

TOWARD AN ANALYSIS OF TRANSITIVE RESULTATIVES

1. PLAN OF THE TALK

- analysis of transitive resultatives in Vietnamese
 - what transitive resultatives (TRs) are
 - background facts about Vietnamese
 - observations about Vietnamese TRs
 - analysis of Vietnamese TRs
- extending the analysis to English TRs

2. TRANSITIVE RESULTATIVES (TRs)

- TRs = $[S NP_1 V NP_2 AP]$, where V is transitive, NP₂ is the direct object of V and AP denotes a state of NP₂ which results from the action described by V (1).
 - (1) a. he pounded the metal flat
 - b. he pounded the metal
 - c. *he pounded
- TRs \neq intransitive resultatives (2a) or depictives (3a-b).
 - (2) a. he ran the pavement thin
 - b. *he ran the pavement
 - c. he ran
 - (3) a. he drank the coffee cold
 - b. he drank the coffee naked
- Intransitive resultatives and depictives will not be dealt with.¹

3. BASIC FACTS ABOUT CLAUSE STRUCTURE IN VIETNAMESE

- declarative sentences = NP T (Neg) (Modal) vP, where T can be *se* (future tense) or \emptyset (unspecified)²

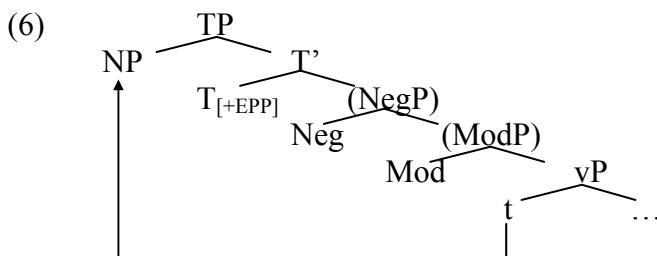
¹ The terms *transitive resultatives*, *intransitive resultatives* and *depictives* are understood here as they are defined in Carrier and Randall (1992).

² There is another tense morphem, *da*, which expresses past tense, and which happens to be phonologically identical to another morpheme which is a verb expressing perfect aspect. I ignore *da* here to simplify the presentation. The argument is not affected. See Trinh (2004) for a detailed analysis.

In Trinh (2004), I argue that sentences without an overt tense morphemes are nevertheless TPs which are headed by an empty T, and that this T is a PF affix which merges with v/V in the PF component. Sentences with empty T are compatible with both future oriented adverbs such as *mai* ('tomorrow') and past oriented ones such as *homqua* ('yesterday'). This suggests that empty T might be interpretable but unvalued in the sense of Pesetsky & Torrego (2004), and that sentences containing it are unspecified for tense. This seems to accord with speakers' intuition.

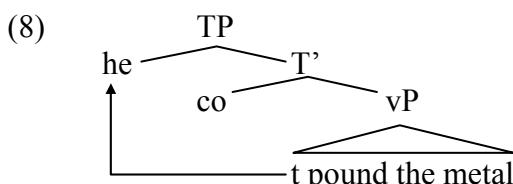
(4) a. no dap mieng sat
he pound the metal
b. no se dap mieng sat
he will pound the metal

(5) no (se) (khong) (phai) dap mieng sat
he (will) (not) (must) pound the metal



- yes-no questions = NP *co* vP *khong*³

(7) [TP no co dap mieng sat] khong
he T_Q pound the metal C_Q
'does/did he pound the metal?'



- No stranded Aux (PF condition): T, Neg, or Mod cannot be stranded⁴

(9) a. *toi se noi, nhung no se khong
I will speak, but he will not
b. *toi se khong noi, nhung no se
I will not speak, but he will
c. *toi phai noi, nhung no khong phai
I must speak, but he not must

³ This raises the question what a yes-no question whose TP is headed by *se* looks like. The answer is that there are no such questions. As *co* and *se* are all overt T heads, and there is no affixation in Vietnamese, they are in complementary distribution.

(i) a. *no co se doc sach khong
he T_Q will read book C_Q
b. *no se co doc sach khong
he will T_Q read book C_Q

To effect the meaning 'will he read books' in an unambiguous way, Vietnamese has to resort to embedding. Thus the meaning 'will he read books' will have to be expressed as 'is it true that he will read books'. See Trinh (2004) for further details.

⁴ In other words, Vietnamese auxiliaries behave similarly to English contracted auxiliaries.

4. OBSERVATIONS ABOUT VIETNAMESE TRs

- similar to English in the relative order of NP₁, NP₂, V and AP

(10) no dap mieng sat bet
he pound the metal flat

- Aux = T (Neg) (Mod) can appear in exactly two positions, after NP₁ or before AP, so we either have [s NP₁ Aux V NP₂ AP] or [s NP₁ V NP₂ Aux AP]

(11) a. no se dap mieng sat bet
he will pound the metal flat
b. no dap mieng sat se bet
he pound the metal will flat
'he will pound the metal flat'

(12) a. no co dap mieng sat bet khong
he T_Q pound the metal flat C_Q
b. no dap mieng sat co bet khong
he pound the metal T_Q flat C_Q
'did he pound the metal flat?'

(13) a. no khong dap mieng sat bet
he not pound the metal flat
b. no dap mieng sat khong bet
he pound the metal not flat
'he did not pound the metal flat'

(14) a. no phai dap mieng sat bet
he must pound the metal flat
b. no dap mieng sat phai bet
he pound the metal must flat
'he must pound the metal flat'

(15) a. no se khong dap mieng sat bet
he will not pound the metal flat
b. no dap mieng sat se khong bet
he pound the metal will not flat
'he will not pound the metal flat'

(16) a. no se phai dap mieng sat bet
he will must pound the metal flat
b. no dap mieng sat se phai bet
he pound the metal will must flat
'he will have to pound the metal flat'

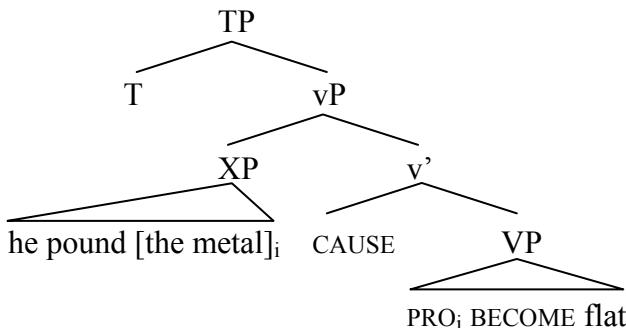
(17) a. no khong phai dap mieng sat bet
he not must pound the metal flat
b. ?no dap mieng sat khong phai bet
he pound the metal not must flat
'he does not have to pound the metal flat'

(18) a. no se khong phai dap mieng sat bet
he will not must pound the metal flat
b. ?no dap mieng sat se khong phai bet
he pound the metal will not must flat
'he will not have to pound the metal flat'

5. ANALYSIS OF VIETNAMESE TRs

- a semantically transparent deep structure⁵

(19)



- *EPP satisfaction (Vietnamese)*

(20) [+EPP] on T is satisfied by movement of any XP to [Spec, T]⁶

Economy

(21) *Shortest Move*⁷

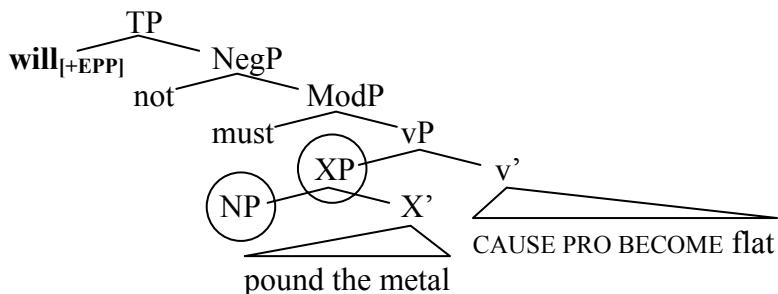
α can move to target K to satisfy a formal requirement F only if there is no β which is closer to K than α and which could satisfy F by moving to K

Closeness

α is closer to K than β if K c-commands α and α c-commands β

- candidates for movement to [Spec, T]⁸

(22)



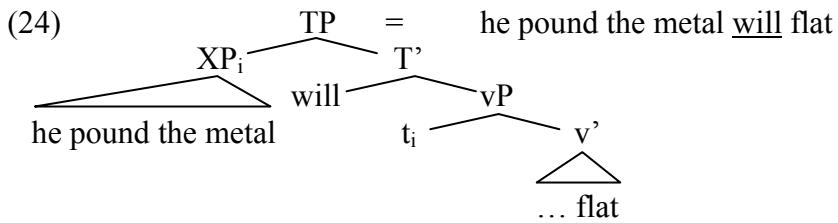
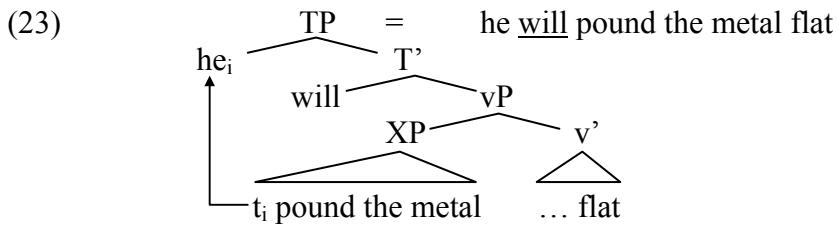
⁵ See Hale and Keyser (1993), Chomsky (1995), Baker (1996). A fact about (19) that I must account for by stipulation is the control relation between [the metal]_i – the direct object of *pound* – and PRO_i – the subject of the VP complement of _{v CAUSE}. Thus I take the Direct Object Restriction (DOR) of Levin and Rappaport (1995: 34) to be a primitive. The DOR says that “a resultative phrase may be predicated of the immediately postverbal NP, but may not be predicated of a subject or of an oblique complement.”

⁶ Adverbs seem not able to satisfy the EPP. We can think of various reasons why this is the case. See Bobaljik (1994, 1999). I leave this issue open.

⁷ This definition is based on Chomsky (1995: 296), where it has the name of Minimize Chain Link (MCL) and is considered part of the definition of Move, not an economy condition.

⁸ It is an empirical fact that nothing can move out of NP (Spec of XP). If we follow Chomsky (1986) and say that non-L-marked XPs (except IP) are barriers, then the problem becomes that of explaining why Spec of XP is a barrier whereas XP and vP_H are not. We can solve this problem by reformulating the definition of L-marking in such a way that in (25), both XP and vP_H are L-marked by T. That might not be so unreasonable, given that XP is a vP, as we will see immediately below, and both vP's in (22) are interpreted for tense by T, and that the head of the lower vP inflects for tense, as we will see later in the discussion of English TRs. I will leave the question open here.

- deriving the distributional facts



- XP must be quite small: it cannot be CP or TP
- syntactic evidence: there can be only one Aux per sentence

(25) a. *no khong dap mieng sat se bet
 he not pound the metal will flat
 ('his not pounding the metal will make it flat')
 b. *no se dap mieng sat se bet
 he will pound the metal will flat
 ('that he will pound the metal will make it flat?')

- semantic evidence: the tense specification of the whole sentence must be unique

(26) hom-qua no dap mieng sat
 yesterday he pound the metal
 'he pounded the metal yesterday'

(27)

	March 02	March 03 = today/now	March 04
	John pounds the metal	*no dap mieng sat se bet <i>he pound the metal will flat</i>	The metal becomes flat

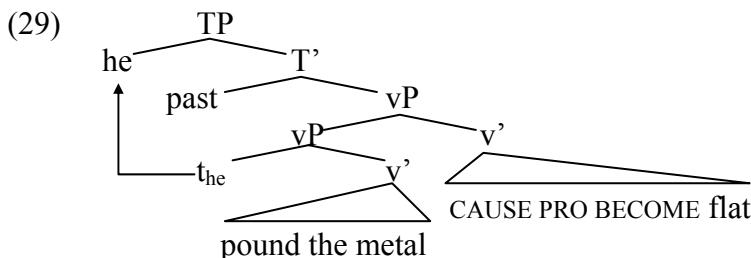
- tentative conclusion: XP = vP

6. EXTENDING THE ANALYSIS TO ENGLISH

- examples of English TRs

(28) a. he pounded the metal flat
 b. he shot the leader of the gang dead

- maybe...



- *EPP satisfaction (English)*
[+EPP] on T must be satisfied by an NP⁹
- evidence that NP₂ is the internal argument of the verb¹⁰

(30) a. [which gang] did you shoot [the leader of t₁] dead?
b. *[which man] did you consider [sc [a friend of t₁] honest]?

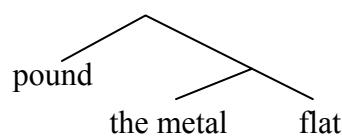
- evidence that AP is an argument, not an adjunct.

(31) a. ?[how flat]₁ do you wonder whether he pounded the metal t₁?
b. *[how severely]₁ do you wonder whether he punished these boys t₁?¹¹

(32) a. John said he would read the papers carefully, and read the papers he did carefully
b. *John said he would pound the metal flat, and pound the metal he did flat¹²

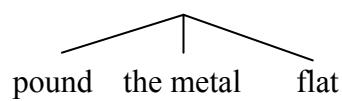
- analyses that have been proposed

(33) *Kayne (1985), Kratzer (2004)*



- NP₂ is an SC subject
- AP is not a selected argument
- V must be intransitivized

(34) *Carrier & Randall (1992)*



- ternary structure
- semantic unit ≠ syntactic constituent
- (ad hoc) adjustment of theta-criterion

⁹ See Chomsky (1995: 232).

¹⁰ See Carrier & Randall (1992: 206 – 207).

¹¹ See Carrier & Randall (1992: 185).

¹² See Levin & Rappaport (1995: 49).

REFERENCES

Baker, M. C. 1996. Thematic Roles and Syntactic Structure. Manuscript. McGill University.

Bobaljik, Jonathan. 1994. What does adjacency do? In *MIT Working Papers in Linguistics* 22, 1 – 32. Department of Linguistics and Philosophy, MIT.

Bobaljik, Jonathan David. 1999. Adverbs: The hierarchy paradox. *Glot International* 4.9/10:27 - 28.

Carrier, J. and Randall, J. H. 1992. The Argument Structure and Syntactic Structure of Resultatives. *Linguistic Inquiry* 23: 173 – 234.

Chomsky, Noam. 1986. Barriers. Cambridge: MIT Press.

Chomsky, N. 1995. *The Minimalist Program*. Cambridge: MIT Press.

Hale, Kenneth, and Keyser, Samuel Jay. 1993. On argument structure and the lexical expression of syntactic relations. In *The View from Building 20*, eds. Kenneth Hale and Samuel Jay Keyser, 53 - 110. Cambridge: MIT Press.

Kayne, R. 1985. Principles of Particle Constructions. In: R. May and J. Koster (eds). *Levels of Syntactic Representation*. Foris, Dordrecht.

Kratzer, A. 2004. Building Resultatives. To appear in Claudia Maienborn und Angelika Wöllstein-Leisten (eds.). *Event Arguments in Syntax, Semantics, and Discourse*. Tübingen: Niemeyer.

Levin, B. and Rappaport, M. 1995. *Unaccusativity at the Syntax-Semantics Interface*. Cambridge: MIT Press.

Pesetsky, D. and Torrego, E. 2000. T-to-C Movement: Causes and Consequences. To appear in Michael Kenstowicz (ed). *Ken Hale: A Life in Language*. Cambridge: MIT Press.

Pesetsky, D. and Torrego, E. 2004. The Syntax of Valuation and the Interpretability of Features. To appear in S. Karimi, V. Smiian and W. Wilkins (eds). *Clausal and Phrasal Architecture: Syntactic Derivation and Interpretation. A Festschrift for Joe Emonds*. Benjamins (in press).

Trinh, T. 2004. *Aspects of Clause Structure in Vietnamese*. Master thesis, Humboldt-Universität zu Berlin.

Trinh, T. 2006. An analysis of transitive resultatives. Squib, MIT.

Williams, E. 1980. Predication. *Linguistic Inquiry* 11: 203 – 238.