



# Not All Fake Pasts Are Real.

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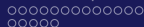
University of Toronto

DLLL Lecture Series, February 5, 2015  
handout @ [individual.utoronto.ca/bjorkman/](http://individual.utoronto.ca/bjorkman/)

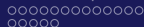


## Section 1

Introduction: what do we mean by “fake” past?



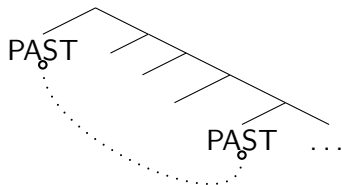
- ▶ At least two domains where past inflection seems to be “fake”:
  - ▶ Sequence of Tense (SOT)
    - (1) My sister told me that her friend **liked** frogs.
  - ▶ Counterfactuals (CFs)
    - (2) CF: If it **was** raining (**now**), I **would** wear my boots.
    - (3) CF: I wish it **was** raining (**now**).



Both SOT and CFs have been analyzed in terms of **feature licensing**:

- ▶ Past tense morphology merely reflects another **higher** past tense

→ disconnect between interpretation and realization of PAST.



- ▶ Arregui (2009) and Romero (2014) make this connection directly.



## Today's Argument In Brief:

- ▶ If SOT and CFs both have “fake” PAST, we expect predicates under PAST to be interpreted the same way in both.
- ▶ As it turns out, predicates show very different effects in SOT and CFs:
  - ▶ Viewpoint and situation **aspect** have different effects.
  - ▶ Contribution of **perfect** somewhat different in both.
  - ▶ Availability of **present** inflection differs.
- ▶ Differences suggest only **one** involves real “fake” PAST.
- ▶ Evidence suggests CFs, not SOT, involve “fake” PAST.
  - ▶ Implications for the typology of tense systems.



## Why should we care?

Languages divide up temporal space in different ways:

past progressive	simple past	perfect
<i>imparfait</i>		<i>passé composé</i>

- ▶ Could be an arbitrary difference.
- ▶ More appealing possibility: arises from differences in representation.

→ how is time represented in **features**

“Fake” inflection = a way to dissociate **form** from **meaning**



## Section 2

### SOT and CFs are similar

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Taking a step back: **Why would we compare SOT and CFs?**

Answer: Reasons to think past morphology shows the **same** behaviour in **both**.



## The profile of PAST in Sequence of Tense

**SOT languages:** English, Dutch, Norwegian, French, Italian...

**Past-under-Past:** Simultaneous Reading

(4) My friend *said* she **was** in Paris. [=“I am in Paris.”]

**Present-under-Past:** “Double Access” Reading

(5) My friend *said* she **is** in Paris. [=“I am in Paris.” *and still is*]

**Past Perfect-under-Past:** Backshifted Reading

(6) My friend *said* she **had been** in Paris. [=“I was in Paris.”]



## A (brief) introduction to PAST in SOT

**Non-SOT languages:** Russian (Comrie, 1985), South-Baffin Inuktitut (Hayashi, 2011), Japanese (Ogihara, 1995), Hebrew (Sharvit, 2003)...

**Past-under-Past:** Backshifted Reading [S. Baffin: Hayashi, 2011]

- (7) jaan uqa-lauq-tuq                      miali  
 Jaan say-PAST-PTCP.3SG Mary  
 singai-lau-ngmat  
 pregnant-PAST-CAUS.3SG  
 “John said that Mary was pregnant.”

**Present-under-Past:** Simultaneous Reading

- (8) jaan uqa-lauq-tuq                      miali  
 Jaan say-PAST-PTCP.3SG Mary  
 singai-∅-ngmat



## Where does SOT PAST come from?

**A standard view:** embedded past tense (in SOT) is **purely morphological**

Over time:

- ▶ Ross (1967): embedded tense is inserted by a rule.
  - ▶ Ogihara (1995): embedded tense is deleted by a rule.
  - ▶ Grønn and von Stechow (2010), Zeijlstra (2012): embedded tense features are **formally uninterpreted**, but **licensed** by matrix counterparts.
- relationship between uPAST and iPAST.



## The profile of past tense in Counterfactuals

Many languages use PAST morphology to mark modal statements as **unrealized** (counterfactual) or **unlikely** (Anderson, 1951; Hale, 1969; Steele, 1975; James, 1982; Palmer, 1986; Fleischman, 1989; Iatridou, 2000; Van Linden and Verstraete, 2008, a.o.).



## A (brief) introduction to PAST in CFs

- (9) Present-oriented CF:  
If they **were** here (now), we **could** ask them.
- (10) Future-Less-Vivid:  
If they **left** tomorrow, they **would** arrive next week.
- (11) Past-oriented CF:  
If they **had left** yesterday, they **would have** arrived next week.



## A (brief) introduction to PAST in CFs

Similarly, PAST (imperfective) marks CFs in Modern Greek (Iatridou, 2000):

- (12) An **eperne** afto to siropa tha **γ<sub>1</sub>inotan** kala  
 if took(IMPF) this syrup FUT became(IMPF) well  
 “If he took this syrup, he would get better.” (FLV)
- (13) An o Kostas iχ<sub>1</sub>e χ<sub>1</sub>rimata tha ayoraze afto to spiti  
 if Kostas had money FUT buy this house  
 “If Kostas had money, he would buy this house.” (PresCF)
- (14) An iχ<sub>1</sub>e pari to siropi tha iχ<sub>1</sub>e γ<sub>1</sub>ini kala.  
 if had taken the syrup FUT had become better  
 “If he had taken the syrup, he would have gotten better.”  
 (PastCF)



## A (brief) introduction to PAST in CFs

PAST in Zulu CFs (Halpert and Karawani, 2011):

- (15) [ukuba **be-**                    ngi- thimul- ile ]  
 if            PAST.IMP- 1SG- sneeze- PFV  
 be-ngi-zo-dinga            ithishi  
 IMP-1SG-FUT-need 5tissue  
 'If I had sneezed, I would have needed a tissue.'

PAST in Palestinian Arabic CFs (Halpert and Karawani, 2011):

- (16) [iza **tileʕ**                    hala?,] **kaan**            b-iwsal            ʕal  
 if   leave.PAST.PFV now,   be.PAST B-arrive.IMP on  
 waʔt            la l-muħaadara  
 the-time for the-lecture  
 'If he left now, he would arrive on time for the lecture.'





Languages with PAST in CFs: (a very partial list)

**Germanic**, **Romance**, **Slavic**, **Zulu** (Halpert, 2010), **Arabic** (Karawani, 2014), **Hebrew** (Iatridou, 2009), **Korean** (Han, 2006), **Walpiri** (Legate, 2003), **Turkish** (Aygen, 2004)...



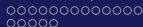
## The Syntax of CF PAST

**Is CF PAST in the same place as real temporal PAST?**

Consensus: **No.**

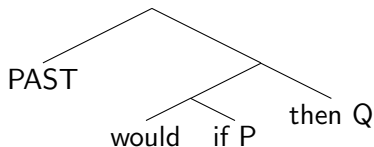
Reasons for this consensus:

1. Semantic interpretation
2. Morpheme Order (Turkish)
3. Correlation with V-to-C Movement



Reasons from **semantic interpretation** to think CF PAST is high:

- ▶ Formal semantics: PAST is temporal but scopes high, composes with modal outside antecedent (Ippolito, 2013; Arregui, 2009; Romero, 2014)



- ▶ Formal syntax: a formal feature received different interpretations in different positions. A COINCIDENCE feature is temporal in  $T^0$ , but modal in  $C^0$  (Ritter and Wiltschko, 2010; Bjorkman, 2011).



**Morphosyntactic** reasons to think CF PAST is high:

Turkish morpheme order: (Aygen, 2004).

Indicative: **V-PAST-COND**

- (17) Dün gece Can erken yat-**dı-ysa** sabah erken  
 Last night John early sleep-Past-COND morning early  
 kalk-abil-ir.  
 get-up-MOD-Past  
 'If John went to bed early last night, he can get up early  
 this morning.'



**Morphosyntactic** reasons to think CF PAST is high:

Turkish morpheme order: (Aygen, 2004).

Counterfactual: **V-COND-PAST**

- (18) Dün gece Can erken yat-**sa-ydı** sabah erken  
 Last night John early sleep-COND-Past morning early  
 kalk-ar-dı.  
 get-up-AOR-Past  
 'If John had gone to bed early last night, he would have  
 got up early in the morning.'



## A (brief) introduction to PAST in CFs

Reasons from **movement** to think CF PAST is high:

Conditional Inversion: T-to-C movement in antecedent.

(19) **Had** they read the book, they would have liked it.

(20) **Were** it raining, we would have a leak.

Limited in current English to *had*, *were*, *should*.

More widely available in other languages, linked to **CFs** (Iatridou and Embick, 1994).

[Exception: V2 Germanic languages—which have more general V-to-C anyway.]



## In conclusion...

SOT }  
CFs }

In **both**:

- ▶ PAST  $\neq$  past meaning
- ▶ PAST = higher
- ▶ Past Perfect = backshifted

→ uPAST



## Section 3

### SOT and CFs are different



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**So far:** T in both SOT and CFs has “fake” PAST features.

**Prediction:** SOT and CFs should have the same (temporal) interpretations.

**Not borne out** → SOT and CFs interact differently with **aspect**.

*(situation type)*

States

Events

*(viewpoint aspect)*

Imperfective

Perfective

(PROG, HAB, GEN)



Both track this distinction, but with different results. . .



We saw that SOT PAST can be “fake” in embedded clauses.

### However:

- ▶ SOT effects occur only with **states/imperfective events**.
- ▶ Perfectives interpreted as (relative) past  
→ like non-SOT languages



## Differences in the Simple Past

(21) The student claimed that they **knew the answer**.

[know the answer] = state → ✓ simultaneous interpretation

(22) My friend said it **was snowing**.

[be snowing] = progressive → ✓ simultaneous interpretation

(23) The students claimed that someone cancelled the exam.

[cancel the exam] = perfective → \*simultaneous interpretation

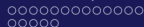


## Differences in the Simple Past

In CFs, by contrast, PAST is **always** “fake”.

**Nonetheless** there is a (different) interaction with aspect:

- ▶ States/imperfectives are present oriented.
- ▶ Perfectives are **forward** shifted.



## Differences in the Simple Past

(24) If the student knew the answer, they would be calmer.

[know the answer] = state → present

(25) If it was raining (right now), the snow would melt.

[be raining] = progressive → present

(26) If we cancelled the exam (tomorrow), the students would celebrate.

[cancel the exam] = event → future



In both SOT and CFs, Past Perfect yields back-shifted readings.

a “second layer” of PAST.

- ▶ In CFs this is straightforward:

(27) If the student had known the answer yesterday, they would have been calmer.

- ▶ But in SOT, somewhat more complicated. . .



## Differences in the Past Perfect

Past Perfect with the state in (28) is back-shifted, as expected.

- (28) a. She said that she had been in Montreal.  
 b. She said that she **was** in Montreal.

Similarly with the perfective event in (29).

- (29) a. They claimed someone had called them.  
 b. They claimed someone **called** them.

**But the same readings are available with the simple past!**





Finally: different interactions with **present** tense.

- ▶ SOT: present-under-past results in “double access” readings.

(30) She said that she is in Montreal.

She said: “I am in Montreal.” *And she still is.*  
PRES (unlike PAST) is **real**.

- ▶ CFs: present tense is impossible.

Fake PAST is required across the board.



## In sum:

CFs and SOT interpretations are systematically **different**:

	CFs	SOT
Impf / State	simultaneous	simultaneous <i>or</i> back-shifted
Pfv Event	forward-shifted	back-shifted
Perfect	back-shifted	back-shifted
Present	<i>n/a</i>	"double-access"

This should **surprise** us if both have the same "fake" PAST.



## Section 4

Which fake pasts are real?



## Finding the real fake PAST

“Fake” PAST has different interpretive effects in SOT and CFs.

→ so perhaps only one has **real** “fake” PAST.

- ▶ One has truly uninterpreted PAST features on T.
- ▶ The other has regular semantic PAST tense.

**But which one is which?**



## Finding the real fake PAST

A problem for fake PAST in SOT: **locality**

- ▶ If PAST is “fake” it needs to be licensed.
- ▶ Syntactic licensing is always subject to locality requirements.
- ▶ SOT requires licensing between matrix and embedded T:
  - ▶ This is a *cross-clausal* relationship.
  - ▶ Across a *finite* clause boundary.
  - ▶ This is what locality is *designed* to exclude.

In more detail: Zeijlstra (2012) ; Grønn and von Stechow (2010).



## Zeiljstra (2012): Upwards Agree

Standard Agree: Probes (uF) look **down**.

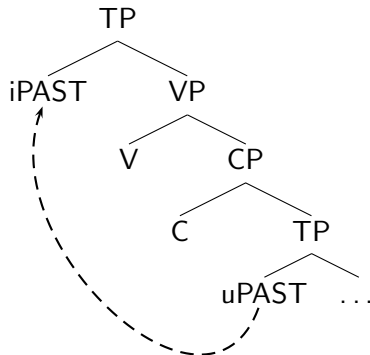
Upwards Agree: Probes (uF) look **up**.

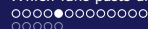
- ▶ Used to account for Negative Concord, Inflection Doubling, **Sequence of Tense**.
- ▶ Constrained by **Relativized Minimality**:
  - ▶ Not possible across another [iF] of the same **type**
- ▶ Also constrained by **phases**.



## Zeiljstra (2012): Upwards Agree

Upwards Agree as applied to SOT:





## Grønn and von Stechow (2010): Feature Transmission (following Heim 2008)

**Basic idea:** how do bound pronouns get their features?

- (31) Only Aaran said that **her** bike was stolen.  
→ Zac didn't say that **his** bike was stolen.

If tenses are pronouns (Partee, 1973), we expect the same thing:

- (32) Aaran said ( $t_1$ ) that her bike was ( $t_1$ ) stolen.

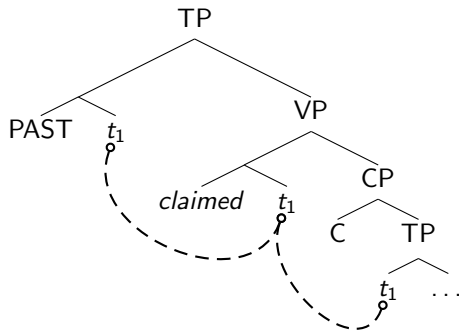




## Grønn and von Stechow (2010): Feature Transmission

For Grønn and von Stechow:

- ▶ Embedded  $t_1$  is bound by matrix **verb**.
- ▶ PAST feature is transmitted via two binding relations.





## Finding the real fake PAST

## Locality problem 1: licensing across domains

A **general theme**: some constituents **block** syntactic relations.

Barriers → Phases / Spell-Out Domains.

**What is a phase?** A constituent that gets **spelled out** before the derivation continues.

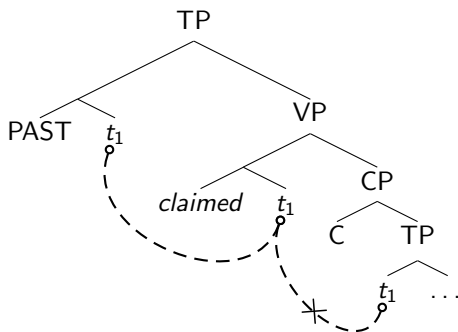
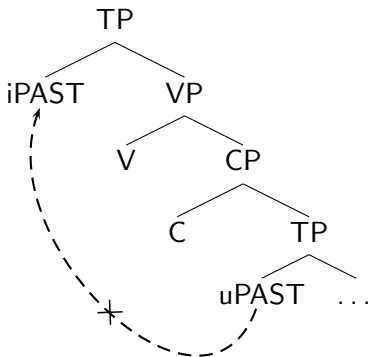
“Spelled out” = phonologically realized and semantically interpreted.

Which constituents are phases? **vP**, **DP**, **CP**.



## Finding the real fake PAST

## Locality problem 1: licensing across domains





## Finding the real fake PAST

## Locality problem 2: licensing across the matrix verb.

**Verbs block inflection.** In English, this is often referred to as “affix hopping”.

A progressive auxiliary blocks PAST from appearing on V:

(33) My friend was \*walked / \*walkinged / ✓walking.

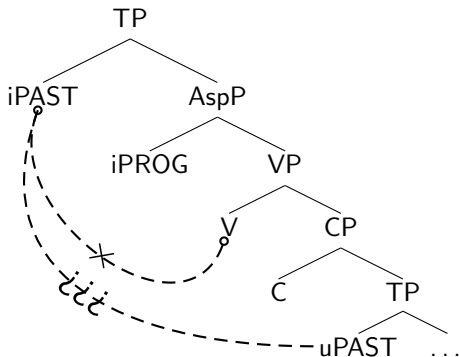
But SOT is possible when the matrix verb is progressive:

(34) My friend **was** *saying* that she **liked** Toronto.



## Locality problem 2: licensing across the matrix verb.

Given the impossibility of licensing uPAST on V, how can uPAST reach embedded T?





## A non-locality consideration:

If PAST is “fake”, interpretation should resemble present tense.

- ▶ Present is “default” tense.
- ▶ Without shifting by PAST, time of evaluation stays at ‘now’.



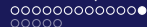
## A non-locality consideration:

How does the present tense interact with aspect?

(35) She is in Montreal. state → now

(36) It is snowing. progressive → now

(37) We leave (tomorrow). perfective → futurate / planned



## Finding the real fake PAST

**In sum:**

**CFs**, not SOT, resemble present tense:

	CFs	SOT	Present
Impf / State	simult.	simult. <i>or</i> back-shifted	simult.
Pfv Event	forward-shifted	back-shifted	forward-shifted
Perfect	back-shifted	back-shifted	back-shifted

And **SOT**, not CFs, would violate locality of licensing.

Conclusion: **CFs** involve real “fake” PAST, SOT doesn’t





## Why is CF PAST present-oriented?

Suggested above that uPAST = present.

- ▶ Why would this be? Assumes present = **absence** of tense.

Reasons to think this is wrong (for English):

- ▶ Overt copula and auxiliary in the present tense (Bjorkman, 2011)

But if CFs can be specified as [iPRES], how can this feature co-occur with [uPAST]?



## Why is CF PAST present-oriented?

On the other hand if present CFs do **not** have [iPRES]:

**three-way** feature system corresponds to a **two-way** meaning difference:

[iPAST]	→	semantic past
[iPRES]	}	semantic present
∅		

(Another issue: do iPAST and uPAST co-occur in past CFs?)



## Resolving the (apparent) conflict

This is resolved if we decompose tense features.

(Cowper, 2003, 2005; Grønn and von Stechow, 2010, a.o.):

**ANCHOR:** (or *DEIXIS*) the time at which a clause is interpreted

vs.

**PAST:** an optional feature that introduces back-shifting.



## Resolving the (apparent) conflict

- ▶ Semantic past (relative to now) =  $\llbracket \text{iANCHOR} + \text{iPAST} \rrbracket$
- ▶ Semantic present =  $\llbracket \text{iANCHOR} \rrbracket$  alone
- ▶ Morphological realization:
 

PAST, ANCHOR	↔	-ed (i.e. simple past)
ANCHOR	↔	-∅/-s (i.e. simple present)



Why is fake past present?

## In sum:

Attributing uPAST to CFs → consequences for inflectional features.

- ▶ Decomposing tense maintains idea that PRES is “less specified”
- ▶ More (featurally) complex PAST can “pre-empt” PRES in the morphology

Remaining issue: The past perfect



## Section 5

## Implications



If CFs, but not SOT, involve licensing, what does this tell us?

**Possibly:** forms that occur in SOT are *semantically* anterior.

But only forms that occur in CFs are featurally  
PAST.



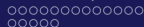
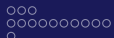
## A recurring puzzle: PERFECT vs PAST

In English:

- ▶ PERFECT participates in SOT (Stowell, 2007)
- ▶ PERFECT expresses non-finite pastness.

but PERFECT can't mark CFs.





## A recurring puzzle: PERFECT vs PAST

In French / Italian: preterite largely supplanted by compound past (=perfect)

- ▶ compound PAST participates in SOT
- ▶ compound PAST expresses non-finite pastness

but **still** not possible in CFs, which require IMPF past

Points to a continued **featural** distinction between compound and simple pasts, even as functional difference changes.



## More generally:

If licensing is responsible for CF inflection, what about doubled particles/modals?

Russian (Sergei Tatevosov, p.c.):

- (38) a. Ešli **by** Dzon umer, my poxoronili **by** ego  
 if SUBJ John died we buried SUBJ he.ACC  
 na gore.  
 on mountain  
 'If John died, we would bury him on the mountain.'



## More generally:

Non-standard English (Stowell (2008): English “Konjunktiv II”)

(39) If you hadn't **a** done that, they wouldn't **a** left  
                                   **of**  **of**  
   **'ve**  **'ve**

(40) %/\* If you hadn't have done that, they wouldn't have left.



## Next steps:

When looking at less described languages, grounds for distinguishing PAST / PERFECT / PFV.

- ▶ All three are associated with “anterior” meanings
- ▶ But (perhaps) only true PAST can be used in CFs

Back to SOT:

- ▶ typologically restricted
- ▶ how do simultaneous readings compose?



Thank you!

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