How Perfect is the Perfect of Evidentiality
Evidence from Georgian

natasha korotkova

University of California, Los Angeles

The Nature of Evidentiality, Leiden University

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Background On Georgian

**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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In focus: Georgian perfect


**Aorist**

(1) urţxul-ma ganʤ-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) urţxul-s ganʤ-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)  tfem-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
"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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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
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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
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-Angeles is? 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:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Exper Perfect</th>
<th>Evid Perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>in questions</td>
<td>✓</td>
<td>no</td>
</tr>
<tr>
<td>under negation</td>
<td>✓</td>
<td>no</td>
</tr>
<tr>
<td>under 'doubt', 'wonder'</td>
<td>✓</td>
<td>no</td>
</tr>
<tr>
<td>under 'not think'</td>
<td>✓</td>
<td>no</td>
</tr>
<tr>
<td>under 'think'</td>
<td>no</td>
<td>✓</td>
</tr>
<tr>
<td>elsewhere</td>
<td>no</td>
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</tr>
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</table>

→ at least resembles behaviour of polarity items
Adverbials: 1


(7) gusin / sarjan stalin-i momk’vda
yesterday / last.year Stalin-NOM die.3SG.S.AOR
‘Stalin died yesterday / last year’.

(8) gusin / sarjan 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  ɣame  t’iroda
   baby-NOM whole night  cry.3SG.S.IMPERF
   ‘Baby was crying all night’.

(10) bavʃv-i  mteli  ɣame  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: uđžinia vs. dauđžinia
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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.’

Might be due to morphology: no way to express future on top of perfect
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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’).
Syntactic embedding is allowed but the evidential never shifts (cf. Sauerland & Schenner 2007):

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<tr>
<th>Speaker.Dir</th>
<th>Subject.Dir</th>
<th>Subject.Indir</th>
</tr>
</thead>
<tbody>
<tr>
<td>perfect: no</td>
<td>perfect: no</td>
<td>aorist: yes</td>
</tr>
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Embed it: 2

**SP.INDIR, SUBJ.DIR** both aorist and perfect are possible

Scenario: My friends live in Georgia, whereas I do not. They have seen monks building and completing a new monastery. They tell me: “Monks built a new monastery”.

(16) \( \text{tfem-ma megobr-eb-ma mitxres} \) \( \text{rom} \)
\( \text{my-ERG friend-PL-ERG tell.3PL.S.3SG.O.1SG.IO.AOR that} \)
\( \text{ber-eb-ma axal-i monaster-i} \)
\( \text{monk-PL-ERG new-NOM monastery-NOM} \)
\( \text{aashenes} \) \( \text{// ber-eb-s a.m.} \)
\( \text{build.3PL.S.3SG.O.AOR} \) \( \text{// monk-PL-DAT n.m.} \)
\( \text{aushenebiat} \)
\( \text{build.3PL.S.3SG.O.PERF} \)
“My friends told me that monks built a new monastery.”
**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) \[ \text{aashenes} \quad \text{// *aushenebiat} \]  
\[ \text{build.3PL.S.3SG.O.AOR} \quad \text{// build.3PL.S.3SG.O.PERF} \]
Embed it: Moral

- evidential projects surviving under attitude reports
- evidential does not pattern with epistemic modals that typically shift; same critique for Bulgarian in (Sauerland & Schenner 2007)
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- Georgian patterns with many languages
- the hottest debate: presupposition or backgrounded assertion?
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$\text{Evid} p$ 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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Modal analysis would require special restriction wrt to tense and aspect.

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Georgian-Internal Complaints

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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) tbi:is--fi t:ovl--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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‘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

E  S
•   •

l

•

t  ↦→

S

•

L

•

l
Capturing Georgian

(18) tbilis-ji  tovl-i  mosula
    Tbilisi-LOC snow-NOM come.3SG.S.PERF
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\[ E = \text{snowing} \quad s = \text{resulting state} \quad t = \text{reference time} \]
\[ s = \text{speech event} \quad L = \text{learning event} \]
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’.
To sum up

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‘Thanks a lot!’
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References


