Zoom with a Minimalist View: Mamoru Saito's Work 2017-2020
[November 14, 2020]

	セッション	担当講師	取り上げる論文
13:30-14:00 （30 分）	[1]話題提供	林	Japanese Wh-Phrases as Operators with Unspecified Quantificational Force
14:00-14:10 （10 分）	[1]（簡単な）質疑応答　（質問受付係：中島）		
14:10-14:50 （40 分）	[2]話題提供	中尾 小畑	(1) Notes on the Locality of Anaphor Binding and A-Movement (2) A Note on Transfer Domains
14:50-15:00 （10 分）	[2]（簡単な）質疑応答　（質問受付係：中島）		
15:00-15:10 （10 分）	休憩		
15:10-15:40 （30 分）	[3]話題提供	中島	Labeling and Argument Doubling in Japanese
15:40-15:50 （10 分）	[3]（簡単な）質疑応答　（質問受付係：林）		
15:50-16:00 （10 分）	休憩		
16:00-17:00 （60 分）	全体討論　（質問受付係：林）		

各トーク直後の質疑セッションでは、簡単なやり取りで済む内容に絞りましょう。

Saito (2017): Japanese wh-phrases as operators with unspecified quantificational force[*]
林 愼将 (九州大学大学院/日本学術振興会)

主な先行研究

Nishigauchi (1990): 日本語の *wh* expression が indefinite であり、unselective binding を受ける。"the quantificational force of a wh-expression" is determined by "a quantificational particle."と述べる。

Tsai (1999): 中国語の *wh* expression が variable である証拠を出す。

Takahashi (2002): 日本語の *wh* expression が unselective binding を受けることに対する批判を行う。*wh* expression と particle は選択関係があると主張する。

Kuroda (1965): 日本語の *wh* expression は variable であるという点で、Nishigauchi、Tsai、Takahashi の親玉。

	wh expression	*wh* expression と particle の関係
Nishigauchi	variable	移動+unselective binding
Tsai	variable	unselective binding (中国語)、移動+unselective binding (日本語)
Takahashi	variable	選択+particle の移動
Saito	operator	非顕在的移動+Agree

日本語 *wh* expression の中心的な特徴

(1) *wh* expression の解釈その 1: interrogative

　　太郎は[[誰がそれを食べた]か]知っている。

(2) *wh* expression の解釈その 2: universal quantification の一部

　　[[[誰が書いた]本]も]面白い。

☺ここから分かること: *wh* expression の quantificational force は particle に由来する。

(3) 日本語 *wh* の locality

　　a. [[花子がその時[[太郎が来る]と]言った]か]教えてください。

　　b. [[花子がその時[[誰が来る]と]言った]か]教えてください。

☺ここから分かること: clause boundary にかかる locality は無い。

　　c. [[花子がその時[[誰が来る]か]尋ねた]か]教えてください。

解釈 A: 「誰」が最も深く埋め込まれている「か」と関連付けられ、外側の「か」は yes/no 疑問の解釈。

解釈 B: 最も埋め込まれている「か」を yes/no 疑問とし、「誰」を外側の「か」と関連付けた解釈は容認度が下がる。??Please tell me who Hanako asked then if she/he is coming.

☺ここから分かること: *wh* island effect が存在し、日本語の *wh* 疑問文は移動により派生される。

2. Nishigauchi (1990)

(7)　a. [[誰が来る]か]教えてください。

　　b. [誰もが読む]本

　　c. [誰かが捨てた]本

　　d. [誰でも持っている]本

　　e. [誰も読まない]本

(8)　　[[[誰が書いた]本]も]面白い。

Kuroda (1965): 日本語の *wh* は indeterminate pronoun であり、variable として機能する。

Nishigauchi (1990): Heim (1982) の unselective binding を用いて分析する。

Unselective binding

(9)　a. Everyone is smart

　　b. [Every$_x$] [x is a person] [x is smart]

　　c. [Every x: x is a person] [x is smart]

　　　　operator restriction　　core sentence (nuclear scope)

(10) Donkey anaphora

　　a. Everyone who bought a painting was satisfied with it

　　b. [Every$_x$] [x is a person and x bought a painting] [x was satisfied with it]

　　c. [Every$_{x, y}$] [x is a person, y is a painting, and x bought y] [x was satisfied with y]

(11) a. If a man sees a panda, he chases it.

　　b. [Every$_{x, y}$] [x is a man, y is a panda and x sees y] [x chases y]

(12) a. John saw a cat.

　　b. [Some$_x$] [x is a cat] [John saw x]

(13) Diesing (1992)

　　a. Firemen are available

　　b. [Some$_x$] [x is a fireman] [x is available]

(14) a. Cats are wise.

　　b. [Generic$_x$] [x is a cat] [x is wise]

---

(15) a. 太郎は[[花子が何を食べた]か]知っている。

　　b. [Q$_x$] [x is a thing] [Hanako ate x]

→*wh* expression は variable

(16) a. [[[誰が書いた]本]も]面白い。

　　b. [Every$_x$] [x is a book and *dare* wrote x] [x is interesting]

　　c. [Every$_{x, y}$] [x is a book, y is a person, and y wrote x] [x is interesting]

→「誰」が unselective binding を受ける

(17) a. 太郎は[[花子が来ると]聞いて]も行かないだろう

   b. 太郎は[[誰が来ると]聞いて]も行かないだろう

   c. 太郎は[[誰が来るか]聞いて]も行かないだろう

解釈 A: 「誰」が「か」と関連付けられて解釈

解釈 B: 「誰」が「も」と関連付けられ、「か」は yes-no 疑問とする解釈はできない。

   *For every x, x a person, Taroo won't go even if he hears if x is coming.

☺ここから分かること: *wh* expression は associated particle の近くに covert に移動する。

→Nishigauchi (1990): unselective binding のために government 関係が必要であり、そのために移動が起こる。

⊗疑問点、問題点: unselective binding と covert movement を両方取ることは little puzzling

(18) 移動では、operator と variable は同一の要素 (Chomsky (1993))

   a. Who did John see?

   b. [[which x: x is a person], x] did John see [[which x: x is a person], x]

   c. [[which x: x is a person], ~~x~~] did John see [~~[which x: x is a person]~~, x]

対して、unselective binding では、quantifier と variable は違う要素→何故移動の関係が必要なのかが不明。

☺Kuroda の indeterminate pronoun 分析を発展させた Nishigauchi は、*wh* 自体が quantificational force を持つと考え、"the quantificational force of a wh expression" is determined by "a quantificational particle"と述べる。

3.1 Tsai (1999)

(19)   Shei   xian   lai,   shei   jiu   keyi   xian   chi   ne

   who   first   come   who   then   can   first   eat Q_{wh}

   'For which x, x a person, if x comes first, then x is allowed to eat first.'

☺ここから分かること: 中国語の *wh* expression は indefinite であり、unselective binding を受ける。

(20)   [$_{CP}$ Op$_{[Q]x}$ [TP … shei$_x$ …… shei$_x$ …]]

(21)   [誰が最初に来たら、誰が最初に食べられるか] (教えてください)

(22)   Shei   xian   lai,   shei   jiu   keyi   xian   chi

   who   first   come   who   then   can   first   eat

   'For every x, x a person, if x comes first, then x eats first.'

☺ここから分かること: conditional には universal operator が含まれ、unselective binding により *wh* expression は universal の解釈を得る。

(23) a. 学生が来れば、僕は pro 会う

   b. *誰が来れば、僕は pro 会う

(24)   Akiu   bu   xiang   chi   shenme

    Akiu   not   want   eat   what

   A. 'Akiu doesn't want to eat anything.' (= ¬ [Some$_x$] [x is a thing] [Akiu wants to eat x])

   B. 'What does Akiu not want to eat?'

(25) a. Ni   xiang-zhidao [Akiu   mai-bu-mai   shenme] (ne)

you   wonder   Akiu   buy-not-buy   what Q_{wh}

'What is the thing x such that you wonder whether Akiu will buy x.'

b. Ni   xiang-zhidao [shei   mai-bu-mai   shenme]

you   wonder   who   buy-Asp   what

A. 'What is the thing x such that you wonder who bought x.'

B. 'Who is the person x such that you wonder what x bought.'

☺ここから分かること: 中国語では *wh* expression が variable で unselective binding を受ける。

(26) 日本語と中国語の違い

a. 日本語: [$_{CP}$ Op[Q] $_x$ [$_{C'}$ [$_{TP}$ ... [$_{DP}$ Op[Q] $_x$ [wh$_x$]] ...] C]]

b. 中国語: [$_{CP}$ Op[Q] $_x$ [$_{C'}$ [$_{TP}$ ... [$_{DP}$ [wh$_x$]] ...] C]]

→日本語では operator は *wh* expression と生起し、移動する一方、中国語では scope 位置に生起する。

☺i. 両言語で *wh* expression は variable であり、ii. 日本語では移動により *wh* island effect が生じる。

(27) Akiu   shei   dou   xiangxin

Akiu   who   all   trust

'Akiu trusts everyone.'

(28) [[誰が書いた本]も]面白い

☹疑問点、問題点: 1. 何故日本語では DP と PP に null interrogative operator が merge するのか。*wh* expression と operator とが local な関係になければならないというわけではない。2. 日本語の *wh* island の問題。3. 日本語の *wh* expression は variable ではない。

(29) 太郎は[[誰が来るか]聞いて]も行かないだろう

(30) Shei   xian   lai,   shei   jiu   keyi   xian   chi

who   first   come   who   then   can   first   eat

'For every x, x a person, if x comes first, then x eats first.'

(31) *誰が来れば、僕は誰に会う

(32) a. 太郎は人に会っていた

b. *太郎は誰に会っていた

(33) a. 太郎は人に会わなかった

b. *太郎は誰に会わなかった

3.2 Takahashi (2002)

(36) a. 太郎はどの本も読んだ。

b. 太郎は本も読んだ。

☺ここから分かること:「も」だけでは universal quantifier にはならない。

(37) [[誰が書いた本]も]図書館にある。

(38) [Every x: x is a person] [Some y: y is a book and x wrote y] [y is in the library]

☺ここから分かること:「本」は universal の解釈にはならない。

Takahashi (2002) の主張: 「も」は *wh* expression と一緒の場合のみ universal quantifier として解釈される。

(39)   [[誰もが書いた本]も]図書館にある

(40) a. Who did John see?

   b. [[which x: x is a person], x] did John see [[which x: x is a person], x]

   c. [[which x: x is a person], ~~x~~] did John see [~~which x: x is a person~~, x]

(41) a. [[誰-も-が書いた本]]

   b. [[[x: x is a person]-[every x]-が書いた本]]

   c. [[[x: x is a person]-~~[every x]~~-が書いた本] [every x]]

⊗疑問点、問題点: 1. wh island。2. *wh* expression を variable としている。3. particle と *wh* expression の関係 i. particle が *wh* expression を選択するのではなく、*wh* expression の方が particle を必要としているように思われる。ii. 「も」に universal quantifier と *also/even* を表すものの二種類を想定しなければならない。

(42)   *誰が来れば、僕は pro 会う

(43) a. 太郎は[[花子が何を食べた]か]知っている (こと)

   b. 太郎は[[花子がわにを食べた]か]知っている (こと)

   c. *太郎は[[花子が何を食べた]と]思っている (こと)

(44) a. [[誰が書いた本]も]図書館にある (こと)

   b. [[懐疑論者が書いた本]も]図書館にある (こと)
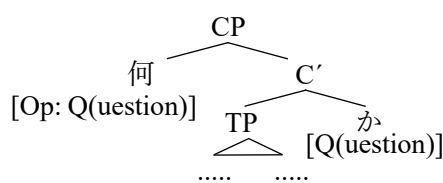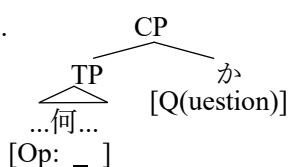
   c. *[[誰が書いた本]が]図書館にある (こと)

(45) 提案

   a. [wh + variable [[..... wh + variable .....] particle]]   (covert movement)

   b. [wh + ~~variable~~ [[..... ~~wh~~ + variable .....] particle]]   (quantificational force)
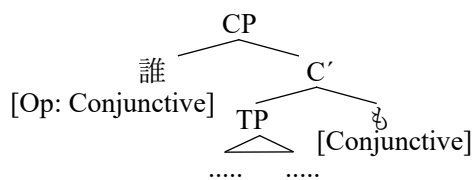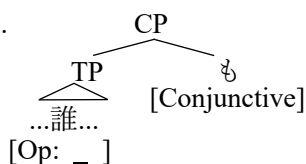
4. 提案

(49) a. 太郎は[[花子が何を食べた]か]知っている

   b.

CP
- TP
  - ...何...
  - [Op: _]
- か [Q(uestion)]

何 [Op: Q(uestion)]
CP
- 何
- C′
  - TP
    - ..... _ .....
  - か [Q(uestion)]

(50) a. 誰が[[書いた本]も]図書館にある

   b.

CP
- TP
  - ...誰...
  - [Op: _]
- も [Conjunctive]

誰 [Op: Conjunctive]
CP
- 誰
- C′
  - TP
    - ..... _ .....
  - も [Conjunctive]

(51)   花子も太郎も次郎もそこにいた

(52)   Everyone was there = [a and b and c and …] were there

(53) a. 誰からか手紙が届いた

   b. [花子か太郎か次郎か]がそこにいた

(54)   Someone was there = [a or b or c or …] was there

(55) a. [[太郎が来て]も]僕は会う

    b. [[誰が来て]も]僕は会う

→二つの mo があると想定する必要はない

(56) a. [[花子がその時[[誰が来る]か]尋ねた]か]教えてください

feature valuation

    b. [CP [TP ... [CP wh [Op: Q] [C′ [TP ... wh ...] か [Q]] ...] か[Q]]

covert movement

(57) a. 太郎は[[誰が来るか]聞いて]も]行かないだろう

feature valuation

    b. [CP [TP ... [CP wh [Op: Q] [C′ [TP ... wh ...] か [Q]] ...] も[Conj]]

covert movement

Discussion

1. 以下の対比に関して、(32b) は日本語の *wh* expression が variable ではない証拠の一つとされるが、(24) の中国語の例から、否定を取り除いても 'Akiu wants to eat something.' の読みは出てこない。この場合中国語で existential closure が使えないのは何故か。

(32) b. 「*太郎は誰に会っていた」

(24)   Akiu   bu   xiang   chi   shenme

        Akiu   not   want   eat   what

        A. 'Akiu doesn't want to eat anything.' (= ¬ [Some$_x$] [x is a thing] [Akiu wants to eat x])

        B. 'What does Akiu not want to eat?'

関連して、日本語では *wh* expression が variable ではないとする証拠として挙げられている以下の例において、日本語では Tsai (1999) に従い null operator movement があると考え、negative island や conditional (universal) operator movement により疑問の null operator movement が block されるとすることで以下の例を排除し、Tsai の分析を擁護することは可能か。

(31)   *誰が来れば、僕は誰に会う

(33) b. *太郎は誰に会わなかった

2. Takahashi (1993) では以下の文に曖昧性があることが述べられている。

(i)   ジョンはメアリーが何を食べたか知りたがっているの?   (Takahashi (1993: 657))

        'Does John want to know what Mary ate?'

        'What does John want to know whether Mary ate?'

wh island と covert movement を考えた場合にこの例をどのように分析するのか。更に、overt movement を考えると、Takahashi (1993) は (ii) に曖昧性は無いと述べる。

(ii)   何を $_i$ ジョンはメアリーが t_i 食べたか知りたがっているの?   (*ibid.*)

> しかし、Ishihara（2002）や Kitagawa（2005）で述べられているように、ここで *wh* island 違反となるような解釈（内側の「か」を yes/no 疑問として、「何」は「の」と関連付けられた解釈）も適切な prosody の下では得られるように思われる。これをどのように捉えるのか。また、適切な prosody を与えても、以下の例において、「誰」を「も」と関連付ける解釈は依然として容認されないように思われるが、これは何故なのか。

(17) c. 太郎は[[誰が来るか]聞いて]も行かないだろう

> 3. 他言語にどこまで応用可能か。英語の *wh* expression も、疑問文の他に関係節、感嘆文等にも使われるため、例えば Chomsky（2015）で言われているように、*wh* expression が unvalued question feature を持つと考えるのは事実に即していないように思われる。しかし、英語の *wh* expression は日本語の *wh* expression と異なり、quantifier によっては普通は解釈を与えられない[1]。従って、英語の *wh* expression も [*u*F] を持つ operator だとすると、その [*u*F] とは何なのか。

> 4. 中国語の（19）、（20）において、二つの独立した *wh* expression が一つの operator に bind されることは Bijection Principle の違反にならないのか。その場合、Chomsky（2020）が ATB に適用した方策を取り、二つの *wh* expression に同一の解釈を与えるとその違反を避けられる可能性があるか。

(19)　　Shei　xian　lai,　　shei　jiu　　keyi　xian　chi　ne
　　　　who　first　come　who　then　can　　first　eat　Q_{wh}
　　　　'For which x, x a person, if x comes first, then x is allowed to eat first.'

(20)　　[CP Op[Q] $_x$ [TP … shei$_x$ …… shei$_x$ …]]

> 5. Case がラベルにならない枠組みにおいて、「何か」の「か」はラベルになれるのか。また、それが C として機能した場合はラベルになれるのか。

(49) a. 太郎は[[花子が何を食べた]か]知っている

b.
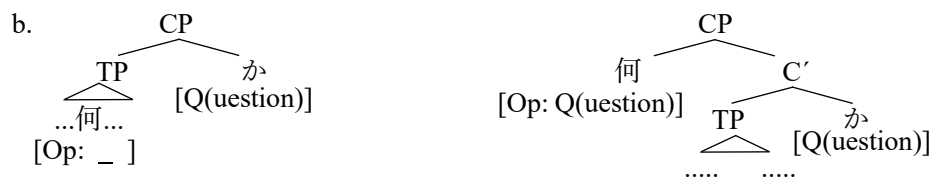
> 6. Chomsky（2000）等に反し、[*u*F] は uninterpretable ではない。

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[1] 英語でも自由関係節に用いられる *whatever* のような *wh* expression では、*every* に由来する接辞により解釈が与えられる。

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Saito (2017a) "Notes on the Locality of Anaphor Binding and A-Movement"

Section 2: Anaphor Binding and Derivational Phase

(Saito (2017b) "A Note on Transfer Domains"の補足)

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2.1. Quicoli's (2008) Proposals

Chomsky (2008): **Phase by phase derivation**

(3a) Embedded **vP** built → complement VP transferred

(3b) Embedded **CP** phase built → complement TP transferred

Quicoli (2008): **Phase-based analysis of anaphor binding**

(4) Information on the reference of an anaphor is sent to the C-I interface along with a transfer domain that includes the anaphor.

(5) a. John recommended himself.

(6) a. [vP John [v [VP recommended himself]]]

- When **VP** is transferred, *John* has already been introduced.

→ The information "himself = John" is sent to the C-I interfaces.

(7) a. *John thinks that Mary recommended himself.

    b. [vP Mary [v [VP recommended himself]]]

- When **VP** is transferred, *John* is **not** in the structure.

→ No information on the antecedent of *himself*.

・**Reconstruction effects**

(8) a. Which picture of himself did John buy?

    b. [vP [which picture of himself] [John [v [VP buy [which picture of himself]]]]]

- Copy of [which picture of himself] in the object position

- "Himself = John" can be determined.

(9) Bill wonders which picture of himself John bought.

(10) a. [vP [which picture of himself] [**John** [v [VP buy [which picture of himself]]]]]

    - Transferred with the information "himself = **John**" **OR** pending

The option available because of the "Bypass Principle".

(i) **Bypass Principle** (Quicoli 2008: 314)
In a phase containing chain-related anaphors, condition A may target either an anaphor inside the local domain or an anaphor outside the local domain.

(10) b. [$_{CP}$ [which picture of himself] [C [$_{TP}$ John [T [$_{vP}$ [which picture of himself] [John [v [$_{VP}$ …]]]]]]]]]

      c. [$_{vP}$ [which picture of himself] **Bill** [v [$_{VP}$ wonders [$_{CP}$ [which picture of himself] [C [$_{TP}$ …]]]]]]]]

      - Transferred with the information "himself = **Bill**"

・**Japanese Scrambling** (cf. Dejima 1999)
Scrambling of the anaphor makes coreference with an upper subject possible.

(11) a. 太郎が$_i$ [$_{CP}$ 花子が$_j$ [$_{CP}$ 次郎が$_k$ 自分自身を$_{i*,j*,k}$ 批判したと] 言ったと] 思っている（こと）

      b. 太郎が$_i$ [$_{CP}$ 花子が$_j$ [$_{CP}$ 自分自身を$_{i*,j,k}$ 次郎が$_k$ 批判したと] 言ったと] 思っている（こと）

      c. 太郎が$_i$ [$_{CP}$ 自分自身を$_{i,j,k}$ 花子が$_j$ [$_{CP}$ 次郎が$_k$ 批判したと] 言ったと] 思っている（こと）

(12) [$_{vP}$ 次郎が [[$_{VP}$ 自分自身を批判 s] v]]

    - No scrambling → "自分自身＝次郎" only

(13) [$_{vP}$ 花子が [[$_{VP}$ [$_{CP}$ [自分自身を] [[$_{TP}$ 次郎が自分自身を批判した] と]] 言 w]v]]

    - Scrambling → "pending" option available

2.2. The Absence of NIC Effects in Languages without φ-feature Agreement

Chomsky's (1981) Binding Theory:
Based on **Specified Subject Condition (SSC) and Nominative Island Condition (NIC)**
(α = anaphor, δ = the binding domain for α)

(14) a. [$_δ$ **subject** [… α …]] (SSC)

      b. [$_δ$ α [**T$_{[+AGR]}$** […]]] (NIC)

(15) *SSC violating examples*

      a. *John expects [$_{TP}$ the guests to be introduced himself].

      b. *Mary believes [$_{TP}$ the speakers to have been introduced to herself].

→ problematic under the phase-based approach, <u>if passive v is **not** a phase</u>

(16) [$_{vP}$ John [v [$_{VP}$ expect [$_{TP}$ [the guests] to be introduced [the guests] to himself]]]]

    - "himself = John" should be possible

(17)   *NIC violating example*
       *John thinks [$_{CP}$ that [$_{TP}$ himself will be nominated]]

No NIC effect when T lacks φ-features
(languages without φ-feature agreement (e.g. Japanese (18)) (cf. Yang 1983);
nonfinite clause (19))
(18)   a.   太郎は [$_{CP}$ [$_{TP}$ 自分自身が 推薦される] と] 思っている
       b.   花子は [$_{CP}$ [$_{TP}$ 自分自身が それを見た] と] 主張した
(19) John believes [$_{TP}$ himself to be the best candidate]

→ problematic under the phase-based approach, <u>if TP is **always** transferred upon completion</u>
<u>of CP</u>
(20) [$_{CP}$ [[$_{TP}$ 自分自身が [[$_{vP}$ 自分自身が [[$_{VP}$ それを 見] v]] T$_{[+Past]}$] と]]
       ("自分自身 = 花子" is not available.)

Proposal: If T lacks φ-features, vP (instead of TP) is transferred when CP is completed.
(21)   a.   [$_{CP}$ [C [$_{TP}$ subject [**T$_{[+AGR]}$** [$_{vP}$ …]]]]]
       b.   [$_{CP}$ [C [$_{TP}$ subject [**T$_{[-AGR]}$** [$_{vP}$ …]]]]]   (order irrelevant)

(22)   [$_{vP}$ 花子が [[$_{VP}$ [$_{CP}$ [[$_{TP}$ 自分自身が [[$_{vP}$ …] **T$_{[+Past]}$**]] C]] 主張 s] v]]
       - "自分自身 = 花子" available upon completion of the matrix vP

Why are the transfer domains different?
(23)   a.   T with φ-features → independently merged
       b.   T without φ-features → C+T merged first, followed by excorporation
(24)   α excludes β =$_{def}$ α does not dominate any instance of β.

If the transfer domain is the "maximal phrase that excludes the phase head,"
it is **TP** in (23a) and **vP** in (23b).

Implication on ECM
(25)   a.   John believes [$_{TP}$ Mary to be a genius].   (ECM complement as TP)
       b.   Mary is believed [$_{TP}$ Mary to be a genius].

If ECM complements are CP: movement to the edge causes improper movement (A-A'-A)
(26)   b.   [$_{CP}$ Mary [C [$_{TP}$ Mary to be a genius]

3

Under the phase-based analysis: No need for movement to the edge; only vP is transferred

(28)   Mary … [$_{CP}$ [$_{TP}$ Mary [to [$_{vP}$ be a genius]]]]

Merit: Allows clausal complements to uniformly be CPs.

Explanations for (15) (= (29))

(30) [$_{CP}$ C [$_{TP}$ the guests [to [$_{vP}$ be introduced the guests to himself]]]]

-    only vP is transferred → "himself = the guests" unavailable, as desired.

Remaining problem: how to avoid movement out of control complements

(31)   a.   Mary decided [$_{CP}$ [$_{TP}$ PRO to go to college]].

        b.   *Mary was decided [$_{CP}$ [$_{TP}$ Mary to go to college]].

            - Movement should be possible if only vP is transferred

2.3. Phases and the Movement Theory of Control

(32) θ-criterion (Chomsky 1981)

    Each θ-role is assigned to exactly one argument and
    each argument is assigned exactly one θ-role.

Hornstein (1999): Movement theory of control

(33)   a.   John tried [$_{CP}$ [$_{TP}$ PRO to win the race]].

        b.   John tried [$_{CP}$ [$_{TP}$ John to win the race]].   (movement into another θ-position)

cf. (34) Mary is believed [$_{TP}$ Mary to be a genius].   (movement into a non θ-position)

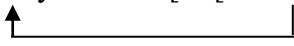- Eliminates D-structure as a "pure representation of thematic relations"
- Eliminates PRO

If only vP is transferred:

(35)   b.   [$_{CP}$ C [$_{TP}$ John [to [$_{vP}$ win the race]]]]

- *John* is free to move after the completion of CP

The ungrammaticality of (31b) (= (36))?: **Tense interpretation** (cf. Stowell 1982)

(37) a. John believes [CP [TP Mary to be a genius]]. (ECM complement **lacks Tense**)

   b. Mary decided [CP [TP Mary to go to college]].

   (Control complement: **possible future tense**)

Suggestion: DP receives one θ-role <u>per Tense domain</u>

(38) [TP … tense … [CP [TP … tense …]]

   domain 2   **domain 1**

- Control: movement into another domain → second θ-role required

Locality of A-scrambling (Mahajan 1990, Tada 1993, Saito 1992, Miyagawa 2001)

Clause internal scrambling = A-movement

(39) a. [彼らが [vP [お互いの先生]を 批判した]] （こと）

   b. ?*[[お互いの先生]が [vP 彼らを 批判した]] （こと）

   c. [<u>彼らを</u> [[お互いの 先生]が [vP 批判した]]] （こと）

   (The scrambled phrase can be the binder)

Long-distance scrambling = A'-movement

(40) a. *[[お互いの 先生]が [vP [CP [田中が 彼らを 批判した] と] 言った]] （こと）

   b. *[彼らを [[お互いの先生]が [vP [CP [田中が批判した] と] 言った]] （こと）

   (The scrambled phrase <u>cannot</u> be the binder)

- Long distance A-scrambling is excluded because of improper movement, if the movement is via [Spec, CP] (41)

- If only vP is transferred, it can move out directly.

   (42) [… DP … [CP [TP DP [TP subject [vP …]]]]]

   Problem of this derivation: movement across two tense domains, but only one θ-role

For further discussion:

Treatment of long-distance anaphora

(i) 太郎ᵢは[自分ᵢが推薦されると]思っている。

(ii) 太郎ᵢは[花子ⱼが自分ᵢ/ⱼを推薦すると]思っている。

- no need to find an antecedent inside a phase?

- LF(covert) movement analysis? (cf. Pica (1987), Katada (1991), a.o.)

- difference from non-subject-oriented anaphors (e.g. 彼自身)

5

> **Two main proposals** in Saito (2017):
> [i] Transfer applies to phases, not phase complements, upon the completion of the next phase up.
> [ii] When T inherits unvalued φ-features from C, it inherits phasehood as well.

Transfer Domain

Saito (2016): NIC effects are not observed in the absence of ø-feature agreement.

(1) a. *Mary insisted [that herself saw it]
    b. 花子は[cp[TP 自分自身がそれを見た]と]主張した

(11) a. [CP [C [TP SUBJ [T[+AGR] [v*P/vP …]]]]]] (→1a)
      The referent of *herself* cannot be specified when it is sent to the CI interface.
      →Condition A violation
    b. [CP [C [TP SUBJ [T[-AGR] [v*P/vP …]]]]]] (→1b)
      v*P/vP is transferred when ø-feature agreement is absent in CP.
      The information that *zibunzisin* corefers with *Hanako* can be sent to the CI interface.:

Question:
Why is it that v*P/vP is the transfer domain when the CP phase lacks ø-feature agreement?
(On the other hand, TP is transferred when T carries ø-features.)

(12) A **phase** is transferred upon completion of the next phase up.
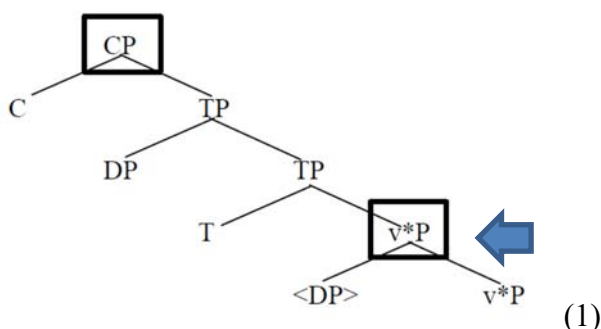   (Transfer applies to a phase, not a phase head complement.)

Under (12), (11b) is the core case. Why is TP transferred in (11a)?

(12) raises two questions:
a. Q1: Is vP indeed transferred as in (11b)?   (discussed later)
b. Q2: Why is TP transferred in (11a) when T carries φ-features?

JPN (for (11b))   ENG (for (11a)) (=(13) in Saito (2017))

No phi-feature agreement in the CP phase   (1)
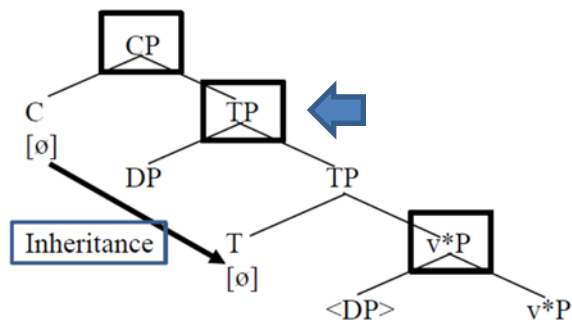
JPN in (11b)
CP and v*P are phases. Hence, when there is no feature inheritance, v*P is transferred upon the completion of the CP phase. [core case]

ENG in (11a)/(13)

When T inherits ø-features from C, it also inherits phasehood from C and TP becomes a phase. Under (12), when the CP phase is completed, TP is transferred. If this is correct, the pattern in (11a) is a special case that obtains because of ø-feature agreement.

_v_ as a Phase Head

vP constitutes a phase just like v*P, following Legate (2003) and Bošković (2007).

[Argument against vP as a phase]

(14) Mary says that **there arrived a man** (on horseback).

(15) a. [CP [TP there [T [vP *v* [VP arrive a man …]]]]]
     b. [vP *v* [VP arrive a man …]]
                  Transfer

Under the assumption that *v*P is a phase, VP, the shaded part in (15b), undergoes Transfer.
→Case of the internal argument *a man* is not valued yet, which causes a clash at the SM interface.

If vP is not a phase, this problem can be avoided.

However, this problem does not arise to begin with if (12) is correct:
Under (12), VP is not transferred until the CP phase is completed, which means the internal argument *a man* can be valued by T before Transfer. →No obstacle for the assumption that vP is a phase.

[Empirical support 1: anaphor binding in unaccusative vP]

(20)　太郎が[花子が**自分自身**の鞄に<u>つまずいた</u>と]言った。（自分自身＝花子・自分自身≠太郎）

The embedded verb is unaccusative. → vP, not v*P

If vP is a phase, the anaphor *zibunzisin* is transferred when the embedded CP phase is completed.
→ The information that *zibunzisin* corefers with *Hanako*, but not with *Taro*, can be sent to the CI interface, which makes a right prediction.
If vP is not a phase, the anaphor *zibunzisin* is transferred when the matrix v*P phase is completed.
→ The information that *zibunzisin* corefers with *Taro* as well as with *Hanako*, can be sent to the CI interface, which causes overgeneration.

[Empirical support 2: ECM]

(21) John expects [CP [TP her [to [v*P <her> [v [VP win the election]]]]]]

Under (12), when the embedded CP phase is completed, embedded v*P, not TP, undergoes Transfer, so that the matrix verb can value Case of *her*.
→It can be assumed that clausal complements with T are uniformly CPs.

Consider (22) with this background.

(22) a. *John expects [the guests to be introduced to himself]
     b. *Mary believes [the speakers to have been introduced to herself]

How can SSC effects in (22) be explained?
The embedded clause in (22) contains passive vP, not v*P. **If vP is not a phase**, the first phase in (22) is matrix v*P, which wrongly predicts that *John* and *Mary* can bind *himself* and *herself*, respectively. **If vP is a phase**, embedded vP, undergoes Transfer when the embedded CP phase is completed:

(23) [CP C [TP the guests [to [vP be introduced the guests to himself]]]]

The reference of the anaphor *himself* cannot be specified in (23), which explains why (22) is ungrammatical.

Summary
(i) A phase, not a phase complement, is transferred upon the completion of the next phase up.
(ii) When T inherits ø-features from C, it inherits phasehood as well.
(iii) vP is also a phase.

Discussion Topics
①フェイズの定義について
Saito (2017)では、phi-feature が T へ継承された場合、phasehood も T へ継承されるとされているが、C はそのまま phase としてのステイタスを維持している。

２つの可能性
(1) C に unvalued feature は残らないがフェイズのままである。
　　⇒フェイズの定義は特定のカテゴリーを指定する必要がある。
(2) C に unvalued feature のコピーが残るので、フェイズのままである。
　　⇒フェイズの定義は unvalued feature の有無によって可能で、カテゴリーを指定する必要はない（かもしれない）。
　　ただし、C に残った unvalued phi-feature のコピーがどう value されるかを考える必要あり。

②C による phi-agreement の可能性
　例えば、Miyagawa (2017)では、日本語の場合は、unvalued phi-feature は T に継承されず、C に残って C-Agreement をすると主張している。T に継承されないのであれば、Saito (2017)の主張と両立する可能性がある？

Saito, Mamoru (2017)

"Labeling and Argument Doubling in Japanese"

Tsing Hua Journal of Chinese Studies 47, 383-405.

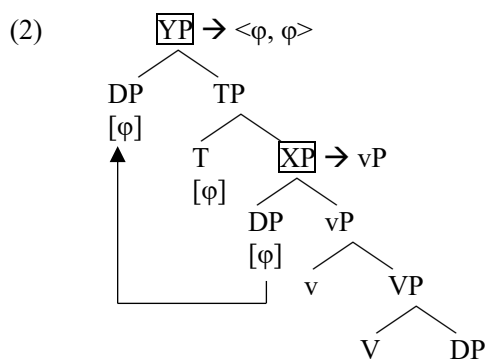Reporter: Takanori Nakashima (Tohoku University)

1. Introduction

- This paper suggests that the labeling algorithm by Chomsky (2013) explains the effects of the theta-criterion.

    ➢ If the suggestion is correct, the theta-criterion should be dispensed with.

2. Labeling in Japanese

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

    ➢ It must accompany an algorithm to determine the label of the newly formed object (Chomsky (2013)).

(1)   a. $\gamma = \{H, \alpha P\}$

           b. $\gamma = \{\alpha P, \beta P\}$

           c. $\gamma = \{H_1, H_2\}$

(2) $\boxed{YP} \rightarrow \langle \varphi, \varphi \rangle$

- This analysis extends to structures created by wh-movement.

(3)   [$_{YP}$ Which book [$_{CP}$ do [$_{TP}$ you think [$_{XP}$ _ [$_{CP}$ that [$_{TP}$ John bought _]]]]]]

- This analysis predicts that internal merge always terminates in a configuration of feature sharing.

(4)   a. Operator movement   b. NP-movement

```
       XP → <Q, Q>                    YP → <φ, φ>
      /    \                         /    \
    wh      C'                     DP      T'
    [Q]    /  \                    [φ]    /  \
          C    TP                        T    TP
          [Q]                           [φ]
```
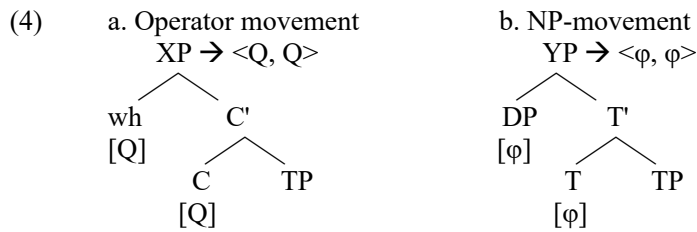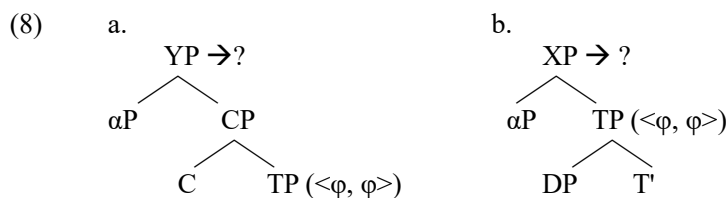
- Chomsky's (2013) proposals on labeling raise interesting research questions with languages like Japanese.
- ① How sentences are labeled in Japanese, a language that lacks phi-feature agreement?
- ② Why the multiple nominative subjects are grammatical in Japanese?
  - ➢ They are straightforwardly ruled out in English.

(5)   [TP 文明国が [TP 男性が [TP 平均寿命が短い]]]

(6)   YP → ?

```
           YP → ?
          /    \
        DP      XP → <φ, φ>
        [φ₁]   /    \
              DP      T'
              [φ₂]   /  \
                    T    vP
                    [φ]
```
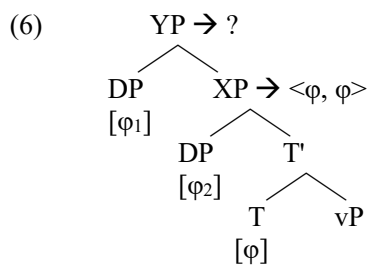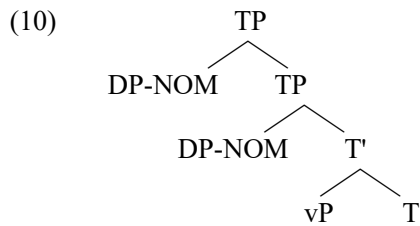
- ③ How do we generate sentences with scrambling, which is argued to be neither operator movement nor A-movement (Saito (1989, 2003), Webelhuth (1989))?
  - ➢ Scrambling is ruled out in English by the labeling requirement.

(7)   a.   みんなが [CP 花子がどの本を選んだか]知りたがっている
            b.   どの本を みんなが [CP 花子が _ 選んだか] 知りたがっている

(8)   a.   b.

```
       YP → ?                         XP → ?
      /    \                         /    \
    αP      CP                     αP      TP (<φ, φ>)
           /  \                           /  \
          C    TP (<φ, φ>)              DP    T'
```
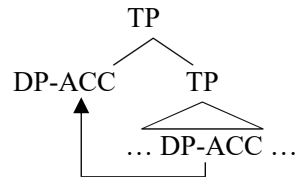
- Saito (2014): Suffixal Case markers make phrases invisible for search and as a result, serving as anti-labeling devices.

(9)   γ = {αP-Case, βP}

2

(10)
```
              TP
        ╱╲
   DP-NOM    TP
          ╱╲
     DP-NOM    T'
              ╱╲
            vP    T
```

(11)   a.   その本を 太郎が ＿ 買った

      b.
```
              TP
        ╱╲
   DP-ACC    TP
              ╱╲
            … DP-ACC …
```

- This analysis makes it possible to examine the theta-criterion in an interesting way.
  - (12) has been ruled out by the theta-criterion as the verb assigns the theme role to two distinct DPs.
  - Labeling fails in this structure as well: When the VP and the higher DP merge, the formed object XP fails to receive a label.

(12)
```
           XP → ?
        ╱╲
     VP    DP
          <theme>
    ╱╲
  V    DP
      <theme>
```
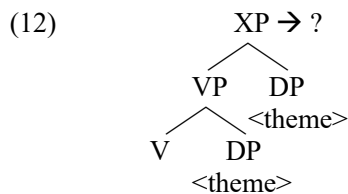
- The situation is different in the Japanese counterpart in (13).
  - By hypothesis, VP provides the label for XP, and there should be no problem with labeling.
  - If the structure is illicit in Japanese, it suggests that the the-criterion is indeed operative. On the other hand, if the structure is allowed, it raises doubts on the theta-criterion.

(13)
```
              XP
        ╱╲
   DP-ACC    VP
  <theme>  ╱╲
        DP-ACC    V
        <theme>
```
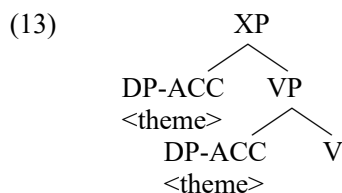
3. Argument Doubling as a General Phenomenon

- Multiple nominative subjects like (14) are consistent with the theta-criterion.

(14)   [TP 文明国が [TP 男性が [TP 平均寿命が短い]]] (=(5))

- The same point holds for multiple accusative sentences like (15).
  - ➢ This example is marginal because there is a somewhat mysterious surface constraint in Japanese against multiple accusative phrases in a single clause.
  - ➢ The example becomes perfect when one of the accusative phrases is dislocated (Harada (1973)).
  - ➢ (15) is consistent with the theta-criterion: *gakusei-o* 'student-ACC' is the causee argument whereas *hamabe-o* 'beach-ACC' expresses a location or a path.

(15)   ??花子が学生を三人浜辺を走らせた

(16)   a.   [CP 花子が学生を三人走らせたの]は浜辺をだ
          b.   [CP 花子が浜辺を走らせたの]は学生を三人だ

- (17) receive the same theta-role from the verb (Kuroda (1988)).
  - ➢ Kuroda confirms this with the ungrammaticality of (18): This example is ungrammatical because one can break fingers but not a person. Cf. (19)

(17)   a. ?? 正雄が花子を頬をぶった
          b.   [CP 正雄が花子をぶったの]は頬をだ

(18)   a.   *正雄が花子を指を二本折った
          b.   *[CP 正雄が花子を折ったの]は指を二本だ

(19)   a.   正雄が花子の指を二本折った
          b.   *正雄が花子を折った

- Dative argument doubling is observed in Japanese (Kuroda (1988)).
  - ➢ *Hanako* and *hoho* 'cheek' are both thematic arguments of *kisus* 'kiss'.
  - ➢ This is confirmed with (21): (21b, c) make sense only if kissing Taroo's daughter automatically means kissing Taroo, which is not true.

(20)　　a. ?? 正雄が花子に頬にキスした

　　　　b.　[CP 正雄が花子にキスしたの]は頬にだ

(21)　　a.　[TP 太郎が [TP 娘がとても賢い]]

　　　　b.　*正雄が太郎に娘にキスした

　　　　c.　*[CP 正雄が太郎にキスしたの]は娘にだ

- The PPs expressing the source/goal can also be doubled in Japenese.

(22)　　a. ?? 日本から広島から(だけ)参加者があった

　　　　b.　[CP 日本から参加者があったの]は広島から(だけ)だ

(23)　　a. ?? 花子がヨーロッパへドイツへ三回だけ行った

　　　　b.　[CP 花子がヨーロッパへ行ったの]はドイツへ三回(だけ)だ

- Can external arguments be doubled in Japanese?
- Major subject constructions like (24a)
  - The major subject construction is most natural with an individual-level predicate as the inner TP describes a property attributed to the major subject (Kuno (1973)).
  - A lower subject cannot be dislocated to a position above a higher subject.

(24)　　a.　[TP 太郎が [TP 娘が一人(だけ)とても賢い]]

　　　　b. ?? [TP 太郎が [TP 娘が一人(だけ)その会議で発言した]]

(25)　　*[CP 太郎がとても賢いの]は娘が一人(だけ)だ

- Consider (26) with this background.
  - (26a) is not a regular major subject sentence but an instance of thematic subject doubling: (24a) does not say that Taroo is smart. On the other hand, (26a) implies that students spoke up in the meeting.
  - The surface effect is avoided when one of the nominative arguments is displaced as in (26b)
  - An agentive subject can also be doubled in Japanese.

(26)　　a. ?* 学生が一年生が三人(だけ)その会議で発言した

　　　　b.　[CP 学生がその会議で発言したの]は一年生が三人(だけ)だ

- This demonstrates that the theta-criterion should be eliminated as a verb can assign the same theta-role to more than one argument quite generally.
- One question that remains is why (24a) cannot be construed as an example of thematic subject doubling.
  - If it could be, (25) should be grammatical.
  - The fact indicates that there is a restriction on argument doubling that forces the major subject interpretation of (24a).

4. Argument Doubling as a Focus Construction

- Argument doubling is not quite free.
  - What makes the grammatical examples of argument doubling possible?

(27) a. *花子が太郎を学生を三人叱った
      b. *[CP 花子が太郎を叱ったの]は学生を三人だ

- (28) suggests that the doubled arguments should have a whole-part relation with body parts.
  - The requirement is not so specific. (29) and (30) have nothing to do with body parts.

(28) a. [CP 正雄が花子をぶったの]は頬をだ (= (17b))
      b. [CP 正雄が花子にキスしたの]は頬にだ (= (20b))

(29) [CP 日本から参加者があったの]は広島から(だけ)だ (= (22b))

(30) a. ?* 花子が果物をりんごを一つ食べた
      b. [CP 花子が果物を食べた]のはりんごを一つ(だけ)だ

- (30) clearly implies that (i) Hanako ate a fruit and that Hanako ate an apple, and that (ii) Hanako eating a fruit and her eating an apple is the same event.
  - For (31a) to be legitimate, (31b) must hold.
  - In (27), Hanako scolding Taroo and her scolding three students cannot be considered the same event even if Taroo is one of the three students.

(31) a. $[_{TP} \ldots \text{DP-ACC}_1 \ \text{DP-ACC}_2 \ldots]$
      b. $[_{TP} \ldots \text{DP-ACC}_1 \ldots]$ and $[_{TP} \ldots \text{DP-ACC}_2 \ldots]$ depict the same event/state.

- (30a) improves as focus is placed on the second accusative argument.

(32)　　?花子が果物をりんごを一つだけ食べた

- A similar effect can be achieved by making the first argument a topic.

(33)　　a. ?* 花子がヨーロッパへドイツへ三回行った
　　　　　b.　?ヨーロッパへは花子がドイツへ三回行った

- Argument doubling requires that the second argument be a focus.
  ➢ The first argument cannot be placed in focus.

(34)　　a.　*[CP 花子がドイツへ三回(だけ)行ったの]はヨーロッパへだ
　　　　　b.　[CP 花子がヨーロッパへ行ったの]はドイツへ三回(だけ)だ

- The first argument in argument doubling must serve to specify the set of alternatives for the focus, in the sense of Rooth (1992).
  ➢ (35a) asserts that 'John saw Mary' is the true sentence among those in the set (35c).

(35)　　a.　John saw MARY.
　　　　　b.　{Bill, Susan, Mary, …}
　　　　　c.　{John saw Bill, John saw Susan, John saw Mary}

- This analysis of focus provides an insight into the interpretation of (36a).
  ➢ (36a) does not mean that an apple is the only thing that Hanako ate. She could have eaten some vegetables and meat in addition (Cf. (36b)).
  ➢ The accusative argument *kudamono-o* 'fruit-ACC' serves to restrict the set of alternatives to fruits as in (37).
  ➢ *kudamono-o* 'fruit-ACC' in (36a) is interpreted as a theme. So, the sentence implies (38).

(36)　　a.　[CP 花子が果物を食べたの]はりんごを一つ(だけ)だ (= (30b))
　　　　　b.　[CP 花子が食べたの]はりんごを一つ(だけ)だ

(37)　　{one orange, two bananas, five peaches, one banana, one apple, …}

(38)　　花子が果物を食べた

- This analysis extends to sentences like (39).
  - ➢ *Hanako* here can be construed as 'Hanako's body part'. Then, it specifies the set of alternatives in (40).

(39)　　[_{CP} 正雄が花子にキスしたの]は頬にだ (= (28b))

(40)　　{Hanako's hand, Hanako's head, Hanako's cheek, …}

- The ungrammaticality of (41) is also expected under the analysis.
  - ➢ Taroo-o 'Taroo-ACC' simply fails to specify the set of alternatives for *gakusei-o sann-nin* 'three students'.

(41)　　*[_{CP} 花子が太郎を叱ったの]は学生を三人だ (= (27b))

- In argument doubling, the second argument must be a focus and the first must serve to specify its set of alternatives.
- The informal analysis in this section suggests that each argument must have a unique role in the wider semantic interpretation.
  - ➢ In (39), *hoho-ni* 'cheek-DAT' shares the theta-role with *Hanako-ni*, but is unique as a focus. *Hanako-ni*, on the other hand, has the unique role of specifying the set of alternatives for the focus.
  - ➢ It is speculated that a version of the theta-criterion that is generalized beyond thematic roles may be at work as part of Full Interpretation.

5. Conclusion

- Theta-criterion violations in English receive an independent account as cases of failure in labeling.
- Labeling mechanism for Japanese proposed in Saito (2014) allows argument doubling in the language.
  - ➢ It constitutes evidence that the theta-criterion should be dispensed with.
- Argument doubling requires one of the arguments to be a focus and the other to specify the set of alternatives for the focus.
  - ➢ Although the theta-criterion seems untenable, there may be a more general requirement that each argument play a unique role in semantic interpretation.

Comments and Discussion

(i)   […… DP$_1$-Case   DP$_2$-Case …….]

             Alt. Set   Focus

■   Can DP$_2$ be an indefinite pronoun?

(ii)   a.   太郎は誰か(*だけ)を批判した

         b.   [cp 太郎が批判したの]は誰か(*だけ)だ

         c.   A: 太郎は誰を批判したの？

              B:#太郎は誰かを批判した。

(iii)   a. ?* 花子が果物を何かを一つ食べた

         b. ?果物を花子が何かを一つ食べた

         c. ?花子が果物を一時間かけて何かを一つ食べた

(iv)   a. ?* 花子がヨーロッパへどこかへ三回行った

        b. ?? ヨーロッパへ花子がどこかへ三回行った

        c. ?花子がヨーロッパへこの一年以内にどこかへ三回行った

■   How does DP$_1$ specify the set of alternatives for focus?

(30)   a. ?* 花子が果物をりんごを一つ食べた

        b.   [cp 花子が果物を食べた]のはりんごを一つ(だけ)だ

(v)   a.   正雄はリンゴだけを食べた

         b.   {リンゴ, ミカン, バナナ, …} = a set of fruits = DP$_1$

         c.   {正雄はリンゴを食べた, 正雄はミカンを食べた, 正雄はバナナを食べた, …}

(17)   a.   ??正雄が花子を頬をぶった

        b.   [cp 正雄が花子をぶったの]は頬をだ

(vi)   a.   正雄は頬にだけキスした

         b.   {頬, 額, 指, …} = a set of body parts ≠ DP$_1$

         c.   {正雄は頬にキスした, 正雄は額にキスした, 正雄は指にキスした}

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(vii)　　[……果物　　　[リンゴ/ミカン/バナナ] …….]
　　　　　　　Alt. Set　　　　　Focus

(viii)　　[……花子 *i*　[pro*i*'s 頬/額/指] …….]
　　　　　　　|_____↑

(ix)　　a.　[……花子　　　　　　[頬/額/指] …….]
　　　　　　　　　　↓
　　　　b.　[……花子's body part　[頬/額/指] …….]
　　　　　　　　　Alt. Set　　　　　Focus

　　　　　　　　(cf. "*Hanako* here can be construed as 'Hanako's body part'." (p. 15))

■　　Argument Tripling

(x)　　a. ?? 正雄が花子に頬に右側にキスした
　　　b.　?[CP 正雄が花子にそっと頬にキスしたの]は右側にだ

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