation of time-span adverbials	1	1	1	1	2	2
Interpretation of manner adverbials	1	1	1	1	2	2
Interpretation of agent-or. adverbials	-	1	1	1	2	2
Binding of the compound reflexive	1S, 1BD	1S, 1BD	1S, 1BD	1S, 1BD	2S, 1BD	2S, 2BD

Annotations:
 - A blue callout bubble points to the first column: "monoeventive (possibly consisting of subevents)"
 - A green callout bubble points to the last column: "biveventive"
 - The last two columns are highlighted in green.

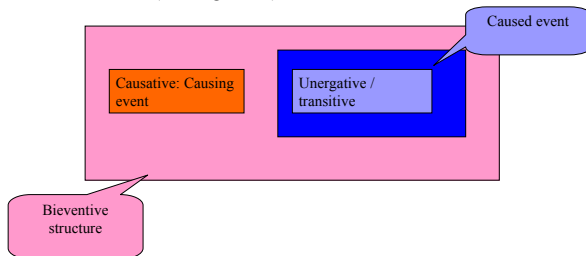
Causativization

- With unaccusatives, the causative morpheme adds an activity subevent to the event structure:



Causativization

- With unergatives and transitives, the causative morpheme adds a new event (causing event) to the event structure:



Event structure and actionality

With unaccusatives, causativization gives rise to an additional process interpretation {FAILED ATTEMPT}:

- *syn* 'break_intr': <ES; P>
 - (51) *butaq eki minut *syn-dy*.
 branch two minute break-PST.3SG
 *'The branch broke for two minutes.'
- *syn-dyr* 'break_tr': <ES, P; P>
 - (52) alim butaq-ny eki minut *syn-dyr-dy*.
 Alim branch-ACC two minute break-CAUS-PST.3SG
 'Alim tried to break the branch for two minutes.'

Event structure and actionality

- eri 'melt_intr': <ES, P; P>

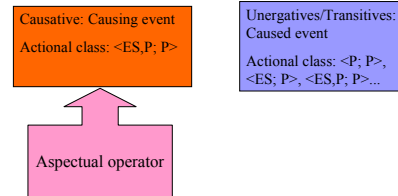
(53) kusok buz-nu eki minut eri-di.
 piece ice-GEN two minute melt-PST.3SG
 'The piece of ice was melting for two minutes, but didn't melt to completion'.

- eri-t 'fill_tr': <ES, P1, P2; P>

(54) alim kusok buz-nu eki minut eri-t-ti.
 Alim piece ice-GEN two minute melt-CAUS-PST.3SG
 1. 'For two minutes, Alim was melting the piece of ice, {but didn't melt it to completion}'.
 2. 'For two minutes, Alim tried to melt the piece of ice, {but it was so cold that Alim failed completely}'.

Event structure and actionality

With unergatives and transitives, causativization creates a causing event with actional characteristics <ES,P; P>



Event structure and actionality

Actionality of the caused event remains intact

zaz 'write' <ES, P; P>

(55) ustaz madina-*ra* qalyt-ny zaz-dyr-dy || zaz-dyr-a-dy.
 teacher Madina-DAT letter-ACC write-CAUS-PST.3SG || write-CAUS-IPFV-3SG
 1. The teacher made // is making Madina write a/the letter {in 10 minutes}.
 (perfective, ES)
 2. The teacher made // is making Madina write a/the letter {for 10 minutes}.
 (perfective, P)
 3. The teacher made // is making Madina be writing a/the letter {at 2 p.m.}.
 (progressive, P)

Event structure and actionality

Actionality of the causing event

Perfective

(56) ustaz eki minut-xa alim-ni cap-tyr-dy.
 teacher two minute-DAT Alim-ACC run-CAUS-PST.3SG
 In two minutes, the teacher persuaded Alim to run.
 (57) ustaz eki minut alim-ni cap-tyr-dy.
 teacher two minute Alim-ACC run-CAUS-PST.3SG
 For two minutes, the teacher tried to persuade Alim to run {but didn't succeed}.

Event structure and actionality

Actionality of the causing event

Progressive

(58) ustaz alim-ni cap-tyr-a-dy.
 teacher Alim-ACC run-CAUS-PRS-3SG
 The teacher is persuading Alim to run.

Perfective: ES, P

Progressive: P

TYR_{BIEVENTIVE}: <ES,P; P>

Passives



Passive morpheme

- -(I)l- / -(I)n- : phonologically conditioned distribution
- Ambiguous
 - ☞ promotional passive
 - ☞ anticausative
 - ☞ causal passive
- Recursive: second, third, etc. morpheme – causal passive only

Promotional passive



Promotional passive

- Selection: transitives (also derived, e.g., causatives)
 - DO occupies the Subject position
 - Subject is optionally expressed in the PP headed by kŭcU ble ‘by’
- (59) kerim kŕlek-ni zyrt-ty.
 Kerim shirt-ACC tear-PST.3SG
 ‘Kerim tore a/the shirt.’
- (60) kŕlek (kerim-ni kŭc-U ble) zyrt-yl-dy.
 shirt Kerim-GEN by tear-PASS-PST.3SG
 ‘A/the shirt was torn by Kerim.’

Promotional passive: Event structure

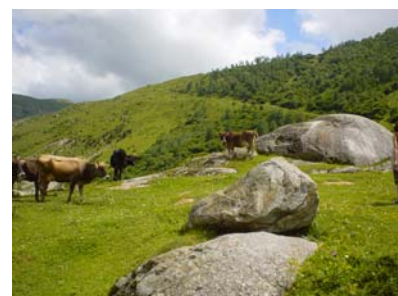
- Passivization does not affect event structure

	sŭr- dŭr- 'plough'	sŭr- ũl- 'get ploughed'	ac- 'open'	ac-ŭl- 'get opened'
Subevental structure: scope of 'again'	2	2	3	3
Interpretation of time-span adverbials	1	1	1	1
Interpretation of manner adverbials	1	1	1	1
Interpretation of agent-or. adverbials	1	1	1	1

Promotional passive: Actionality

- Passivization does not affect actional characteristics of the verb
- zyrt ‘tear’ <ES,P; P> - zyrt-yl ‘be/get torn’ <ES,P; P>
 kŕr ‘see’ <ES,S; S> - kŕr-Un ‘be seen’ <ES,S; S>
 sŭr-dŭr ‘make plough’ <ES,P; P> <ES,P;P> -
 sŭr-dŭr-ũl ‘be caused to plough’ <ES,P; P> <ES,P;P>

Anticausative



Anticausative

- Selection: transitive [-manner] verbs (non-derived)
- DO occupies the Subject position
- Agent cannot be expressed

(61) *kerim k0lek-ni zyrt-ty.*

Kerim shirt-ACC tear-PST.3SG
'Kerim tore a/the shirt.'

(62) *k0lek (*kerim-ni kUc-U ble) zyrt-∅-dy.*

shirt Kerim-GEN by tear-ANTICAUS-PST.3SG
'A/the shirt tore (*by Kerim).'

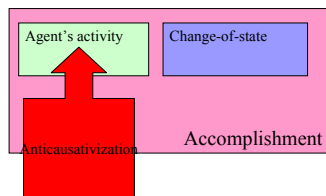
Anticausativization: Event structure

- Anticausativization affects event structure

	bur 'turn.tr'	bur-∅ 'turn.intr'	ac 'open.tr'	ac-∅ 'open.intr'
Subevental structure: scope of 'again'	2	1	3	2
Interpretation of time-span adverbials	1	1	1	1
Interpretation of manner adverbials	1	1	1	1
Interpretation of agent-or. adverbials	1	-	1	-

Anticausativization: Event structure

- Anticausativization affects Activity subevent:



Anticausativization: Actionality

- Anticausativization eliminates one specific type of process interpretation – FAILED ATTEMPT

(63) *iSci eki kUn Uj-nU oj-du.*

worker two day house-ACC destroy-PST.3SG

'The worker was involved in taking down the house for two days' (lit. 'The worker took down the house for two days.')

- a. <Failed attempt>: For two days, the worker was trying to take down the house, but the house was so firm that he gave up, not being able to remove a single brick.
- b. <Partial success>: For two days, the worker was taking down the house; he removed the roof and one of the walls, but then was asked to stop.

Anticausativization: Actionality

<ES,P; P> result verbs: Atelic interpretation

- Group 1 : FAILED ATTEMPT and PARTIAL SUCCESS
oj 'destroy', *buz* 'spoil', *quj* 'pour out', *soz* 'stretch', *tazala* 'clean', *t0g* 'spill out'

- Group 2 : FAILED ATTEMPT
zyrt 'tear', *ac* 'open', *ij* 'untie', *ujat* 'wake up', *zab* 'close'

Anticausativization: Actionality

<ES,P; P> result verbs under anticausativization

- Group 1 : FAILED ATTEMPT and PARTIAL SUCCESS

- retain atelic interpretation

<ES,P; P> => <ES,P; P>

- Group 2 : FAILED ATTEMPT

- lose atelic interpretation

<ES,P; P> => <ES; P>

Causal passive



Causal passive

- Selection: intransitives (also derived, e.g. anticausatives, promotional/causal passives)
- Subject retains its position
- The meaning of external causation is introduced
- Causer is optionally expressed in the PP headed by *küCü ble* 'by'

Causal passive

Unaccusative

- (64) a. *illew (*alim-ni küCü ble) syn-dy.*
 toy Alim-GEN by break-PST.3SG
 'The toy broke (*by Alim).'
- b. *illew alim-ni küCü ble syn-yl-dy.*
 toy Alim-GEN by break-PASS-PST.3SG
 'The toy was broken by Alim.'

Unergative

- (65) a. *alim (*farida-ny küCü ble) bar-dy.*
 Alim Farida-GEN by leave-PST.3SG
 'Alim left (*by Farida).'
- b. *alim farida-ny küCü ble bar-yl-dy.*
 Alim Farida-GEN by leave-PASS-PST.3SG
 'Alim left (because something was done) by Farida.'

Causal passive: Causative coercion

Causal passive is a product of causative coercion

- the *-l* morpheme always applies to a **transitive predicate**;
- the *-l* morpheme existentially binds the Agent/causer argument and induces promotion of the Patient to the subject position;
- if a verb provides a suitable argument structure, which is the case with transitives, the *-l* morpheme produces a 'normal' promotional passive;
- if a predicate does not have a transitive argument structure, the verb undergoes **coercion** through **covert causativization**. Causativization introduces a new agent/causer argument, as usually, thus creating a transitive structure.

Causal passive: Causative coercion

*-l*_{PASS} (Vintrans) → *-l*_{PASS} (CAUS(Vintrans))

Evidence:

Intransitives combined with the passive morphology pattern with (overt) causatives with respect to event structure

- ☞ semantic type of causation
- ☞ interpretation of agent-oriented adverbials
- ☞ interpretation of time-span and rate adverbials
- ☞ scope of negation

Causal passive: Event structure

Illustration: Agent-oriented adverbials

- **Passives of unaccusatives: unambiguous**

- (66) *butaq lejla-Ra acuuRa syn-yl-dy.*
 branch Leila-DAT to.spite break.intr-PASS-PST.3SG
 'The branch was broken to spite Leila'.

- **Causatives of unaccusatives: unambiguous**

- (67) *alim lejla-Ra acuuRa butaq-ny syn-dyr-dy.*
 Alim Leila-DAT to.spite branch break.intr-CAUS-PST.3SG
 'Alim broke the branch to spite Leila'.

Causal passive: Event structure

■ Passives of unergatives: ambiguous

- (68) alim lejla-Ra acuuRa fatima-nykUcU ble zUz-Ul-dU.
 A. L.-DAT to.spite F.-GEN by swim-PASS-PST.3SG
 1. 'Alim was allowed by Fatima to swim to spite Leila (it was Alim who wanted to spite Leila)'.
 2. 'Alim was allowed to swim by Fatima, who wanted to spite Leila'.

■ Causatives of unergatives: two-way ambiguous

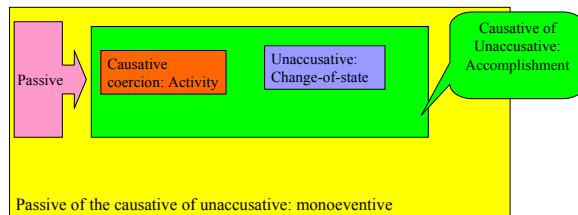
- (69) fatima alim-ni lejla-Ra acuuRa zUz-dUr-dU.
 F. A.-ACC L.-DAT to.spite swim-PASS-PST.3SG
 1. 'Fatima let Alim swim to spite Leila (it was Alim who wanted to spite Leila)'.
 2. 'In order to spite Leila, Fatima made Alim swim (it was Fatima who wanted to spite Leila)'.

Causal passive: Event structure

	Unaccusatives		Unergatives	
	causative	passive	causative	passive
Type of causation	direct	direct	indirect	indirect
Scope of time-span and rate adverbials	unambiguous	unambiguous	two-way ambiguous	two-way ambiguous
Interpretation of agent-oriented adverbials	unambiguous	unambiguous	two-way ambiguous	two-way ambiguous
Scope of <i>zalydan</i> 'again'	two-way ambiguous	two-way ambiguous	two-way ambiguous	two-way ambiguous
Scope of negation	unambiguous	unambiguous	two-way ambiguous	two-way ambiguous

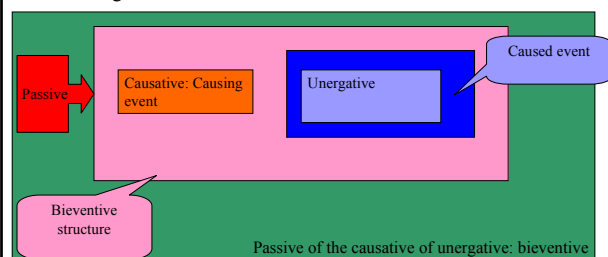
Causal passive: Event structure

- With unaccusatives, the passive morpheme introduces an activity subevent to the event structure via the causative coercion:



Causal passive: Event structure

- With unergatives, the passive morpheme introduces a new causing event to the event structure via the causative coercion :



Causal passive: Actionality

- Affects actionality in the same way as the causative morpheme.
- This is what we would expect under coercion analysis of the causal passive: indeed, causative coercion acts as a causative morpheme, and promotional passive does not affect actionality.