Inducing and Blocking Labeling

To appear, *Glossa*

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Introduction

Case markers *ga* 'NOM" and *o* 'ACC'

The topic marker *wa*

Complementizer *to*, *no*, ...

The Q-particle *ka/no*

Each has its function.

At the same time, they have a uniform syntactic function of contributing to the labeling of structures.

(1) The labeling function of particles
   (i) Attaches to a non-projectable element => induces projection
   (ii) Attaches to a projectable element => blocks projection

Problems Of Projection (POP)

(2) Merge

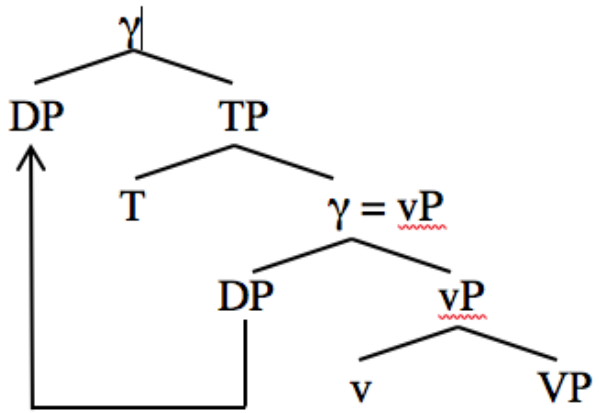
Merge applies to two objects α and β, and forms a new object γ = {α, β}.

(3) a. γ = {H, αP}

b. γ = {αP, βP} Problem of Projection

c. γ = {H1, H2} Problem of Projection

(4a)



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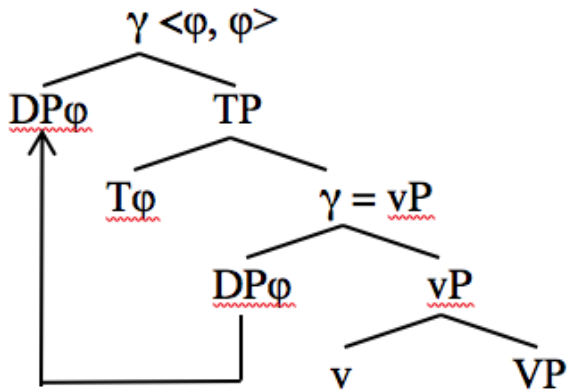


Miyagawa, Wu, Koizumi (to appear):

An issue with (4a): the offending DP that would trigger a POP still exists in Spec,vP.

Solution:

There is a general understanding that the lower copy is not identical to the head copy; the lower copy, for example, would contain just enough information for interpreting as a copy/trace (Fox 1999, 2000, 2002). One way to concretely think of this is to go back to Pesetsky's (1982) distinction of c- vs. s-selection. C-selection is for category while s-selection is for semantics. Once the DP vacates its original position, we could imagine that only features associated with s-selection would remain, excluding features related to c-selection from occurring, and it is these c-selection features that otherwise would lead to a POP. In this way elements of the lower copy does not impede labeling.

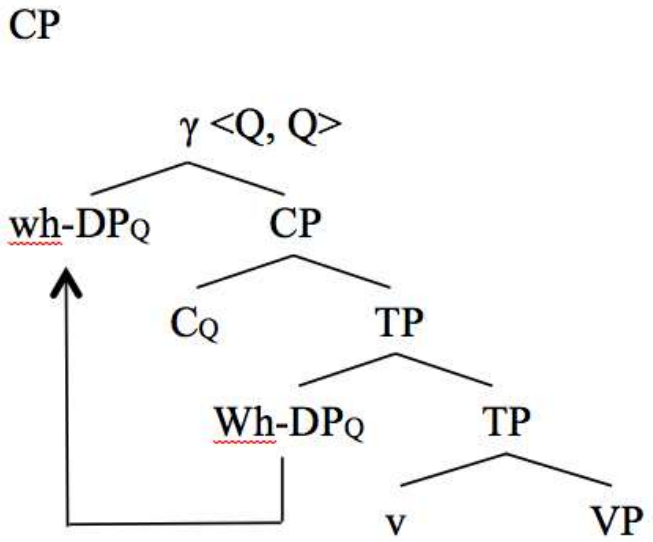
Inducing labeling

Wh-questions

(5) Which dog does Mary like?

Chomsky (2015)

(6a)



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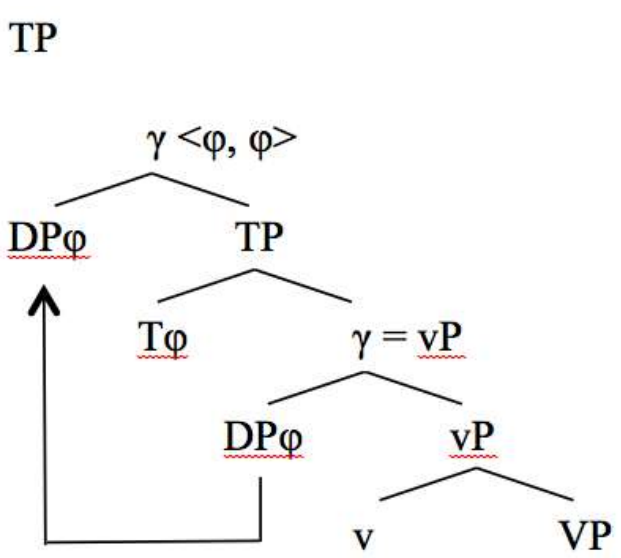


Old Japanese

Wh-movement (Nomura 1993, Watanabe 2002)

Man'yooshuu, *8th C*

(7) Idukuni-ka kimi-ga funefate kutsa mutsubi-kemu. (1169)
which-KA you-NOM ship stop grass tie-PAST
'Where did you anchor your ship?'

Wh-movement began to disappear when the Q/focus particle (*ka*) began to occur at C (Miyagawa 2010)

(8) Study of this phenomenon in the 10th C *Tale of Genji* (Isobe 1990)
1/3: wh-movement
1/3: wh-in-situ with *ka* at the end
1/3: wh-in-situ with another focus particle (*zo*) at the end

(9) Kono nisi-naruie-ha **nani-bito**-no sumu-zo?
this west-be house-TOP what-person-NOM live-Q
'What person lives in this house to the west?'

(10) Q-particle meets the EPP requirement on C (Miyagawa 2001)

Reinterpreted within the theory of labeling:

(11) The function of the Q-particle
The Q-particle attaches to C to induce labeling by giving C independent categorical status.

The C-Q combination in Japanese is an independent category: the C-Q combination occur as a morphosyntactically independent item that does not affect the accentuation of the preceding element.

The tense is part of the metrical phrase with the stem (McCawley 1968)

(12) a. ta’be ‘eat’
b. tabe’-ru ‘eat-PRES’
c. tabe-rare’-ru ‘eat-can-PRES’
d. tabe-sase-rare’-ru ‘eat-cause-PASSIVE-PRES’

In contrast, attaching the Q-particle *ka*, which is an enclitic, does not affect accentuation.

(13) tabe’ru ka ‘eat-PRES Q’

Q-particle gives C independent categorical status, which induces labeling of C without the need for a specifier.

Classic non-EPP effect: pro-drop in Romance

Parallel with C: pro-drop is possible in Romance because T has independent categorical status.

Oltra-Massuet (1999, 2000) for Catalan verbs, Guerzoni (2000) for Italian and by Oltra-Massuet and Arregi (2005) for Spanish: in Romance, stress typically occurs on the vowel that precedes the tense morpheme. This is shown for Spanish below (the data is drawn from Richards 2016).

(14) a. cantá-**ba**-is
sing-**IMP.IND-**2PL
'you (pl.) sang (imperfective)'

b. cantá-**ste**s
sing-**PREF**.2PL
'you (pl.) have sung'

c. canta-rí**-a**-is
sing-FUT-**PAST-**2PL
'you (pl.) would sing (conditional)'

There is a word-internal boundary for assigning metrical stress that immediately precedes the tense, as illustrated for *cantá* -***ba***-*is* ‘sing-IMP.IND 2PL.

(15) cantá)-**ba**-is

The formalism that these linguists use is adopted from Idsardi (1992).

The agreement morpheme in Romance behaves like the Q-particle in Japanese: it gives independent categorical status to T, so labeling is induced without the need for a specifier.

Contrary to these Romance languages, French does not allow pro-drop. French does not have a reliable stress preceding tense, but instead it occurs on the final syllable (see Richards 2016).

(16) a. chant-i-éz
sing-**IMP.IND**-2PL
‘you (pl.) sang (imperfective)’

b. chant-é
sing-**PREF**.2PL
‘you (pl.) have sung’

c. chant-er-éz
sing-FUT-2PL
‘you (pl.) will sing’

Contiguity (Richards 2016)

Operates over stress and prosodic patterns to predict a number of syntactic operations.

(17) T-Support

If T is a suffix, it must follow a metrical boundary.

In English/French, where there is no reliable metrical boundary preceding tense, a DP, which has a metrical boundary at the end, must be moved up. This is the EPP movement.

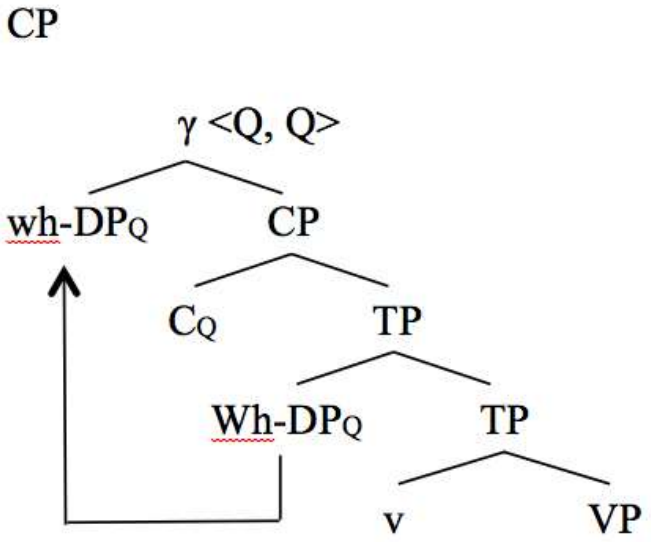
(18) $[_{TP}\ XP\ )_{METRICAL\ BOUNDARY}\ [\ T\varphi\ ...$

Why did the wh-phrase move in Old Japanese?

(19) Idukuni-ka kimi-ga funefate kutsa mutsubi-kemu. (1169)
which-KA you-NOM ship stop grass tie-PAST
'Where did you anchor your ship?'

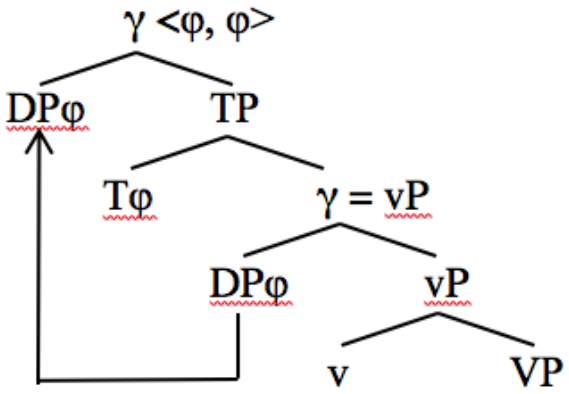
The C does not have independent categorical status, thus the wh-phrase must move to its specifier, and C projects by feature sharing.

(20)



Expletive construction

Chomsky (2013)



Inducing labeling predicts that such Spec-Head agreement isn't necessary.

(23) There are many people in the room.

(24) Henni leiddust strákarnir.
her.3SG.DAT bored.3PL the boys.3PL.NOM
'She found the boys boring.'

Root clause and labeling

Q-particle drop (Yoshida and Yoshida 1997)

(25) Dare-ga kuru (no)?
who-NOM come Q
'Who will come?'

The Q-particle can never be omitted in embedded contexts.

(26) Hanako-wa [dare-ga kuru *(ka)] sitteiru.
Hanako-TOP who-NOM come Q know
'Hanako knows who will come.'

Why is the omission of the Q-particle possible in the root, but not in an embedded clause?

(27) Root and labeling

The root clause need not be labeled.

Labeling and C:

(28) Hanako-wa [Taroo-ga iku *(to)] omotta.
Hanako-TOP Taro-NOM go C thought
'Hanako thought that Taro will go.'

Labeling and C:

(29) Hanako-ga iku.
Hanako-NOM go
'Hanako will go.'

(30) Hanako-wa [Taroo-ga iku *(to)] omotta.
Hanako-TOP Taro-NOM go C thought
'Hanako thought that Taro will go.'

(31) Taroo-ga iku yo.
Taro-NOM go EXPL
'Taro will go!'

Complementizer drop (Saito 1986)

(32) John-wa [Mary-ga ki-ta (tte)] yuu-ta/omoo-ta.
John-TOP Mary-NOM come-PAST that say-PAST/think-PAST
'John said/thought (that) Mary came.'

Only possible with ‘say’ and ‘think’ (Kishimoto 2006).

These verbs typically allow root-clause phenomena in their subordinate clause.

(Hooper and Thompson 1973, Miyagawa 2017)

Negative Constituent Preposing (Emonds 1969, 1976)

(33) John said/thought that never in his life would he win the lottery.

Complementizer-less clause cannot scramble (Kishimoto 2006)

(34) [Mary-ga ki-ta *(tte)]$_i$ John-ga t_i yuu-ta.
Mary-NOM come-PAST that John-NOM say-PAST
‘*(That) Mary came John said.’

Topicalization

(35) Watakusi-(wa) iku.
I-TOP go

(36) Hanako-wa [watakusi-*(wa) iku to] omotteiru.
Hanako-TOP I-TOP go C think
‘Hanako thinks that I will go.’

Case-marker Drop

In informal speech in Japanese, the accusative case marking can optionally be left out; this so-called "case drop" is most common if the object is adjacent to the verb (Saito 1985, Fujii and Ono 2000).

(37) a. Mariko-ga nani(-o) katta no?
Mariko-NOM what(-ACC) bought Q
'What did Mariko buy?'

b. Nani*(-o) Mariko-ga katta no?
what(-ACC) Mariko-NOM bought Q
'What did Mariko buy?'

Similar to DOM: with the case marker *–o*, the object tends to be referential, specific, or somehow salient in discourse, while such presuppositional interpretation is not found with the bare object (Fujii and Ono 2000).

The nominative case marker cannot be omitted (Kuno 1973, Saito 1985).

(38) Dare*(-ga) hon-o katta no?
who(-NOM) book-ACC bought Q
'Who bought a book?'

There is one position in which the nominative *–ga* may be omitted — if the predicate is unaccusative (Fujii and Ono 2000).

(39) Kesa nani(-ga) todoita no?
this.morning what(-NOM) arrived Q
'What arrived this morning?'

Same in acquisition: Miyamoto, Wexler, Aikawa, Miyagawa (1999)

Aki (2;3 – 3;00) left out *–o* 94% of the time.

For *–ga*, it was omitted for unaccusative/existential verbs anywhere between 63% and 95% depending on the verb, but only 23% of the time with unergative/transitive verbs.

Blocking projection

Case marking blocks projection (Saito 2016)

Case marking marks the node as “weak” (Saito 2018)

Case marking as projection blocker: Kumamoto Japanese (Kato 2007)

Two nominatives, *ga* (vP external) and *no* (vP internal; glossed as GEN).

(40) a. Taroo-ga/*no son syoosetu-ba koota bai.
Taro-NOM/GEN the novel-ACC bought FP
‘Taro bought the novel.’

b. Son syoosetu-ba Taroo-ga/no koota bai.
the novel-ACC Taroo-NOM/GEN bought FP

Case marking does not block Q-float (Shibatani 1977, Miyagawa 1989)

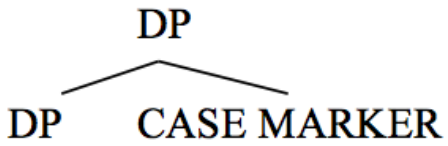
(41) a. Gakusei-ga kinoo san-nin hasitta.
student-NOM yesterday 3-CL ran
'Three students ran yesterday.'

b. Hanako-ga hon-o ni-satu yonda.
Hanako-NOM book-ACC 2-CL read
'Hanako read two books.'

P does.

(42) *Hito-ga [$_{pp}$ [$_{DP}$ mura] kara] futa-tu kita.
People-NOM village from 2-CL came
Intended: 'People came from two villages.'

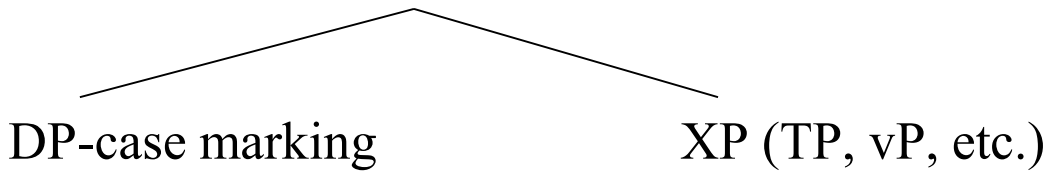
(43) Miyagawa (1989)



(44) Proposal for the "weak" nature of case marking
Case marking is a head that is inert for the purpose of labeling.

(45) Nature of projection blocking: [DP $H_{CASE\ MARKER}$]
Search picks H as the closest candidate for labeling, but the H cannot furnish labeling, and the search picks the sister node.

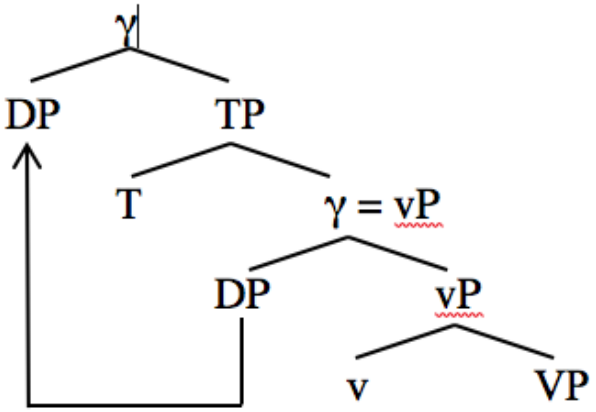
(46)



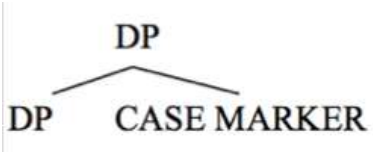
Movement and Case marking: equivalent for labeling

Miyagawa, Wu, Koizumi (to appear)

Movement (Chomsky 2013) and Case marking (Saito 2018) are equivalent for the purposes of labeling.



The offending DP in Spec,vP is made inert for the purposes of labeling because it only has s-selection features, and not c-selection features, because it is a copy.



This DP is made inert for labeling because the head, Case Marker, cannot project.

Differential Object Marking

(47) a. Hasan bir kitap aldı. (Turkish)
Hasan a book bought
'Hasan bought a book'

b. Hasan bir kitab-ı aldı.
Hasan one book-ACC bought
'Hasan bought one book'

The bare object is interpreted as indefinite (or nonspecific); the case-marked object as definite (or specific) (e.g., von Heusinger and Kornfilt 2005).

Bare objects cannot occur away from the verb.

(48) a. *Bir kitap Hasan aldı.
a book Hasan bought
'Hasan bought a book'

b. Bir kitab-ı Hasan aldı.
one book-ACC Hasan bought

Even in the base SOV order, the two objects occupy different positions; the case-marked object occurs higher, outside the VP (e.g., Kennelly 1994, Zidani-Eroğlu 1997, Kelepir 2001). Test using VP adverb 'completely'.

(49) a. Hasan kitab-ı tamamen okudu.
Hasan book-ACC completely read
'Hasan read the book completely.'

b. *Hasan tamamen kitab-ı okudu.
Hasan completely book-ACC read

(50) Hasan tamamen kitap okudu.
Hasan completely book read
'Hasan read a book.'

Kelepir (2001): case-marked objects "move above the VP to check their case features" and get a presuppositional reading (Diesing 1992, Kennelly 1994, Zidani-Eroğlu 1997). Same in other DOM languages (Aissen 2003).

Bantu

Bantu languages are said to show no case effect (Harford Perez 1985, Ndayiragije 1999, Alsina 2001, Baker 2003, Carstens and Diercks 2009, Diercks 2012).

Halpert (2012)

(51) Raising out of a finite clause

a. ku-bonakala [ukuthi **uSipho** **u**-pheka iqanda].
17S-seems that AUG.1Sipho 1S-cook AUG.5egg
'It seems that Sipho is cooking an egg.' *Zulu*

b. **uSipho** **u**-bonakala [ukuthi **u**-pheka iqanda].
AUG.1Sipho 1S- seems that 1S-cook AUG.5egg
'Sipho seems to be cooking an egg.' *Zulu*

(52) Inversion

a. **olukwi** si-**lu**-li-seny-a bakali OVS
11wood NEG-11S-PRES-chop-FV 2 women
'WOMEN do not chop wood.' (Baker 2003) *Kinande*

b. **omo-mulongo mw**-a-hik-a mukali LOC V S
18LOC-3village 18S-T-arrive-FV 1woman
'At the village arrived a woman.' (Baker 2003) *Kinande*

Projection licensor: agreement under movement for noun class

A prominent property of Bantu is that nominals, regardless of where they occur, tend to be overtly marked for its noun class. Thus, *mu-rúmé* 'man' is Class 1, as indicated by *mu*, something which we also see with Class 1 *mu-kali* 'woman'.

Table 1: Noun classes in Lubukusu (Diercks 2010)

NOUN CLASS	AUGMENT	PREFIX	EXAMPLE	GLOSS
1	o-	mu-	omukhasi	'woman'
2	ba-	ba-	babaana	'children'
3	ku-	mu-	kumukhono	'arm/hand'
4	ki-	mi-	kimikhono	'arms/hands'
5	li-	li-	lilyaanda	'ember'
6	ka-	ma-	kamaanda	'embers'
7	si-	si-	sisyaangu	'sponge'
8	bi-	bi-	bibyaangu	'sponges'
9	e-	N-	eendubi	'basket'
10	chi-	N-	chiindubi	'baskets'
11	lu-	lu-	lulwiika	'horn'
12 DIM	kha-	kha-	khakhaana	'small child'
14	bu-	bu-	bubwiino	'ink'
15	khu-	khu-	khukhwanja	'to begin'
16 (LOC 'at')	a-		amulyaango	'at/near the door'
16a (LOC 'towards')	sya-		syamulyaango	'towards the door'
17 (LOC 'on')	khu-		khumulyaango	'on the door'
18 (LOC 'in')	mu-		mumulyaango	'in the door'
20 (AUG)	ku-	ku-	kukwaana	'big child'
/4	ki-	mi-	kimyaana	'big children'
23 (LOC 'in the vicinity of')	e-		enaarobi	'at Nairobi'

The subject, the object, or the locative moving to Spec,TP, and the verbal element agrees with what has moved.

(53) a. Omukali mo-a-seny-ire olukwi (lw'-omo-mbasa). (SVO)
woman.1 AFF-1.S/T-chop-EXT wood.11 LK11-LOC.18-axe.9
'The woman chopped wood (with an axe).' *Kinande*

b. Olukwi si-lu-li-seny-a bakali (omo-mbasa). (OVS)
wood.11 NEG-11.S-PRES-chop-FV women.2 LOC.18-axe.9
'Women do not chop wood (with an axe).' *Kinande*

c. ?Omo-mulongo mw-a-hik-a omukali. (LocVS)
LOC.18-village.3 18.S-T-arrive-FV woman
'At the village arrived a woman.' *Kinande*

Bantu has augment vowels, which attach as a prefix to DPs. Halpert (2012) argues that the augment vowel has the function of case marking, thereby showing that Bantu in fact has case marking despite its traditionally "caseless" characterization.

(54) a. Yohani si-a-nzire mu-kali.
John NEG-1.S/T-like CL1-woman
'John does not like a(ny) woman.'

b. Omukali mo-a-teta-gul-a ki-ndu.
AUG-CL.1-woman AFF-1.S-NEG/PAST-buy-FV CL7-thing
'The woman didn't buy anything.'

c. *Mu-kali mo-a-teta-gul-a eritunda.
CL 1-woman AFF-1.S/T-NEG/PAST-buy-FV fruit.5
'No woman bought a fruit.'

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