

OBJECTS IN THE PSEUDOPASSIVE^{*}

the syntax and semantics of bare-NP complements

THE PUZZLE

Alongside the *common* pseudopassive construction, as in (1a), some English speakers also allow the surprising variant in (2a-c):

- (1) a. Oh no! Our papier-mâché blowfish was sat on (by an unsuspecting guest).
- (2) a. Don't use that cutting-board – it was chopped *habanero* on!
 b. These pants just aren't meant to be tucked *shirts* into.
 c. That seat was spat gum on!

I will refer to the constructions in (2) as PIPPs¹ (to be elaborated shortly); PIPPs raise some immediate questions:

- Q:**
- What licenses the direct objects in (2) to appear right-adjacent to *passive* verbs?
 - How does the object of a preposition get raised to subject in place of the direct object?
 - Why do only *some* speakers allow constructions as in (2)?

This talk addresses primarily the first two questions. Namely, we examine the syntactic and semantic nature of the pseudopassive direct objects, which we will discover to have the following characteristics:

1. Determiners, possessors, and pronouns are inadmissible.
2. Pre-nominal NP-level modifiers are possible, post-nominals and DP-level modifiers are out.
3. Objects have necessarily narrow scope, i.e., are scopally inert.
4. Objects cannot be extracted by topicalization or wh-movement.

****I conclude from these properties that the pseudopassive direct objects are bare-NPs, not DPs, patterning similarly to the pseudo-incorporation structures of Inuktitut, Hindi, Niuean, Chol²....Hence the abbreviation PIPP, Pseudo-Incorporated Pseudo-Passive.**

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¹ This (albeit post-theoretical) abbreviation was kindly suggested to me by Omer Preminger.

² See Bittner (1984), van Geenhoven (1998), Wharram (2003) for Inuktitut and West Greenlandic, Dayal (2003) for Hindi, Massam (2001) for Niuean, Coon (2006) for Chol.

AN ANALYSIS IN STEPS

- ❖ *Syntax in a tight corner*: to raise the PP-object, the Direct Object (henceforward DO) cannot be an intervener and must be interpreted as an NP/property, unable to satisfy EPP; (capturing property 1&2 above)
- ❖ *Syntax effects Semantics*: as an NP, the direct object combines with V as a property of type $\langle e, t \rangle$, restricting V's domain – DO is non-quantificational & cannot participate in scope interactions (property 3)
- ❖ *Semantics effects Syntax*: movement of DO would leave a trace of type $\langle e \rangle$, which cannot combine with V in this position (lest it should be an intervener again for PP-object raising). Extraction of DO is blocked (property 4)

Section 1: introduces the notable properties of PIPPs.

Section 2: discusses the syntax of PIPPs argued to necessitate their NP/property interpretation.

Section 3: a semantics is given for these constructions following Wharram (2003) and Deal (2007), who posit an antipassive morpheme (overt or covert) which creates a property-taking predicate from an argument-taking one (i.e., morphologically encoding the role of Restrict in Chung&Ladusaw 2004)

Section 4: concludes

1 IN SEARCH OF D

1.1 No Determiners, No Pronouns, No Possessors...

Items that usually (i.e. are argued to) inhabit D are illicit in the pseudopassive direct object.

Pseudopassive direct objects cannot be preceded by strong determiners or quantifiers, in (3):

- (3)
- a. *This cutting-board was chopped *the* avocado on (...and that one the tomato).
 - b. *This cutting-board was chopped *every* avocado on.
 - c. *This cutting-board was chopped *some* avocados on (...the rest are on the table)
 - d. *This cutting-board was chopped *an* avocado on (the one that was on the table).

NB: (3c) and (3d) are fine on a weak/existential interpretation, on which they are arguably not determiners but rather nominal modifiers (Partee 1989, Zamparelli, Alonso-Ovalle&Menendez-Benito 2002).

Pronouns are not possible:

- (4) a. –What about the students? *-The NSF grant was paid them with.
(vs. ‘The NSF grant was paid students with’)
b. –Where’d this dirt come from? *You were dumped it on, weren’t you?
(vs. ‘you were dumped dirt on’)

Possessors are also out (argued for English to be in D or SpecDP, Cardinaletti 1998, Larson&Cho 2003, a.o.):

- (5) a. *Those pants just aren’t meant to be tucked *Blanche’s* shirts into.
b. *These pants just aren’t meant to be tucked *my* shirts into.
c. *Oh no! This cage was kept *Jurassic Park’s* Raptors in, but they’ve escaped!

1.2 Bigger than N...

In contrast to lexical noun-incorporations (baby-sitting, salamander-hunting, etc.), PIPP direct objects are NPs, supporting modifiers, weak quantifiers (as noted above), and conjunction.

Modifiers of the direct object are readily accepted (and even publicly attested) in the pseudopassive:

- (6) a. Sega Genesis system was used and taken good care of. (from a merchandise-description on ebay)
b. This cutting board was chopped various different local root vegetables on.
c. Wow, this fabric could be made lovely cushions out of.

Conjoined modified NPs are possible also:

- (7) a. That cutting-board was only chopped purple onions and fresh tomatoes on.
b. This cage is kept velociraptors and baby tyrannosaurs in.
c. The stolen money was bought a sports car and some liquor with.

Again, definite/strong quantifiers are not possible in conjunction:

- (8) a. *That cutting-board was only chopped the onions and the tomatoes on.
b. *This cage is kept every velociraptor and (that) baby tyrannosaur in.
c. *The stolen money was bought the sports car and that liquor with.

1.3 Adjective Interpretations

Adjectives well-known to be ambiguous pre-nominally only allow one interpretation as pseudopassive object modifiers.

Now, certain adjectives in English can appear both pre- and post-nominally: in pre-nominal position these adjectives are ambiguous between two different interpretations, whereas in post-nominal position the ambiguity is resolved, as in (9) (Bolinger 1967):

- (9) a. *visible* stars = stars inherently visible, or stars visible right now
 stars *visible* = stars visible right now
- b. every *unsuitable* word = every word is unsuitable, or the words that are unsuitable
 every word *unsuitable* = every word that is unsuitable
- c. every *possible* candidate = every potential candidate, every candidate possible (.. to interview)
 every candidate *possible* = every candidate it was possible for us to interview...

HOWEVER, when we use these adjectives to modify pseudopassive direct objects, only one interpretation is possible:

I. Stage-Level vs. Individual-level

- (10) a. Here, this table is to be noted *visible* stars in for each hour of your observation, #(and whether you could see them or not).³
 b. *Where's an astronomy book that's listed stars *visible* in?
 c. Where's an astronomy book that's listed *visible* stars in?
 d. #This fancy telescope was to be counted *visible* stars with, but the clouds were so thick that there weren't any.
 e. Did you hear about that botched-up burglary back in the 50's? Well there's the prison that was locked-up *responsible* individuals in... #(until they were finally acquitted years later).

** Only individual-level meaning is possible.

II. Restrictive vs. Non-restrictive

- (11) a. I'll never hire that baby-sitter again – my children were yelled several *unacceptable* curse-words at while we were out... (#we only yell the acceptable ones at them).
 b. *My children were yelled several curses (that were) *unacceptable* at.
 c. Igor's editorial was deleted *tenable* accusations from... (#of course, the *untenable* ones were left in).

³ The hash-mark outside of the brackets indicates that the utterance would be awkward, and rather inappropriate *without* the bracketed continuation.

***Only non-restrictive reading is present!*

III. Implicit Relative vs. Modal

- (12) a. This computer program will be background-searched *possible* candidates with...(# then we'll sort out which ones have potential).
 b. *This program will be background-searched candidates *possible* with.

***Only modal 'potential' reading is available!*

What this tells us – the ambiguity stems from level of modification – *stage-level, restrictive, implicit relative* interpretations arise when adjective modifies DP-level (α in (13)); *individual-level, non-restrictive, modal* interpretations arise when adjective modifies NP-level (β in (13)) (Larson (1998)), illustrated in (13):

- (13) a. [_{DP} D α [_{NP} β N] α] (α = DP modifier; β = NP modifier)
 (Larson&Maršič 2004: 280)

***accepting this, PIPP direct objects do not allow NP-level modification*

1.4 Extraction

Pseudopassive direct objects cannot extract overtly by Wh-movement or topicalization.

...the result is crashingly bad:

- (14) a. *Habanero, this cutting-board was chopped t on.
 b. *What was this cutting-board chopped t on?
 c. *A student, the NSF grant was paid t with.
 d. *Who was the NSF grant paid t with?

Cagri (2007) argues that Turkish bare-NPs cannot raise for case, nor undergo wh-movement or topicalization, whereas full DPs can. NB, wh-words *can* occur in situ, however, suggesting that wh-words can be NPs and the restriction on movement has another source:

- (15) a. *How many onions was this cutting board chopped on?
 b. This cutting board was chopped *how many* onions on?
 c. Quick, I need to know when this cutting-board was chopped *what* on!
 (cf. (14b))

2 SYNTAX: RAISING PRIORITIES

2.1 Closest and Highest

Assuming that an argument raises to subject position of a passive verb to satisfy the EPP on T (Extended Projection Principle, in the sense of Chomsky 1995), theoretically the *closest* (i.e., *highest*) phrase/head with the appropriate D-features is raised, by a rule such as *Attract Closest*, in (19):

- (19) *Attract Closest*
 α can raise to target K only if there is no legitimate operation Move β targeting K, where β is closer to K
 (Pesetsky 2000:15)

and the higher phrase (defined in (20)) is necessarily closer, (where higher=closer):

- (20) *Higher*
 X is higher in the tree than Y if the set of nodes dominating X is a subset of the set of nodes dominating Y (i.e., if X dominates or c-commands Y)
 (Pesetsky, 24.952 class hand-out)

But the DO is structurally ‘higher,’ shown in (21-23) (assuming that passive constructions are derived from their active counterparts, as in Baker, Johnson&Roberts (1989)).⁴

- (21) *Variable binding*
 a. June introduced *every astronaut_i* to *her_i* evil twin.
 b. June introduced *her*_{i/j}* evil twin to *every astronaut_i*.
- (22) *Condition C*
 a. I paid *him*_{i/j}* with *Elliot_i*’s paycheck.
 b. I paid *Elliot_i* with *his_i* paycheck.
- (23) *Superiority effects*
 a. What did that kid spit on who?
 b. ?Who did that kid spit what on?

(21-23) suggest the base position of DO asymmetrically c-commands the PP-object. Why doesn’t it intervene?

⁴ We unfortunately cannot perform these tests on the actual PIPP forms, since the DO is a non-specific indefinite in all the cases discussed, which is incompatible with variable binding and co-indexing. We have already seen in (15) that multiple-question formation is actually possible in PIPPs, and that in these sentences it is the PP-object that is raised to SpecCP, with the wh-DO is in situ. Once the PP-object has raised to SpecTP, however, it is of course now closest to the Wh-probe on C; this cannot, then, determine the base heights of the two phrases.

***PIPP DOs are bare-NPs, which do not bear the D-features necessary to check EPP;⁵ bare-NPs cannot be arguments (Stowell 1981, Longobardi 1984), and cannot be interveners to PP-object raising. The PIPP-English speaker, upon understanding the subject to have moved from PP-object position, interprets DO as bare-NP to satisfy Attract Closest, saving the derivation.*

3 SEMANTICS: COMBINING PREDICATES WITH PROPERTIES

3.1 Pseudo-Incorporation

A number of researchers have observed direct objects with similar restrictions across a variety of languages; these constructions are usually referred to as pseudo-incorporation (a.k.a. semantic incorporation, NP-incorporation).

Instances of very similar phenomena are popping up everywhere, it seems: Greenlandic Inuktitut (Bittner 1984, van Geenhoven 1998, Wharram 2003), Niuean (Massam 2001), Tongan (Ball 2005), Hindi (Dayal 2003), Chol (Coon 2006), Chamorro (Chung&Ladusaw 2004)...

Some examples:

Tongan

- (24) a. Na'e ta: ki:ta: fo'ou 'a Sione.
 PAST hit guitar *new* ABS (name)
 'Sione played a new guitar.'
 b. Na'e to: manioke *mo e talo* 'a Sione.
 PAST plant cassava *and taro* ABS (name)
 'Sione planted cassava and taro too.'

(Ball 2005:21)

→ Determiners, case markers, and pre-nominal adjectives are banned from DO position; subject bears absolutive case (i.e., sentence is considered intransitive)

⁵ The lack of D-features on the PIPP DO is arguably not enough to motivate the PP-object to raise to SpecTP – the PP-object also must be needy, that is, caseless. Contrasts as in (i) suggest that an item won't move unless it requires some feature to be checked also:

- (i) a. It seems to Julia that grapefruit is a wonderful breakfast.
 b. Grapefruit_i seems to Julia t_i to be a wonderful breakfast.
 c. *Julia_i seems to t_i that grapefruit is a wonderful breakfast.

(modeled on examples from Pesetsky 24.952 class hand-out)

I argue elsewhere (Mills 2006) that pseudopassives form from prepositions that are lexically unvalued for Tense (in the sense of Pesetsky&Torrego 2004), and therefore cannot value this feature on their nominal complement (which would correspond to case-checking in previous theories)

Chol

- (25) a. tyi i-kuchu si' wiñik
 PERF 3E-carry wood man
 'The man carried wood.'
 b. *tyi i-kuchu jiñi si' wiñik
 PERF 3E-carry DET wood man
 'The man carried the wood.'
 c. tyi i-tsepe kabäl koya' jiñi xk'aläl
 PERF 3E-cut many tomato DET girl
 'The girl cut a lot of tomatoes.'

(Coon 2006:1-2, 7)

→ Again, determiners are illicit with the DO, as well as proper names, emphatic pronouns, possessives; modifiers are still possible, and the verb and object remain independent words.

Hindi

- (26) a. anu *har bacca/ har bacce-ko sambhaalegii *case obligatory on DP animates*
 Anu every child every child-ACC will-look-after
 'Anu will look after every child' (typical sentence)
 b. anu bacca nahii samhaalegii Neg > ∃, *∃ > Neg.
 Anu child not will-look-after
 'Anu will not look after children'
 c. anu ek bacce-ko nahii samhaalegii Neg > ∃, ∃ > Neg.
 Anu one child-ACC not will-look-after
 'Anu will not look after a particular child'

(Dayal 2007:3)

→ Although case marking is obligatory on animate DPs in Hindi, it is not present on indefinites that behave like bare-NPs (i.e., restricted scope, etc.)

(South Baffin) Inuktitut

- (27) a. Tuglasi taku-lauq-t-a-ra
 Douglas see-PAST-PART-TRANS-1SERG.3SABS
 'I saw Douglas'
 b. Ippaksak Tuglasi-mik taku-lauq-t-u-nga
 yesterday Douglas-MOD see-PAST-PART-INTRANS-1SABS
 'Yesterday, I saw someone named Douglas ("a Douglas")'

(Wharram 2003)

→ When DO in Inuktitut appears with special 'modularis' morpheme/case, this object becomes a scopeless indefinite, even when this object is a proper name. Note that the predicate is marked as intransitive in (27b), when the 'modularis' morpheme is present.

***The PIPP DO patterns parallel to these cross-linguistic cases of pseudo-incorporation, which I will take to warrant a similar analysis for PIPP semantics as for the many other cases.*

The semantic analyses proposed are for the most part in agreement: the non-specific indefinite in the above constructions is a property of type $\langle e, t \rangle$ (and therefore not an argument of type $\langle e \rangle$) – often argued to be the general type of bare-NPs.⁶ The predicate combines with this property, to yield the same predicate but with its domain restricted. ... but how this is achieved differs from linguist to linguist...

→How do predicates that are lexically encoded to search for saturating arguments come to combine instead with properties?

the main proposals

Dayal (2003), van Geenhoven (1998) – a special (property-selecting) verb exists, or is formed (lexically) from its transitive correspondent. To capture Hindi's restriction on verb-object combinations (which must have some relative cultural frequency as typical activities), Dayal gives the semantics in (28):

- (28) a. $\lambda x \lambda y \lambda e [V(e) \ \& \ Ag(e) = y \ \& \ Th(e) = x]$ *regular transitive verb*
 b. $\lambda P_{\langle e, t \rangle} \lambda y \lambda e [P-V(e) \ \& \ Ag(e) = y \ \& \ Appropriately-Classificatory(e)]$
incorporating verb
 c. An event denoted by a predicate δ that incorporates a property γ is
appropriately classificatory iff
 $\diamond_{\text{probable}} (\exists e [\delta(e) \ \& \ \exists y [Ag(e) = y] \ \& \ \exists x [\gamma(x) \ \& \ Th(e) = x]])$ (extensional)
 $\diamond_{\text{probable}} (\exists e [\delta(e) \ \& \ \exists y [Ag(e) = y] \ \& \ Th(e) = \gamma])$ (intensional)

(Dayal 2003:16)

The English construction appears to be highly productive, however, perhaps disfavouring a lexical account.

Chung&Ladusaw (2004) – a new rule of semantic composition, Restrict (combines predicates with properties). This operation interprets the NP property p as a restrictive modifier of the predicate, yielding the original function (defined by the predicate) with its domain restricted to the subdomain of elements that have the property p (Chung&Ladusaw 2004:5).

⁶ Chierchia (1998) argues that languages differ with regards to the lexically-coded type of their nouns. English, in his theory, has both nouns of the argument type (mass nouns, and kinds), and those of the property-type (those that aren't mass nouns or kinds). Most of the English nouns we have discussed so far fall into the property-type NP category, and those that don't are easily type-shifted by 'Derived Kind Predication' to allow for the kind of combination soon to come. Chierchia's theory is not problematic, then.

Questions left to solve

- ? How do PIPP-acceptors' grammars differ from those of standard English speakers? (i.e., pseudo-incorporating from non-PIing languages)
- ? Can we find syntactic evidence for this silent morpheme in English?
- ? Is there any connection between ANTIP and the English conative alternation?

Thank you!

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