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 θ-roles both from the verb and the adjective while the one in (1b) receives a θ-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 θ-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 θ-role.

(6)   a.   [$_{v*P}$ John hammer+v* [$_{VP}$ the metal t_V [$_{AP}$ (the metal) flat]]]
       b.   [$_{v*P}$ John drink+v* [$_{VP}$ t_V [$_{AP}$ himself sick]]]

(7)   [$_{vP}$ John drink+v [$_{VP}$ t_V [$_{AP}$ (John) sick]]]

(8)   a.   [$v[u\theta]$ [$_{VP}$ V [$_{AP}$ John sick]]]   b.   [$v[u\theta]$ [$_{VP}$ John [$_{VP}$ V [$_{AP}$ (John) sick]]]]
                                    PIC violation

(9)   Phase-Impenetrability Condition (PIC)
       In phase α with head H, the domain of H is not accessible to operations outside α, 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)   [$_{v*P}$ John drink+v*[$u\varphi$] [$_{VP}$ t_V null DP]]

(13)   [$_{v*P}$ drink+v*[$u\theta$] [$_{VP}$ null DP t_V [$_{AP}$ John sick]]]
                                    MLC violation

(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)   [$_{v*P}$ John drink+v*[$u\varphi$] [$_{VP}$ null DP t_V [$_{AP}$ himself sick]]]
                                    MLC violation

3. Split Lexical Insertion Hypothesis

(16)   What did you file e without reading e?

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(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
    a.   Both FF and CAT   English
    b.   FF only   Japanese
    c.   CAT only   Moroccan Arabic

(19) Parallel derivation: [file CAT_{what}]   [reading FF_{what}]

(20)   a.   you file CAT_{what} [without reading FF_{what}]
    b. FF_{what} C you file CAT_{what} [without reading (FF_{what})]

    c. CAT_{what} FF_{what} C you [$_{v*P}$ (CAT_{what}) [$_{v*P}$ (you) file (CAT_{what}) [without reading (FF_{what})]]]   to remedy PF defectiveness

(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.   [$_{VP}$ $CAT_{the\,metal}$ hammer [$_{AP}$ $FF_{the\,metal}$ flat]]
    b.   [$_{VP}$ $FF_{the\,metal}$ $CAT_{the\,metal}$ hammer [$_{AP}$ ($FF_{the\,metal}$) flat]]
    c.   [$_{v*P}$ John hammer+$v*$ [$_{VP}$ $FF_{the\,metal}$ $CAT_{the\,metal}$ t_V [$_{AP}$ ($FF_{the\,metal}$) flat]]]

(23) The ice froze solid.
    a.   [$_{VP}$ $CAT_{the\,ice}$ freeze [$_{AP}$ $FF_{the\,ice}$ solid]]
    b. $FF_{the\,ice}$ T [$_{vP}$ freeze+v [$_{VP}$ $CAT_{the\,ice}$ t_V [$_{AP}$ ($FF_{the\,ice}$) solid]]]
    c.   [$_{TP}$ $CAT_{the\,ice}$ $FF_{the\,ice}$ T [$_{vP}$ freeze+v [$_{VP}$ ($CAT_{the\,ice}$) t_V [$_{AP}$ ($FF_{the\,ice}$) solid]]]]

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

(25) *[$_{vP}$ CAT_{John} drink+v [$_{VP}$ t_V [$_{AP}$ FF_{John} sick]]]

(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?
    b.   *How do you wonder whether to punish?   (Carrier and Randall 1992: 185)
        The resultative predicate is an argument of the verb.

(29)   a.   *John HIT t.
    b.   *John BELIEVE [t to be intelligent].
    (HIT/BELIEVE share the θ-structure of *hit* and *believe* but lack Case features)   (Chomsky 1995: 313)

(30) *[$_{vP}$ CAT_{John} hit+v [$_{VP}$ t_V FF_{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.

(32)   Moroccan Arabic

Shmen maqal ntaqd   qblma yqra   **h**?

which article he-criticized before reading it

'Which article did he criticize before reading?'   (Ouhalla 2001: 148)

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?

        b.   *How angry does Mary wonder whether John left?   (Carrier and Randall 1992: 185)

           The depictive predicate is an adjunct.

(36)   John left angry.

        a. $[_{vP}$ CAT$_{John}$ leave$+v$ $[_{VP}$ $t_V]]$ $[_{Adjunct}$ FF$_{John}$ angry]   (parallel derivation)

        b. $[_{vP}$ $[_{vP}$ CAT$_{John}$ leave$+v$ $[_{VP}$ $t_V]]$ $[_{Adjunct}$ FF$_{John}$ angry]]

        c. $[_{TP}$ CAT$_{John}$ FF$_{John}$ T $[_{vP}$ $[_{vP}$ (CAT$_{John}$) leave$+v$ $[_{VP}$ $t_V]]$ $[_{AP}$ (FF$_{John}$) angry]]]

(37)   John ate the meat raw.

        a. $[_{VP}$ eat CAT$_{the\ meat}]$ $[_{Adjunct}$ FF$_{the\ metal}$ raw]   (parallel derivation)

        b. $[_{VP}$ $[_{VP}$ eat CAT$_{the\ meat}]$ $[_{Adjunct}$ FF$_{the\ meat}$ raw]]

        c. $[_{v*P}$ John eat$+v*$ $[_{VP}$ CAT$_{he\ meat}$ FF$_{the\ meat}$ $[_{VP}$ $[_{VP}$ t_V (CAT$_{the\ meat}$)] $[_{Adjunct}$ (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 $[_{v*P}$ 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 he$_1$ invited Mary$_2$ to] was every man$_1$ $\sqrt{}$ introduced to her$_2$ *?

        b.   *[At which of the parties that he$_1$ invited Mary$_2$ to] was she$_1$ * introduced to every man$_2$ *?

                             (Legate 2003: 507)

Unaccusative

(43)   a.   [At which conference where he$_1$ mispronounced the invited speaker$_2$'s name] did every organizer$_1$'s

           embarrassment $\sqrt{}$ escape her$_2$ *?

        b.   *[At which conference where he$_1$ mispronounced the invited speaker's name$_2$] did it$_2$ * escape every$_1$

           organizer entirely *?   (*ibid*: 508)

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

(45)   Every child$_1$ doesn't seem to his$_1$ father to be smart.   (every > not), (not > every)   (Sauerland 2003 310)

(46) a. Every child$_1$ **doesn't** seem to **his$_1$ father** [$_{TP}$ (every child) to be smart]

    b. Every child$_1$ **doesn't** seem+v [$_{VP}$ (every child) [$_{VP}$ [to **his$_1$ father**] t_V [$_{TP}$ (every child) to be smart]]]

(47) a. *There seems a man$_1$ to be t_1 in the garden.   Merge over Move

    b. There$_2$ seems t_2 to be a man in the garden.

(48) There was a rumor [that a man$_1$ was t_1 in the room].   *There* is not included in the subnumeration.

(49) a. There has been a book$_1$ put t_1 on the table.   Move over Merge?

    b. *There$_1$ has been t_1 put a book on the table.

(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. [v* [$_{VP}$ V [John to be a genius]]]

        PIC violation

    c. [v* [$_{VP}$ 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.

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