OBJECTS IN THE PSEUDOPASSIVE: THE SYNTAX AND SEMANTICS OF BARE-NP COMPLEMENTS*

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Although rare cross-linguistically, pseudopassives are common English constructions; a subset of English speakers, however, accept a surprising variant which includes a direct object right adjacent to the verb, such as '*this cutting board was chopped ginger on.*' These variants raise a new question: how is the direct object licensed as complement to a *passive* verb? In this paper, I argue that the direct objects in these constructions are not full DPs, but rather bare-NPs. As such, they combine semantically with the predicate as properties, they lack the necessary D-features to satisfy the EPP, and do not raise for Case. This allows the object of the prepositional phrase to raise to SpecTP, stranding the preposition. The pseudopassive-object's necessarily narrow scope, as well as its unavailability for topicalization or wh-movement from its base position also support this account.

1. Introduction

The author of this paper was startled to discover that she (and select other consulted speakers) produces and accepts such sentences as in (2), a variation on the more pedestrian pseudopassive demonstrated in (1):

(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 PIPPs[1] (to be elaborated shortly); PIPPs raise some immediate questions:

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

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

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This paper addresses primarily the first two questions. Namely, I examine the syntactic and semantic nature of the pseudopassive direct objects, which I show to have the following characteristics:

1. Determiners, possessors, and pronouns are inadmissable.
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.

From these properties I conclude that the pseudopassive direct objects are bare-NPs, not DPs. This grouping of properties has become quite familiar in the literature over the past several years, most commonly explained as *pseudo-incorporation* (as termed by Massam 2001 for Niuean), or *semantic incorporation* (Dayal 2003) of the direct object and the verb. Although previous research has identified pseudo-incorporation in a wide variety of languages, Inuktitut, Hindi, Niuean, Chol,[2] etc., it has not yet been observed in English; I claim that the constructions in (2) are just such an instance of pseudo-incorporation in English, hence the abbreviation PIPP**,** Pseudo-Incorporated Pseudo-Passive.

The analysis I put forward here argues that PIPPs and their peculiar properties fall-out straightforwardly from the regular interactions between syntax and semantics. First off, syntax is in a bind; 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 the EPP (capturing property 1&2 above). The property-hood of the DO has the semantic consequences of restricting the verb's domain but not saturating its internal argument position (which must be existentially bound instead) – the DO cannot be interpreted referentially (i.e., specifically) and therefore has necessarily narrow scope. This explains the DO's lack of scope interactions, as I show in section 2.5 (property 3 above). Finally, because the semantic type of the DO is computed as <e,t> (i.e., as a property), movement of the DO will leave a trace of type *e* in its place, which cannot combine with the verb in this position (lest it should be an intervener again for PP-object raising). Extraction of the DO by wh-movement or topicalization is therefore blocked (capturing property 4).

The rest of the paper proceeds as follows: section 2 introduces the notable properties of PIPPs, as numbered 1-4 above. Section three discusses the proposals for the semantics of pseudo-incorporation that have been made in the literature, while section four concludes with some directions for future study.

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[2] See Bittner (1984), van Geenhoven (1998), Wharram (2003) for Inuktitut and West Greenlandic, Deal (2007) for Nez Perce, Dayal (2003) for Hindi, Massam (2001) for Niuean, Coon (2006) for Chol.

2. In Search of D

2.1 No Determiners, No Pronouns, No Possessors…

When we take a closer look at what types of nominal phrases are possible in PIPP direct object position, we observe that Items which usually (i.e. are argued to) inhabit D are illicit in the pseudopassive direct object.

First off, pseudopassive direct objects cannot be preceded by strong determiners or quantifiers, seen in (3):

(3) a. *This cutting-board was chopped *the* avocado on.
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).

It is important to note, however, that the acceptability of indefinite determiners, as in (3b&c), varies with their interpretation as either strong or weak (i.e., specific vs. non-specific, or put differently, presuppositional vs. non-presuppositional); the sentences in (3b&c) are fine on a weak/existential reading. Crucially, weak interpretations of indefinite determiners have been argued in the literature to derive from their ability to combine with nouns as modifiers, rather than as generalized quantifiers (Partee 1989, Diesing 1992, Alonso-Ovalle&Menendez-Benito 2002). When understood referentially, as indicated in the examples above, the indefinites are true determiners, i.e. D-heads, and the sentences are ungrammatical.

In (4), we see that pronouns are also 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')

Finally, possessors, which are argued for English to be in D or SpecDP (Cardinaletti 1998, Larson&Cho 2003, a.o.), cause the sentences to be ungrammatical:

(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

Given that those items expected to occur in D are not possible in PIPP direct object position, it is logical to suspect that there is no D projection in these nominal phrases. The next section briefly demonstrates that although the DO is smaller than a DP, it is larger than just an N-head.

2.2 Bigger than N

In contrast to lexical noun-incorporations (baby-sitting, salamander-hunting, etc.), PIPP direct objects appear to be larger phrases supporting modifiers, weak quantifiers (as noted above), and conjunction. We see in the following examples that 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 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 okra 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 conjunctions either:

(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.

The possibility of modification and conjunction are both strong support that the DO is not a simple N-head. The position and interpretation of modifiers is however restricted in interesting ways, which I elaborate on presently.

2.3 Adjective Interpretations

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…

When we use these adjectives to modify pseudopassive direct objects, however, only one interpretation is possible, shown in the following examples:

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).

In (10a), the pragmatically preferred context would be one in which the stars that are actually visible at each hour of observation (given cloud-cover, light-pollution, etc.) are the ones being noted in the table; the bracketed continuation disambiguates the context to one that instead forces the individual-level interpretation of 'visible stars.' That (10a) is awkward *without* this continuation indicates that the stage-level interpretation is inaccessible – the only reading available is therefore the individual-level one which clashes with the preferred context until the continuation is parsed. Similarly, in (10d) the sentence is interpreted as a contradiction since our world knowledge maintains that the set of inherently visible stars is constant (modulo the occasional super-nova), while the sentence asserts that there weren't any such stars. This contradiction is unexpected if the pre-nominal adjective 'visible' is ambiguous between stage-level and individual-level readings.

The post-nominal position for these adjectives is completely ungrammatical, shown in (10b). The example in (10e) is similar to (10a) – *responsible individuals* in this sentence can only be understood as 'people who are generally responsible individuals,' and not as 'people who were responsible for the crime.' The interesting observation from (10) is that only the individual-level interpretations of the modifiers in question are 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).

Again in (11a,c) we observe that only one reading, the non-restrictive one, is possible for the typically ambiguous modifiers *unacceptable* and

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

untenable. (Example (11b) shows that these adjectives are not possible in post-nominal position either.)

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.

Lastly, *possible* in (12) can only mean 'potential candidates,' its modal reading, and not '(all) candidates that it was possible for us to compile,' which would be the implicit relative reading.

Following Larson (1998), I assume that the ambiguity typically observed for these modifiers falls out from the syntactic level, either NP or DP, that is modified. *Stage-level*, *restrictive*, and *implicit relative* interpretations arise when the adjective modifies the DP-level (α in (13)); *individual-level*, *non-restrictive*, and *modal* interpretations arise when the adjective modifies the NP-level (β in (13)). It's worth noting that only the DP-level modifiers surface both pre- and *post*-nominally, recalling that post-nominal ones are all illicit in PIPPs.

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

If the partitioning into DP-level and NP-level modifiers represented in (13) is correct, then the results of the above examples correlate nicely with those of the previous sections. That is, if PIPP direct objects are necessarily NPs, then it is expected that DP-level modification is not possible. The NP status of the DO has other repercussions as well, which I explore in the next two sections.

2.4 Extraction

A curious fact about PIPP direct objects is that they cannot be extracted overtly by topicalization, in (14a,c), or wh-movement, attempted in (14b,d):

(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.
c. *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. Thus, PIPP DOs appear again to pattern with the behaviour of bare-NPs crosslinguistically, and not with DPs.[4] I argue below that extraction of PIPP DOs is blocked by the semantic

[4] Note that the problem for wh-movement is not due to any restriction of NPs from being wh-words, since wh-words are possible as PIPP DOs *en situ*, in (i):

(i) 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))

type of the trace they would leave behind – an individual of type *e*, and not a property of type <e,t> which the predicate is anticipating – but we will come to this shortly.

2.5 Scopelessness

Related to the extraction pattern above, PIPP DOs have necessarily narrow scope, unlike the behaviour of their canonical-sentence counterparts. It is well known that multiple quantified phrases in a sentence (in English) generally result in scope ambiguities. In attempting to find scope ambiguities in PIPPs, however, we get the following (some sentences adapted from Carlson 1977, Chierchia 1998):

(15) a. Every cutting-board was chopped vegetables on. **(some) > every*
b. Each grant was paid three students with. **three > each*
c. All vegans have been fed an animal product to...
...by accident at some point in their lives. *all > an*
...*gelatin was snuck into all water supplies! **an > all*
d. This cutting-board was chopped an onion on reapeatedly.
[wide scope for 'repeatedly]
e. ?Each lab was tested parts of that machine in. **(some) > each*
…repeatedly [wide scope for 'repeatedly]
f. That cutting-board wasn't chopped a habanero on. *Neg > a, *a > Neg*

Although scopelessness is expected for the bare plural in (15a), (given that the same scopelessness is observed for bare plurals in non-pseudopassive contexts), it isn't expected for the singular indefinite in (15c), nor the non-kind bare plural in (15e).[5]

Given that scope ambiguity is argued to arise from Quantifier Raising (May 1977, and much work since), the PIPP DO's scopal inertness is either support that the DO is an NP and thus non-quantificational, or that the PIPP DO cannot extract at all for other or related reasons (as seen above), or both. The following two sections develop a preliminary analysis of the PIPP properties reviewed above.

3. Syntax: Raising Priorities

3.1 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 only the *closest* (i.e., *highest*) phrase/head with the appropriate D-features can raise, by a rule such as *Attract Closest*, in (16):

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[5] Non-kind bare plurals have been observed in the literature to show the same scope ambiguities in English as singular indefinites, as in (i):

(i) a. I didn't see parts of that machine. *some > every, every > some*
(Carlson 1977)

(16) *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)

Assuming that probing heads search down the tree for their goals, the closest goal is necessarily the higher one, where we might define *higher* as in (17):

(17) *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* – the common tests in (18-20) demonstrate that direct object asymmetrically c-commands the PP (assuming that passive constructions are derived from their active counterparts, as in Baker, Johnson&Roberts (1989)):[6]

(18) *Variable binding*
a. June introduced *every astronaut*$_i$ to *her*$_i$ evil twin.
b. June introduced *her*$_{*i/j}$ evil twin to *every astronaut*$_i$.

(19) *Condition C*
a. I paid *him*$_{*i/j}$ with *Elliot*$_i$'s paycheck.
b. I paid *Elliot*$_i$ with *his*$_i$ paycheck.

(20) *Superiority effects*
a. What did that kid spit on who?
b. ?Who did that kid spit what on?

The question then, is why doesn't the DO act as an intervener to raising of the PP-object in PIPPs?[7]

We can understand now that it's likely not a coincidence the PIPP DO is neither an intervener to passive-raising, nor able to support a DP-level (as evidenced in the previous sections); bare-NPs do not bear the D-features necessary to check the EPP, and therefore are not possible goals for T's probing

[6] 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 (14) 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.

[7] Another question to ask is whether these PIPP DOs require Case. As we will see in section 4, cross-linguistic comparison suggests they don't: pseudo-incorporated DOs frequently cannot take case-marking (Tongan, Hindi), or the predicate they appear with has intransitive morphology (Inuktitut, Nez Perce).

(Stowell 1981, Longobardi 1984). The PIPP-English speaker, upon understanding the subject to have moved from PP-object position, must interpret the DO as a bare-NP in order to satisfy *Attract Closest*, saving the derivation. This NP restriction has semantic repercussions, as we've already seen in terms of the available interpretations of indefinite determiners and adjectives, and scope interactions. Section 4 explores the semantic side of the PIPP construction.

4. Pseudo-Incorporation: Combining Predicates with Properties

A number of researchers have observed direct objects with similar restrictions across a variety of languages: 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). These constructions are usually referred to as *pseudo-incorporation* (a.k.a. *semantic incorporation*, or *NP-incorporation*). Taking a look at a few cases, and the evident parallel between them and PIPP DOs, we see that a common analysis is ideal.

Up first, we observe that the sentences in (21) from Tongan include a direct object despite that the subject is absolutive marked (not ergative as would be expected if the sentences were transitive). Ball (2005) explains that determiners, case markers, and pre-nominal adjectives are banned from DO position in these constructions.

Tongan

(21) 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)

We find a comparable situation in Chol – determiners are illicit with the DO (shown in (22b)), as well as proper names, emphatic pronouns, and possessives, though modifiers are still possible (as in English, and Tongan).

Chol

(22) 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)

Although case marking is usually obligatory on animate DPs in Hindi, it is not present on indefinites that show the same scopal inertness as discussed for English in section 2.5, demonstrated by the contrast between (23b) and (23c):

Hindi

(23) a. anu *har bacca/ har bacce-ko sambhaalegii
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)

As a final example, the Inuktitut pseudo-incorporated DO in (24b) is argued by Wharram to be licensed by a certain morpheme (the antipassive morpheme, which is null in Inuktitut but overt in West Greenlandic) which attaches to the verb, taking it from a predicate taking an individual (type *e*) as its first argument, to one that takes instead a property of type <e,t>.

(South Baffin) Inuktitut

(24) 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)

Just like the other cases above, when the DO in Inuktitut appears with special 'modularis' case, this object becomes a scopeless indefinite, even when this object is a proper name. Note that the predicate is marked as intransitive in (24b), when the DO has 'modularis' case.

The semantic analyses proposed by these researchers are for the most part in agreement: they argue that the non-specific indefinite DOs in the above constructions are interpreted as properties of type <e,t> (not as arguments of type *e*) – often claimed to be the basic type of bare-NPs.[8] The predicate combines with this property, to yield the same predicate but with a restricted domain. Where analyses tend to differ is at what level of representation, or by

[8] 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 for this account.

what mechanism individual-taking predicates are shifted to their property-taking counterparts. Dayal (2003), van Geenhoven (1998), and Ball (2005) each propose a lexical rule for pseudo-incorporating verb creation, however the English construction displays a productivity that is not typical for purely lexical phenomena, rendering this approach suspect.[9]

Two other promising proposals have been made in recent pseudo-incorporation literature, one for a new rule of semantic composition (Chung&Ladusaw 2004), and another for a new morpheme (Wharram 2003, Deal 2007). A major difficulty that arises in trying to find support for either of these approaches is that in most of the pseudo-incorporating languages researched to date, there is no overt 'signal' for when the predicate is to be combined with a property in place of an individual – that is, pseudo-incorporation appears to be a rather silent process. If the mechanism at work is indeed a rule of semantic composition such as *Restrict*,[10] (that proposed by Chung&Ladusaw), then we would want to investigate whether this rule is available in all languages, and what other constructions we might predict it to play a role in interpreting.

As for the new morpheme proposal, one researcher has claimed that the predicate's property-taking 'signal' is not silent, but is in fact overtly realized as antipassive morphology in West Greenlandic; Wharram (2003) gives this morpheme the semantics in (25):

(25) ANTIP[11]
$\lambda P_{<e,<s,t>>} \lambda Q_{<e,t>} \lambda e . \exists x. P(x)(e) \& Q(x)$
(Wharram 2003)

ANTIP in (25) takes first a regular intransitive predicate, then a property, and introduces an existentially closed variable for which both the predicate and the property are true. I would like to claim, then, following Wharram (2003) for Inuktitut and West Greenlandic, and Deal (2007) for Nez Perce,[12] that such an ANTIP morpheme is present in English PIPPs as well. Ignoring for the moment the PP, an implementation of ANTIP in one of the PIPP examples from above is derived partially in (26):

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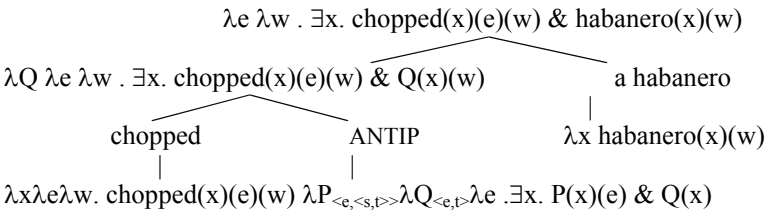
[9] In contrast, Dayal (2003) explains that Hindi pseudo-incorporation can only occur with verb-argument pairs that are "appropriately classificatory" (i.e., have some relative cultural frequency as a typical activity), a restriction which she argues is best defined in the lexical semantics of the predicate.

[10] The *Restrict* 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).

[11] See Deal (2007) for reasons why this morpheme needs to be modalized by an accessibility relation to possible worlds. I have not implemented her modifications here only for simplicity of exposition.

[12] Deal (2007) actually makes the stronger claim that an ANTIP morpheme as in (25) is present in all constructions (cross-linguistically) which involve a predicate taking a property as internal argument.

(26) *chopped* ANTIP *a habanero*



Finally, we can come back to the curious facts we observed above regarding PIPP DO extraction: once the PIPP predicate has combined with ANTIP, it can no longer combine with an individual argument of type *e*, but must take a property. But the semantic framework in use above, namely along the lines of Heim&Kratzer (1998), holds that traces are interpreted as type *e*. If this is correct, then any attempt to extract the NP-property will cause a type mismatch, and ungrammaticality.

5. Conclusion

In this paper I argued that PIPP direct objects are bare-NPs, and as such, they must combine somehow with V as properties of type <e,t>. To allow this combination, a silent morpheme ANTIP adjoins to the verb root. As a result however, PIPP DOs cannot be extracted, since their type *e* trace would cause a type mismatch with the newly created V-ANTIP predicate. As bare-NPs, the DO cannot satisfy the EPP, and the PP-object is raised to subject in its place, creating in effect a structure that is both passive (the subject is "suppressed") and antipassive (the theme is also "suppressed" in a certain sense).

As mentioned above, this is only a preliminary analysis of PIPPs, however, and many questions are left for further exploration and more thorough investigation. For instance, can we find syntactic evidence for a silent ANTIP morpheme in English? Do the stranded prepositions of PIPPs play a role in licensing PIPP structure (by, say, being reanalyzed as an ANTIP-like morpheme)? And importantly, how do PIPP-acceptors' grammars differ from those of standard English speakers (i.e., pseudo-incorporating from non-pseudo-incorporating languages)? As ever, this is an ongoing project, and answers to these questions must await future papers.

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