

***While we attended a talk: marking  
access to the information in Khanty  
temporal constructions***

**15th Conference on Typology and Grammar for Young Scholars, 23.11.18**

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# Introduction

## What?

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- Temporal participial constructions denoting Simultaneity

## Where?

- Northern Khanty < Khanty < Ob-Ugric < Ugric < Uralic
- Kazym variety, data from fieldwork in Kazym (2018)

## Why?

- They display nontrivial discourse-semantic properties

## How?

- A cognitive-functional account in the framework of Cognitive Grammar (Langacker 1987, 1991), partly inspired by Mental Spaces Theory (Fauconnier 1994, Fauconnier & Sweetser 1996)

# Outline of the talk

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- ✱ Introduction
- ✱ **Temporal relations and evidentiality**
- ✱ **Marking access to the information**
  - ✱ *Perspective and mode of access*
  - ✱ *Perspective and cognition*
  - ✱ *Perspective and factuality*
- ✱ **Cognitive interpretation**
- ✱ **Conclusion**

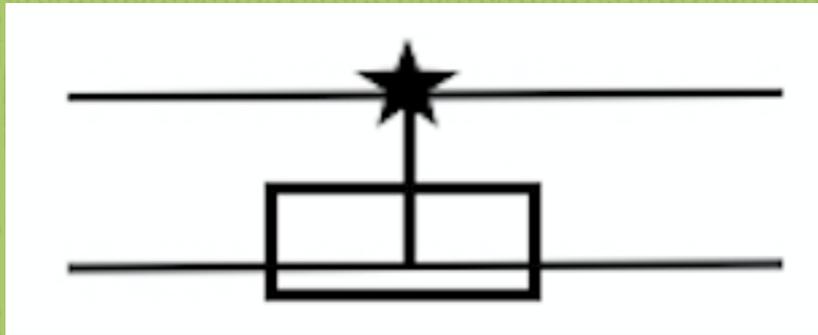
# Temporal relations...

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Temporal relations between events:

- Anteriority — ‘after P, Q’, ‘until P, Q’
- Posteriority — ‘before P, Q’, ‘until P, Q’
- Simultaneity — ‘when P, Q’, ‘while P, Q’
  - SIOVER = Simultaneity Overlap, vs. SIDUR = Simultaneity Duration (Kortmann 1998)

# Temporal relations...



## Simultaneity Overlap

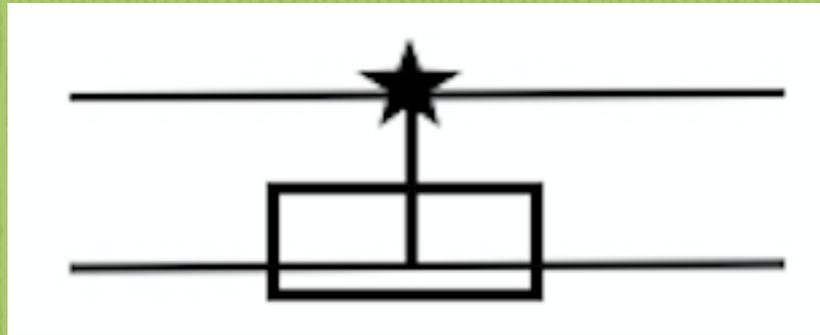
*When he was eating I left.* ‘when P, Q’, ‘until P, Q’

*When he came I left.*

- Simultaneity — ‘when P, Q’, ‘while P, Q’

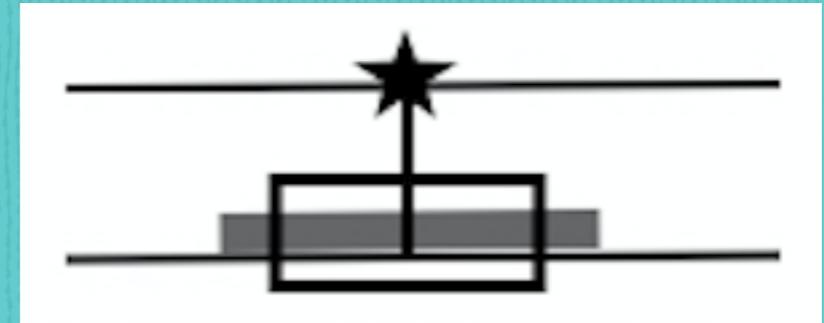
- SIOVER = Simultaneity Overlap, vs. SIDUR = Simultaneity Duration (Kortmann 1998)

# Temporal relations...



## Simultaneity Overlap

*When he was eating I left.*  
*When he came I left.*



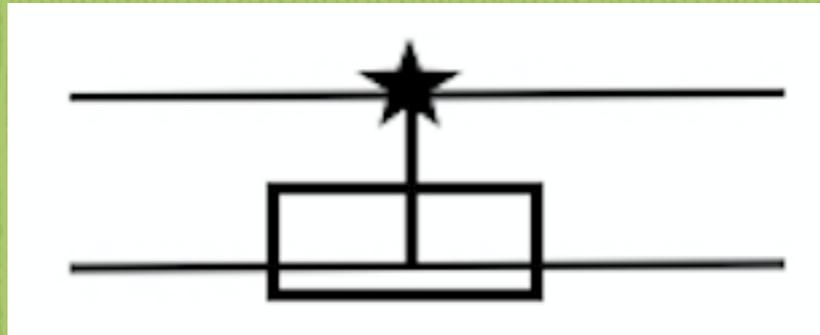
## Simultaneity Duration

*While he was eating I left.*  
*While he was eating I was singing.*

- Simultaneity — ‘when P, Q’, ‘while P, Q’

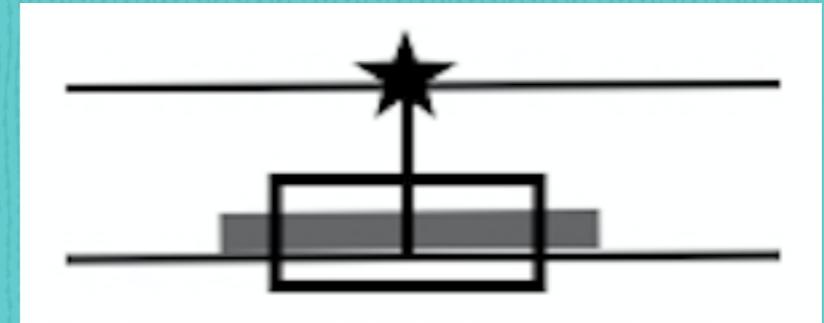
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# Temporal relations...



## Simultaneity Overlap

*When he was eating I left.*  
*When he came I left.*



## Simultaneity Duration

*While he was eating I left.*  
*While he was eating I was singing.*

**In Khanty:**  
**V<sub>PTCP</sub> saxət**

**In Khanty:**  
**V<sub>PTCP</sub> mär(ən)**

# Temporal relations...

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Punctual context, both *mär* (SIDUR) and *saxət* (SIOVER):

(1a) [**oms-əm mär-εw-ən**]    pɛtʼa-jen    juxt-əs  
sit-PTCP.PST while-1PL-LOC    Pete-2SG    come-PST[3SG]  
'While we were sitting Pete came.'

(1b) [**oms-t-εw                    saxət**]    pɛtʼa-jen    juxt-əs  
sit-PTCP.NPST-1PL when    Pete-2SG    come-PST[3SG]  
'When we were sitting Pete came.'

# Temporal relations...

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Durative context, only *mär* (SIDUR) fully acceptable:

(2a)  $\rho\epsilon\tau^{\prime}a\text{-jen}$     [ **$r\epsilon\pi\iota\tau\text{-}\epsilon\mu$**      **$m\ddot{a}r\text{-}\alpha\lambda\text{-}\epsilon\eta\eta$** ]     $a\text{ri}\eta\text{-}\epsilon\varsigma$   
Pete-P.2sg    work-PTCP.PST    while-3sg-LOC    sing-PST[3sg]  
‘While Pete was working he sang.’

(2b) ? $\rho\epsilon\tau^{\prime}a\text{-jen}$     [ **$r\epsilon\pi\iota\tau\text{-}t\text{-}\alpha\lambda$**      **$s\alpha\chi\epsilon\tau$** ]     $a\text{ri}\eta\text{-}\epsilon\varsigma$   
Pete-P.2sg    work-PTCP.NPST-3SG    when    sing-PST[3sg]  
Exp.: ‘When Pete was working he sang.’

# ... and evidentiality

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## Evidentiality in Northern Khanty:

(3a) aśe-n            jɤxt-əs  
father-P.2sg    come-PST[3sg]  
'Your father came.'

(3b) aśe-n            jɤxt-m-aλ  
father-P.2sg    come-EV.PST-3sg  
'Your father came (I heard/I understood/I was told).'

## ... and evidentiality

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Neutral context, both *mär* (SIDUR) and *saxət* (SIOVER):

(4a) [ma **uλ-əɱ** **mär-ɛɱ-ən**]  
I sleep-PTCP.PST while-1sg-LOC

(4b) [ma **uλ-t-ɛɱ** **saxət**]  
I sleep-PTCP.NPST-1sg when

pet'a-jen ow-ɛɱ **sɛŋk-ɛɱ-əs**

Pete-P.2sg door-1sg knock-MOM-PST[3sg]

‘While; when I was sleeping Pete **knocked** at my door.’

## ... and evidentiality

---

Unwitnessed main event, only *mär* (SIDUR) fully acceptable:

(5a) [ma **υλ-ə̃m** **mär-ε̃m-ə̃n**]  
I sleep-PTCP.PST while-1sg-LOC

(5b) ?[ma **υλ-t-ε̃m** **saxət**]  
I sleep-PTCP.NPST-1sg when  
pet'a-jen ow-ε̃m **sε̃ŋk-m-aλ**  
Pete-P.2sg door-1sg knock-EV.PST-3sg

'While; when I was sleeping Pete **apparently knocked** at my door (= I didn't hear).'

## ... and evidentiality

Unwitnessed main event, only *mär* (SIDUR) fully acceptable:

(5a) [ma uλ-əm mär-εm-ən]

I sleep-PTCP.PST while-1sg-LOC

(5b) ?[ma uλ-t-εm saxε]

I sleep-PTCP.NPST-1sg when

pet'a-jen ow-εm sεŋk-m-aλ

Pete-P.2sg door-1sg knock-EV.PST-3sg

'While; when I was sleeping Pete **apparently knocked** at my door (= I didn't hear).'

**Why should mär be the only option with evidentiality?**

## ... and evidentiality

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*mär* => the Speaker did not witness the main event:

(6) [ma ul-əm mär-əm-ən]

I sleep-PTCP.PST while-1sg-LOC

pet'a-jen ow-əm **σηκ-əm-əs**,

Pete-P.2sg door-1sg knock-MOM-PST[3sg]

'While I was sleeping Pete **knocked** at my door.'

+ **ma än χελ-s-əm** / ?ma nuχ werlə-s-əm  
I NEG hear-PST-1SG.SG I up wake-PST-1SG  
'I didn't hear.' 'I woke up.'

## ... and evidentiality

*mär* => the Speaker did not witness

Why does *mär* require  
the non-firsthand  
access implication?

(6) [ma uλ-əm mär-εm-ən]  
I sleep-PTCP.PST while-1sg-LOC

pet´a-jen ow-εm **σηk-εm-əs**,  
Pete-P.2sg door-1sg knock-MOM-PST[3sg]

‘While I was sleeping Pete **knocked** at my door.’

+ **ma än χελ-s-εm** / ?ma nuχ werλə-s-əm  
I NEG hear-PST-1SG.SG I up wake-PST-1SG  
‘I didn’t hear.’ ‘I woke up.’

## ... and evidentiality

---

*saxət* => the Speaker did witness the main event:

(6a) [ma **uλ-t-εm** **saxət**]

I sleep-PTCP.NPST-1sg when

pet'a-jen ow-εm **senk-εm-əs**,

Pete-P.2sg door-1sg knock-MOM-PST[3sg]

'When I was sleeping Pete knocked at my door.'

+ ?ma än χθλ-s-εm / ma nuχ **wεrλə-s-εm**  
I NEG hear-PST-1SG.SG I up wake-PST-1SG  
'I didn't hear.' 'I woke up.'

# ... and evidentiality

*saxət* => the Speaker did witness the main event:

(6a) [ma uλ-t-εm saxət]

I sleep-PTCP.NPST-1sg when

pet'a-jen ow-εm *senk-εm-əs*,

Pete-P.2sg door-1sg knock-MOM-PST[3sg]

'When I was sleeping Pete knocked at my door.'

And vice versa?

+ ?ma än χθλ-s-εm / ma nuχ wεrλə-s-εm  
I NEG hear-PST-1SG.SG I up wake-PST-1SG  
'I didn't hear.' 'I woke up.'

# Temporal relations and evidentiality

	Witnessed main event	Unwitnessed main event
mär 'while'	+	+
saxət 'when'	+	?

A proposed explanation:

- Normally, temporal constructions include the **OBSERVATION frame** requiring a directly perceptible main event (cf. the notion of frame, Fillmore 1982)
- Surprisingly, *mär* can also code simultaneity with «backstage», unwitnessed main events

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- ✱ Cognitive interpretation
- ✱ Conclusion

# Marking access to the information

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Unlike *saxət*, *mär* can code simultaneity with «backstage», unwitnessed main events

Questions addressed here:

- From whose perspective is an event witnessed or unwitnessed?
- What kind of information is regarded as «backstage»?

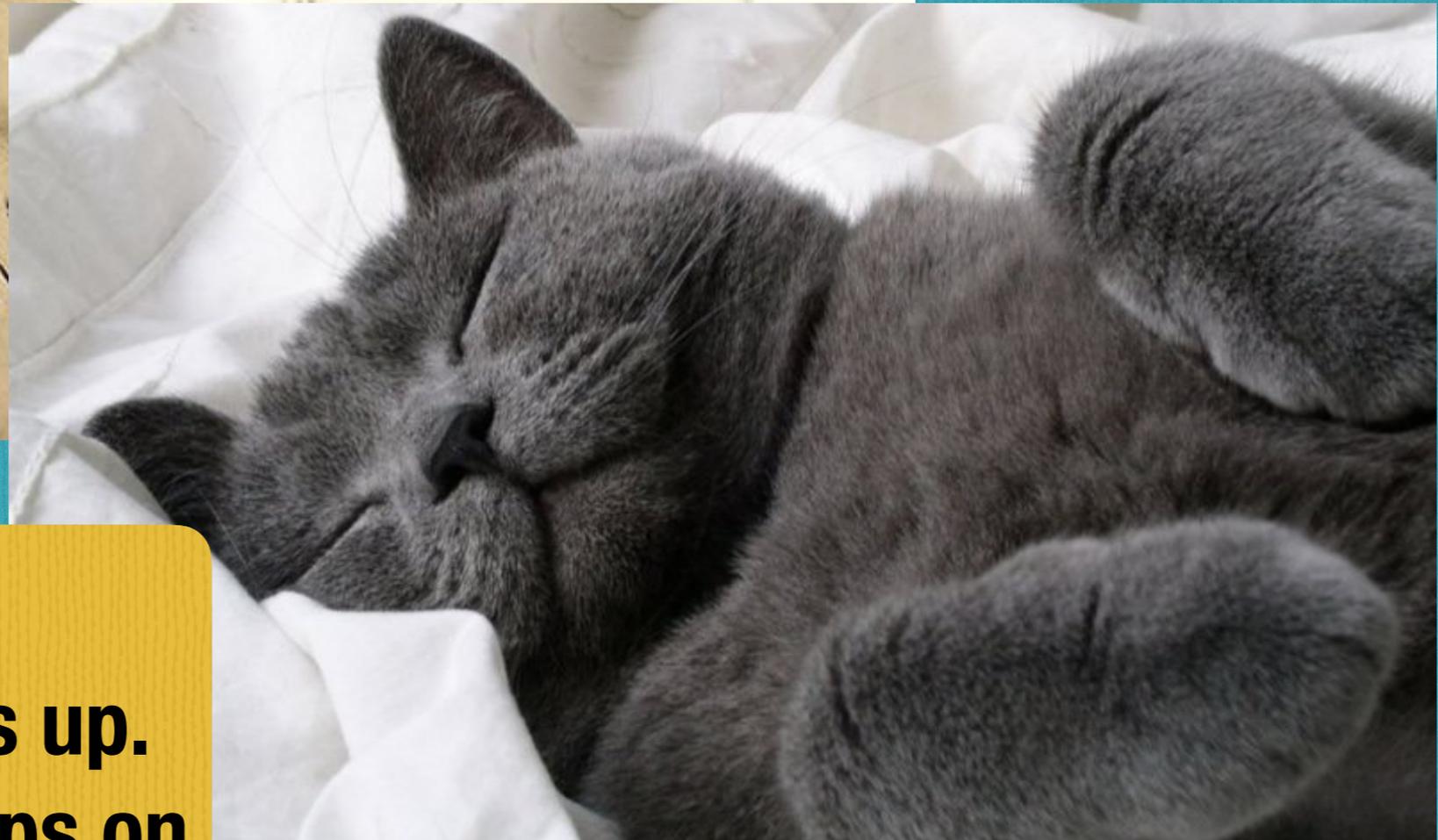
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**Pete & Speaker's door**



- Speaker**
- 1. Hears and wakes up.**
  - 2. Doesn't hear, sleeps on**

# Perspective and mode of access

1. Speaker = Dep Subj, **saxət** => **Speaker's perspective and firsthand access**

(6b) [ma uλ-t-εm saxət]

I sleep-PTCP.NPST-1sg when

pet'a-jen ow-εm σεηk-εm-əs,

Pete-P.2sg door-1sg knock-MOM-PST[3sg]

'When I was sleeping Pete knocked at my door.'

+ ?ma än χθλ-s-εm /

I NEG hear-PST-1SG.SG

'I didn't hear.'

ma nuχ wεrλə-s-εm

I up wake-PST-1SG

'I woke up.'

# Perspective and mode of access

1. Speaker = Dep Subj, mär => **Speaker's perspective but no firsthand access**

(6a) [ma ul-əm mär-εm-ən]

I sleep-PTCP.PST while-1sg-LOC

pet'a-jen ow-εm seŋk-εm-əs,

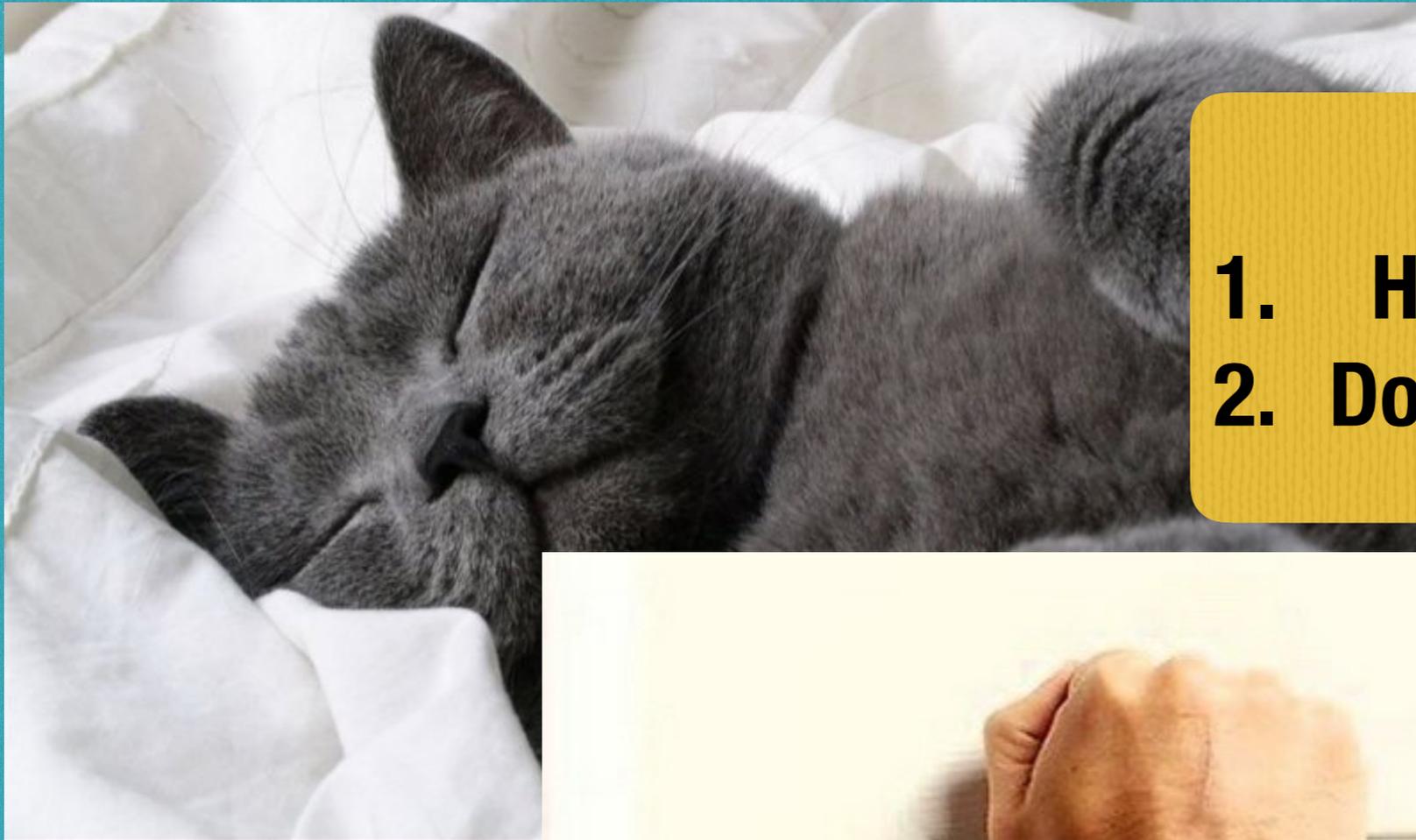
Pete-P.2sg door-1sg knock-MOM-PST[3sg]

'While I was sleeping Pete knocked at my door.'

+ ma än χəλ-s-εm / ?ma nuχ wεrλə-s-əm  
I NEG hear-PST-1SG.SG I up wake-PST-1SG

'I didn't hear.'

'I woke up.'



## **Pete**

- 1. Hears and wakes up.**
- 2. Doesn't hear, sleeps on**

**Speaker & Pete's door**



# Perspective and mode of access

2. Pete = Dep Subj, Speaker = Main Subj, **saxət => Pete's (= Protagonist's) perspective and firsthand access**

(7a) [pɛt´a-jen    uλ-t-aλ    saxət]

Pete-P.2sg    sleep-PTCP.NPST-3sg    when

ma    ow-əλ    σεηk-s-εm,

I    door-3sg    knock-PST-1sg

‘While Pete was sleeping I knocked at his door.’

+ ?λɰw    än    χəλ-s-əλλε    /

I    NEG    hear-PST-3SG.SG

‘He didn’t hear.’

λɰw    nuχ    wεrλə-s

I    up    wake-PST[3sg]

‘He woke up.’

# Perspective and mode of access

2. Pete = Dep Subj, Speaker = Main Subj, mär => **Pete's (Protagonist's) perspective but no firsthand access**

(7b) [pɛt´a-jen uλ-əɱ mär-äλ-ən]  
Pete-P.2sg sleep-PTCP.PST while-3sg-LOC

ma ow-əλ σεηk-s-εɱ,  
I door-3sg knock-PST-1sg

‘While Pete was sleeping I knocked at his door.’

+ λɰw än χəλ-s-əλλε / ?λɰw nuχ wεrλə-s  
I NEG hear-PST-3SG.SG I up wake-PST[3sg]  
‘He didn’t hear.’ ‘He woke up.’



**Pete**  
**Works and says something**

- Speaker**
- 1. Hears it**
  - 2. Doesn't hear**

# Perspective and mode of access

3. Pete = Dep & Main Subj, **saxət**, ?mär => **Speaker's perspective and firsthand access**

(8a) ?pet´a-jen [rəpit-əm mär-aλ-ən]  
Pete-P.2sg work-PTCP.PST while-3sg-LOC

(8b) pet´a-jen [rəpit-t-aλ saxət]  
Pete-P.2sg work-PTCP.NPST-1sg when

muλti lupə-s  
what.INDEF say-PST[3sg]

‘While; when Pete was working he said something.’

# Perspective and mode of access

3. Pete = Dep & Main Subj, mär, ?saxət => **Speaker's perspective but no firsthand access**

(9a)    πετ´α-jen    [rəpit-əm    mär-aλ-ən]  
         Pete-P.2sg    work-PTCP.PST    while-3sg-LOC

(9b)    ?πετ´α-jen    [rəpit-t-aλ    saxət]  
         Pete-P.2sg    work-PTCP.NPST-1sg    when

         multi    lup-m-aλ  
         what.INDEF    say-EV.PST-3sg

‘While; when Pete was working he apparently said something (I didn’t hear).’

# Perspective and mode of access

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## Interim summary:

- «Backstage» event as a non-firsthand information
- Speaker's perspective unless (s)he is a part of the observed situation => shift to Protagonist

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  - ✱ *Perspective and factuality*
- ✱ Cognitive interpretation
- ✱ Conclusion

**Pete thinks, learns or remembers something**



**Can the Speaker witness these events?**

# Perspective and cognition

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## 1. Main event 'said' observable by the Speaker

(8a) ?pet´a-jen      [rəpit-əm      mär-aλ-ən]  
Pete-P.2sg      work-PTCP.PST      while-3sg-LOC

(8b) pet´a-jen      [rəpit-t-aλ      saxət]  
Pete-P.2sg      work-PTCP.NPST-1sg      when

muλti      lupə-s  
what.INDEF      say-PST[3sg]

‘While; when Pete was working he said something.’

# Perspective and cognition

---

## 2. Main event 'learn' NOT observable by the Speaker

(10a)  $\rho\epsilon\tau'\alpha\text{-jen}$     **[ $r\epsilon\pi\text{it-}\epsilon\text{m}$        $m\ddot{a}r\text{-}\alpha\lambda\text{-}\epsilon\text{m}$ ]**  
Pete-P.2sg      work-PTCP.PST    while-3sg-LOC

(10b)  $? \rho\epsilon\tau'\alpha\text{-jen}$     **[ $r\epsilon\pi\text{it-t-}\alpha\lambda$        $s\alpha\chi\epsilon\tau$ ]**  
Pete-P.2sg      work-PTCP.NPST-1sg    when

$\mu\alpha\lambda\text{ti}$        **$u\check{s}\text{-}\alpha$        $w\epsilon r\text{-}\epsilon s$**   
what.INDEF    mind-dat    make-pst[3sg]

'While; when Pete was working he learned something.'

# Perspective and cognition

3. Main event ‘remembered’ *metonymically* observable by the Speaker through Pete’s reaction

(11a) ?pɛt´a-jen      [rɐpit-əm      mār-aλ-ən]  
Pete-P.2sg      work-PTCP.PST      while-3sg-LOC

(11b) pɛt´a-jen      [rɐpit-t-aλ      saxət]  
Pete-P.2sg      work-PTCP.NPST-1sg      when

muλti      nɐmɐλm-əs  
what.INDEF      remember-PST[3sg]

‘While; when Pete was working he remembered something.’

# Perspective and cognition

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## 4. Neither event observable by the Speaker, both OK (???)

(12a)  $\rho\epsilon\tau\acute{\alpha}\text{-jen}$  [**nəms-əm**      **mär-aλ-ən**]  
Pete-P.2sg      think-PTCP.PST      while-3sg-LOC

(12b)  $\rho\epsilon\tau\acute{\alpha}\text{-jen}$  [**nəms-t-aλ**      **saxət**]  
Pete-P.2sg      think-PTCP.NPST-1sg      when

$\acute{\sigma}\text{it}$       **uš-a**      **wεr-s-əλλε**  
DEM      mind-dat      make-pst-3sg.sg

‘While; when Pete was thinking he learned that.’

# Perspe

Speaker cannot observe by himself  
but takes Pete's (Protagonist's)  
perspective

## 4. Neither event ob

(12a)  $\rho\epsilon\tau'\alpha\text{-jen}$  [nəms-əm mār-aλ-ən]  
Pete-P.2sg think-PTCP.PST while-3sg-LOC

(12b)  $\rho\epsilon\tau'\alpha\text{-jen}$  [nəms-t-aλ saxət]  
Pete-P.2sg think-PTCP.NPST-1sg when

σίτ uš-a wεr-s-əλλε  
DEM mind-dat make-pst-3sg.sg

‘While; when Pete was thinking he learned that.’

# Perspective and mode of access

---

## Interim summary:

- «Backstage» event as a non-firsthand information
- «Backstage» event as an unobservable cognitive process
- Speaker's perspective unless (s)he is a part of the observed situation or both events are third party's cognitive processes => shift to Protagonist

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- ✱ Conclusion

A close-up photograph of a person's hand holding the stem of a core of an eaten apple. The apple core is partially eaten, showing the white flesh and the remaining red and yellow skin. The background is a blurred outdoor setting with green foliage and a building with a corrugated metal roof.

**Pete has just eaten  
five apples**

**Could the Speaker have  
observed this event?**

# Perspective and factuality

1. Main event ‘ate an apple’ observable (*saxət*) or not observable (*mär*) by the Speaker

(13a) [päsən    χonəŋ-ən    **oms-əm**    **mär-εw-ən**]  
table            at-LOC            sit-PTCP.PST            while-3sg-LOC

(13b) [päsən    χonəŋ-ən    **oms-t-εw**    **saxət**]  
table            at-LOC            sit-PTCP.NPST-1sg    when

pet´a-jen    jabloka    λε-s  
Pete-P.2sg    apple    eat-PST[3sg]

‘While; when we were sitting at the table Pete ate an apple.’

# Perspective and factuality

## 2. Main event ‘ate five apples’ as a factual information, not observable by the Speaker

(14a) [päsán χonəŋ-ən **oms-əm** **mär-εw-ən**]  
table at-LOC sit-PTCP.PST while-3sg-LOC

(14b)?[päsán χonəŋ-ən **oms-t-εw** **saxət**]  
table at-LOC sit-PTCP.NPST-1sg when

pət´a-jen wεt jabloka λε-s  
Pete-P.2sg five apple eat-PST[3sg]

‘While; when we were sitting at the table Pete ate five apples.’

# Perspective and mode of access

---

## Interim summary:

- «Backstage» event as a non-firsthand information
- «Backstage» event as an unobservable cognitive process
- **«Backstage» event as a factual information**
- Speaker's perspective unless (s)he is a part of the observed situation or both events are third party's cognitive processes => shift to Protagonist

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- ✱ **Cognitive interpretation**
- ✱ Conclusion

# Cognitive interpretation

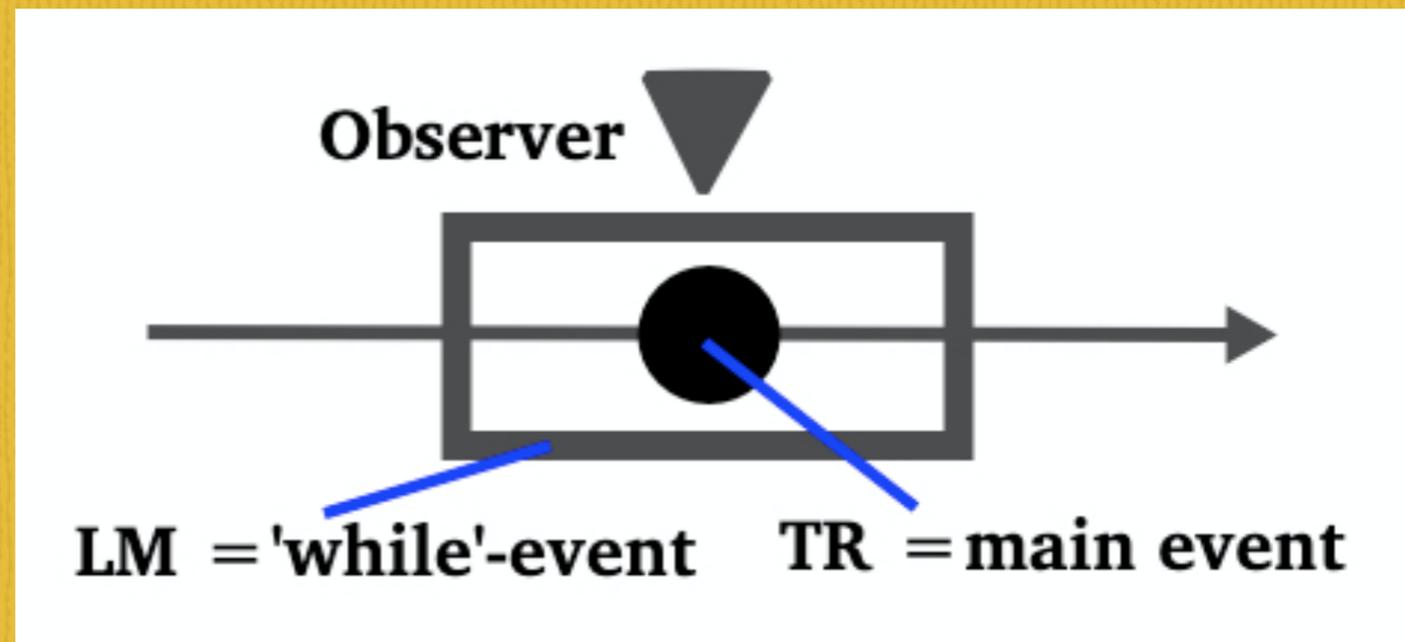
SIDUR meaning (while, пока, mär) can be represented using the container image schema (Lakoff 1987)

- Dependent event (= Landmark, LM) is a container in which the main event (= Trajector, TR) is placed inside
- This container is extended lengthwise on a time axis
- Opacity of the container makes the TR *invisible* for the dependent event participants or any exterior observer (except coreferent subjects!)
- Cf. SIOVER meaning with two visible overlapping events

# Cognitive

SIDUR meaning (while)  
the container image so

## SIDUR 'while'



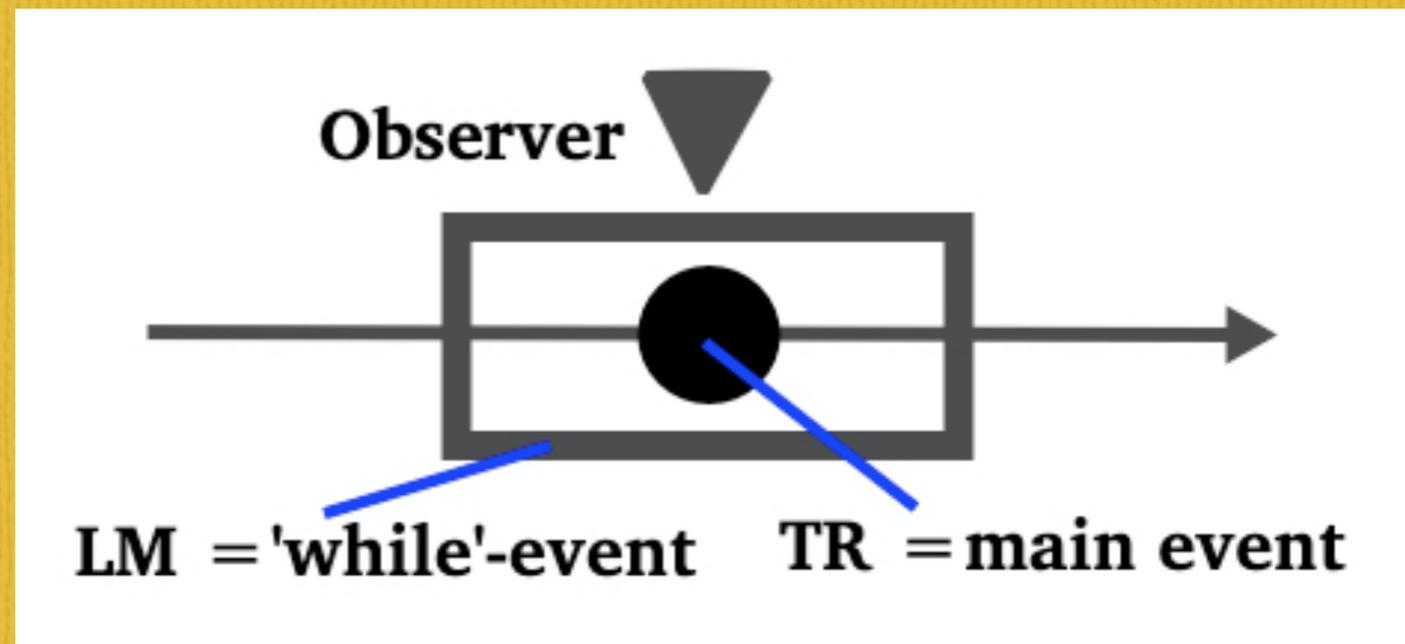
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# Cognitive

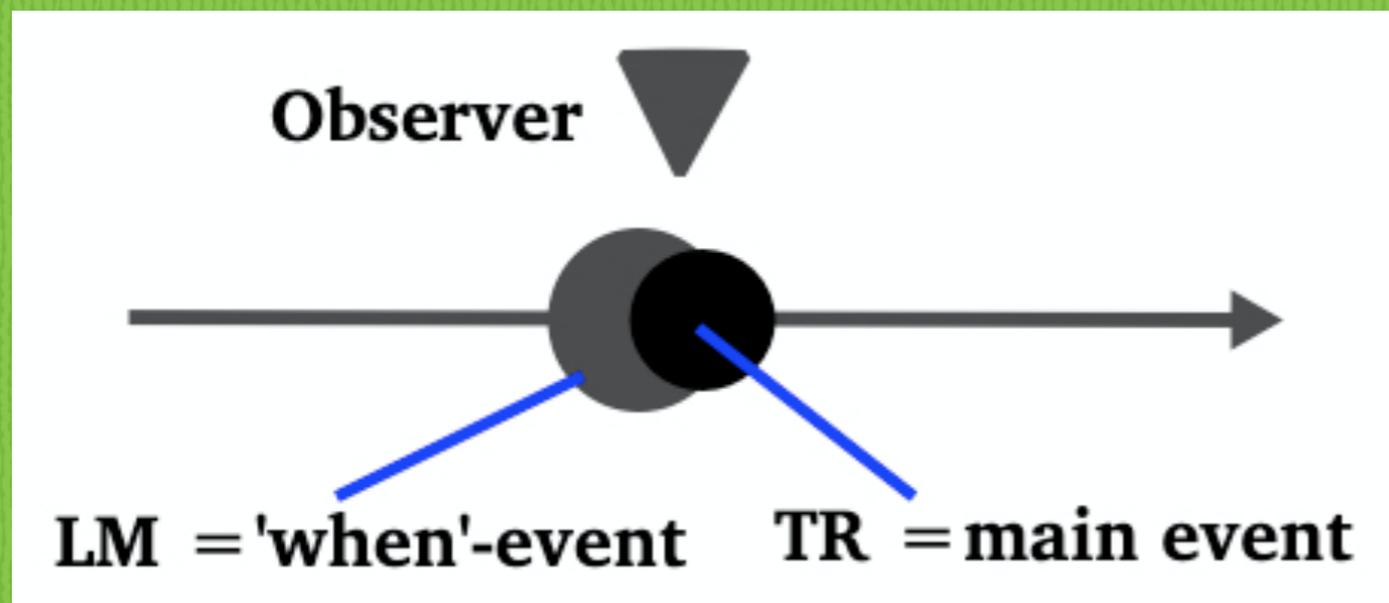
SIDUR meaning (while)  
the container image so

- Dependent event (= Landmark, LM) is a container in which the main event (= Trajectory, TR) is placed inside

## SIDUR 'while'



## SIOVER 'when'



wise on a time axis

the TR *invisible* for the  
any exterior observer

ible overlapping events

# Cognitive interpretation

---

Recall the durative context in (2a):

(2a)  $\rho\epsilon\tau^{\prime}a$ -jen    [**rəpɪt-əm**    **mär-aλ-ən**]    arij-əs  
Pete-P.2sg    work-PTCP.PST    while-3sg-LOC    sing-PST[3sg]  
‘While Pete was working he sang.’

In this kind of examples there appear to be **no restrictions on using *mär* => no non-firsthand access implication (?). Why?**

# Cognitive interpretation

A metaphorical approach to Perfective-Imperfective distinction in Slavic (Janda 2004):

- **PERFECTIVE IS A SOLID OBJECT:** perfective events are discreet, countable, have edges, perceptually salient etc.
- **IMPERFECTIVE IS A FLUID SUBSTANCE:** imperfective events are uncountable, shapeless, perceptually diffuse etc.

# Cognitive interpretation

A metaphorical approach to Perfective-Imperfective distinction in Slavic (Janda 2004):

- **PERFECTIVE IS A SOLID OBJECT:** perfective events are discreet, countable, have edges, perceptually salient etc.
- **IMPERFECTIVE IS A FLUID SUBSTANCE:** imperfective events are uncountable, shapeless, perceptually diffuse etc.

**Solid object** can occupy different amount of space within a container, it's necessary to evaluate its size, shape etc.

**Fluid substance** is evenly distributed within a container, no necessity to witness it visually.

# Cognitive

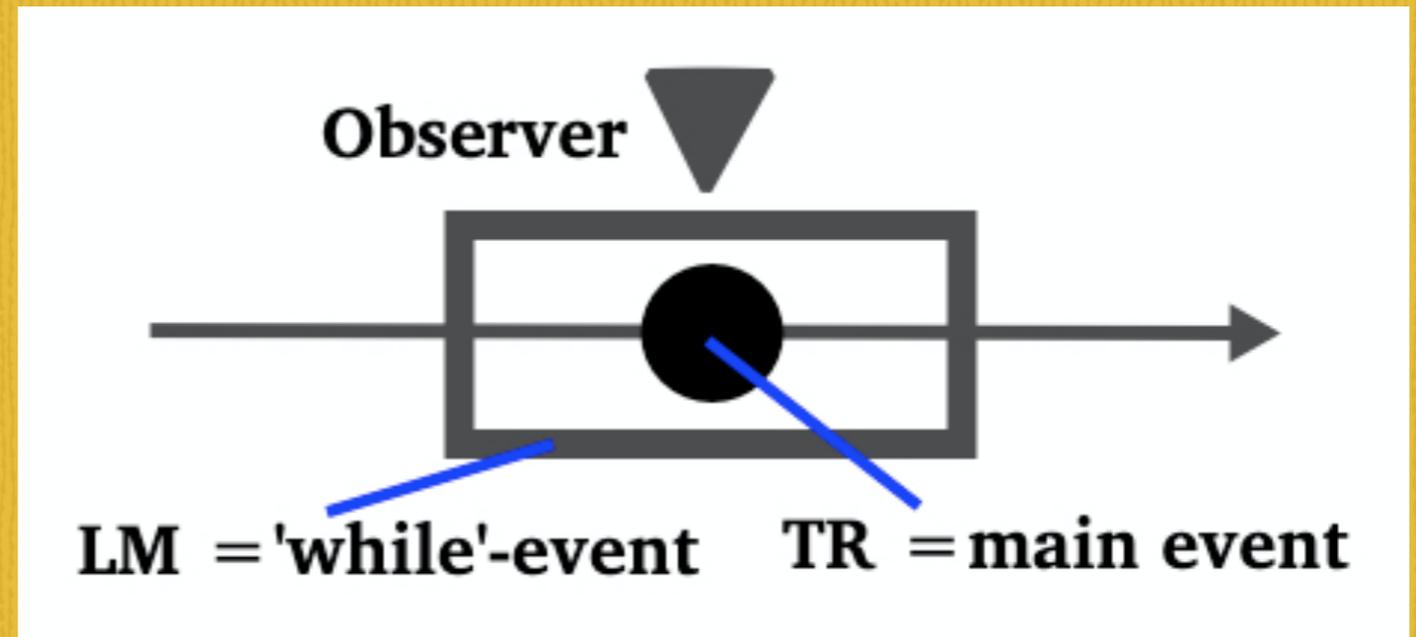
A metaphorical approach  
distinction in Slavic (Janda)

- **PERFECTIVE IS A SOLID OBJECT**: perfective events are discrete, countable, have edges, perceptually salient etc.
- **IMPERFECTIVE IS A FLUID SUBSTANCE**: imperfective events are uncountable, shapeless, perceptually diffuse etc.

**Solid object** can occupy different amount of space within a container, it's necessary to evaluate its size, shape etc.

**Fluid substance** is evenly distributed within a container, no necessity to witness it visually.

## Solid object + Container schema



# Cognitive

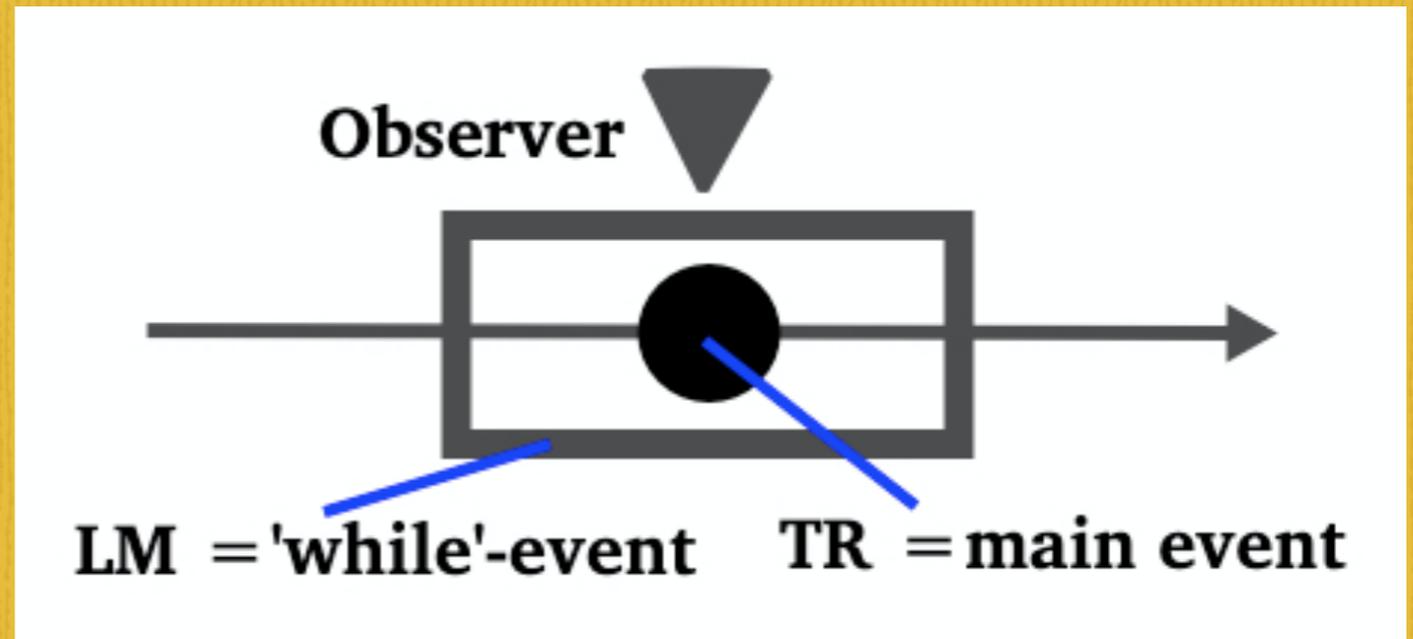
A metaphorical approach  
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- **PERFECTIVE IS A SOLID OBJECT**  
discreet, countable, have edges, perceptually current event
- **IMPERFECTIVE IS A FLUID**  
are uncountable, shape

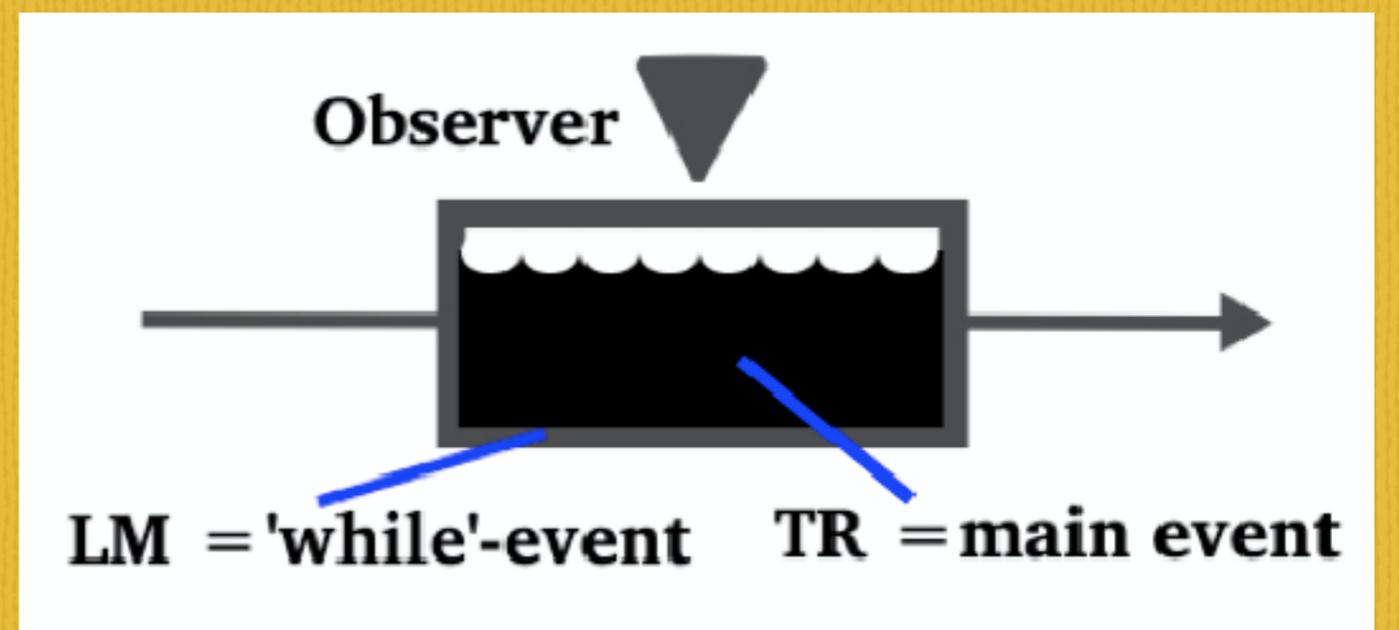
**Solid object** can occupy  
a container, it's necessary

**Fluid substance** is evenly  
necessity to witness it vis

## Solid object + Container schema



## Fluid substance + Container schema



# Outline of the talk

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- ✱ Introduction
- ✱ Temporal relations and evidentiality
- ✱ Marking access to the information
  - ✱ *Perspective and mode of access*
  - ✱ *Perspective and cognition*
  - ✱ *Perspective and factuality*
- ✱ Cognitive interpretation
- ✱ **Conclusion**

# Conclusion

- *Mär* is used to mark simultaneous events only without direct access to the perfective main event
- In case of Imperfective main event no restrictions are observed, because such events are evenly spread within the given time interval and require no special evaluation
- Accessibility of the main event is defined with respect to the Speaker > Protagonist
- Cases of inaccessibility include unwitnessed, factual information and cognitive processes (maybe more?)
- The analysis is expected to hold in other languages with a ‘when’/‘while’ distinction, such as Russian, English, German and many other

**Thank you for your  
attention!**

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