

# Null Arguments in Pre-modern Japanese

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# Features of the OJ Corpus

XML mark-up following the internationally recognized standards of the Text Encoding Initiative (TEI)

Phonemic transcription

Orthography

Part of speech

Morphology

Lexeme and morpheme ID; Lexicon

Syntactic constituency: clauses and NPs

# Texts used in the Old Japanese (8<sup>th</sup> Century) corpus

|                           |        |           |
|---------------------------|--------|-----------|
| <i>Kojiki kayō</i>        | 古事記歌謡  | 712       |
| <i>Nihon shoki kayō</i>   | 本書紀歌謡  | 720       |
| <i>Fudoki kayō</i>        | 風土記歌謡  | 730s      |
| <i>Bussokuseki-ka</i>     | 仏足石歌   | after 753 |
| <i>Man'yōshū</i>          | 万葉集    | after 759 |
| <i>Shoku nihongi kayō</i> | 続日本紀歌謡 | 797       |

# Three inflection types

7 of the inflection types in OJ are subordinators. We noticed that 3 of these, though similar in some respects, head clauses that contain null arguments to differing degrees.

Provisional: *yukeba* “When/because (I) go”

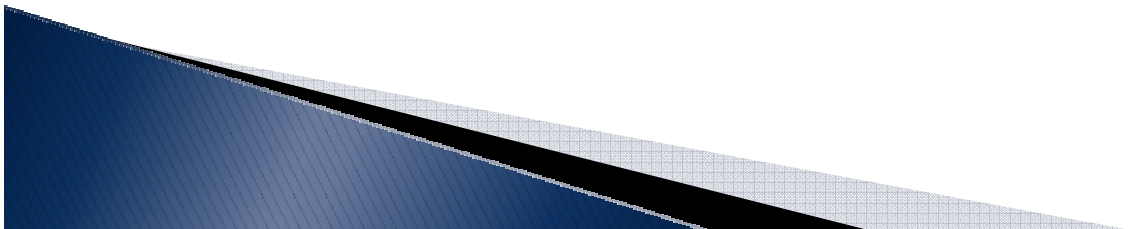
Conditional: *yukaba* “If (I) go”

Concessive: *yukedo* “Even when (I) go”

# Population of 3 clause types

(OJ, overall)

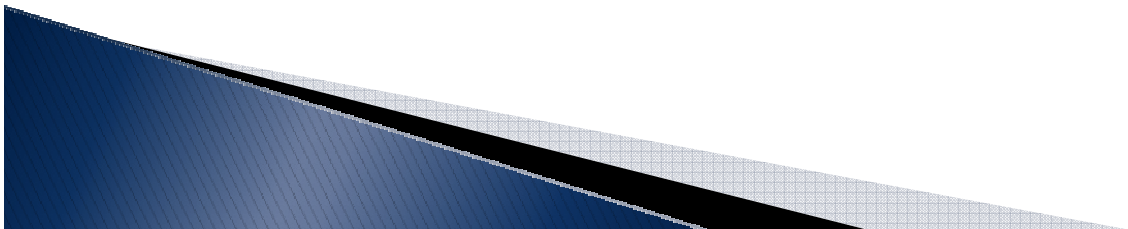
|              | No. | Ratio of total (2108) |
|--------------|-----|-----------------------|
| Provisional: | 909 | .43                   |
| Conditional: | 651 | .31                   |
| Concessive:  | 548 | .26                   |



# Starting point

Clauses with empty frames (OJ corpus, overall):

|              | No. | Ratio within each clause type |
|--------------|-----|-------------------------------|
| Provisional: | 417 | .458                          |
| Conditional: | 361 | .554                          |
| Concessive:  | 463 | .845                          |



# Example:MYS 20.4299

年月波 / 安良多安良多爾 / 安比美礼騰 /  
安我毛布伎美波 / 安伎太良奴可母

tositukwi pa / arata-arata-ni / **ZERO** api-  
miredo

a ga mopu kimi pa / aki-dara-nu kamo

"Though **we** see **each other** renewedly with the  
months and years, how I never tire of you  
upon whom my thoughts dwell. "

# Phonographically written COJ

見者

*miba?*    *mireba?*

miba

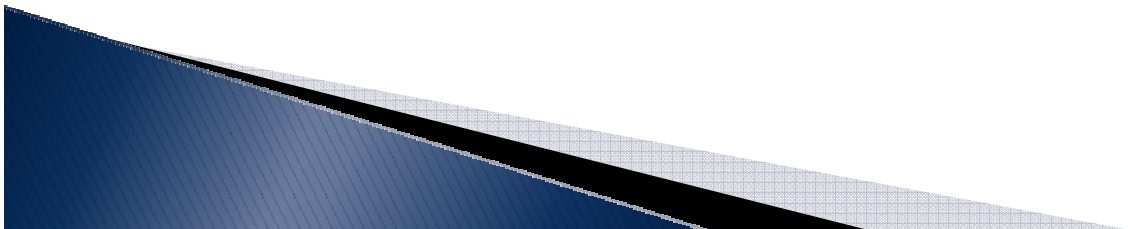
|              | No. | Ratio of total (651) |
|--------------|-----|----------------------|
| Provisional: | 281 | .43                  |
| Conditional: | 229 | .35                  |
| Concessive:  | 141 | .22                  |



# Unexpected results

Clauses with empty frames (COJ, phono):

|              | No. | Ratio within each clause type |
|--------------|-----|-------------------------------|
| Provisional: | 144 | .512                          |
| Conditional: | 109 | .476                          |
| Concessive:  | 117 | .830                          |



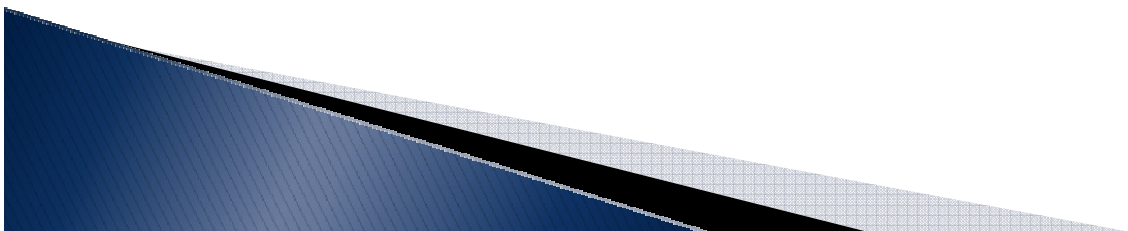
# Sampling the phon. data

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

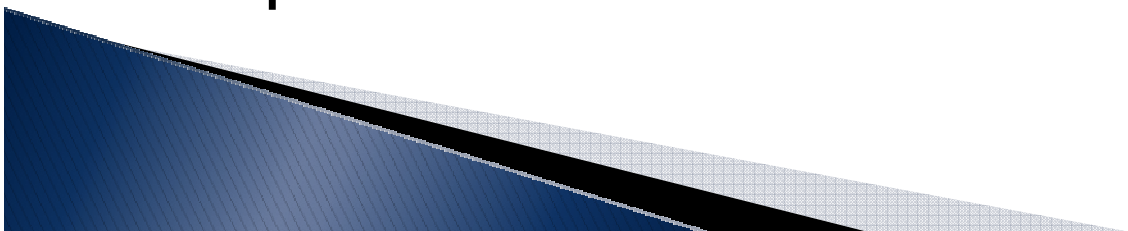


# Assumptions

Empty argument slots were counted as null, whether they were the result of ellipsis, movement, or pro-drop.

Topicalized NPs are assumed to be adjoined to the clause and (normally) associated with a null position inside the clause.

NPs with topic markers are assumed to be topics.



# Argument slots

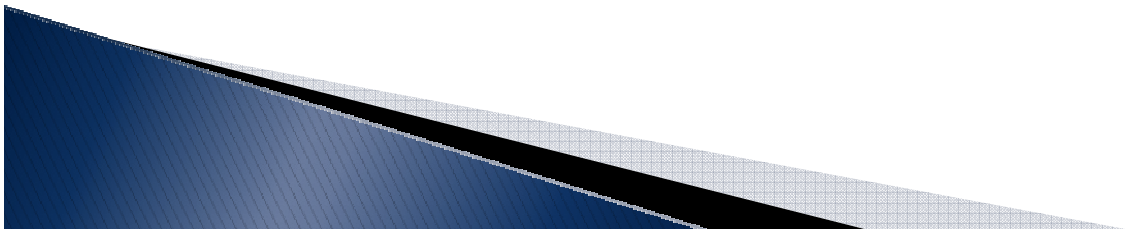
NP arguments corresponding to four core grammatical roles:

Subject

Object

Indirect object

Experiencer/Possessor

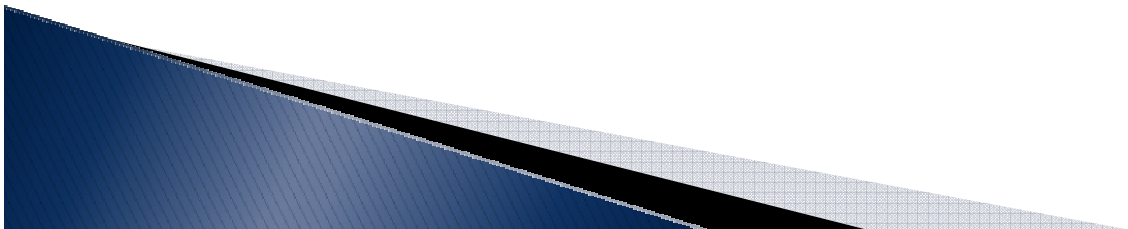


# The c0 predicate

Inflection: Prov/Cond/Conc

Predicate: *xxxxxxxxxx*

No. of core NP argument slots: 1 / 2 / 3



# The 4 argument slots

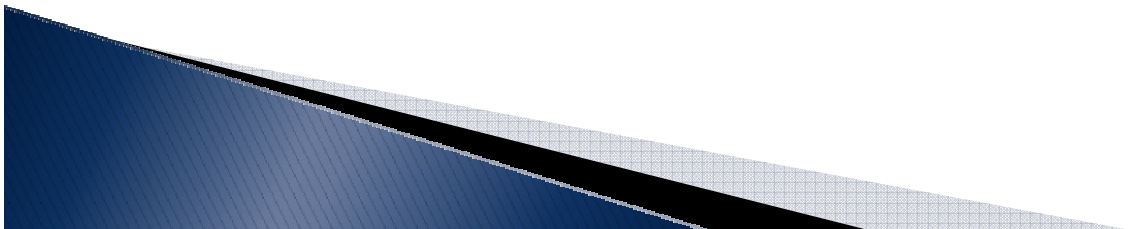
3 categories for each of the 4 slots.

For example the subject slot:

Subject: overt(= c0:arg)

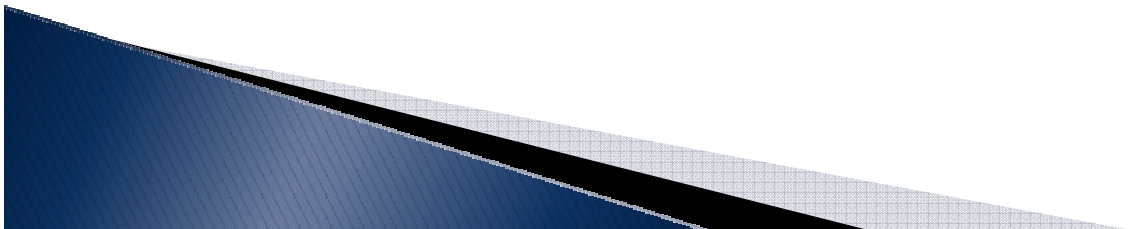
Antecedent location: n/a

C1 grammatical role: none



# Positions for endophoric antecedents

c0:low topic; c0:topic ;  
c1:arg ; c1:relative head; c1:low topic; c1:topic;  
c1:right-dislocated; c1Right:topic;  
coordRight:topic; coordLeft:arg;  
coordLeft:topic;  
c2:arg; c2:relative head;  
vocative  
Prev-S; Pev-S-event



# Types of exophoric antecedents

1<sup>st</sup> person singular, plural

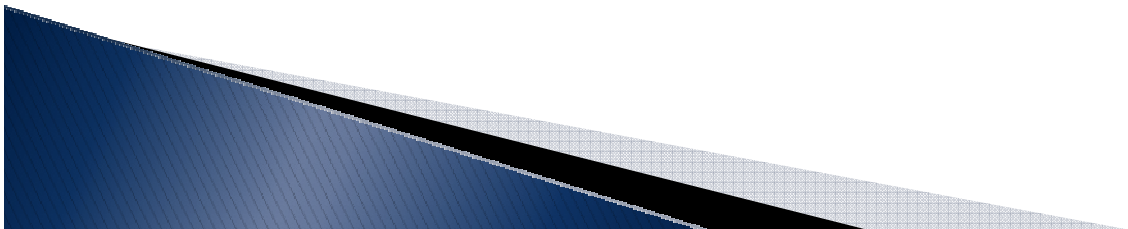
2<sup>nd</sup> person singular

3<sup>rd</sup> person singular

Indeterminate as to person

Time

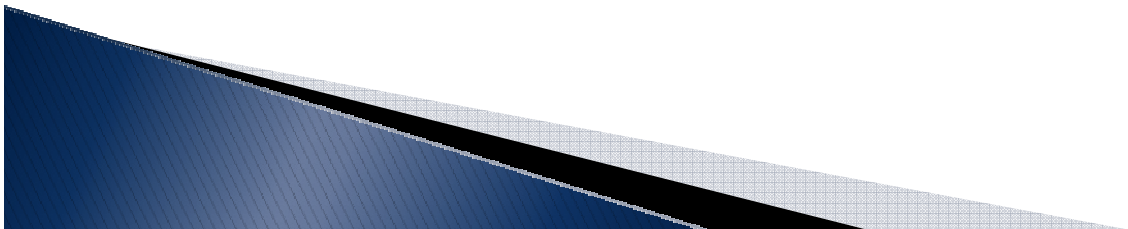
Weather





# Null arguments with exophoric reference:

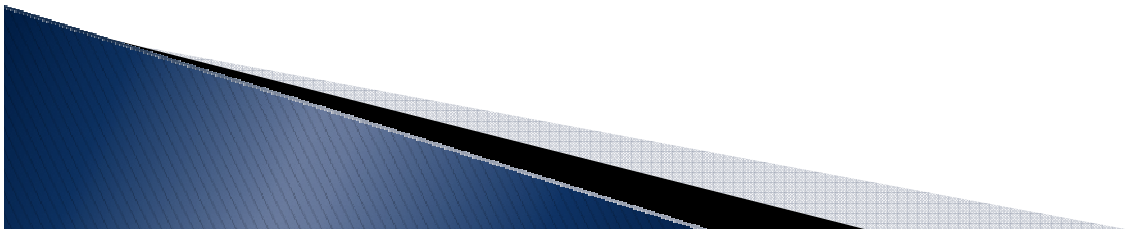
|       | subj | obj | ind | exp/poss | exo | null | ratio |
|-------|------|-----|-----|----------|-----|------|-------|
| Prov: | 52   | 3   | 4   | 1        | 60  | 74   | .810  |
| Cond: | 53   | 7   | 6   | 3        | 69  | 95   | .766  |
| Conc: | 45   | 10  | 2   | 2        | 59  | 125  | .472  |



# Analysis by Arg-slot

Subjects:

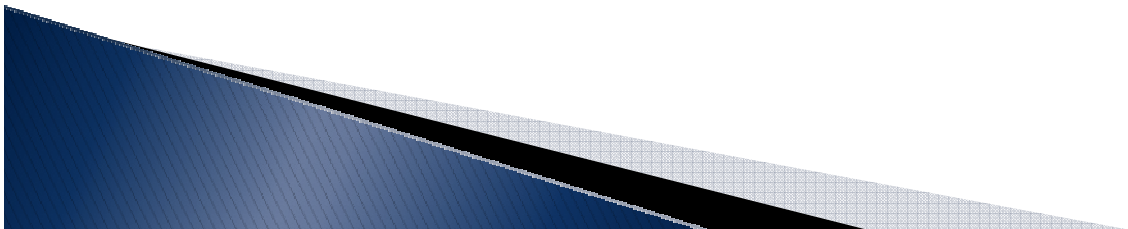
|              | Overt | Null |
|--------------|-------|------|
| Provisional: | 40    | 60   |
| Conditional: | 30    | 70   |
| Concessive:  | 10    | 90   |



# Analysis by arg-slot

Objects:

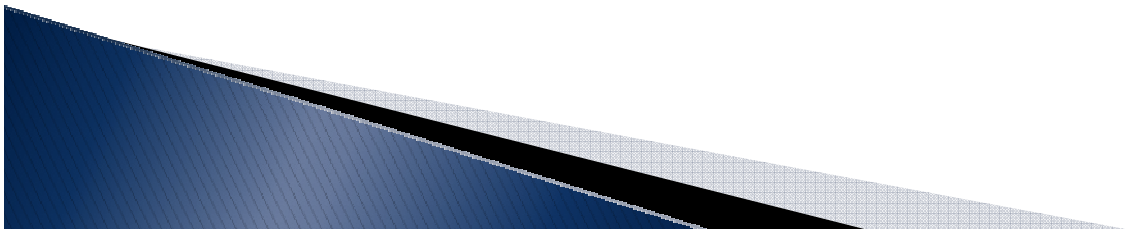
|              | Overt | Null |
|--------------|-------|------|
| Provisional: | 23    | 8    |
| Conditional: | 16    | 15   |
| Concessive:  | 2     | 26   |



# Analysis by arg-slot

Indirect object:

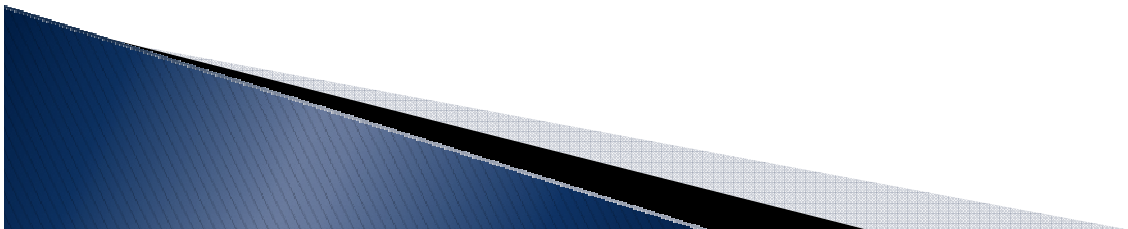
|              | Overt | Null |
|--------------|-------|------|
| Provisional: | 1     | 5    |
| Conditional: | 1     | 7    |
| Concessive:  | 0     | 5    |



# Analysis by arg-slot

Exp'cer/Pos'sor

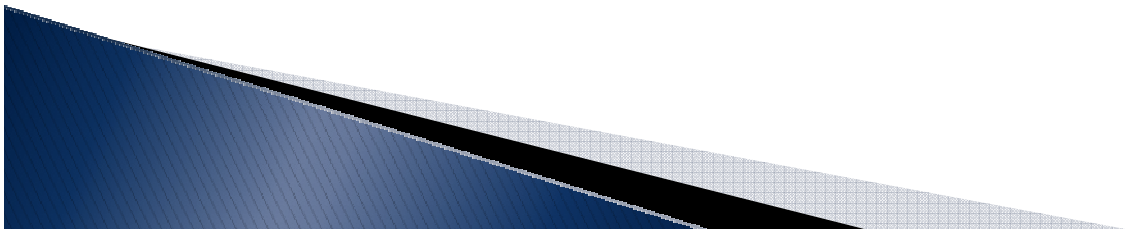
|              | Overt | Null |
|--------------|-------|------|
| Provisional: | 0     | 1    |
| Conditional: | 0     | 3    |
| Concessive:  | 0     | 4    |



# Empty frames

(out of 100 tokens)

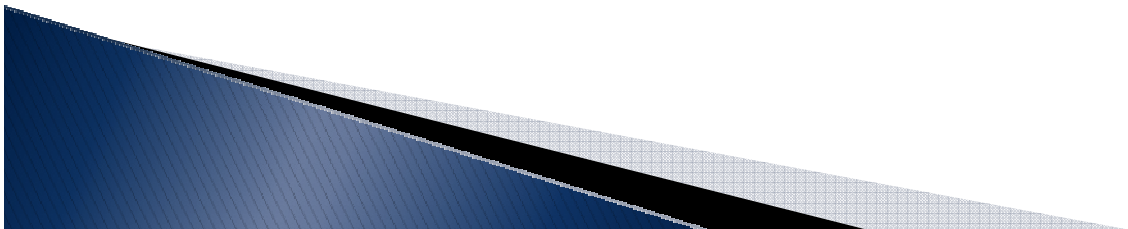
|              | 1-place | 2-place | 3-place | total |
|--------------|---------|---------|---------|-------|
| Provisional: | 32      | 10      | 0       | 42    |
| Conditional: | 41      | 26      | 1       | 68    |
| Concessive:  | 58      | 28      | 0       | 86    |



# Saturated frames

(out of 100 tokens) :

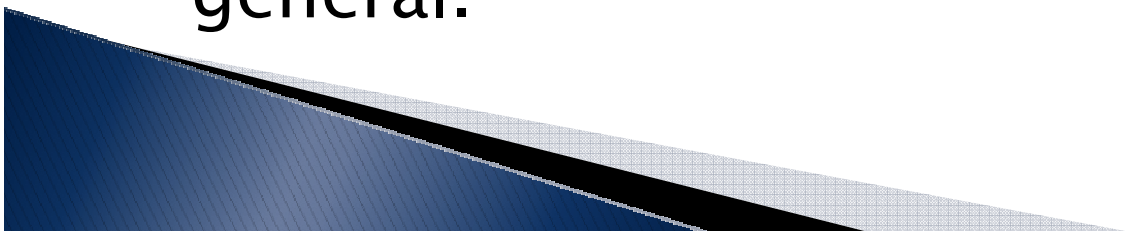
|              | 1-place | 2-place | 3-place | total |
|--------------|---------|---------|---------|-------|
| Provisional: | 33      | 4       | 0       | 37    |
| Conditional: | 22      | 2       | 0       | 24    |
| Concessive:  | 5       | 0       | 0       | 5     |



# Counting empty and filled argument slots

|              | Null | No. of slots | Ratio |
|--------------|------|--------------|-------|
| Provisional: | 74   | 137          | .540  |
| Conditional: | 95   | 142          | .669  |
| Concessive:  | 125  | 137          | .912  |

A more fine-grained analysis suggests the pattern we initially saw for empty frames is a reflection of a tendency in null arguments in general.



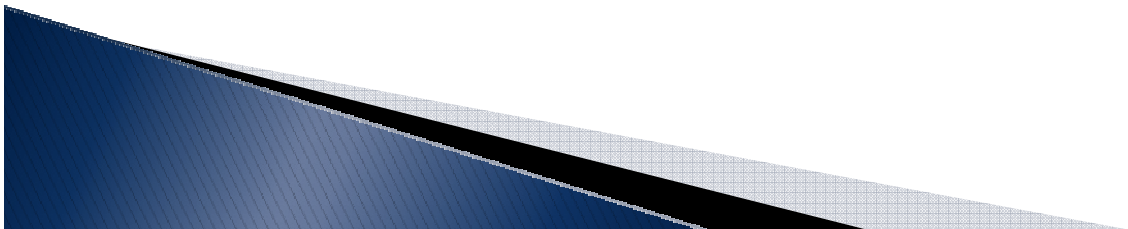


# Overt args in the Provisional

安伎也麻能 / 毛美知乎可射之 / 和我乎礼婆 /  
宇良之保美知久 / 伊麻太安可奈久爾

*akiyama no / momidi wo kazasi / wa ga woreba  
urasipo mitiku / imada aka-naku ni*

“When I sit wearing the colored leaves of the  
autumn mountain, the shore tide flows full,  
as I haven’t yet had my fill.” (MYS.15.3707)



# Notable patterns

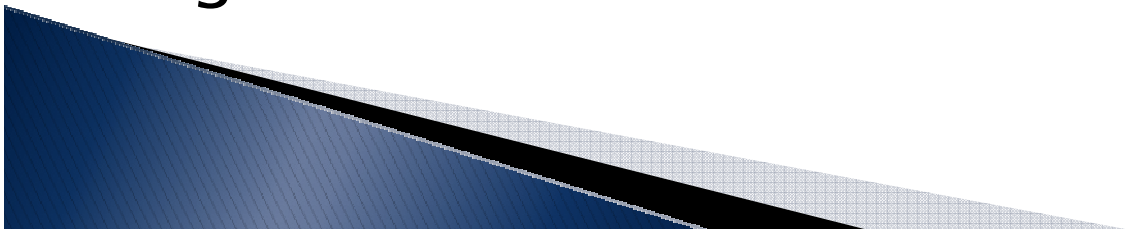
38 null arguments with a c0:low topic or c0:topic as an antecedent

35 of them appear in concessive clauses

There is one case of c0:subject to c1:subject forced backwards control in KK.51

There is one case of a c0:low topic subject co-referring to a c1:arg object in MYS.5.854

Otherwise, null arguments corresponding with a c0:low topic or c0:topic never have a grammatical role in c1.



# C0:topic antecedent

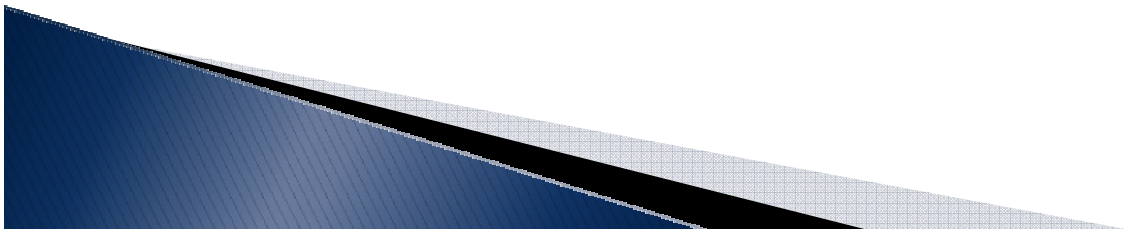
模騰渠等爾 / 娑那播左該騰模 / 那爾騰柯母 /  
于都俱之伊母我 / 磨陁左枳串渠農

*moto gotoni / pana pa sakedomo / nani to mo  
/ utukusi imo ga / mata saki-de-ko-nu*

“Though flowers bloom on every stalk, how is it  
that my beautiful girl still hasn’t come out  
blossoming?” (NSK.114)

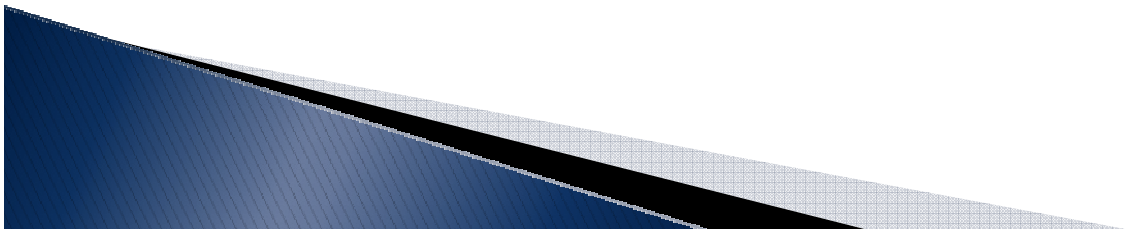
# Switch reference

Morphological elements at points of clause juncture indicating that a null argument with a subject grammatical role in a subordinate clause co-refers with an argument in the superordinate clause with the same role (“same subject”, or “SS” function) or not (“different subject”, or “DS” function).



# Claim for EMJ

Inflected forms ending in *-ba* (Provisional and Conditional) have as DS function. (Akiba 1977; Fujii 1985)



# DS function in EMJ

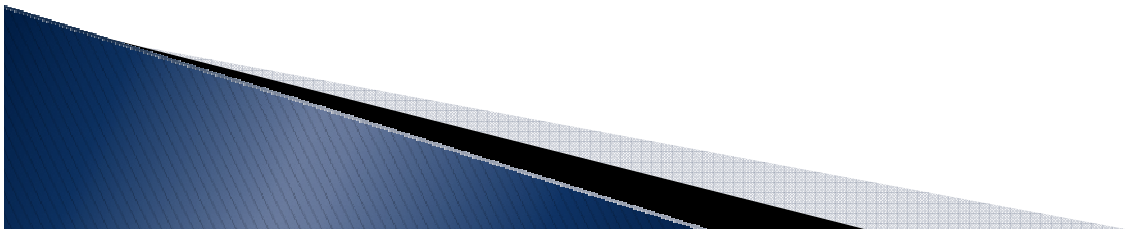
Switch reference of conjunctive particles in  
*Sakaki*:

Switch of subject

–*ba* 68.7%

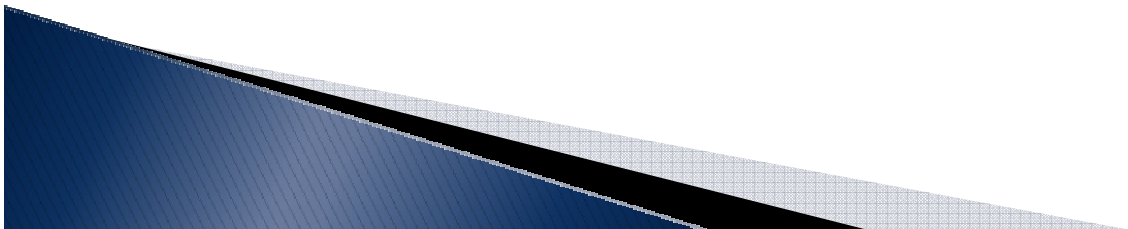
–*do* 73.1%

(McAuley 2002: pg. 32, table.5)



# DS function in COJ

|              | switch | null | ratio |
|--------------|--------|------|-------|
| Provisional: | 38     | 50   | .760  |
| Conditional: | 50     | 70   | .714  |
| Concessive:  | 66     | 90   | .733  |



# Role discontinuity in COJ

All 4 grammatical roles

|       | overt | diff | none | total | clauses | ratio |
|-------|-------|------|------|-------|---------|-------|
| Prov: | 40    | 18   | 30   | 88    | 99      | .89   |
| Cond: | 30    | 18   | 27   | 75    | 96      | .78   |
| Conc: | 10    | 16   | 47   | 73    | 97      | .75   |

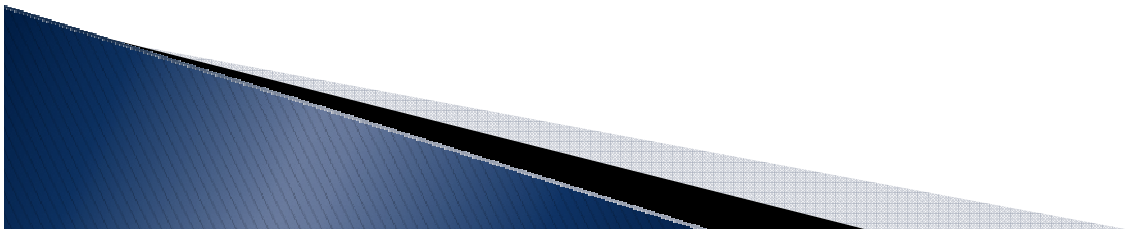


# Shift in switch reference:

Provisional has strong DS in OJ.

Concessive comes to have stronger DS than the Provisional and Conditional in EMJ

The Provisional and Conditional become SS by LMJ (Ohori 1994)

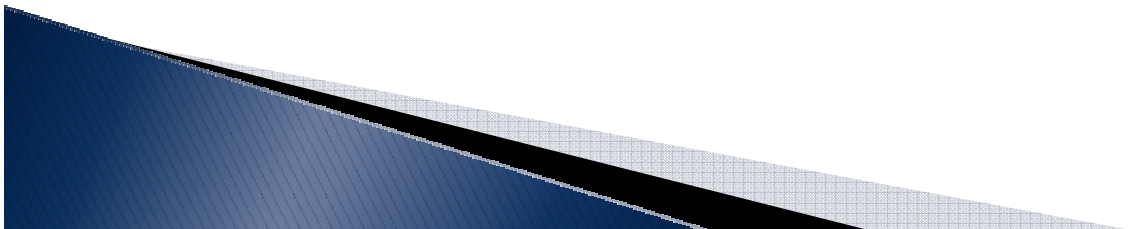


# Shift in semantics

Provisional takes on the irrealis conditional meaning by NJ

Conditional form almost dies out in colloquial speech by NJ

Some of the realis conditional functions of the Provisional are taken over by new patterns with conjunctive *to* and inflection *-tara*



# Is NJ *to* like OJ Provisional?

Yamaguchi–Fujii (1993, pg.16) says yes. There are semantic restrictions on *to* that might explain a high rate of overt arguments.

*to* embedded in non–past tense c1: a habitual, or logical condition–consequent relation

*to* embedded in past tense c1: "After/while S\_1 happened, what do you think happened? I observed/discovered that S\_2 happened".

(Kuno 1973: pp. 184–199)

# Uncontrollability a factor?

In NJ *to* the action denoted by the c1 predicate cannot be controllable by the c0 subject.

\*太郎が運転すると、あの帽子をかぶる。

“When Taro drives he wears that hat.”

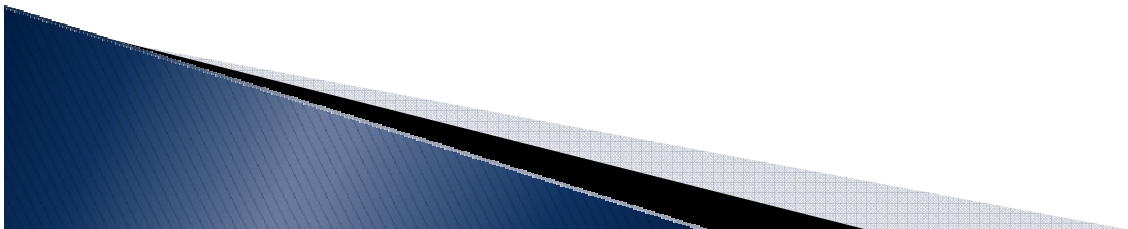
Furthermore, with NJ *to* condition, the consequent cannot represent a command, a request, or a determination by the speaker.

(Kuno 1973)

# Probably not

The predicate heads of clauses embedding  
Concessives show a high number of  
adjectives, unaccusatives.

It is possible to find Provisional conditions to  
optative consequents in OJ.



# Example

阿我農斯能 / 美多麻多麻比弓 / 波流佐良婆 /  
奈良能美夜故爾 / 咩佐宜多麻波祢

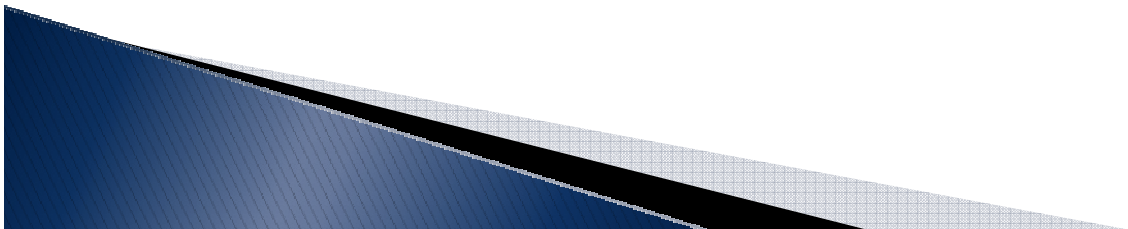
a ga nusi no / mi-tama tamapite / **paru sareba** /  
nara no miyakwo ni / **myesage-tamapane**

"My Lord, by your leave, when Spring comes, I  
want you to summon me to Nara, the capitol"  
(MYS.5.882)

# Pronouns in c0:arg

Definite NP pronouns in COJ (phonographic)

|              | pronouns | Est. slots | ratio |
|--------------|----------|------------|-------|
| Provisional: | 32       | 383        | .083  |
| Conditional: | 11       | 319        | .034  |
| Concessive:  | 7        | 193        | .036  |

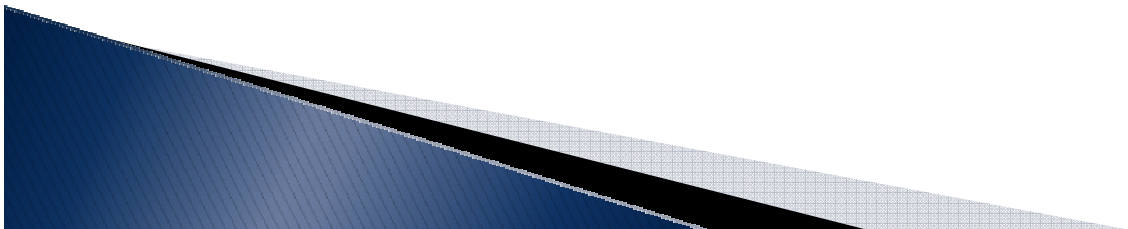


# Pronouns in c0:arg

Definite NP pronouns in EMJ

*Ise monogatari*      circa 900  
*Tosa niki*              935

|              | pronouns | Est. slots | ratio |
|--------------|----------|------------|-------|
| Provisional: | 26       | 428        | .06   |
| Conditional: | 3        | 109        | .027  |
| Concessive:  | 5        | 100        | .05   |





# References

- Akiba, Katsue. 1977. "Switch reference in old Japanese," Proceedings of the annual meeting of the Berkeley Linguistics Society, Volume 3, Berkeley Linguistics Society, pp.610–619
- Kuno, Susumu. 1973. The Structure of the Japanese Language. MIT Press.
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- Ohuri, T. 1994. "Diachrony of Clause Linkage: TE and BA in Old through Middle Japanese," Amsterdam Studies in the Theory and History of Linguistic Science Series 4, 1994, Issue 109, pp. 135, John Benjamins BV, Netherlands.
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