Syntactic Analysis of Intransitive Resultatives from the Minimalist Perspective

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1. Introduction

- > Type 1 Unergatives can participate in resultative constructions.
- (1) English¹
 - a. The joggers ran the pavement thin.
 - b. They drank the teapot dry.
 - c. Mary danced herself tired.

(2) Icelandic

- a. Hann hljóp sig haltan. *he ran self-ACC limp-ACC* 'He ran himself limp.'
- b. Hann oeskradhi sig haasan. *he shouted himself-ACC hoarse-ACC* 'He shouted himself hoarse.'
- > Type 2 Unergatives never participate in resultative constructions.

(3) French

- a. *Je me suis bu malade. *I myself am drunk sick*'I drank myself sick.'
- b. *Ils ont couru le trottoir mince. *they have run the pavement thin* 'They ran the pavement thin.'

2. Previous Approach

- 2.1. Basic Facts
- (4) a. John hammered the metal flat.
 - b. John hammered the metal.

- (i) John danc ed Mary around the room.
- (ii) The children played leapfrog across the park.
- (iii) The sailors caught a breeze and rode it clear of the rocks.

¹ I assume that the directional PPs in the examples below are not resultative predicates, but are internal path arguments of verb, following Rothstein (2004: 87-89).

- (5) a. John drank himself sick.
 - b. *John drank himself.
 - c. John drank.
 - d. *John drank sick.

[with the intended meaning "John drank and as a result he became sick."]

b.

b.

2.2. Ter nary-Branching Analysis—Carrier and Randall (1992)





- 2.3. XP-Movement for Theta-Role Saito (2001)
- (7) a. John hammered the metal flat.







(8) a. $*John[_{VP}t'[HITt]]$

b. *John [vP t' [BELIEVE [t to be intelligent]]]

(HIT / BELIEVE share the θ -structure of *hit* and *believe* but lack Case feature)

(Chomsky, 1995: 313)

(9) Saito's Generalization

[A]n NP can move to VP Spec and pick up an internal θ -role. On the other hand, [...] an NP cannot move to ν P Spec and receive an external θ -role.

(Saito, 2001:56)

2.3.1. Problems with Saito's Analysis

- (10) a. John washed. (= John washed himself.)
 - b. John shaved. (= John shaved himself.)
 - John dressed. (= John dressed himself.) c.

(11) a. $[_{\nu P} _ v [_{\nu P} \text{ wash John}]]$

 $\left[v_{P} John_{1} wash + v \left[v_{P} t_{V} t_{1} \right] \right]$ b.

(12) John drank himself sick.

a.

(13) John hammered the metal flat.

- $\begin{bmatrix} v_{P} \underline{John[D]} & v[u\phi] & [v_{P} \underline{hammered} & [A_{P} \underline{the metal[D]} & flat]] \end{bmatrix}$ $\begin{bmatrix} v_{P} \underline{John[D]} & hammered + v[u\phi] & [v_{P} \underline{the metal_{1}[D]} & t_{V} & [A_{P} t_{1} \\ flat]] \end{bmatrix}$ a.
- b.
- $\begin{bmatrix} T & T \\ \hline u \phi \end{bmatrix} \begin{bmatrix} v_P & John[D] & hammered + v \\ \hline v \phi \end{bmatrix} \begin{bmatrix} v_P & the metal_1[D] & t_V \\ \hline v \phi \end{bmatrix} \begin{bmatrix} v_P & the metal_1[D] & t_V \\ \hline v \phi \phi \end{bmatrix} \begin{bmatrix} v_P & t_1 & flat \end{bmatrix} \end{bmatrix}$ c.

(14) *John drank sake sick.

- a. b.
- (15) θ -roles are formal features and are therefore capable of driving movement, [...].

(Bošković and Takahashi, 1998: 351)

(16) Minimal Link Condition

K attracts α only if there is no β , β closer to K than α , such that K attracts β .

(Chomsky, 1995: 311)

a. $\begin{bmatrix} \theta \end{bmatrix} \underline{DP[D]} \underline{DP[D]}$ $\swarrow \qquad \checkmark \qquad \checkmark$ b. $\underline{\quad \ \ } \begin{bmatrix} \theta \end{bmatrix} \underline{DP[D]} \underline{DP[D]}$ $\boxed{\quad \ \ } \underbrace{\quad \ \ }$ (17) a.

(18) Defective Intervention Constraints

 $\alpha > \beta > \gamma$

> is c-command, β and γ match the probe α , but β is inactive so that the effects of matching are blocked.

(Chomsky, 2000: 123)

(Lasnik, 1999: 125)

(19) $\boxed{\Gamma[u\phi]} v[u\phi] DP[D] DP[D]$ ACC^{\wedge}

- (20) *John drank sick.
 - a. $[v_P _ [v drank + v[u\phi] [v_P t_V [AP John[D] sick]]]]$
 - b. $[_{\nu P} John_1[D] drank+\nu[u\phi] [_{\nu P} t_V [_{AP} t_1 sick]]]$
 - c. $[_{T'} \boxed{[\underline{\mathsf{u}} \phi]} [_{\mathcal{V} P} \boxed{John_1[D]} drank + \nu [u\phi] [_{\mathcal{V} P} t_V [_{AP} t_1 sick]]]]$

(21) John drank yesterday.

a. $[_{\mathrm{T}} \ \boxed{\Gamma[\mathbf{u}\phi]} \ [_{\nu P} \ \boxed{John_1[D]} \ drank + \nu[u\phi] \ [_{\nu P} \ t_{\mathrm{V}} \]] \ yesterday]$

3. Proposals

(22) [I]f an expression contains only features interpretable at IL[interface level], it converges at IL.

(Chomsky, 2000: 95)

(23) [T]he V in an unergative VP does have a null DP complement, [...].

(Pesetsky and Torrego, 2004: 512)

- (24) $\left[_{\nu P} \nu \left[\frac{u \varphi}{v [u \varphi]} \right] \left[_{\nu P} V \text{ null DP[D]} \right] \right]$
- (25) John drank yesterday.
 - a. $[_{\Gamma} \boxed{\Gamma[\underline{u\phi}]}_{NOM} [_{vP} \boxed{John_1[D]} drank + v[\underline{u\phi}] [_{vP} t_v null DP[D]]] yesterday]$
- (26) John drank himself sick.
 - a. $[_{T} T \underbrace{ \mathsf{I}_{\mathsf{u} \varphi}}_{NOM} [_{vP} \operatorname{John}[D] \operatorname{drank} + v \underbrace{ \mathsf{u} \varphi}_{VP} [_{vP} \operatorname{t}_{v} \operatorname{null} DP[D] [_{AP} \operatorname{himself}[D] \operatorname{sick}]]]]$
- (27) There is likely to arrive a man.
 - a. [T[up] be likely [Expl[D, p-incomplete] to arrive a man[D]]]
- (28) Expl[etive] is $[\phi$ -]incomplete.

(Chomsky, 2001: 16)

(29) α must have a complete set of φ -features (it must be φ -complete) to delete uninterpretable features of the paired matching element β .

(ibid.: 6)

- (30) Maximization Principle Maximize the matching effects.
- (31) Null DP in unergative VP is φ -incomplete.
- (32) Maximization Principle must be applied in English intransitive resultatives.
- (33) John drank yesterday.
 - a. $[_{T} \underline{\Gamma[u\phi]}[_{vP} \underline{John[D]} drank+v[u\phi][_{vP} t_v null DP[D, \phi-incomplete]]]]$
- (34) The uninterpretable features of T (or v) can be deleted by an incomplete set of φ -features of a DP, iff there is no more remote goal.²
- 4. Analysis
- 4.1. Intransitive Resultatives
- (35) John drank himself sick.³,
 - a. $[_{T} [\underline{T}[\underline{u\phi}]]_{VP} [\underline{John[D]}] drank+v[\underline{u\phi}] [_{VP} t_V null DP[D, \phi-incomplete] [_{AP} himself[D] sick]]]]$
- (36) We expect there to arrive a man.
 - a. $[_{T'} \boxed{\Gamma[u\phi]} [_{vP} weD]$ expect+ $v[u\phi] [_{TP} Expl[D, \phi-incomplete]$ to arrive a man[D]]]
- (37) *John drank sick.
 - a. $[_{\nu P} _ [_{\nu'} \operatorname{drank} + \nu[u\phi] [_{\nu P} t_{v} \operatorname{null} DP[D, \phi-incomplete] [_{AP} John[D] sick]]]]$ b. $[_{T'} \overline{\Gamma[u\phi]} [_{\nu P} \operatorname{drank} + \nu[u\phi] [_{\nu P} t_{v} \operatorname{null} DP[D, \phi-incomplete] [_{AP} John[D] sick]]]]$

4.2. Supporting Evidence

4.2.1. Gapping

- (38) a. John hammered a hubcap thin and Mary, flat.
 - b. *John sang the baby asleep and Mary, happy.

(Chomsky, 2001: 15)

 $^{^{2}}$ This indicates that the contrast below should be analyzed in the different way from the analysis that rules out () by the reason that the uninterpretable features of T is remained. See Vikner (1995) for a possible approach.

⁽i) It is likely that John is honest.

⁽ii) *There is likely that John is honest.

³ This analysis implies that the null DP bears a theta-role, though it does not bear Case. Notice that the null DP has the same property with the inherently Case-marked DP which is considered to require the theta-role assignment, though it does not structurally Case-marked in Chomsky (1986). This indicates that the null DP might have an inherent Case. I leave this matter open for future research. See Lasnik (1999) for the analysis of the inherent Case within the minimalist framework.

- (39) a. John₃ [$_{\nu P}$ t₃ hammered+ ν [$_{VP}$ a hubcap₁ t_V [$_{AP}$ t₁ thin]]] and Mary₂ [$_{\nu P}$ t₂ hammered+ ν [$_{VP}$ a hubcap₁ t_V [$_{AP}$ t₁ flat]]]
 - b. John₃ [$_{\nu P}$ [$_{\nu P}$ t₃ hammered+ ν [$_{VP}$ a hubcap₁ t_V t_{AP}]][_{AP} t₁ thin]] and Mary₂ [$_{\nu P}$ [$_{\nu P}$ t₂ hammered+ ν [$_{VP}$ a hubcap₁ t_V t_{AP}]][_{AP} t₁ flat]]
 - c. John hammered a hubcap thin and Mary Δ [AP t₁ flat]
- (40) a. John₂ [$_{\nu P}$ t₂ sang+ $_{\nu}$ [$_{\nu P}$ t_V null DP [$_{AP}$ the baby asleep]]]and Mary₁ [$_{\nu P}$ t₁ sang+ $_{\nu}$ [$_{\nu P}$ t_V null DP [$_{AP}$ the baby happy]]]
 - b. John₂ [$_{\nu P}$ [$_{\nu P}$ t₂ sang+ ν [$_{\nu P}$ t_V null DP t_{AP}]][$_{AP}$ the baby asleep]]and Mary₁ [$_{\nu P}$ [$_{\nu P}$ t₁ sang+ ν [$_{\nu P}$ t_V null DP t_{AP}]][$_{AP}$ the baby happy]]
 - c. *John sang the baby asleep and Mary Δ [AP the baby happy]
- 4.2.2. Topicalization
- (41) a. Flat, John hammered the metal.
 - b. *Thin, the joggers ran the pavement.
- (42) a. ____, John hammered [$_{VP}$ the metal₁ t_v [$_{AP}$ t₁ flat]].
 - b. $[AP t_1 flat]$, John hammered the metal₁ t_V t_{AP}.
- (43) a. ____, the joggers ran $[VP t_V \text{ null } DP [AP the pavement thin]].$ $<math>\Lambda$
 - b. *[A thin], the joggers ran null DP $[AP \text{ the pavement } t_A]$
- 4.2.3. Cleft Sentence
- (44) a. It was a steak that John cooked black.
 - b. It was his Nikes that the jogger ran threadbare.
- (45) a. *It was crazy that Mary drove John.
 - b. *It is eccentric that Mary considers John.
- (46) a. It is white that Peter painted the walls.
 - b. *It is thin that the joggers ran the pavement.
- (47) a. It was _____ that the joggers ran [AP [DP his Nikes] [A threadbare]]
 b. *It is _____ that Mary considers [AP [DP John] [A eccentric]].

- (48) a. It is that Peter painted the walls $\left[AP t_1 \text{ white}\right]$.
 - b. It is $[AP t_1 white]$ that Peter painted the walls₁ t_{AP} .
- - b. It is [A thin] that the joggers ran null DP $[AP \text{ the pavement } t_A]$

4.3. Unaccusative Resultatives

(50) A phase is CP or vP, but not TP or a verbal phrase headed by H lacking φ -features not entering into Case / agreement checking: neither finite TP nor unaccusative / passive verbal phrase is phase.

(Chomsky, 2000: 106-107)

- (51) The ice froze solid.
 - a. $[_{T'} \underline{\Gamma[up]} [_{\nu P} \text{ froze} + \nu [\underline{up \text{ incomplete}}] [_{VP} \text{ the ice}[D] t_V [_{AP} t_1 \text{ solid }]]]]$
- 5. Consequence
- 5.1. Crosslinguistic Variation
- 5.1.1. Expletive Constructions
- (52) Icelandic
 - a. Það eru/*er málfræðingar í heberginu.
 *Expl <u>are</u>/*is <u>linguists</u> in room.the* "There are linguists in the room."

(Vangsnes, 2002: 57)

b. [T[uq] Expl[D, q-incomplete] eru málfræðingar[D] í heberginu]

(53) French

- a. Il y a des livres sur la table. *Expl there <u>has</u> INDEF-PL <u>books</u> on the table* "There are books on the table."
- b. $\begin{bmatrix} T[u\phi] Exp[D] y a + v[u\phi] des liveres[D] sur la table] \\ \hline NOM^{\land} & \Box ACC^{\Box} \land$
- (54) There exists the parameter pertaining to the existence of the phi-incomplete DPs.

5.1.2. Intransitive Resultatives

(55) Icelandic

- a. Hann oeskradhi sig haasan.
 - he shouted himself hoarse

b.	[_{T'} T[uφ] [_{vP} Hann[D] oeskradhi+v[uq] [vp tv null DP[D	, <i>q</i> -incomplete] [AP sig[D] haasan]]]]
	${\sf L}_{NOM}$ ${\sf A}$	Δ	
		••••••••••••••••••••••••••••••	At

- (56) French
 - a. *Ils ont couru le trottoir mince. *they have run the pavement thin*b. [TP [[uq] [vP ils[D] ont couru+v[uq] [vP tv null DP[D] [AP le trottoir[D] mince]]]] NOMA
- (57) Pierre a peint les murs en blanc. *Pierre has painted the pictures in white* 'Pieere painted the pictures white.'

(Legendre, 1997: 47)

- (58) The status of the null DP, whether it is phi-complete or phi-incomplete is involved with the acceptability of intransitive resultatives in natural languages.
- 6. Summary

Selected References

- Bošković, Ž., and D. Takahashi. 1998. "Scrambling and Last Resort," Linguistic Inquiry 29. 347-366.
- Carrier, J., and J. Randall. 1992. "The Argument Structure and Syntactic Structure of Resultatives," *Linguistic Inquiry* 23. 173-234.
- Chomsky, N. 1986. Knowledge of Language: Its Nature, Origin, and Use. Praeger.
- Chomsky, N. 1995. The Minimalist Program. MIT Press.
- Chomsky, N. 2000. "Minimalist Inquiries: The Framework," in R. Martin, and J. Uriagereka, eds., *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*. MIT Press
- Chomsky, N. 2001. "Derivation by Phase," in M. Kenstowicz, ed., Ken Hale: A Life in Language, 1-52. MIT Press.

Lasnik, H. 1999. Minimalist Analysis. Blackwell.

- Legendre, G 1997. "Secondary Predication and Functional Projections in French," *Natural Language and Linguistic Theory* 15, 43-87.
- Pesetsky, D., and E. Torrego. 2004. "Tense, Case, and the Nature of Syntactic Categories," in J. Guéron, and J. Lecarme, eds., *The Syntax of Time*, 495-537. MIT Press.
- Rothstein, S. 2004. Structuring Events: A Study in the Semantics of Lexical Aspect. Blackwell.
- Saito, M. 2001. "Movement and θ-Roles: A Case Study with Resultatives," in *The Proceedings of the Second Tokyo Conference on Psycholinguistics*, 35-60.
- Vangsnes, A. Ø. 2002. "Icelandic Expletive Constructions and the Distribution of Subject Types," in P. Suvenonius, ed., Subjects, Expletives, and the EPP, 43-70. Oxford University Press.
- Vikner, S. 1995. Verb Movement and Expletive Subject in the Germanic Languages. Oxford University Press.