

# How Perfect is the Perfect of Evidentiality

## Evidence from Georgian

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# General Profile

- relaxed SOV order
- subject & object drop
- polypersonal agreement
- split ergativity

Multiple tenses are united in three series on the basis case marking:

- ① PRESENT: present, future, imperfect, conditional, present subjunctive, future subjunctive
- ② AORIST: aorist, optative (second subjunctive)
- ③ PERFECT: perfect, pluperfect, third subjunctive

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- 3 PERFECT: **perfect**, pluperfect, third subjunctive

# In focus: Georgian perfect

Frequently ascribed evidential meaning (Harris 1981, Hewitt 1995, Böeder 2000, Topadze 2011):

## AORIST

- (1) urtʃxul-ma gandʒ-i daimala  
 dragon-ERG treasure-NOM hide.3SG.S.3SG.O.AOR  
 'The dragon hid the treasure.' {irrespective of whether the speaker has witnessed hiding}

## PERFECT

- (2) urtʃxul-s gandʒ-i daumalia  
 dragon-DAT treasure-NOM hide.3SG.S.3SG.O.PERF  
 'I was told that / I infer that the dragon hid the treasure.'

NB: Ambiguous between hearsay / inference

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# Inferred reading

Inference based on visible results as opposed to mental constructs:

- (3) tʃem-s megobr-eb-s eldorado up'ovniat  
 my-DAT friend-PL-DAT Eldorado find.3PL.PERF  
 'I infer that my friends found Eldorado.'

VISUAL: {They sent me a letter, I see the stamp. /

MENTAL: #They went on a trip in search of Eldorado, did not return and I conclude that they made it to there.}

NB: result requirement does not have to be aspectual and might be saturated by context

# What and where

## “Perfect of Evidentiality” (PE)

- (present) perfect morphology encodes some sort of evidentiality all over the globe: Dogon, Newari, Scandinavian languages, Spanish of La Paz (Aikhenvald 2004: 112-114), Northern Ostyak (Nikolaeva 1999), Komi Zyryan (Leinonen 2000)
- with high concentration in the “Old World evidential belt” (evidential-rich Balkan-Caucasus region): BALKAN ROMANCE: Aromanian, Daco Romanian, Megleno Romanian; IRANIAN: Farsi, Tajik; INDO-ARYAN: Romani; SOUTH SLAVIC: Bulgarian, Macedonian; DAGHESTANIAN: Agul, Archi, Bagvalal, Dargwa; INDO-EUROPEAN ISOLATES: Eastern Armenian and Albanian; TURKIC: Turkish, Azerbaijani; KARTVELIAN: **Georgian**



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Perfect + Evidentiality = ?

# Izvorski 1997: 1

Izvorski 1997: proposed for Bulgarian, supposedly universal Evidential perfects should **always** be ambiguous between the two superficially identical forms:

- a perfect perfect
  - ✓ aspectual form (e.g. incompatible with aorist-loving adverbials like 'yesterday', 'last year', 'at 5 pm')
  - ✓ no indirect evidence flavour: might be direct, might be neutral
- a perfect evidential
  - ✓ no aspectual restrictions (e.g. compatible with any adverbials)
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## Izvorski 1997: 2

The evidential is given a Kratzerian semantics for modals (with a twist):

- indirect evidence for  $p$  is a presupposition
- modal base contains only worlds where there is indirect evidence for  $p$ : evidentially possible worlds
- ordering source structures worlds wrt speaker's attitude towards available evidence for  $p$  (reliability etc)
- evidential is a necessity operator  $\square$  over closest evidentially possible worlds

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# Izvorski 1997: 3

Two main predictions:

- two independent forms
- evidential is an epistemic modal

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Is Izvorski 1997 correct assuming that PEs are always twofaced?

# Not a perfect perfect

Out of the blue no pure aspectual interpretation, i.e. one that is free of indirect evidence: ← bad for Izvorski 1997

(4) tovl-i      movida  
 SNOW-NOM come.3SG.S.AOR  
 'It snowed.' {The speaker *might* have witnessed the snow falling.}

(5) tovl-i      mosula  
 SNOW-NOM come.3SG.S.PERF  
 Inference: 'It snowed.' {The speaker did not witness the snow falling but witnesses the result, e.g. all is white.}  
 Hearsay: 'I was told that it snowed.' {The speaker did not witness the snow falling and might not witness the result.}

Also, used in narratives and folktales.

# Footnote: Genuine Perfect-1

The form does have an experiential interpretation (*'I have tried yoga once'*) without indirect evidence requirement:

- (6)      utovia                  Los-Angelesʔi?  
           rain.3SG.S.PERF LosAngeles.LOC  
           'Did it ever rain in Los Angeles?'

In wh-questions, the same form turns a sentence into an exclamative.

# Footnote: Genuine Perfect-2

Complimentary distribution with the evidential interpretation:

	EXPER PERFECT	EVID PERFECT
in questions	✓	no
under negation	✓	no
under 'doubt', 'wonder'	✓	no
under 'not think'	✓	no
under 'think'	no	✓
elsewhere	no	✓

→ at least resembles behaviour of polarity items

# Adverbials: 1

Fine with (some) yes-aorist adverbials: 'yesterday', 'at 5 sharp', 'in 3 hours', 'on Saturday' ← good for Izvorski 1997

(7) **guʃin** / **ʃarʃan** stalin-i **momk'vda**  
 yesterday / last.year Stalin-NOM die.3SG.S.AOR  
 'Stalin died yesterday / last year'.

(8) **guʃin** / **ʃarʃan** stalin-i **momk'vdara**  
 yesterday / last.year Stalin-NOM die.3SG.S.PERF  
 'I was told that / I infer that Stalin died yesterday / last year'.

The contrast seems to be solely evidential.

# Adverbials: 2

Fine with no-aorist adverbials: ‘for 3 hours’, ‘whole day’, ‘always’

← good for Izvorski 1997

(9) bavʃv-i mteli γame t'iroda  
 baby-NOM whole night cry.3SG.S.IMPERF  
 ‘Baby was crying all night’.

(10) bavʃv-i mteli γame ut'iria  
 baby-NOM whole night cry.3SG.S.PERF  
 ‘I was told that baby was crying all night’.

The contrast seems to be solely evidential, again.

# Just an evidential?

Compatibility with adverbials inherited from aspectual class rather than imposed by perfect. Maybe, this is a pure evidential?

# Not a perfect evidential either! 1

## Restrictions of aspectual nature: ← bad for Izvorski 1997

- some verbs form an aspectual pair (accomplishment) by adding a preverb (the choice of preverb depends on a verb): *c'ers* 'write smth' vs. *dac'ers* 'write smth up'
- in the perfect, only the preverbed verb is good: \**c'era* vs. *da-c'era*
- restriction is not morphological
- in inceptive pairs 'sleep' vs 'fall asleep' both members are good: *uđinia* vs. *dauđinia*
- perfect seems to require some resulting state when available



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## Not a perfect evidential either! 2

Verbal event described by the scope proposition should be in the past ← bad for Izvorski 1997

→ e.g. no adverbials referring only to the present or future or contexts forcing this interpretation:

Scenario: You go to psychic readings where they read your hand and tell you: "You will buy a thousand cars".

- (11) #miq'idia                      at'a-s                      mankana-s  
 buy.3SG.S.3SG.O.PERF thousand-DAT car-DAT  
 Intended: 'I was told that I will buy a thousand cars.'  
 Available (mirative reading): 'I blacked-out and do not remember that I bought 1,000 cars.'

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# Interplay with tense/aspect: Interim moral

The story of two independent forms does not work well:

- no good perfect free of indirect evidence burden
- no good indirect evidential free of aspectual relations
- rather one form that both carries indirect evidence requirement and is (somehow) yoked with tense/aspect

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# General

Status of the evidential component is largely debated. Challengeability, negatability, and embeddability are often used to help distinguish between modal and illocutionary evidentials  
(Faller 2002, Matthewson et al 2007, Murray 2010)

# Challenge it

Never possible to challenge the very fact of having indirect evidence:

- (12) kalifornia-s k'anonieri gauxdia  
 California-DAT legal make.3SG.S.3SG.O.PERF  
 marihuan-is gamoq'eneba  
 marijuana-GEN usage.MSD.NOM  
*'I was told that California legalized marijuana.'*

Reply:

- (13) es ar aris martali  
 it-NOM NEG be.3SG.S.PRES true  
*'That is not true, California did not legalize marijuana.'*  
 #: *'That is not true, you did not hear that.'*

# Negate it

Never possible to put under negation: it either is too high and scopes over or is beyond propositional operators and does not interact

(14) sup'-i ar gaak'eta  
 soup-NOM NEG make.3SG.S.3SG.O.AOR

'She did not cook the soup'.

= 'It is not the case that she cooked the soup'.

Negation > Aorist

(15) sup'-i ar gauk'etebia  
 soup-NOM NEG make.3SG.S.3SG.O.PERF

*'I find out that she did not cook the soup.'*

≠ It is not the case that I found out that she cooked the soup.

(also: 'She has never cooked soup').



# Embed it: 1

*Syntactic* embedding is allowed but the evidential never shifts (cf. Sauerland & Schenner 2007):

	SUBJECT.DIR	SUBJECT.INDIR
SPEAKER.DIR	perfect: no aorist: yes	perfect: no aorist: yes
SPEAKER.INDIR	perfect: yes aorist: yes	perfect: yes aorist: yes



# Embed it: 3

*SP.DIR*, *SUBJ.INDIR* only aorist is possible

Scenario: I have seen monks building and completing a new monastery. My friends only read about that and tell me: “Monks built a new monastery”.

(17) aashenes // \*aushenebiat  
 build.3PL.S.3SG.O.AOR // build.3PL.S.3SG.O.PERF

# Embed it: Moral

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# Beyond assertion

- backgrounded and projective meanings are recognized as part of a large family of **not-at-issue content**: proposed in (Simons et al 2010 and subsequent work), (Murray 2010) specifically for evidentials
- Georgian patterns with many languages
- the hottest debate: presupposition or backgrounded assertion?
- no *truly* empirical reasons to tell...

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# Georgian-External Complaints

- Epistemic modals might scope under negation. Evidentials may not.
- $EVIDp$  is not up to negotiation: it directly updates the common ground. It is shown by the fact that having indirect evidence for  $p$  is not challengeable or cannot be denied. The scope proposition,  $p$ , is asserted and is up to negotiation. Normally modals behave differently: the whole sentence  $\Box p$  is asserted, not only  $p$  itself.

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- Epistemic modals shift under embedding. In Georgian, evidential remains speaker-oriented.
- Modal analysis would require special restriction wrt to tense and aspect.

This might be a very special modal but there seems to be a more plausible approach!

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# Learning events

(Neo-)Reichenbachian ontology that gets us main temporal and aspectual relations; e.g. (Kamp & Reyle 1993):

- ① VERBAL EVENT: that described by a proposition
- ② REFERENCE TIME (or topic time)
- ③ SPEECH EVENT: utterance

Koev (2011):

- all of the above
- plus LEARNING EVENT: getting to know the proposition
- when learning event follows verbal event **indirect evidence comes for free**
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# Capturing Georgian

- (18) tbilis-fi tovl-i mosula  
 Tbilisi-LOC snow-NOM come.3SG.S.PERF  
*'I was told that / I infer that it snowed in Tbilisi'.*

**E = snowing**    s = resulting state    t = reference time  
**s = speech event**    L = learning event

## HEARSAY



## INFERENCE

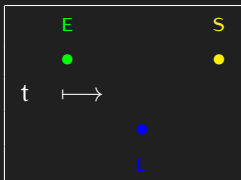


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## HEARSAY



## INFERENCE

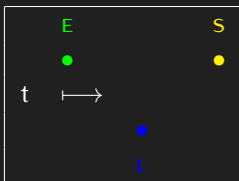


# Capturing Georgian

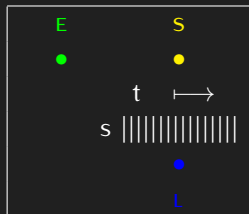
- (18) tbilis-fi tovl-i mosula  
 Tbilisi-LOC snow-NOM come.3SG.S.PERF  
*'I was told that / I infer that it snowed in Tbilisi'.*

E = snowing    s = resulting state    t = reference time  
 s = speech event    L = learning event

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# To sum up

I argue that Georgian does not completely fit into Izvorski's scheme:

- there are no two independent forms
- the evidential does not look like a modal

Instead I propose to apply a temporal learning analysis, where direct operating over events and times gives power to handle temporal and aspectual contribution of this 'perfect'.

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Instead I propose to apply a temporal learning analysis, where direct operating over events and times gives power to handle temporal and aspectual contribution of this 'perfect'.

დიდ-ი მაღლობა

didi madloba

big.NOM thanks

‘Thanks a lot!’



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Koopman and Dominique Sportiche  
UCLA audience

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