The Japanese marker '*tokoro da*': A case study in time and modality

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Topics of this talk

- Interplay between temporality and modality
- Semantic differences between lexical statives and derived statives

Outline

'*S-tokoro da/datta*'

- '*tokoro*' (lit. 'place', 'point') is grammatically a noun

  ➽'*S-tokoro*' roughly means 'point at which S'

- '*da / datta*' is the copula (Nonpast and Past)
- Temporal markings and aspectual properties affect the interpretation.

‘*S-tokoro da/datta*’

Non-stative S

(1) Kaigi-ga hazimaru tokoro da.
meeting-NOM begin-NONPAST TOKORO COP-NONPAST
‘The meeting is about to begin.’

(2) Kaigi-ga hazimaru tokoro datta.
meeting-NOM begin-NONPAST TOKORO COP-PAST
‘The meeting was about to begin.’

(3) Kaigi-ga hazimatta tokoro da.
meeting-NOM begin-PAST TOKORO COP-NONPAST
‘The meeting has just begun.’

(4) Kaigi-ga hazimatta tokoro datta.
meeting-NOM begin-PAST TOKORO COP-PAST
‘The meeting had just begun.’

'*S-tokoro da/datta*'

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Interpretation of tenses:

	Nonpast	*Past*
Matrix:	$S \leq R$	$R < S$
Embedded non-stative:	$R < E$	$E < R$

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Similar to the behavior of non-statives under other connectives:

(5) Kaigi-ga hazimaru { toki / mae / *ato / *uti }
meeting-NOM begin-NONPAST when / before / after / while
'before the meeting began / begins'

(6) Kaigi-ga hazimatta { toki / *mae / ato / *uti }
meeting-NOM begin-PAST when / before / after / while
'after the meeting began / begins'

'*S-tokoro da/datta*'

Non-stative S

Generalizations for '*S-tokoro*' with non-stative *S*:

- Nonpast ('*S-ru tokoro*'):
  "just before an occurrence of an S-event"
- Past ('*S-ta tokoro*'):
  "just after an occurrence of an S-event"

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Comments:

- Simplified story
- Tense/Aspect

'*S-tokoro da/datta*'

Simple stative S

(7) Eigo-ga hanaseru.
English-NOM speak-POTENTIALIS-NONPAST
'I can speak English.'

Statives under '*tokoro*' are generally degraded, *but* can be rescued with a counterfactual reading.

(8) Eigo-ga hanaseru tokoro { da / datta }.
English-NOM speak-POT-NPST TOKORO COP-NPST COP-PAST
'I would be able / would have been able to speak English.'

Most natural in a context with an explicitly given or contextually salient counterfactual antecedent.
(e.g., '*if I had grown up in the US . . .*').

- Still: No temporal reading for '*tokoro*' with stative S. Why?

'*S-tokoro da/datta*'

Simple stative S

	Nonpast	*Past*
Embedded non-stative:	$R < E$	$E < R$
Embedded simple stative:	$R \subseteq E$	✗ *

Similar to the behavior of statives under other connectives:

(9) Eigo-ga hanaseru { toki / *mae / *ato / uti }
English-NOM speak-POT-NPST when / before / after / while
'while I was / am able to speak English'

'*S-tokoro da/datta*'

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Embedded non-stative:	$R < E$	$E < R$
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First guess:

- Embedded statives require inclusion of R in E; embedded non-statives don't.

Q: Does the incompatibility with '*tokoro*' follow from that (alone)?

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A: No.

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Derived stative S

The suffix '*-tei-*' combines with non-statives and produces either Progressives or Perfects (result-state or experiential).

(10) Zyon-ga akai zyaketto-wo {ki-teiru / ki-teita}.
John-NOM red jacket-ACC wear-TEI-NONPAST wear-TEI-PAST
Progressive: 'John {is/was} putting on a red jacket.'
Perfect: 'John {is/was} wearing a red jacket.'

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'*tokoro*' is well-formed and temporal with the Progressive, but marginal and counterfactual with the Perfect.

(11) Zyon-ga akai zyaketto-wo ki-teiru tokoro
John-NOM red jacket-ACC wear-TEI-NONPST TOKORO
{da / datta}
COP-NONPST COP-PST
Progressive: 'John {is/was} putting on a red jacket.'
Perfect (marginal): 'John would have worn a red jacket.'

'*S-tokoro da/datta*'

Derived stative S

	Nonpast	*Past*	*'tokoro'*
Embedded non-stative:	$R < E$	$E < R$	ok, temp.
Embedded simple stative:	$R \subseteq E$		marg, cf.
Embedded '*-tei-*' (Perf):	$R \subseteq R', E < R'$		marg, cf.
Embedded '*-tei-*' (Prog):	$R \subseteq R', R' \subseteq E$		ok, temp.

Similar to the behavior of '*teiru-*' clauses with other connectives:

(12) Ki-ga taore-tei-ru { toki / *mae / *ato / uti }
tree-NOM fall-TEI-NPST when / before / after / while
Prog:'while the tree is / was falling'
Perf: 'while the tree is / was on the ground (after falling)'

- Both readings of '*teiru*' are "stative": $R \subseteq R'$.
- Only Perf. is "static": Nothing happens in R.

Outline

Basic points

- Derive the observed data from basic assumptions about the meanings of the parts and their interactions.

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- Two ingredients in the semantics of '*tokoro*':
  - on an *ordering* relation
  - *change* in the immediate surroundings of the reference interval

Event measurement

Basic ideas

(Filip 2012 for overview)

- Eventive predicates: properties of events (*run, give a talk,. . .*)
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- Events involve notion of progression/change:
  build a house: increase in ‘house’; *run*: increase in distance covered; etc.
- Statives: homogeneous (increase only in time that has elapsed)

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Implementation

Events e and states s induce orderings on the set of temporal instants (note: $\tau(e)$: runtime of event e, Krifka 1989)

- Events ('change'):
  1. $t \trianglelefteq_e t'$ – 'e has progressed at least as far in t' as in t'

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- States ('no change'):
  1. $t \trianglelefteq_s t'$ for all t, t' at which the state holds
  2. Superinterval property: If a state holds at interval i, it also holds at times just before and just after i.

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➽ If the clause is non-stative, then the R lies in E just in case the reading is Progressive.

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  - Perfect S: $R \subseteq R'$, $E < R'$, superinterval property of R'
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  - Progressive S: $R \subseteq E$
    ➽ Change happens ✓

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    - ➽ R surrounded by times later than E ✗
  - Progressive S: $R \subseteq E$
    - ➽ Change happens ✓
- ➽ Violation just in case S is stative or Perfect.

Counterfactuality
Outline

- '*tokoro*' requires that there be *change* along an *order*.
- Temporal order:
  - always available
  - with non-statives and Progressives, generally allows for a way of placing *R* in time such that the condition is fulfilled.
  - not so for statives and Perfects
- If the order of *times* does not have the required properties, context may provide a suitable order of *worlds* instead.

➽ If an antecedent is given (explicitly or through context), this makes available a ranking or *words* according to the truth value of the antecedent.

➽ The resulting reading of '*S-tokoro da*': "The world lies next to one at which the antecedent is true."

Some highlights of the analysis:

- Temporal and modal readings through the interplay of a large number of factors.
- Temporal and modal dimensions blend into each other (cf. the literature on “fake Past” in counterfactuals)
- Different kinds of (basic or derived) statives show starkly different behavior in some circumstances.

Some highlights of the analysis:

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- Different kinds of (basic or derived) statives show starkly different behavior in some circumstances.

Some open questions:

- Temporal expressions get recruited for modal meanings. Does it happen in the other direction?
- How much of this process and/or the reasoning behind it is universal?