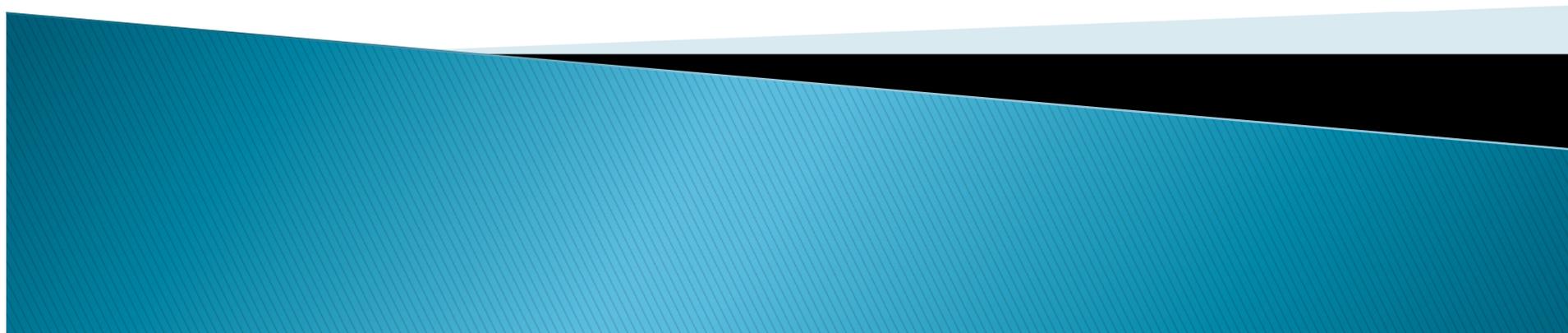


Null Pronouns in Certain Clause Types in OJ

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NINJAL, 18 May, 2014



Three studies on null pronouns in OJ subordinate clauses:

- ▶ Horn, Stephen W. and Kerri L. Russell. 2013. "Null Arguments in Pre-modern Japanese." *Acta Linguistica Hafniensia*, 45.1.
 - ▶ Frellesvig, Bjarke, Stephen W. Horn, Kerri L. Russell, and Peter Sells. 2013. "Provisional and Conditional Clauses in Old Japanese." In Özge, Umut, ed. *Proceedings of the 8th Workshop on Altaic Formal Linguistics*. MIT Working Papers in Linguistics, 67, 65-78.
 - ▶ Peter Sells "On null pronouns in Old Japanese (上代日本語のゼロ代名詞) “通時コーパスプロジェクト・オックスフォード大 VSARPJプロジェクト合同シンポジウム (NINJAL Diachronic Corpus Project – Oxford VSARPJ Project Joint Symposium Corpus Based Studies of Japanese Language History), National Institute for Japanese Language and Linguistics, 30-31 July 2012
 - ▶ Follow up study
- 

Study 1: Null Arguments in Pre-modern Japanese

Results:

1. Provisional, Conditional, and Concessive clauses are subordinate to the clauses (headed by following predicates) to which they are linked.
2. All 3 clause types can either adjoin S_2 left of the S_2 subject NP or follow the S_2 subject NP.
3. All 3 clause types can escape the scope of S_2 questions, negation, and modals.
4. Conditional clauses regularly occupy a high position.
5. A large proportion of arguments in Provisional clauses are overt, and out of the null arguments in Provisional clauses, many take extrasentential antecedents.
6. Subjects in S_1 can co-refer to subjects in S_2 in Provisional clauses (i.e., there is no Switch Reference function for the Provisional clause)



Sampling the phon. data

100 tokens from each clause type, at random

This sample, compared to the aggregate of numbers for all three clause types, represents:

14.2% of OJ, overall

46% of the phonographically written data

Argument slots

For each NP argument corresponding to one of four core grammatical roles (Subject, Object, Indirect object, Experiencer/Possessor) we analysed

Realization: Overt or null?

Anaphoric relationship: In which direction?

Syntactic position of co-referent NP

Grammatical role of co-referent NP

Empty core NP argument slots to total number of slots

	1-place predicates	2-place predicates	3-place predicates	total no. slots	Null pronouns	overt NPs	ratio of null to total
Provisional	67	31	2	135	74	61	.45
Conditional	64	31	5	141	94	47	.66
Concessive	60	35	5	145	128	18	.88

Provisional clauses are more likely to contain overt arguments.



Extrasentential antecedents to null pronouns (by grammatical role)

	total null pronouns	extrasentential antecedents	Ratio
Subjects	221	163	.74
Objects	49	20	.41
indirect objects	19	19	1.0
experiencer/possessors	7	6	.86

Null subjects and exp/poss's are most likely to have extrasentential antecedents.



Extrasentential antecedents to null pronouns (by clause-type)

	total null pronouns	extrasentential antecedents	Ratio
Provisional	74	63	.85
Conditional	94	74	.79
Concessive	128	71	.55

Null arguments in Provisional clauses are few, and they often have extrasentential antecedents.



Terminology: S_1 and S_2

The right edge of S_1 precedes the right edge of S_2 , i.e.,

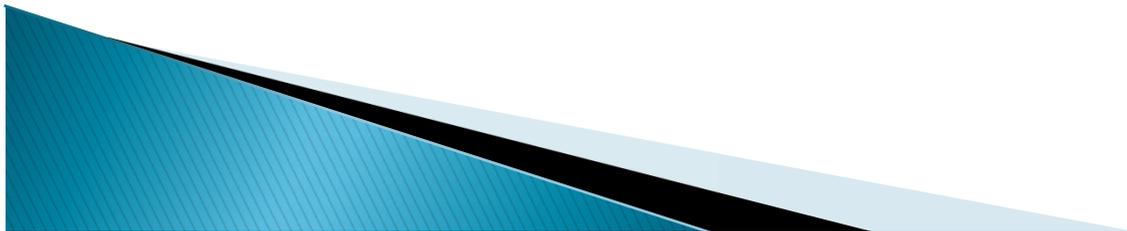
$\dots V_1 s_1] \dots V_2 s_2]$

here V_1 is Provisional, Conditional, or Concessive.



Co-reference relations between S_1 and S_2

Out of 300 clause linkages, there are 27 examples where one S contains a null pronoun that co-refers to an overt NP in the other S.



Direction of pronominalization

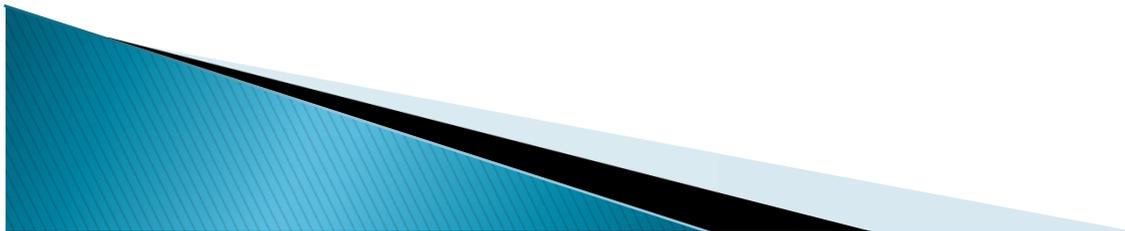
Left pronominalization

$$[_{S_2} \dots [_{S_1} e_i \dots V_1] \dots NP_i \dots V_2]$$

Right pronominalization

$$[_{S_2} \dots [_{S_1} NP_i \dots V_1] \dots e_i \dots V_2]$$

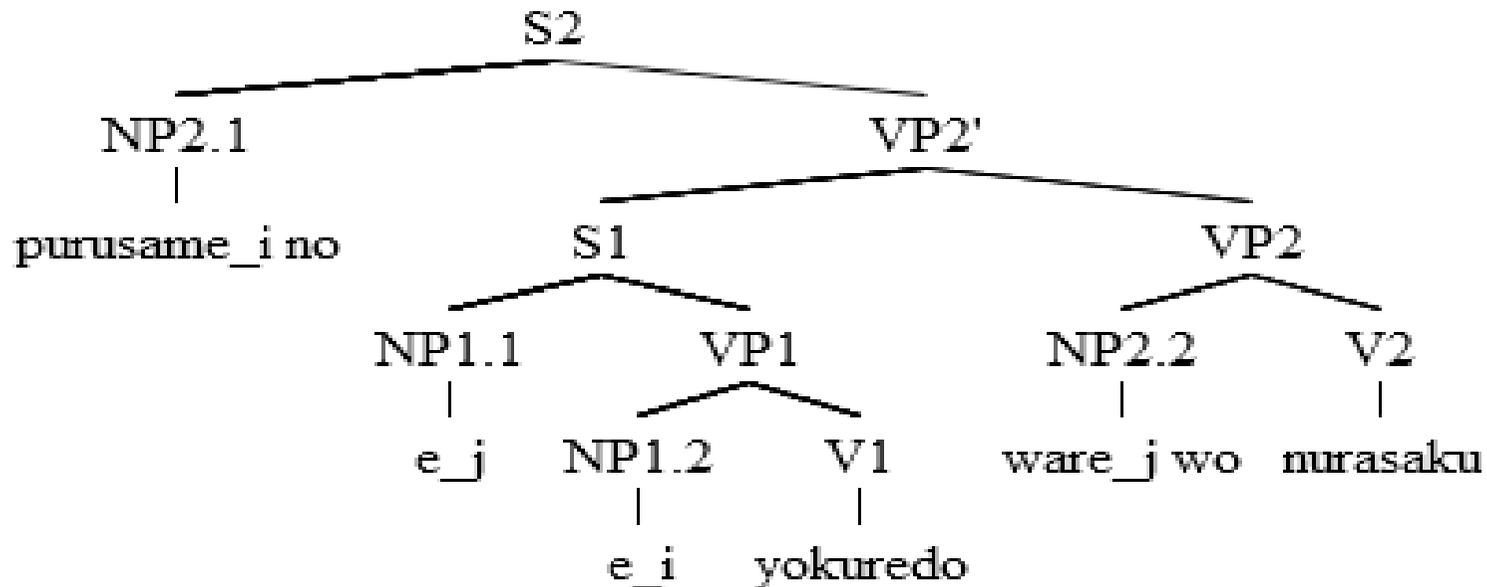
Binding

$$[_{S_2} \dots NP_i \dots [_{S_1} \dots e_i \dots V_1] \dots V_2]$$


parusame binds e_i subject in S_1 , *ware*
left- pronominalizes e_j object in S_1

(2) *parusame*_{*i*} *no* [e_j e_i *yokuredo*]
spring.rain GEN avoid.CONC
*ware*_{*j*} *wo* *nurasaku*
I ACC soak.NMNL

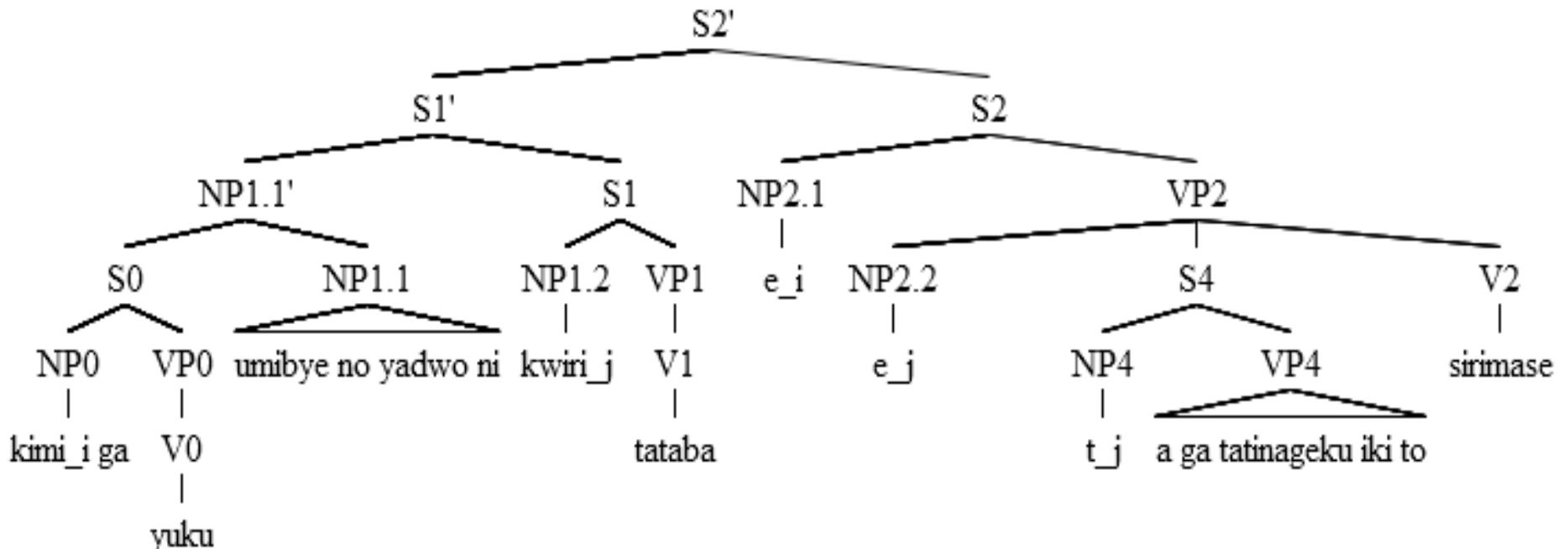
‘The fact that the spring rain, though I avoid it, soaks
me.’ (MYS.9.1697)



kwiri right-pronominalizes the e_j object in S_2

- (3) *kimi ga yuku umibye no yadwo ni*
 lord GEN go.ADN shore GEN lodging DAT
kwiri_j tataba e_j a ga tati-nageku
 mist stand.COND I GEN stand-lament.ADN
iki to siri-mase
 breath COMP know-AUX.IMP

‘If, at the seaside lodging where you, my Lord, are going, the mist rises, know it to be the breath of my sighing.’ (MYS.15.3580)



Escaping scope of matrix questions

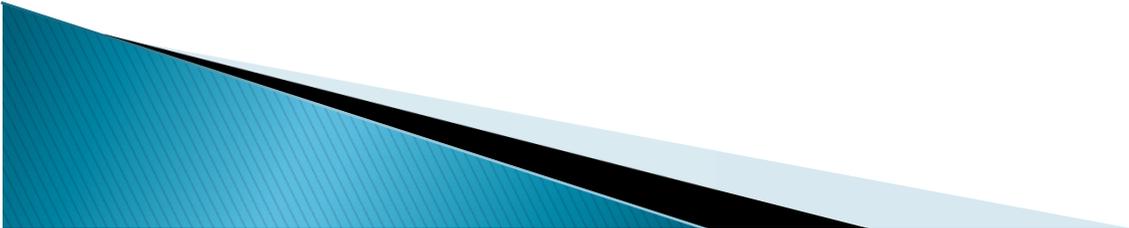
(4)

<i>imo</i>	<i>ga</i>	<i>swode</i>	<i>wakarete</i>		
beloved	GEN	sleeve	separate.GER		
<i>pisa ni</i>			<i>nari-nuredo</i>		<i>pito-pi mo</i>
long.past	COP.INF		become-PERF.CONC		one-day ETOP
<i>imo wo</i>		<i>wasurete</i>	<i>omope</i>		<i>ya</i>
beloved	ACC	forget.GER	think.EXCL		Q

‘Though it has become a while since I parted from my beloved's sleeve, is there even a day when I am forgetful of my beloved in my thoughts?’

*‘Is there even a day when I am such that, though having been parted from my lover’s sleeve, I am forgetful of her?’

(MYS.15.3604)



Escaping scope of matrix negation

(9)	<i>tukupane ni</i>		<i>apa-mu</i>		<i>to</i>
	Tsukuba Peak DAT		meet-CONJ.CONCL		COMP
	<i>ipi-si</i>	<i>kwo pa</i>		<i>ta ga</i>	<i>koto</i>
	say-SPST.ADN	child TOP		who GEN	words
	<i>kikeba ka</i>	<i>mi-ne</i>		<i>apa-zu-kye-mu</i>	
	hear.PROV Q	HON-sleep		meet-NEG-SPST-CONJ.ADN	

‘The girl who said she would meet me at Tsukuba Peak because she heard
whose rumors must it be, that she won't sleep with me?’

*‘It might not be the case that she —having heard whose rumors?—will sleep
with me, the girl who said she would meet me at Tsukuba Peak’

(FK.2)



Escaping scope of matrix modals

- (10) *asukakapa* *seku* *to*
Asuka.River be.blocked.CONCL COMP
siri-seba *amataywo mo* *wi-nete*
know-SPST.COND most.night ETOP lead-sleep.GER
ko-masi wo *seku to*
come-SUBJ.ADN CNJT be.blocked. CONCL COMP
siri-seba
know-SPST.COND

‘If I had known that the way at Asuka River would be blocked, I would have led (her) to bed many nights, if I'd known it would be blocked’

*’ It would have been the case that I —provided I knew the way at Asuka River is blocked— led (her) to my bed many nights.’

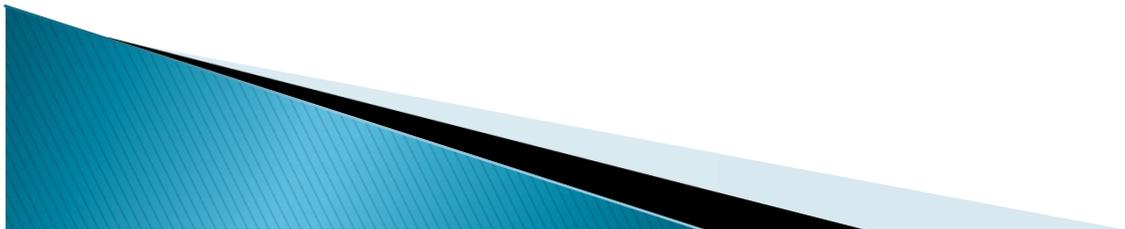
(MYS.14.3545)



Null subjects, null objects

	Null subjects	Overt subjects	ratio of null to total
Provisional	61	39	.61
Conditional	71	29	.71
Concessive	89	11	.89

	Null objects	Overt objects	ratio of null to total
Provisional	7	21	.25
Conditional	15	16	.48
Concessive	27	4	.87



Roles of S2 antecedents to S1 object null pronouns

	S2 subject	S2 object	S2 experiencer/ possessor	no co-reference with S2 arguments
Provisional	3	0	0	4
Conditional	2	4	0	9
Concessive	7	9	2	9



Roles of S2 antecedents to S1 subject null pronouns

	S2 subject	S2 object	S2 indirect object	S2 experiencer	S2 possessor	no co-reference with S2 arguments
Provisional	11	2	1	13	3	31
Conditional	22	3	2	8	3	33
Concessive	26	4	0	3	3	53

Null subject arguments in all 3 clause types occasionally take S₁ subject NPs as antecedents: None of them have a Switch-reference function.



Role retention in S2 for null S1 subjects

	retained	total S1 null subjects	ratio
Provisional	11	61	.18
Conditional	22	71	.31
Concessive	26	89	.29



Retention of subject in EMJ *Sakaki*

	retention of subject
Provisional and Conditional	31.3%
Concessive	26.9%

(adapted from McAuley 2002, 32, fig.5)

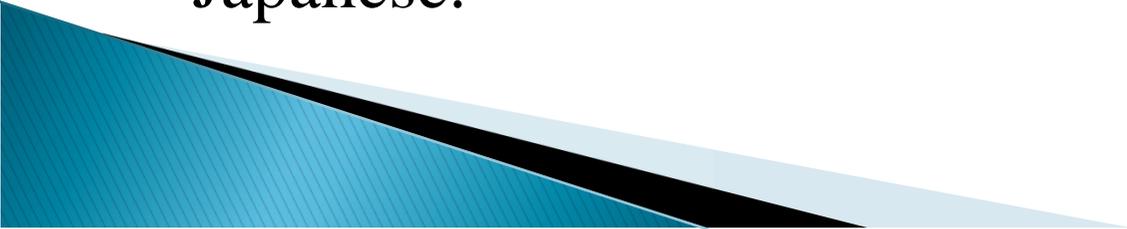
Ohuri (1994) and McAuley (2002) find that ‘conjunctive particle *-ba*’ doesn’t have a Switch-reference function in EMJ.



Retention of subject in OJ

	retention of subject
Provisional and Conditional	25%
Concessive	29%

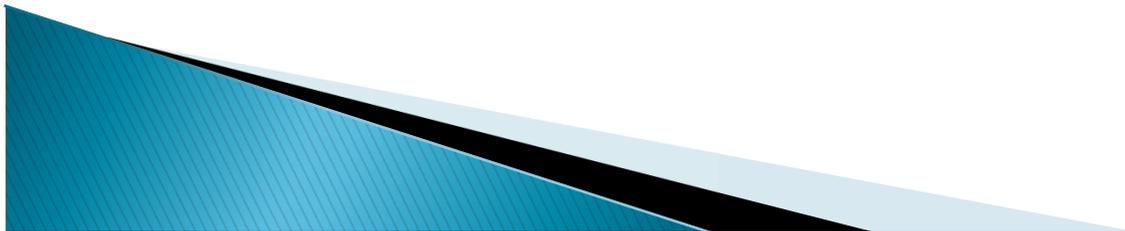
In order to compare our OJ data to EMJ, we also conflate the Provisional with the Conditional. Clearly there is no categorical Switch-reference function to the two clause types in question at either stage in the development of Japanese.



Study 2: Provisional and Conditional Clauses in Old Japanese

Results:

1. Provisional clauses contrast with Infinitive and Gerund clauses with regard to scope.
2. Provisional clauses in OJ are similar to *to*-clauses in Modern Japanese.
3. Right-pronominalization shows that Provisional and Conditional clauses can adjoin S_2 above and to the left of an S_2 subject position.
4. Binding shows that Provisional clauses can adjoin to VP below and to the right of an S_2 subject NP.
5. Genitive marked S_2 subjects can Bind non-subjects in Provisional S_1 .
6. There are no examples in the corpus where a Genitive marked S_2 precedes and co-refers to a null subject argument in a Provisional or Conditional clause.
7. Anaphora from a Provisional clause is to a superordinate clause subject, an experiencer, or the possessor of the subject, but never to an object.



OJ Provisional clauses similar to *to*-clauses in Modern Japanese?

to-clauses in Modern Japanese:

1. The semantic scope of an overt subject of S_1 can be limited to S_1 ,
2. the overt subject of S_2 may appear to the left of S_1 (therefore S_1 is embedded inside S_2),
3. No negative, aspect or illocutionary markers in S_2 may scope over S_1 .

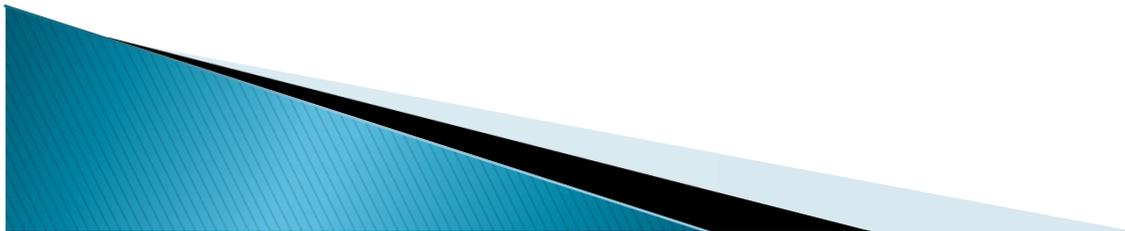
(Kuno 1973, Ohori 1994)



The overt subject of S₂ may appear to the left of S₁

- (2) [_{S₂} *nubatama no* *ywogwiri no* *tatite* *opoposi-ku*
 black.jewel COP night.mist GEN stand.GER vague-ACOP
ter-eru *tukuywo no* [_{S₁} *mireba*]
 shine-STAT moon.night GEN see.PROV
kanasi-sa]
 be.touching-ACOP.EXCL

‘How touching, when you look at it, is the moon that shines dimly when the mist of the jewel-black night rises.’ (MYS.6.982)



No negative, aspect or illocutionary markers in S_2 may scope over S_1

This was demonstrated in Study 1, but we present more evidence here:



No negative markers in V_2 may scope over S_1

- (3) [_{S2} [_{S1} *topo-kuareba*] *pito-pi.pito-ywo mo*
[far-ACOP.PROV] one-day.one-night even
omopa-zute.aru ramu] *mono to*
think-NEG.PROG PCONJ person COP.INF
omoposi-myesu na
think-RESP PRB
‘Don't think (of me) as someone who, just because (he) is
far away, doesn't think of you day and night!’
(MYS.15.3736)



No aspect markers in V_2 may scope over S_1

- (4) $[_{S_2} [_{S_1}$ *kasumi* *tatu* *nwo no* *pe no*
 mist rise field GEN above GEN
kata ni *yuki-sikaba*] *ugupisu*
slope DAT go-SPAST.PROV warbler
naki-tu]
cry-**PERF**
‘When I was going to (once I arrived at) the slope over
the field where mist rises, a warbler began to sing.’
(MYS.8.1443)



No illocutionary markers in S_2 may scope over S_1

- (5) [_{S2} [_{S1} *okure wite* *wa ga* *kwopwi woreba*]
be.left.behind PROG.GER I GEN yearn PROG.PROV
- sirakumo no* *tanabiku yama wo* *kyepu ka*
white.clouds GEN stretch mountain ACC today Q
- kwoyu ramu*
cross PCONJ

‘As I am yearning, being left behind, would it be today that you cross the mountain over which the white clouds stretch?’
(MYS.9.1681)

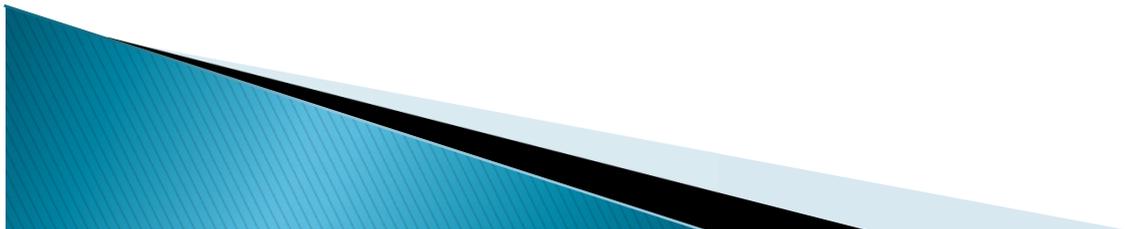
We conclude OJ Provisional clauses are similar to NJ *-to* clauses in many respects.



Gerund clauses fall under the scope of negation in a superordinate clause

- (7) [_{S2} *yama wo* *sige-mi* [_{S1} *irite mo*] *tora-zu*]
 mountain ACC rife-ACOP.INF enter.GER ETOP take-NEG
- [_{S2} *kusa puka-mi* [_{S1} *torite mo*] *mi-zu*]
 grass deep-ACOP.INF take.GER ETOP see-NEG

‘Because the mountain is overgrown, we don't enter and take (any flowers); because the grass is deep, we don't take and see (any flowers).’ (MYS.1.16)



Right-pronominalization: S₁ adjoins to S₂ above an S₂ subject position

- (8) [S₂ [S₁ [*apumidi no apusakayama ni tamuke*
 Ōmi Road GEN Ōsaka Mountain DAT make.offering
*site] wa ga **kwoye-yukeba**] [*sasanami no*
 do.GER I GEN cross-go.PROV] wavelet GEN
sigā no karasaki saki-kuaraba]
 Shiga GEN Karasaki be.blessed-ACOP.COND
*mata **kapyeri-mi-mu**]*
 again return-look-CONJ*

‘When I cross, making an offering at Ōsaka Mountain of Ōmi Road, if Karasaki in Shiga of Sasanami is blessed, I will look back on (all this) again.’ (MYS.13.3240)



Left pronominalization: S_1 adjoins to VP_2 below an S_2 subject position

- (9) $[_{S_2} [_{S_1} e_i \text{ omopu ni si}$ *amari-ni-sikaba*
think.ADN DAT RES exceed-PERF-SPAST.PROV
 $[kadwo ni idete]$ $[_{NP} wa ga]_i$ *koipusu*
door DAT go.out.GER I GEN lay.down.prostrate
'(...) my collapsing upon going out of doors because worry overwhelmed
me.' (MYS.12.2947b)



There is also Binding from a matrix subject NP into S_1

- (10) [_{S2} [_{NP} *nubatama no* *ywogwiri no* *tatite*
 black.jewel COP night.mist GEN stand.GER
opoposi-ku *ter-eru* *tukuywo no*]_i
 vague-ACOP shine-STAT moon.night GEN
 [_{S1} *e_i mireba*] *kanasi-sa*]
 see.PROV be.touching-ACOP.EXCL
 ‘How touching, when you look at (it), is **the moon that
 shines dimly when the jewel-black night mist rises.**’
 (MYS.6.982)



Hypothesis:

Genitive-marked subjects of Provisional and Conditional clauses never co-refer to S₂ subject null pronouns. This forces the interpretation in (12).

- (12) [S₂ [S₁ [NP *midu.no.ye no* *urasima no* *kwo ga*]_i
Mizunoe GEN Urashima GEN child GEN
tamakusige *ake-zuari-seba*] *e_j* *mata mo*
jewel.box open-NEG-SPAST.COND again even
apa-masi wo]
meet-SUBJ CNJ
‘If only **the child from Urashima in Mizunoe** hadn't opened
the box, **(I, we, she)** could have met (him) even again.’ (FK.15)

On reconsideration, an interpretation with a co-referring S₂ null pronoun is probably more appropriate for (12). Afterward we discovered at least one two more counterexamples: (MYS.13.3240, MYS.19.4254)



One more observation:

Of S_1 NPs, only subjects can co-refer to null arguments in Provisional clauses.

For example, (9, 10) above.



Study 3: On null pronouns in Old Japanese

Anaphoric relations between subordinate subject/object and superordinate subject/object

Results:

1. Provisional clauses

Anaphora is always to the superordinate clause subject, or an experiencer, or the possessor of the subject, but never an object.

[S][S], S [S], [S] S, O [S], [O] S

2. Conditional clauses

Either argument (S/O) in the subordinate clause may corefer with either argument (S/O) in the superordinate clause.

[S][S], S [S], [S] S, O [S], ~~{O}S~~

[O][O], O [O], [O] O, S [O], ~~{S}O~~

3. The Provisional is more restricted than the Conditional.



More results

4. **Provisional clauses** appear with Topic binding and don't seem to show 'mixed' cases.

5. **Conditional clauses** do not readily appear with Topic binding (the Conditional already is a/the Topic?) and the few 'mixed' cases (OS, SO) seem to be Right Pronominalization (X [X]), with one argument overt.

Disjoint subjects in Provisional clauses

(1) 霞 立 野 上乃 方尔
[s₂ [s₁ *kasumi* *tatu* *nwo no* *pe no* *kata ni*
mist rise field GEN above GEN slope DAT
行之可波 鶯 鳴都
yuki-sikaba] *ugupisu naki-tu*
go-SPAST.PROV] [warbler cry-PERF]

“When I was going to (once I arrived at) the slope over the field where mist rises, a warbler began to sing.” (MYS.8.1443)

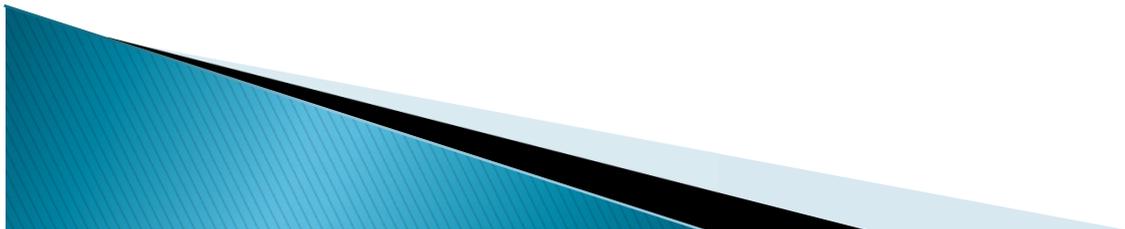


O[S] with a Provisional clause

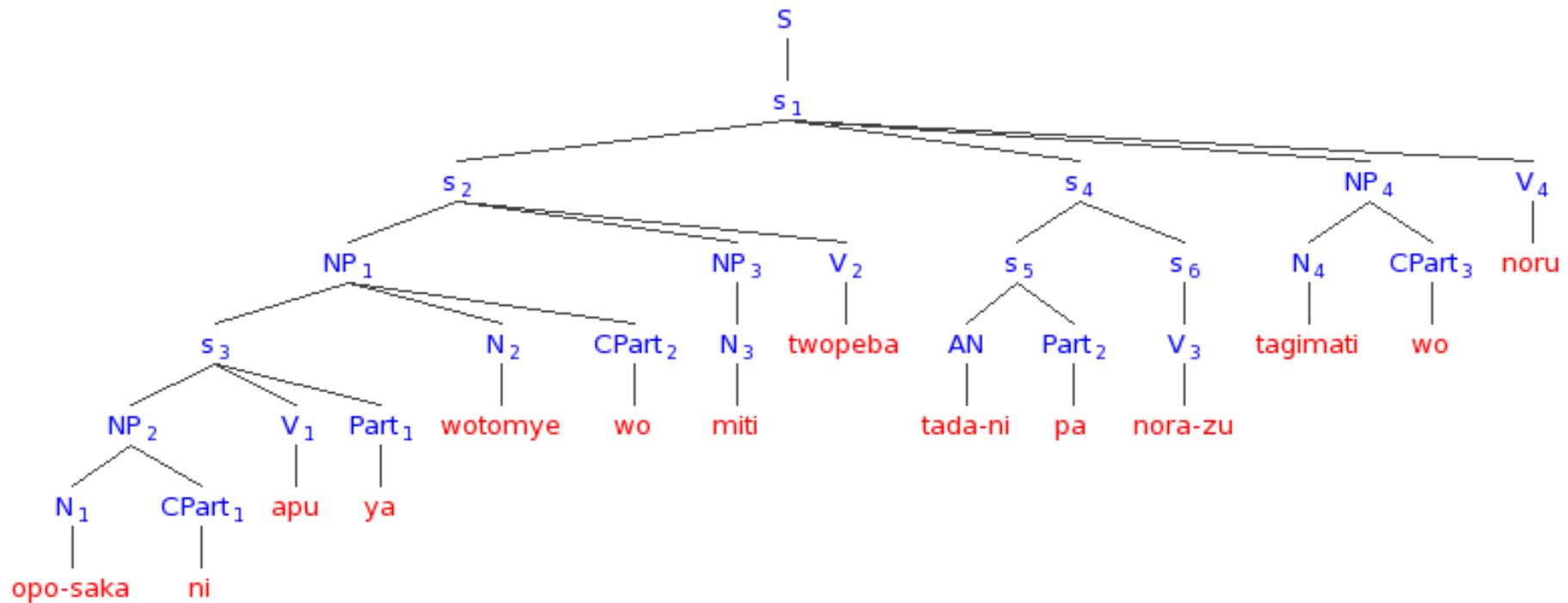
(2)

	於朋佐箇珥	阿布夜	烏等謎烏	
	<i>o</i>	<i>apu ya</i>	<i>wotomye-wo</i>	_i
	[_{S2} [_{S1} [_{NP}	meet FOC	young.woman-ACC	
	big.hill-DAT			
彌知	度沛麼	哆駄珥破		能邏孺
<i>miti</i>	<i>twopeba]</i>	<i>tadani pa</i>	<i>pro</i>	<i>nora-zu]</i>
road	ask.PROV	straight TOP		say-NEG

“When I asked the way from the young woman I met on the big hill, she didn't say [tell me] the direct way.” (NSK.64)



NSK.64



“When I asked the way from the young woman I met on the big hill, she didn't say [tell me] the direct way.”

A null pronoun in a Provisional clause bound to the experiencer in the main clause

- (3) 曾乎 見礼婆 許己呂乎 伊多美
 [_{S2} [_{S1} *so wo* *mireba*] *kokoro wo* *ita-mi*]
 that ACC see.PROV heart ACC hurt
 “Because (to me) my heart is painful when [I] see that...” (MYS 18.4122)



Null object in a Conditional takes as antecedent an object in S₂

(4)	凡尔	吾之	念者
	[_{S2} [_{S1} <i>oboroka-ni</i>	<i>ware si</i> <i>pro_i</i>	<i>omopaba</i>]
	carelessly-Dat I EMPH	think.Cond	
	人妻尔 有	云 妹尔	
	<i>[_{NP} <i>pitoduma ni</i> <i>ari to</i></i>	<i>ipu</i> <i>imo ni]_i</i>	
	man's.wife DAT Cop Comp say	beloved DAT	
	戀管	有米也	
	<i>kwopwitutu</i>	<i>ara-me ya</i>	
	love-Cont	Stat-Conj Foc	

“If I carelessly thought [about her], would [I] be loving my beloved, who is said to be another's wife?” (MYS.12.2909)

- ▶ [O] O (object is actually dative)

Follow-up studies on Provisional clauses: Co-reference with superordinate subjects:

Study 3 (Sells 2012) claimed that null pronouns in
Provisional clauses could co-refer to overt NPs in S_2
only if those overt NPs were subjects.



Co-reference with superordinate subjects

- ▶ Confirmation of the preliminary results of Sells 2012:
 - 1) When null arguments in Provisional clauses take overt NPs in superordinate clauses as antecedents, those antecedents are subject arguments of the superordinate clause. (from a survey of 180 Provisional clauses with empty frames and overt NPs in the superordinate clause)
 - 2) When null arguments in Conditional clauses take overt NPs in superordinate clauses as antecedents, there is no such restriction on the grammatical roles of the antecedents in the superordinate clause. (from a survey of 102 Conditional clauses with empty frames and overt NPs in the superordinate clause)



Conditional with S[O]

- (1) [_{S2} [_{S1} *kimi ga* *yuku* *umibye no* *yadwo ni* *kwiri_j*
lord GEN go.ADN shore GEN lodging DAT mist
tataba] *e_j* [*a ga* *tati-nageku* *iki*
stand.COND I GEN stand-lament.ADN breath
to] *siri-mase*]
COMP know-AUX.IMP

‘If, at the seaside lodging where you, my Lord, are going, the mist rises, know it to be the breath of my sighing.’ (MYS.15.3580)



Follow-up studies on Provisional clauses: Uncontrollability in Provisional constructions

Study 2 suggested that OJ Provisionals were similar to NJ *-to* clauses. The most prominent semantic feature of NJ *-to* clauses is that the subject cannot be in control of at least one of the actions denoted by V_1 and V_2 .



Uncontrollability and Provisional clauses

We examined 467 Provisional constructions having empty argument frames in either S_2 or S_2 or both.

We found 55 ‘Same Subject’ constructions in all the possible configurations: $[S]S$, $S[S]$, and $[S][S]$.

Of those 55 constructions, 3 contained controllable predicates in both S_2 and S_2 . All 3 constructions were in the configuration $S[S]$.



Counterexamples to uncontrollability: S[S]

- (2) [S₂ [S₁ [NP (...)]_i *wa go opokimi no*]_i *ame.no.sita*
 I GEN lord GEN realm.under.heaven
osame-tamapeba] *e_i* *inisipyu yu na-kari-si*
 quell-bestow.PROV early.times ABL not.exist-SPAST
sirusi tabi maneku
 omens instance frequently
mawosi-tamapi-nu
 do-bestow-PERF.CONCL
 ‘(...) when **my lord** pacified the realm under heaven (**he**) made manifest again and again signs that had not existed since early times.’ (MYS.19.4254)



Counterexamples to uncontrollability: S[S]

Where the overt argument is in the subordinate clause, there are instances where both predicates are controllable:

- (3) [_{S2} [_{S1} [*apumidi no apusaka yama ni*
Ōmi Road GEN Ōsaka Mountain DAT
tamuke site] ***wa_iga*** *kwoye-yukeba*] (...)
make.offering do.GER I GEN cross-go.PROV (...)
e_i *mata kapyeri-mi-mu*]
again return-look-CONJ

‘When **I** cross, making an offering at Ōsaka Mountain of Ōmi Road, (...)

(I) will look back on (all this) again.’ (MYS.13.3240)



