

To in two places and the dative alternation

Lisa Levinson, NYU

Penn Linguistics Colloquium, February 28, 2004

1 The Problem

- Sentences such as those in (1) are syntactically different, but semantically similar:
 - (1) a. John sent a letter to Mary. (PP Goal)
 - b. John sent Mary a letter. (DP Goal)
- But no syntactic alternation?
 - Larson (1988), Baker (1988), and Dikken (1995), among others, have argued for a syntactic derivational relation between such sentences
 - But, for a variety of reasons, most recent literature has argued to the contrary for an “alternative projection” approach, which derives each variant entirely independently (Pesetsky 1995, Harley 2002, Beck and Johnson 2004)
 - This leaves us without a good explanation for the systematic nature of the alternation.
- While those supporting an alternative projection approach set aside the importance these similarities due to a perceived lack of systematic correspondence, I will show that, once we place aside irrelevant data, the alternation **is** systematic
- I will focus on alternations with *to*-PPs, but a similar analysis should cover the *for*-PP alternation as well

2 Two places for *to* (and only one relevant one)

2.1 Why do only a subset of *to*-PPs alternate?

- There is a well-documented possessor, or animacy, constraint on English DP Goals, as described in Pinker (1989), Harley (2002), Pylkkänen (2002)¹
- Such a constraint is meant to account for the ungrammaticality of examples such as (2):

(2) * John sent London a letter.

- However, I will argue that what this constraint on DP Goals corresponds to the same constraint on objects of the preposition *to* when it appears in a particular structural position
- I will informally refer to these selected objects as ‘Animate Recipients’
- While *to* can take a variety of object types, we see that only Animate Recipient objects of *to* will alternate with the DOC
- I will show that such PPs form a natural class, beyond their alternation with DPs

2.2 Structural Differences in *to*-PPs

- Although Animate Recipient and Directional PPs look similar in English, they are **structurally different**, which we can diagnose by their *wh* behavior and ability to co-occur with British *do*-ellipsis
- British *do*-ellipsis is as illustrated in (3)

(3) John didn't sent the letter to London, but he will **do** to Sydney.

where the *do* stands in for an elided constituent, here ‘sent the letter’.²

¹Green (1974) proposed that the possession constraint was due to the presence of HAVE in the DOC. This has been taken up by Dikken (1995) and Harley (2002), in very different approaches. However, as noted in Pylkkänen (2002), such an analysis does not produce the expected semantic results. For one, an Animate Recipient need not end up possessing the Theme, but is only an intended recipient.

²The precise analysis of British *do*-ellipsis is not important here, I simply use it as a diagnostic of **some** structural difference between PP types, as illustrated below.

- (4) a. John sent the letter to Mary.
 b. **Who** did John send the letter to?
 c. ?* John didn't send the letter to Mary, but he will do **to Jane**.
 d. John sent Mary the letter.
- (5) a. John sent the letter to London.
 b. **Where** did John send the letter?
 c. John didn't send the letter to London, but he will do **to Sydney**.
 d. * John sent London the letter.
- (6) a. John gave ten dollars to Jane.
 b. **Who** did John give ten dollars to?
 c. * John didn't give ten dollars to Mary, but he will do **to Jane**.
 d. John gave Mary ten dollars.
- (7) a. John donated ten dollars to Kerry.
 b. **Where** did John donate ten dollars? / **Who** did John donate ten dollars to?³
 c. John didn't donate ten dollars to Dean, but he will do **to Kerry**.
 d. * John donated Kerry ten dollars. (But see section 3)

- (4) and (5) vary with the 'Goal' type⁴ (*Mary / London*)
- (6) and (7) vary with the verb (*gave / donated*)
- These distinctions are due to the presence of two distinct positions for *to*-PPs, which I will call *to(f)*, for 'functional' *to*, and *to(dir)*, for 'directional' *to*.
- Only objects of *to(f)* share the same 'theta role' as that required for the DOC, so only these should be expected to appear in the same part of the thematic hierarchy, and thus alternate (see section 5)
- A summary of the properties of *to(f)* and *to(dir)* is given in 8:

³*to(dir)* can also be realized as *to-what* or *to-who*, as seen here, but if *where* is possible, this is a definite diagnostic for *to(dir)*

⁴'Goal' to be construed in a very informal fashion

	PP	object-type	<i>wh</i>	OK w/British <i>do</i> -ellipsis	Alternates with DOC
(8)	to(<i>dir</i>)	Direction	where	yes	no
	to(<i>f</i>)	Animate Recipient	to-who	no	yes

- suggests that the DOC alternation is not dependent on the verb, but rather on the type of relation between the arguments

3 Morpho-phonological Constraints?

- The non-alternation of some verbs (such as *donate*) has been attributed to their morpho-phonological properties, or their being a part of the Latinate (vs. Germanic) lexicon (Storm 1977, Pinker 1989, Harley 2002)
- Indeed, seems very non-syntactic... HOWEVER –
- *donate* in the DOC is not ungrammatical for all speakers
- Keeping the facts from the previous section in mind, we will see that this seems to be due to speaker variation in allowing a to(*f*) type interpretation for *donate*, and not on a morpho-phonological constraint
- For these speakers, *donate* is like *send* (optionally taking a to(*f*) or to(*dir*) complement)
- When there is an Animate Recipient object, then the DP Goal is acceptable
- Some speakers find DP Goals with *donate* more acceptable in the context of organ donation, so that (9) is better than (10)

(for some speakers)

- (9) John donated Mary a kidney. (cf. John donated a kidney **to(f)** Mary.)
- (10) * John donated the ASPCA money. (cf. John donated money **to(dir)** the ASPCA.)

This is consistent with the *wh* behavior: (11)

- (11) * Where did John donate a kidney? (with the answer (9))

and judgments of British English speakers who accept (9), and also find (12) degraded (since they would have to(*f*)):

- (12) ?* John didn't donate a kidney to Mary, but he will do to Jane.

4 First Conclusions

- No need to resort to Latinate/Germanic lexicon distinction or the stress patterns of verbs
- DOC compatibility is not a property of verbs, but depends on the relations between the arguments
- If we ignore the irrelevant (e.g., Directional) cases, then we see no thematic differences between the DP and PP Goals

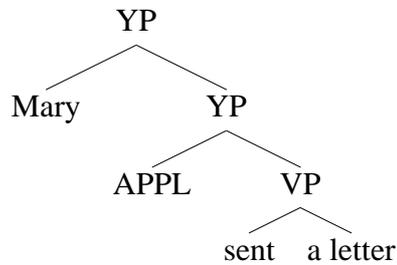
5 In the spirit of a thematic hierarchy...

- A thematic hierarchy has been posited to explain recurrent patterns in argument structure (Baker 1988, Damonte 2004)
- I adopt a loose interpretation of theta roles and UTAH, in the sense that thematic arguments should be consistently ordered with respect to each other, though not necessarily always in the same positions
- The Animate Recipient Goals under discussion should both be generated either above or below the Theme. I will advocate the hierarchy Goal > Theme
- The difference between the structures reduces to:
 - DP Goals are introduced by null applicative heads (see below)
 - PP Goals merge with VP
- Applicative heads are primarily associated with affixes found on English DOC-like structures in Bantu, where an additional affix is found on the verb (vs. sentences with only one DP object)
- This is illustrated in the Chichewa example below, with the *ir* applicative morpheme: (Baker (1988) example 121)

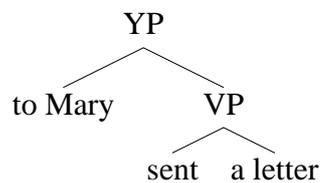
- (13) a. Ngombe zi-na-tumiz-a mitolo ya udzu **kwa mbuzi**.
 cows SP-PST-send-ASP bundles of grass **to goats**
 The cows sent bundles of grass to the goats.
- b. Ngombe zi-na-tumiz-**ir**-a **mbuzi** mitolo ya udzu.
 cows SP-PST-send-**APPL**-ASP **goats** bundles of grass
 The cows sent the goats bundles of grass.

- A sketch of the structures for English, with APPL as the null applicative head ⁵:

(14) DP Recipient:



(15) PP Recipient:



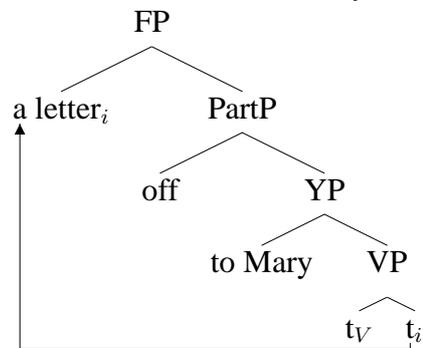
- On this account, semantic differences which do remain between alternating forms are due to the differing properties of the applicative head which introduces a DP as in (14) and a PP (15).

6 The Syntactic Alternation

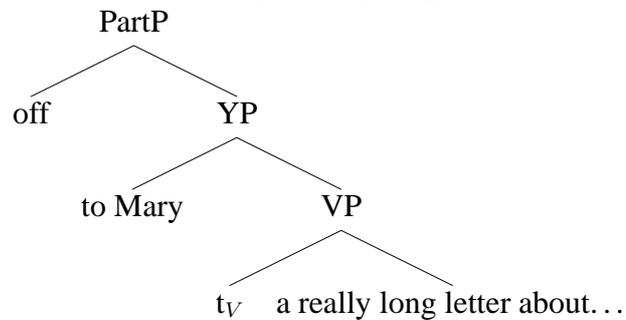
- There is a position FP which serves some kind of discourse-related function for DPs, a type of ‘scrambling’
- The structures are illustrated below, with the addition of a particle in ‘PartP’ to illustrate that a particle generated in this position would derive the correct word order, at least for the cases currently under consideration

⁵I abstract away from what may or may not be in Spec,VP

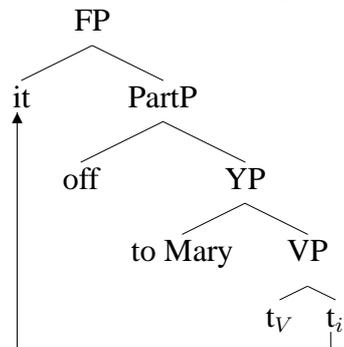
- (16) a. **PP Recipient:**
 John sent a letter off to Mary.



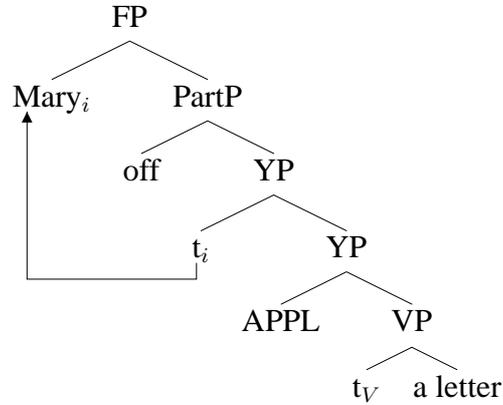
- b. **PP Recipient with Heavy Theme:**
 John sent off to Mary a really long letter about Alaska.



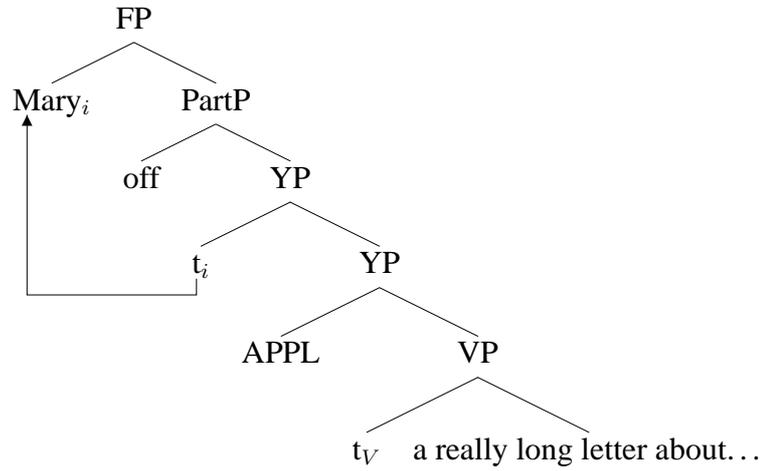
- c. **PP Recipient with Weak Pronoun Theme:**
 John sent it off to Mary.



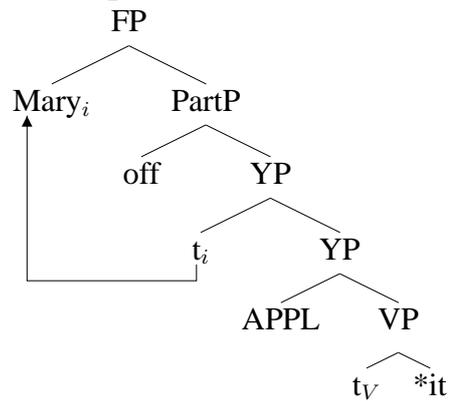
- (17) a. **DP Recipient:** John sent Mary off a letter.



- b. **DP Recipient with Heavy Theme:**
John sent Mary off a really long letter about her trip to Alaska.



- c. **DP Recipient with Weak Pronoun Theme:** * John sent Mary off it.



- Not motivated by Case, because we find that the movement is not wholly obligatory –
 - heavy DPs often remain low, not moving to FP (‘Heavy NP shift’) (16b)
 - weak pronouns obligatorily move to FP (16c), (17c)
- Object shift was also proposed for English in Johnson (1991), but in that analysis the movement was for Case reasons
- The current analysis shares more in common with proposal for English object shift as scrambling in Takano (1998), though I am claiming that the closest DP moves to FP, not just a Theme DP
- Movement of the closest DP, including the Goal DP, allows us to also provide an account for the ungrammaticality of weak pronoun Themes in the DOC, as the result of a Relativized-Minimality-type effect

7 Conclusion

- The *to*-PPs which alternate with DP Goals form a class syntactically, not just semantically
- This provides further evidence in support of a syntactic alternation
- A syntactic alternation analysis which gives all Animate Recipient Goal arguments the same position in the thematic hierarchy is tenable, and plausibly extendable to other DP-PP alternations
- Such an analysis with “object shift” to FP seems compatible with argument weight phenomena found in these constructions

References

- Baker, Mark. 1988. *Incorporation: a theory of grammatical function changing*. Chicago: University of Chicago Press.
- Beck, Sigrid, and Kyle Johnson. 2004. Double objects again. *Linguistic Inquiry* 35:97–124.
- Damonte, Federico. 2004. The thematic field: The syntax of argument structure enhancing morphology. Doctoral Dissertation, Università degli studi di Padova.
- Dikken, Marcel den. 1995. *Particles*. New York: Oxford University Press.
- Green, Georgia M. 1974. *Semantics and syntactic regularity*. Bloomington: Indiana University Press.
- Harley, Heidi. 2002. Possession and the double object construction. In *Yearbook of linguistic variation*, ed. Pierre Pica and Johan Rooryck, volume 2. Amsterdam: John Benjamins.
- Johnson, Kyle. 1991. Object positions. *Natural Language and Linguistic Theory* 9:577–636.
- Larson, Richard K. 1988. On the double object construction. *Linguistic Inquiry* 19:335–391.
- Pesetsky, David. 1995. *Zero syntax: Experiencers and cascades*. Cambridge, MA: The MIT Press.
- Pinker, Stephen. 1989. *Learnability and cognition: The acquisition of argument structure*. Cambridge, MA: MIT Press.
- Pykkänen, Liina. 2002. Introducing arguments. Doctoral Dissertation, MIT.
- Storm, Peter. 1977. Predicting the applicability of dative movement. In *The CLS book of squibs*.
- Takano, Yuji. 1998. Object shift and scrambling. *Natural Language and Linguistic Theory* 16:817–889.