Split Lexical Insertion Hypothesis:  
A Case Study of Secondary Predicates

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1. Introduction
(1) a. John hammered the metal (flat).  
b. John drank himself *(sick).
(2) The postverbal DP in (1a) receives $\theta$-roles both from the verb and the adjective while the one in (1b) receives a $\theta$-role only from the adjective.
(3) a. John drank.  
b. *John drank sick. (as having a resultative meaning)
(4) a. It is not movement but the Split Lexical Insertion that concerns the multiple $\theta$-role assignment.  
b. VP is a phase in English.  
c. The fake reflexive object in unergative resultatives is inserted as a last resort.

2. Movement Approach (Saito 2001)
(5) DP can move to receive a $\theta$-role.
(6) a. $[v_p \text{John hammer}+v^\phi [v_p \text{the metal} t_v [AP (the metal) flat]]]$  
b. $[v_p \text{John drink}+v^\phi [v_p t_v [AP himself sick]]]$
(7) $[v_p \text{John drink}+v [v_p t_v [AP (John) sick]]]$
(8) a. $[\check{\text{vp}} [v_p \text{V John sick}]]$  
b. $[\check{\text{vp}} [v_p \text{V John} [v_p t_v [AP (John) sick]]]]$
(9) Phase-Impenetrability Condition (PIC)  
In phase $\alpha$ with head $H$, the domain of $H$ is not accessible to operations outside $\alpha$, only $H$ and its edge are accessible to such operations.  
(Chomsky 2000: 108)
(10) a. Case Filter: DPs must bear Case.  
b. Inverse Case Filter: Case assigners must check/assign their Case.
(11) The V in an unergative VP does have a null DP complement.  
(Pesetsky and Torrego 2004: 512)
(12) $[v_p \text{John drink}+v^\phi [v_p t_v \text{null DP}]]$
(13) $[v_p \text{drink}+v^\phi [v_p t_v \text{null DP} [AP John sick]]]$
(14) Minimal Link Condition (MLC$^1$)  
Let $P$ be a probe. Then the goal $G$ is the closest feature that can enter into an agreement relation with $P$.  
(Collins 2002: 57)
(15) $[v_p \text{John drink}+v^\phi [v_p t_v [AP himself sick]]]$

3. Split Lexical Insertion Hypothesis
(16) What did you file e without reading e?

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$^1$ See also Chomsky 1995: 297, 2000: 122.
(17) **Split Lexical Insertion (SLI) Hypothesis** (Agbayani and Ochi 2007)
Separation of FF (formal features) and CAT (categorical feature) takes place in the course of lexical insertion/External Merge as well.

(18) **Theta Assignment Parameter**
- Both FF and CAT  □ English
- FF only  □ Japanese
- CAT only  □ Moroccan Arabic

(19) **Parallel derivation:**
\[ \text{[file CAT}_w\text{what]} \quad \text{[reading FF}_w\text{what]} \]

(20)
- a. you file CAT\(w\) \text{[without reading FF}\(w\)\text{what]}
- b. FF\(_w\) CAT\(w\) you file CAT\(_w\) \text{[without reading (FF}\(_w\)\text{what]}}
- c. CAT\(_w\) FF\(_w\) you \[\nu_p \text{CAT}_w\text{what} \quad \nu_p \text{you file (CAT}_w\text{what) \text{[without reading (FF}_w\text{what)]]}] \quad \text{to remedy PF defectiveness} \quad (Ochi 1999)

(21)
- a. Attract of FF is insensitive to phase boundaries.
- b. Move of CAT must be cyclic (sensitive to phase boundaries). (Ochi 1999)

(22) John hammered the metal flat.
- a. \[ \text{VP CAT}_w\text{the metal hammer } \text{AP FF}_w\text{the metal flat}] \]
- b. \[ \text{VP FF}_w\text{the metal CAT}_w\text{the metal hammer } \text{AP (FF}_w\text{the metal) flat}] \]
- c. \[ \nu_p \text{John hammer+} \nu^* \text{VP FF}_w\text{the metal CAT}_w\text{the metal } \text{t}_V \text{AP (FF}_w\text{the metal) flat}] \]

(23)
- a. The ice froze solid.
- b. FF\(_w\) CAT\(_w\) freeze \[\nu_p \text{VP FF}_w\text{the ice freeze } \text{t}_V \text{AP (FF}_w\text{the ice) solid}] \]
- c. \[ \nu_p \text{CAT}_w\text{the ice FF}_w\text{the ice freeze+} \nu^* \text{VP (CAT}_w\text{the ice) t}_V \text{AP (FF}_w\text{the ice) solid}] \]

(24)
- b. *John drank sick. (as having a resultative meaning)

(25) *[\nu_p \text{CAT}_w\text{John drink+} \nu^* \text{VP FF}_w\text{John}] \]

(26) **Derivational Lexical Integrity** (Agbayani and Ochi 2007)
FF and CAT of a single LI must be inserted simultaneously (though not necessarily in the same position), without any operations applying between the insertion of FF and the insertion of CAT.

(27)
- a. ?How flat do you wonder whether they hammered the metal?
- b. ?How threadbare do you wonder whether they should run their sneakers?

(28)
- a. ?Which boys do you wonder whether to punish?
- □ The resultative predicate is an argument of the verb.

(29)
- a. *John HIT \(t\).
- b. *John BELIEVE \(t\) to be intelligent.
\(\text{HIT/BELIEVE share the} \theta\text{-structure of hit and believe but lack Case features) (Chomsky 1995: 313)}\)

(30) *[\nu_p \text{CAT}_w\text{John hit+} \nu^* \text{VP FF}_w\text{John}] \]

(31)
- a. VP is a phase (at least in English).
- b. A resumptive pronoun is inserted as a last resort when the SLI is blocked.
4. Depictives

(33) John drank sick. (as having a depictive meaning)

(34) a. John left angry. [subject-oriented] b. Bill ate the meat raw. [object-oriented]

(35) a. *How raw do you wonder whether John ate the meat?
   □ The depictive predicate is an adjunct.

(36) John left angry.
   a. \[vP CAT\_ John leave+ [vP \_ v] [Adjunct FF\_ John angry] \] (parallel derivation)
   b. \[vP [vP CAT\_ John leave+ [vP \_ v] [ Adjunct FF\_ John angry]] \]
   c. \[vP CAT\_ John FF\_ John T [vP [vP (CAT\_ John) leave+ [vP \_ v] [ Adjunct (FF\_ John) angry]]] \]

(37) John ate the meat raw.
   a. \[vP eat CAT\_ the meat [Adjunct FF\_ the meat raw] \] (parallel derivation)
   b. \[vP [vP eat CAT\_ the meat [Adjunct FF\_ the meat raw]] \]
   c. \[vP * John eat+ raw [vP CAT\_ the meat FF\_ the meat [vP [vP \_ V (CAT\_ the meat) leave+ [vP \_ v] [ Adjunct (FF\_ the meat) raw]]] \]

(38) Subject-oriented depictives adjoin to vP whereas object-oriented depictives adjoin to VP.

vP fronting

(39) a. Mary said that John would leave angry and \[vP leave angry \] he did t.
   b. Mary said that Bill would eat the meat raw and \[vP eat the meat raw \] he did t. (McNulty 1988: 7-8)

Heavy DP Shift (adjunction to VP)

(40) a. John left [the party for the ambassador from Ulan Bator] angry.
   b. *John left t angry [the party for the ambassador from Ulan Bator].

(41) a. Jude never eats [fish over two days old] raw.
   b. Jude never eats t raw [fish over two days old]. (Larson 1988: 4-5)

5. VP is a Phase

Passive

(42) a. [At which of the parties that he1 invited Mary2 to] was every man1 √ introduced to her2 *?
   b. *[At which of the parties that he1 invited Mary2 to] was she1 * introduced to every man2 *?
   □ (Legate 2003: 507)

Unaccusative

(43) a. [At which conference where he1 mispronounced the invited speaker2’s name] did every organizer1’s embarrassment √ escape her2 *?
   b. *[At which conference where he1 mispronounced the invited speaker2’s name2] did it2 * escape every1 organizer entirely *? (ibid: 508)

(44) Unaccusative and passive VPs are phases as well. (ibid: 506)

(45) Every child1 doesn’t seem to his1 father to be smart. (every > not), (not > every) (Sauerland 2003 : 310)
(46)  a. Every child doesn’t seem to his father [TP (every child) to be smart]
    b. Every child doesn’t seem+ v [VP (every child) [VP [to his father] tV [TP (every child) to be smart]]]

(47)  a. *There seems a man1 to be t1 in the garden.
    b. There1 seems t1 to be a man in the garden. □ Merge over Move

(48)  There was a rumor [that a man1 was t1 in the room]. □ There is not included in the subnumeration.

(49)  a. There has been a book1 put t1 on the table.
    b. *There1 has been t1 put a book on the table. □ Move over Merge?

(50)  N= {there, has, been, {put, a, book, on, the, table}} □ There is not included in the subnumeration.
    a. [VP put a book on the table]
    b. [VP a book [VP put (a book) on the table]]
    c. there has been [VP a book [VP put (a book) on the table]]

(51)  a. Mary believes John to be a genius.
    b. [r* [VP V [John to be a genius]]]
       □ PIC violation
    c. [r* [VP John V [(John) to be a genius]]]

(52)  Object Shift of the ECM subject is obligatory in English (Agbayani and Ochi 2006, Bošković 2007).

6. Conclusion
(53)  a. The multiple θ-role assignment is not a result of movement but the result of the SLI.
    b. VP is a phase in English so that the SLI across VP is prohibited.
    c. A resumptive pronoun is inserted as a last resort when the SLI is blocked.
    d. Merge is preferred over Move.
    e. The ECM subject must undergo the Object Shift in English.

Selected References