

## Exercise 8.13-16

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### Exercise 8.13

(i) のデータを参考に (ii-a),(ii-b) の LF 表示を考え, 量化詞の作用域の違いを説明せよ.

- (i) a. Some student attended every course.  
 $\rightsquigarrow$  some student  $\succ$  every course, every course  $\succ$  some student  
 b. Some student said that Mary attended every course.  
 $\rightsquigarrow$  some student  $\succ$  every course, \*every course  $\succ$  some student
- (ii) a. Some student seems to have attended every course.  
 $\rightsquigarrow$  some student  $\succ$  every course, every course  $\succ$  some student  
 b. Some student seems to himself to have attended every course.  
 $\rightsquigarrow$  some student  $\succ$  every course, \*every course  $\succ$  some student

(1) QP は原則 TP(IP) に付加すること,\*<sup>1</sup> および (2) Scope Principle \*<sup>2</sup> を仮定する.

Scope Principle

QP A が QP B を非対称に c-command し, かつそのときに限り QP A  $\succ$  QP B となる.

(ii) a. Some student seems to have attended every course.

c. [<sub>IP<sub>A</sub></sub> every course [<sub>IP<sub>B</sub></sub> some student to have [<sub>VP</sub> some student attended every course ]]] QR

d. [<sub>TP</sub> some student seems [<sub>IP<sub>A</sub></sub> every course [<sub>IP<sub>B</sub></sub> some student to have [<sub>VP</sub> some student attended every course ]]]]

e. [<sub>TP</sub> some student seems [<sub>IP<sub>A</sub></sub> every course [<sub>IP<sub>B</sub></sub> [~~some student~~] to have [<sub>VP</sub> [~~some student~~] attended ~~every course~~ ]]]]

$\rightsquigarrow$  some student  $\succ$  every course

f. [<sub>TP</sub> [~~some student~~] seems [<sub>IP<sub>A</sub></sub> every course [<sub>IP<sub>B</sub></sub> [~~some student~~] to have [<sub>VP</sub> some student attended ~~every course~~ ]]]]

$\rightsquigarrow$  every course  $\succ$  some student

- 元の作用域は (e) のように matrix TP の主語を LF で残せば得られる.
- (f) のように *some student* の下位コピーを利用することで, 作用域が逆転する解釈を得られる (cf. GB における再構成).

(ii) b. Some student seems **to himself** to have attended every course.

\*<sup>1</sup> May (1977) に基づく, 最も古典的な分析である. May (1985) 等は VP への付加も想定している.

\*<sup>2</sup> May (1985) の提案を単純化したものである.

g. [TP some student+himself seems [PP to himself] [IP<sub>A</sub> every course [IP<sub>B</sub> some student to have [VP some student attended every course ]]]] covert A-movement

h. [TP some student+himself seems [PP to ~~himself~~] [IP<sub>A</sub> every course [IP<sub>B</sub> ~~some student~~ to have [VP ~~some student~~ attended ~~every course~~ ]]]]]

↪ some student > every course

i. \*[TP ~~some student~~/~~himself~~ seems [PP to himself] [IP<sub>A</sub> every course [IP<sub>B</sub> ~~some student~~ to have [VP ~~some student~~ attended ~~every course~~ ]]]]]

- 元の作用域は (h) のように matrix TP の主語を LF で残せば得られる。実際, *himself* の解釈も問題ない。
- しかし (f) と異なり, (i) のように *some student* の下位コピーを利用しようとすると, *himself* が解釈不可能なため派生が crash し, 逆の作用域の解釈は得られない。

!

QR は c-command 関係を作り出すため, 照応詞のように “構造が出来上がった後” の移動ではない。  
さらに chain reduction は複数通り (この場合 2 × 3 通り) 考えられる。  
↪ Spell-Out の作用や移動の動機を含め, QR についてはより厳密な議論が必要である。

#### Exercise 8.14

(i) の解釈を書き下し, その派生を与えよ。

- (i) a. The boys wondered which jokes about each other the girls told.  
b. The boys wondered which jokes about each other the girls heard.

- (i) a. The boys wondered which jokes about each other the girls told.

解釈その 1:

The boys wondered which<sub>x</sub> the girls+each other<sub>y</sub> told [ *x* jokes about *y* ]

LF その 1:

[TP The boys wondered [CP [which ~~jokes/about/each/other~~] [TP the girls+each other told [ ~~which~~ jokes about ~~each/other~~ ]]]]]

解釈その 2:

The boys+each other<sub>y</sub> wondered [which jokes about *y*]<sub>x</sub> the girls told *x*

LF その 2:

[TP The boys+each other wondered [CP [ which jokes about ~~each/other~~] [TP the girls told [ ~~which~~ ~~jokes/about/each/other~~ ]]]]]

- 相互代名詞は先行詞によって認可される位置に “不可視な” 移動をする。
- 束縛原理 A においては, Preference Principle によって後回しにされる [Spec,CP] での意味領域の限定が可能 (解釈その 2) である。

- (i) b. The boys wondered which jokes about each other the girls **heard**.

解釈その 1:

The boys wondered which<sub>x</sub> the girls+each other<sub>y</sub> heard [ *x* jokes about *y* ]

LF その 1:

[<sub>TP</sub> The boys wondered [<sub>CP</sub> [~~which jokes/about/each/other~~] [<sub>TP</sub> the girls+each other heard [~~which~~ jokes about ~~each/other~~ ]]]]

解釈その 2:

\*The boys+each other<sub>y</sub> wondered [which jokes about y]<sub>x</sub> the girls heard x

LF その 2:

\*[<sub>TP</sub> The boys+each other wondered [<sub>CP</sub> [ which jokes about ~~each/other~~ ] [<sub>TP</sub> the girls heard [~~which~~ ~~jokes/about/each/other~~ ]]]]

- (a),(b) は同一の構造をもつが, (b) においては (判断はできないが, 主題の意図を察するにおそらく) 解釈 2 が許されない. 例えば *tell*, *hear* の  $\theta$  役割の違いが解釈の違いにも影響を及ぼしているかもしれない.
- 高い位置の再帰代名詞/相互代名詞を移動させ, Preference Principle から [Spec,CP] に *wh*-operator のみ残すと, FI を満たさず, 収束しないのであった. 解釈 2 はそのあとのオプションであり, (b) における非対称性も自然であるといえよう.

### Exercise 8.15

(i) を導出する派生 (ii)-(vi) は, Extension Condition だけで除外することはできない. Minimalist Program のもとで, どのように非文と予測できるのか?

- (i) \*Which book did you leave the library without finding?
- (ii) a. K = [<sub>PP</sub> without PRO finding [ which book ]]  
b. L = [<sub>VP</sub> leave the library ]
- (iii) a. K = [<sub>PP</sub> without PRO finding [ which book ]]  
b. L = [<sub>VP</sub> leave the library ]  
c. M = [ which book ]
- (iv) a. N = [ did you [<sub>VP</sub> [<sub>VP</sub> leave the library ] [<sub>PP</sub> without PRO finding [ which book ]]]]  
b. M = [ which book ]
- (v) [[ which book ]<sub>i</sub> did you [<sub>VP</sub> [<sub>VP</sub> leave the library ] [<sub>PP</sub> without PRO finding [ which book ]<sub>i</sub> ]]]
- (vi) [[ which book ]<sub>i</sub> did you [<sub>VP</sub> [<sub>VP</sub> leave the library ] [<sub>PP</sub> without PRO finding [ ~~which/book~~ ]<sub>i</sub> ]]]

(i) \*Which book did you leave the library without finding? (= (78))

まず Extension Condition 違反となる派生を復習する.

Extension Condition (= (74))

Overt applications of Merge can only target root syntactic objects.

「付加部は適用外」という stipulation は放棄したのであった。

(80) a. K = [PP without PRO finding [ which book ]]

b. L = [ [C **did**] you [VP leave the library ]]

(81) a. K = [PP without PRO finding [ which book ]]

b. L = [ did you [VP leave the library ]]

c. M = [ which book ]

(82) a. K = [PP without PRO finding [ which book ]]

b. N = [ [ which book ] did you [VP leave the library ]]

(83) [[ which book ] did you [VP [VP leave the library ] [PP without PRO finding [ which book ]]]]

(84) [[ which book ] did you [VP [VP leave the library ] [PP without PRO finding [ ~~which book~~ ]]]]

- (80) までに [+wh] の素性をもつ C が併合されている。この素性によって *which book* のコピーが動機付けられる。
- (81) におけるコピーは adjunct island に問題を起こさない (付加部とは関係の中で定義される)。
- (82)→(83) で VP が root でないにもかかわらず PP と併合されており, Extension Condition に違反する。

さて, 問題となる派生を見てみよう。

(ii) a. K = [PP without PRO finding [ which book ]]

b. L = [VP leave the library ]

(iii) a. K = [PP without PRO finding [ which book ]]

b. L = [VP leave the library ]

c. M = [ which book ]

(iv) a. N = [ did you [VP [VP leave the library ] [PP without PRO finding [ which book ]]]]

b. M = [ which book ]

(v) [[ which book ]<sub>i</sub> did you [VP [VP leave the library ] [PP without PRO finding [ which book ]<sub>i</sub> ]]]

- (ii)→(iii) で *which book* をコピーし, その後 (iii)→(iv) で VP と付加部を併合することによって, Extension Condition 違反を回避している。
- しかし (ii)→(iii) におけるコピーは何に動機付けられるのか? Move = Copy & Merge は Last Resort であって, 積極的には選択されない。 (ii) 時点で Numeration の index は 0 でないため, コピーに先駆けて併合が行われるはず。
- (ii) で K,L を併合すると [PP without...] が adjunct island になり, *which book* がコピーできなくなるので, 収束しない。

### Exercise 8.16

(i) のような parasitic gap (寄生空所) のある文は, sideward movement によって説明可能である.

(i) Which paper did you file without reading?

(ii) a.  $K = [_{PP} \text{ without reading } [ \text{ which paper } ]]$

b.  $L = [_{VP} \text{ file } ]$

(iii) a.  $K = [_{PP} \text{ without reading } [ \text{ which paper } ]]$

b.  $L = [_{VP} \text{ file } [ \text{ which paper } ]]$

(iv)  $[_{VP} [_{VP} \text{ file } [ \text{ which paper } ] ] [_{PP} \text{ without reading } [ \text{ which paper } ]]$

(v)  $[[c \text{ did } ] \text{ you } [_{VP} [_{VP} \text{ file } [ \text{ which paper } ] ] [_{PP} \text{ without reading } [ \text{ which paper } ]]]]$

(vi) a.  $[[ [ \text{ which paper } ] \text{ did you } [_{VP} [_{VP} \text{ file } [ \text{ which paper } ] ] [_{PP} \text{ without reading } [ \text{ which paper } ]]]]$

b.  $[ [ [ \text{ which paper } ] \text{ did you } [_{VP} [_{VP} \text{ file } [ \text{ ~~which paper~~ ] ] [_{PP} \text{ without reading } [ \text{ ~~which paper~~ ] ] ] ]]$

この提案が正しいとすれば, 非文となる (vii) の parasitic gap はどのように除外されるのか, 派生 (viii)-(x) に沿って考えよ.

(vii) \*Who did you file which paper without reading?

(viii) a.  $K = [_{PP} \text{ without reading } [ \text{ which paper } ]]$

b.  $L = [_{VP} \text{ file } ]$

(ix) a.  $K = [_{PP} \text{ without reading } [ \text{ which paper } ]]$

(ix) b.  $L = [_{VP} \text{ file } [ \text{ which paper } ]]$

(x) a.  $[[ [ \text{ who } ] [ \text{ did you file } [ \text{ which paper } ] ] [_{PP} \text{ without reading } [ \text{ which paper } ]]]]^a$

b.  $[[ [ \text{ who } ] [ \text{ did you file } [ \text{ ~~which paper~~ ] ] [_{PP} \text{ without reading } [ \text{ ~~which paper~~ ] ] ]]$

<sup>a</sup> p.285 (x) は誤植である.

8.15 と同様に, まずは (1) Extension Condition, (2) adjunct island, (3) コピーする動機 に注目しながら, 正文である (i) を見る.

(i) Which paper did you file without reading?

parasitic gap は移動の痕跡としないのが一般的である.

!

(i)' Which<sub>i</sub> paper did you file  $t_i$  without reading  $e$ ?

↑

(ii) a.  $K = [_{PP} \text{ without reading } [ \text{ which paper } ]]$

b.  $L = [_{VP} \text{ file } ]$

(iii) a. K = [PP without reading [ which paper ]]

b. L = [VP file [ which paper ]]

(iv) [VP [VP file [ which paper ]] [PP without reading [ which paper ]]]

(v) [[C did ] you [VP [VP file [ which paper ]] [PP without reading [ which paper ]]]]

(vi) a. [[ which paper ] did you [VP [VP file [ which paper ]] [PP without reading [ which paper ]]]]

- (ii)→(iii) では *file* の Theme  $\theta$ -role を付与するために *which book* をコピーしており, adjunct island でもない.
- (iii)→(iv) の併合は Extension Condition を満たす.
- (v)→(vi) における *which book* のコピーは C の wh 素性に駆動される.

! (ii)–(vi) の派生では *which book* が *reading* と *file* から  $\theta$  役割をもらうので  $\theta$ -criterion に違反するが, 移動として分析するため, ここでは許容する.

次に非文となる (vii) を観察する.

(vii) \*Who did you file which paper without reading?

(viii) a. K = [PP without reading [ which paper ]]

b. L = [VP file ]

(ix) a. K = [PP without reading [ which paper ]]

b. L = [VP file [ which paper ]]

(x) [CP [ who ] [ did you file [ which paper ]] [PP without reading [ which paper ]]]

- (1)–(3) に関わる部分は先の派生と同じなので問題なし.
- (ix)→(x) で *who* は [Spec, CP] に併合されるので,  $\theta$  役割が付与されず,  $\theta$ -criterion に違反する.

このように (vii) が非文であることは簡単にわかる. またここまでの議論が正しければ, (xi)\*<sup>3</sup>は (xii) で *who* が  $\theta$  役割を付与されるので, 正文となる.

(xi) Who filed which paper without reading.

(xii) [VP who [VP filed which paper without reading which paper]]

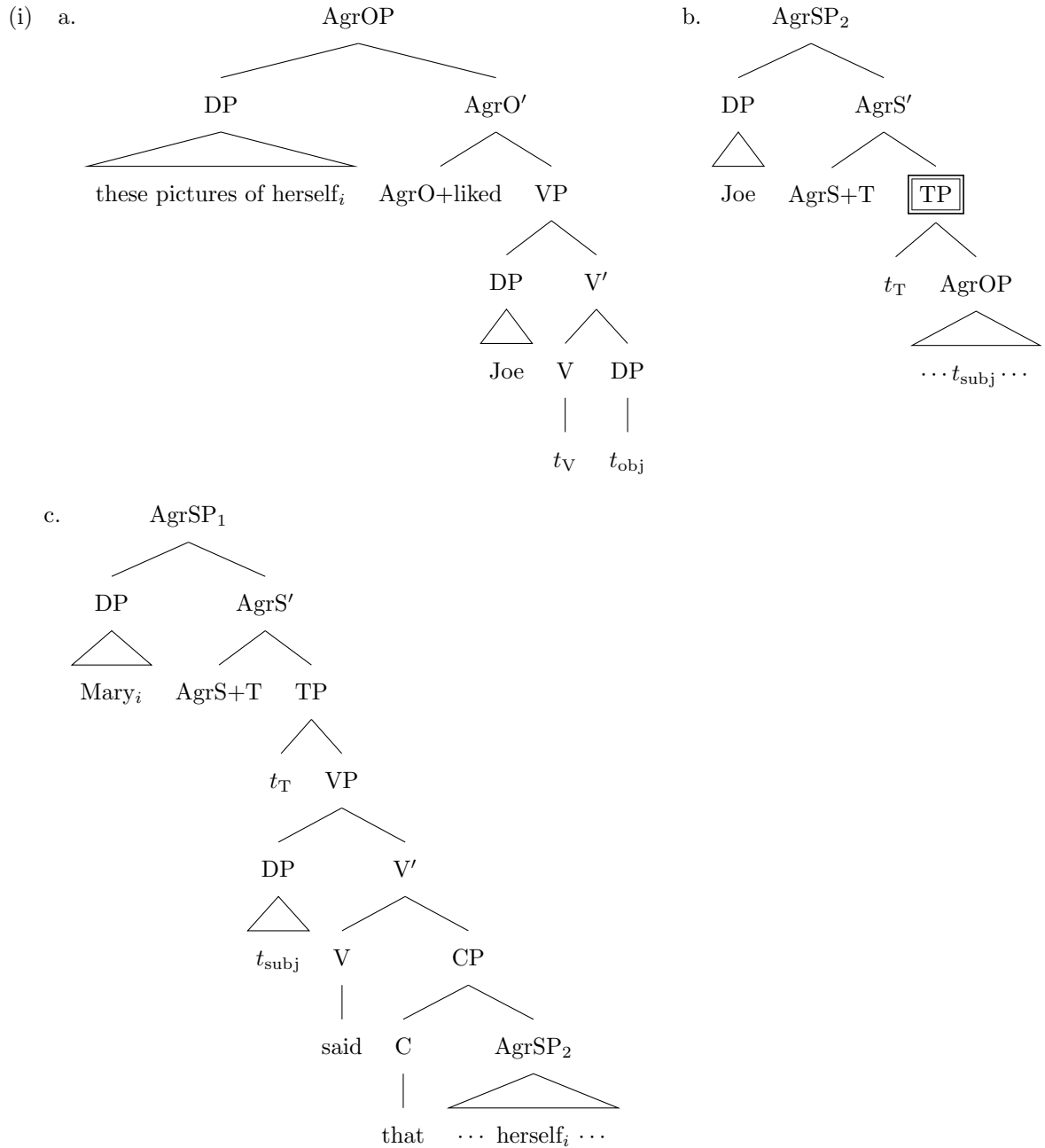
しかし  $\theta$ -criterion に stipulation を設けたうえで  $\theta$ -criterion によってある派生を排除するというのは ad hoc な処理に過ぎず, より精緻な議論が必要である.

\*3 p.285 (x-a) のデータ.

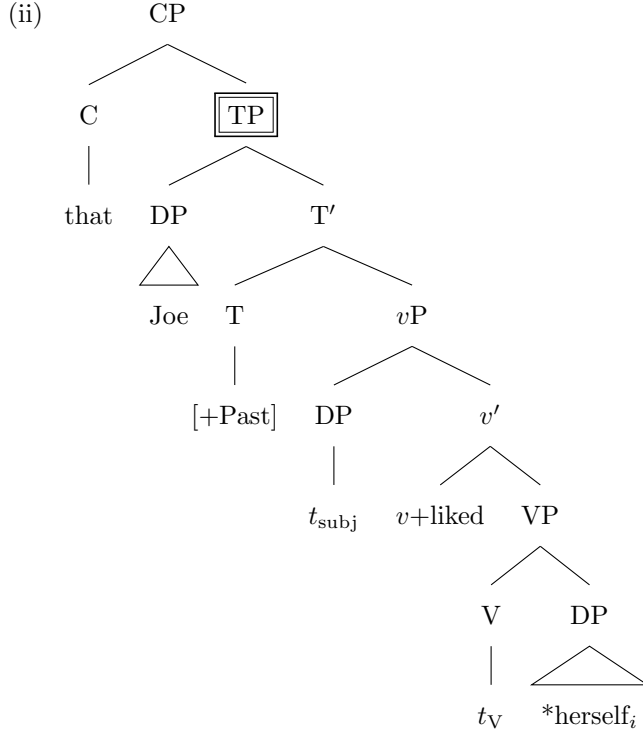
### Exercise 8.1

格素性は Spec-head の関係で認可されると仮定する．このとき split Infl (i.e. TP&Agr projection) と unsplit Infl&light verb (i.e. TP&*v*P) の両方のアプローチで (4) の LF 表示を与えよ．またその表示において, 束縛原理で用いる統率範疇 (domain) の定義を修正すべきか答えよ．

- (4) a. \*[ Mary<sub>i</sub> said that [TP Joe liked these pictures of herself<sub>i</sub> ]] (束縛原理 A 違反)  
 b. [ Mary<sub>i</sub> said that [TP Joe liked these pictures of her<sub>i</sub> ]]  
 c. \*[ He<sub>i</sub> said that [TP Mary likes these pictures of Joe<sub>i</sub> ]] (束縛原理 C 違反)



d. [<sub>AgrSP<sub>1</sub></sub> Mary<sub>i</sub> ... [<sub>AgrSP<sub>2</sub></sub> ... [<sub>TP</sub> ... [<sub>AgrOP</sub> theses pictures of herself<sub>i</sub> ... ]]]]



Domain (= (2))

$\alpha$  is the domain for  $\beta$  iff  $\alpha$  is the smallest IP (TP) containing  $\beta$  and the governor of  $\beta$ .

- (i) は TP+Agr のアプローチで, (d) のように *herself* を含む最小の TP に先行詞 *Mary* が存在しないので, 束縛原理 A 違反となる. したがって束縛原理 B の統率範疇としても機能することもわかる.
- (ii) も少し構造が大きくなるだけで, 統率範疇は今まで通りで問題ない.

### Exercise 8.2

(i) のデータは不可視な *wh* 移動と束縛原理 B の

(i) John<sub>i</sub> wondered which woman liked which pictures of him<sub>i</sub>.

- (ii) a. [<sub>TP</sub> John<sub>i</sub> wondered [[ which pictures of him<sub>i</sub>]<sub>k</sub> + [ which woman]<sub>j</sub> [ *t<sub>j</sub>* liked *t<sub>k</sub>* ]]]  
 b. [<sub>TP</sub> John<sub>i</sub> wondered [ which<sub>k</sub> + [ which woman]<sub>j</sub>] [<sub>TP</sub> *t<sub>j</sub>* liked *t<sub>k</sub>* pictures of him<sub>i</sub> ]]]

- (a) の *him* の統率範疇は matrix TP だから束縛原理 B 違反となり, *wh* 句全体の不可視な移動を仮定すると, 誤った予測をする.
- (b) の *him* の統率範疇は [*t<sub>j</sub>* liked *t<sub>k</sub>* pictures of him<sub>i</sub>] となり, *wh* のみの移動を支持する.



### 8.3

(11) John<sub>i</sub> wondered which pictures of him<sub>i/\*k</sub> Fred<sub>k</sub> liked.

a. Fred<sub>k</sub> liked which pictures of him<sub>i</sub>

b. [<sub>CP</sub> [ which pictures of him<sub>i</sub> ] Q Fred<sub>k</sub> liked *t* ]

c. [<sub>TP</sub> John<sub>j</sub> [<sub>CP</sub> [ which pictures of him<sub>i</sub> ] Q Fred<sub>k</sub> liked *t* ]]

- (a) で束縛原理 B から *Fred* に *k* が添え字づけられる。
- (b) では (a) における添え字づけによって *him* ≠ *Fred* の解釈が保たれ、束縛原理 B の適用の有無について考える必要がない。
- (c) で *John* に *j* (≠ *k*) が添え字づけられる。

→ 派生の各段階で束縛原理 B を適用 & contraindexing では *him* の先行詞が文中に存在せず、うまくいかない。

### 8.4

(16) He<sub>\*i</sub> wondered which picture of John<sub>i</sub> he<sub>\*i</sub> liked.

(i) Which picture of John<sub>i</sub> did he'<sub>\*i</sub> say that he<sub>i</sub> liked?

a. [<sub>TP</sub> he<sub>\*i</sub> liked which picture of John<sub>i</sub> ]

b. [<sub>CP</sub> [ which picture of John<sub>i</sub> ] that he<sub>\*i</sub> liked *t* ]

c. [<sub>TP</sub> he'<sub>\*i</sub> say [<sub>CP</sub> [ which picture of John<sub>i</sub> ] that he<sub>\*i</sub> liked *t* ]

d. [<sub>CP</sub> [ which picture of John<sub>i</sub> ] did [ he'<sub>\*i</sub> say [ *t'* that he<sub>\*i</sub> liked *t* ] ]]

- (a) で束縛原理 C から *he* ≠ *John* が決まる。
- (b) でも束縛原理 C が適用されるが、*he* = *John* の解釈は (a) によって退けられる。
- (c) では *he'* ≠ *John* が決まる。
- (d) でも束縛原理 C が適用されるが、*he'* = *John* の解釈は (c) によって退けられる。

→ 派生の各段階で束縛原理 C を適用 & 一度得た (先行詞の参照に関する) 解釈を保持では *he* (= *John*) の解釈は不可能である。

この派生の DS = (a) からは *he* = *John* の解釈を説明できず、(b) 以降の段階における *he*, *John* への (効果のある) 束縛原理 C の適用が必須である。

## 参考文献

- [1] 金子義雅・中村捷・原口庄輔 (編著) (2016). 『増補版 チョムスキー理論辞典』研究社。
- [2] Hornstein, Norbert (1995) *Logical Form: From GB to Minimalism*. Oxford: Blackwell.
- [3] Hornstein, Norbert, Jairo Nunes & Kleantes Grohmann (2005). *Understanding Minimalism*. Cambridge: Cambridge University Press.
- [4] May, Robert (1977) “The Grammar of Quantification.” Doctoral dissertation, MIT.
- [5] May, Robert (1985) *Logical Form: Its Structure and Derivation*. Cambridge: MIT Press. ([1][pp.421-

422], [2][p.153] より参照)