

A Movement Analysis of Some Double Object Constructions

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1. Introduction to the debate

The so-called **dative alternation**, examples of which are provided in (1) and (2), has been the center stage of a debate that has lasted over 40 years.¹

- (1) a. John gave a ball to Mary. (2) a. John threw a ball to Mary.
b. John gave Mary a ball. b. John threw Mary a Ball.

The debate consists of two opposing approaches to the dative alternation. On the one hand, **alternative projection** (AP) approaches claim that the DOC and PDC have distinct underlying structures; i.e. one is not derived from the other. See, for instance, Oerhle (1976), Marantz (1993), Pesetsky (1995), Harley (1995, 2002), Bruening (2001, 2010), and Pylkkänen (2002, 2008). On the other hand, **transform** (T) approaches claim that the DOC is syntactically derived from the PDC. See, for instance, Larson (1988, 1990, forthcoming b); Baker (1988, 1997); den Dikken (1995), Ormazabal & Romero (2010, 2012) among others.^{2,3} Two types of empirical support for AP approaches have figured prominently in the literature.⁴ The first is the existence of so-called non-alternating DOCs, an example of which is in (3), from Bruening (2010:288).

- (3) a. The lightening here gives me a headache.
b. *The lightening here gives a headache to me.

The AP argument is that the lack of existence of PDC variants of non-alternating DOCs is naturally explained on an AP approach where there is no syntactic derivational relation between the two. Since there is no syntactic derivational relation, there is no expectation that a DOC should have a PDC variant. In contrast, the lack of existence of PDC variants on a T approach is unexpected, since the DOC is syntactically derived from the PDC.

The second piece of support comes from the noted distinct interpretations of the IO in the PDC versus in the DOC, as illustrated in (4), from Harley (2002:35).

- (4) a. The editor sent the article to Sue/Philadelphia.
b. The editor sent Sue/^{??}Philadelphia the article.

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¹ I will refer to the (a.) examples in (1) and (2) as the **prepositional dative construction (PDC)** and to the (b.) examples as the **double object construction (DOC)**. I will use the term **indirect object (IO)** to refer to the DP that is interpreted as the goal/recipient/intended possessor. The IO in (1) and (2) is *Mary*. I will use the term **direct object (DO)** to refer to the DP that is interpreted as the theme/patient. The DO in (1) and (2) is *a ball*.

² There have been accounts that assume the DOC is basic from which the PDC is derived (see, for instance, Dryer 1985).

³ Rappaport-Hovav & Levin (2008) state that AP approaches are currently widely assumed, although Emonds & Whitney (2006) argue that the evidence weighs in favor of T approaches. The debate is still lively.

⁴ Another set of facts surrounds the existence of non-alternating DOC idioms and non-alternating PDC idioms. I do not discuss idioms here, but see Larson (forthcoming a) who argues that the idiom facts do not constitute evidence in favor or against either approach.

The IO in the PDC in (4a) is interpreted as a location, while the IO in the DOC in (4b) is interpreted as a possessor/affect object.⁵ Since Philadelphia is not a good possessor—unless anthropomorphized—it cannot be the IO in the DOC.⁶ The AP argument is that, given (Relativized) UTAH, different interpretations of the IO in the PDC and in the DOC entail different underlying configurations.⁷ This is natural on an AP approach, not so on a T approach.⁸

Although the AP argument is sound, it has been observed that when the IO is *heavy enough*—at least for **some** so-called non-alternating DOCs—the DOC can surface in a PDC variant, as in (5), from Bresnan & Nikitina (2007:4).⁹

- (5) ...a stench or smell is diffused over the ship that would **give a headache to the most athletic constitution.**

Moreover, Rappaport-Hovav & Levin (2008) observe that at least for what they refer to as the *give*-class of verbs, the possessor interpretation of the IO is also available in the PDC variant, as in (6), from Rappaport-Hovav & Levin (2008:139). I will refer to these non-alternating DOCs that surface in the PDC due to prosodic (or information structure) conditions as *pseudo-non-alternating DOCs*.

- (6) I gave the package to Maria/*London.

The focus of this paper is on the status of the facts in (5) and (6) within the AP-T debate. Concretely, I argue that an AP approach cannot naturally account for the role of weight in licensing the PDC variants of these pseudo-non-alternating DOCs, nor can it naturally account for the possessor interpretation of the IO in the PDC variant. In contrast, I argue that by incorporating some aspects of a T approach, a more natural explanation of these facts is obtained. Concretely, we can explain these data if (i) we allow a single DP to receive more than one Theta-role, an assumption that is becoming more widely adopted (See, for instance, Hornstein 1999 et seq., Ramchand 2008, Deal 2013b), and (ii) we adopt the copy-theory of movement (Chomsky 1993) and the P(ronounce) L(ow) C(opy) of Bošković (2001) and Nunes & Bošković (2007) where *prosodic constraints* can give rise to a low pronunciation of a copy.

Specifically, I will argue that the structure of pseudo-non-alternating DOCs is as in (7a), where the IO merges as a complement of P and then moves to the specifier of an Applicative Phrase, where it is pronounced. The IO receives a theta-role in both positions, as the complement of P and in Spec,Appl. The PDC variants of these DOCs is illustrated in (7b), where the IO is pronounced *low* as the complement of P, in its first merged position. A question arises on this analysis regarding the pronunciation of the P in the PDC variant: Why is the P pronounced when the IO is low? I offer a tentative answer to this question.

- (7) a. [_{VP} V [_{AppIP} IO Appl [_{VP} DO V [_{PP} ~~P~~ IO]]]]
 b. [_{VP} V [_{AppIP} ~~IO~~ Appl [_{VP} DO V [_{PP} P IO]]]]

The structure of this paper is as follows. In section 2, I provide further attested examples from the literature of pseudo-non-alternating DOCs that surface in PDC variants when the IO is heavy, and

⁵ The arguments put forth here are independent of whether the correct interpretation of the IO in the DOC is possessor or affected object. I remain agnostic in this respect.

⁶ Inanimates tend not to be good possessors. However, if there is an inanimate IO, the DO must form a part-whole relation with the IO, as in example (22a) below.

⁷ *Relativized UTAH*, from Larson (1990): Identical thematic relationships are represented by identical relative relations between items at D-Structure.

⁸ Regarding well-known c-command affects, not discussed here, see Barss & Lasnik (1986) and Bruening (2010).

⁹ This is not necessarily the case for **all** non-alternating DOCs. I restrict the discussion to those DOCs that do surface in the PDC when the IO is *heavy enough*. Thus, while the AP argument still holds for those “truly” non-alternating DOCs, it does not for those discussed in this paper.

offer a sketch of how a T approach can handle these facts by adopting the copy-theory of movement (Chomsky 1993) and the P(ronounce) L(ow) C(opy) of Bošković (2001) and Nunes & Bošković (2007). In section 3, I discuss in more detail Rappaport-Hovav & Levin's (2008) *give*-class of verbs and contrast them with their *throw*-class. The proposal in (7) naturally accounts for the *give*-class if we allow prosodic factors to regulate the pronunciation of the IO in Spec,Appl vs. as the complement of P, as dictated by the PLC.¹⁰ The analysis also extends to an additional set of observations from Rappaport-Hovav & Levin (2008) regarding their *throw*-class, where distinct DPs surface in Spec,Appl and as the complement of P at the same time. Given the proposal in (7), where two positions are available, these facts can be accommodated. In contrast, it is not clear how an AP approach can handle them. In section 4, I offer some speculative remarks regarding the pronunciation of the P when the IO is pronounced low. I suggest that its pronunciation is not regulated directly by syntactic mechanisms, but by a post-syntactic constraint. I put forth one phonological constraint proposed in Anttila (2008) that can account for the pronunciation of P when the IO is low. Section 5 concludes the paper briefly.

2. More so-called non-alternating DOCs

Consider more instances of pseudo-non-alternating DOCs, in (8) to (11).

- (8) a. Mary gave John a black eye. [Larson 1988:376]
 b. *Mary gave a black eye to John.
- (9) a. The Count gives Mary the creeps. [Richards 2001:187]
 b. *The Count gives the creeps to Mary.
- (10) a. The lightening here gives me a headache. [Bruening 2010:288]
 b. *The lightening here gives a headache to me.
- (11) a. You shouldn't begrudge John his wealth. [Stowell 1981: 308]
 b. *You shouldn't begrudge his wealth to John.

As noted, however, when the IO is *heavy enough*, a PDC variant can surface (Wasow 1997, Richards 2001). In fact, for each example in (8) to (11), there have been PDC variants with *heavy* IOs attested in the literature, in (12a) to (12d) respectively.

- (12) a. One of the Jewish children is a spunky girl, who gave a black eye to the kid with the German roots before the start of the war. [Rappaport-Hovav & Levin 2008: 139]
- b. The Count gives the creeps to [anyone who talks with him for five minutes]. [Richards 2001:187 fn.4]
- c. ...a stench or smell is diffused over the ship that would give a headache to the most athletic constitution. [Bresnan & Nikitina 2007:4]
- d. But no one could begrudge its splendid facilities to a city which lost 16,000 of Armenia's 25,000 dead on December 7,1988, and was half-ruined by the earthquake. [Wasow 1997:84]

¹⁰ While I do not discuss information structure, it has been noted that it also plays a role in the dative alternation. See, for instance, Wasow (1997, 2002), Rappaport-Hovav & Levin (2008), Bresnan & Nikitina (2008), Larson (forthcoming b) and references therein.

On an AP approach, these data are simply mysterious. How is it that a non-alternating verb can appear in the PDC when the PDC is an independent construction from the DOC?¹¹ I suggest here that a T approach provides a natural solution. I assume that the DOC version of these non-alternating DOCs is the result of the IO moving from the complement of a preposition to the Spec of an Applicative Phrase à la Marantz (1993) and Bruening (2010), where it receives its possessor/affected object interpretation.^{12,13} This is illustrated in (13), which represents the (a) sentences in (8) through (11).

(13) $[_{VP} V [_{AppIP} \uparrow IO Appl [_{VP} DO V [_{PP} P \text{IO}]]]]$

Strikethrough represents lack of pronunciation. I claim that the sentences in (12) can be accounted for in terms of a low pronunciation of the IO, as in (14).

(14) $[_{VP} V [_{AppIP} \uparrow \text{IO} Appl [_{VP} DO V [_{PP} P IO]]]]$

The syntactic derivations in (13) and (14) are the same; they differ only by where the IO is pronounced, in (14) as the complement of P, and in (13) in Spec,Appl. On this approach two questions arise: 1. Assuming there is a preference for pronunciation of high copies (Bošković 2001, Nunes & Bošković 2007), what licenses a low pronunciation of the IO? And 2. Why do we have to pronounce the P when the low copy itself is pronounced? In this section, I provide an answer to the first question. In section 4 I suggest that the answer lies in a post-syntactic module and suggest one concrete account: Anttila's (2008) Optimality Theoretic (OT) analysis, which provides one possible solution.

I follow Franks (1998), Bošković (2001), Nunes & Bošković (2007) and assume that a lower copy can be pronounced in order to avoid a violation of a PF constraint, something that is referred to as P(ronounce) L(ower) C(opy). As is standardly assumed in the literature, the IO in (12) can be pronounced as the complement of P, because it is heavy. Weight in these instances appears to be playing a crucial role. Thus, when a heavy IO is pronounced low it avoids violation of some PF constraint. For the sake of space, I will not offer a full-blown analysis of phonological weight, but simply show how one recent OT approach can provide an answer. Specifically, Anttila (2008) offers just such an account. He puts forth two prosodic constraints to account for the role of weight in the dative alternation:

- (15) a. **The Nuclear Stress Rule:** The most prominent syllable of the rightmost constituent in a phrase P is the most prominent syllable of P.
 b. **The Stress-to-Stress Principle:** Word stress implies phrasal stress ($WS \supset PS$) (gradient).

Anttila (2008: 53) states that "The net effect of the gradiently evaluated Stress-to-Stress Principle is to maximize the number of lexical stresses in the constituent under phrasal stress. A number of predictions follow. First, the absolute number of word stresses should be irrelevant for end weight. Only the relative weight of the argument phrases should matter (as argued in Wasow 2002, but cf. Jäger and Rosenbach 2004)." Ultimately, a heavier IO will incur more violations of *The Stress-to-Stress Principle* if it is not to the right of a lighter DO.

¹¹ Bruening (2010) offers one possible answer to this question. Based mainly on scope freezing effects, he claims that the sentences in (12) are disguised DOCs. That is, the IO is still in Spec,Appl, however, in these cases, the heavy IO licenses a rightward specifier, which accounts for the word order. These are instances of what he calls R-dative shift. Bruening (2010:292) states that "The most important point of this analysis is that, although R-dative shift looks identical on the surface to the prepositional dative construction, it is really a double object construction." See Ormazabal & Romero's (2012) detailed reply to Bruening's proposal.

¹² See Section 3 below where a more detailed discussion of the IO's interpretation is carried out.

¹³ Case is not the main focus of this paper. One possibility, however, following Baker (1988), den Dikken (1995) and more recently Ormazabal & Romero (2010), is that P incorporates into the verb and as a result the IO cannot check its case on P. In Spec,Appl, the IO can check structural accusative on *v*. With respect to DO, two options would be available: 1. DO gets inherent case; or 2. Appl itself has a Case feature on which DO can check its Case. On this second option, Appl would function with regards to Case like Baker & Collins's (2006) linker, or Deal's (2013a) μ . For another possibility see footnote 19.

3. The interpretation of IO

Oehrle (1976) and Green (1974) observe that the IO has distinct interpretation in the PDC and in the DOC, a possessor (16) and (17) or an affected object (18).¹⁴

- (16) a. John threw the ball to first base/the pitcher [Rappaport-Hovav & Levin 2008]
 b. John threw the pitcher/*first base the ball.
- (17) a. The editor sent the article to Sue/Philadelphia. [Harley 2002: 35]
 b. The editor sent Sue/^{??}Philadelphia the article.
- (18) a. The lightening here gives me a headache. [Bruening 2010: 288]
 b. *The lightening here gives a headache to me.

These facts can be easily accounted for by dropping the theta-criterion (Hornstein 1999 et seq., Ramchand 2008), a fairly standard minimalist move. If we do this, we allow the IO to get a theta-role as complement of P and in Spec,Appl both.¹⁵ A consequence of this is that the IO in the DOC is compatible with a subset of interpretations of the IO in PDC as has been previously noted (Pesetsky 1995: 141; Rappaport-Hovav & Levin 2008).¹⁶

Dropping the theta-criterion and allowing a single DP to receive more than one theta-role opens the way for a straightforward account of some recent facts noted by Rappaport-Hovav & Levin (2008). They observe that there are two classes of verbs entering into the dative alternation. These are illustrated in (19) and (20).¹⁷

- (19) *Dative verbs having only a caused possession meaning*
 a. Verbs that inherently signify acts of giving: give, hand, lend, loan, pass, rent, sell...
 b. Verbs of future having: allocate, allow, bequeath, grant, offer, owe, promise...
 c. Verbs of communication: tell, show, ask, teach, read, write, quote, cite...
- (20) *Dative verbs having both caused motion and possession meanings*¹⁸
 a. Verbs of sending (*send*-type verbs): forward, mail, send, ship,...

¹⁴ A related observation concerns a “successful transfer inference” present in the DOC, but absence in the PDC. A classic set of examples comes from Green (1974:157): i. *Mary taught John Linguistics*; ii. *Mary taught linguistics to John*. where in (i) there is a successful transfer, the inference being that John learned some amount of linguistics, while transfer is not necessarily successful in (ii), thus, John can be interpreted as a student of linguistics, without necessarily having learned linguistics. Rappaport-Hovav & Levin (2008) show that there is not always a successful transfer inference in the DOC and that in the PDC sometimes successful transfer is required. They illustrate that the verb itself plays a role in the inference of transfer.

¹⁵ This is fundamentally what Stowell (1981:310) claims as well, albeit within a different model, where an empty category is left instead of a copy: “In a sense then, we might say that the incorporated NP is associated with two theta-roles simultaneously: goal and possessor.” Also, dropping the Theta Criterion in possessor raising constructions has been recently adopted, as in Lee-Schoenfeld (2006) and Rodrigues (2010); see Deal (2013b) for a general discussion of possessor raising that incorporates an abandonment of the Theta Criterion.

¹⁶ Harley (2002) argues against this superset-subset relation based on the existence of non-alternating DOCs. As we saw above, however, many non-alternating DOCs do, in fact, alternate. Moreover, the present account might be taken as a syntactic underpinning of Beavers’s (2010) observation that for many shifted DPs there tends to be *monotonically stronger truth conditions* associated with it than when the same DP is not shifted.

¹⁷ Citing Levinson (2005), Rappaport-Hovav & Levin (2008) note that the *to* phrase of *give*-type verbs cannot be questioned by *where*, although *to*-phrase of *throw*-(and *send*-)type verbs can: **Where did you give the ball?*; *Where did you throw the ball?* *To third base*. They relate this to the lack of spatial goals with *give*-type verbs. Another difference they discuss relates to the ability to modify the extent of the spatial path, a possibility available for the *throw* class, but not for the *give* class.

¹⁸ Rappaport-Hovav & Levin (2008) further separate *throw*-type verbs from *send*-type verbs, in line with their verb sensitive approach. The differences between these two classes are tangential to the main arguments laid out here, thus, I collapse them for current purposes.

- b. Verbs of instantaneous causation of ballistic motion (*throw*-type verbs):
fling, flip, kick, lob, slap, shoot, throw, toss...
- c. Verbs of causation of accompanied motion in a deictically specified direction:
bring, take
- d. Verbs of instrument of communication: e-mail, fax, radio, wire, telegraph,
telephone...

Rappaport-Hovav & Levin (2008) refer to the verbs in (19) as the *give*-class and the verbs in (20) as the *throw*-class. One important difference between the two classes is that for *give*-class verbs, the IO is always interpreted as a possessor, regardless of whether it surfaces in the DOC or the PDC. In contrast, for the *throw*-class, the IO has distinct interpretations: in the DOC it is interpreted as a possessor, while in the PDC it can also receive a location interpretation. This is illustrated in (21) for the *give*-class, where inanimate IOs are out whether in the DOC or the PDC, data from Rappaport-Hovav & Levin (2008:139). This is not the case for *throw*-class verbs, as the data from (16) and (17) above illustrate.

- (21) a. I gave the package to Maria/*London.
b. I gave Mary/*London the package.

More examples of *give*-class verbs collected from the internet in (22) illustrate the same interpretation of the IO in the PDC. Moreover, as noted by Rappaport-Hovav & Levin (2008: 139), possession is indeed involved given the paraphrases with *have* illustrated in (23).

- (22) a. Give a fresh coat of paint to the front door.
b. One of the Jewish children is a spunky girl, who gave a black eye to the kid with the German roots before the start of the war.
c. Cultural commissioner Megan Whilden said that the five ‘Artscape’ pieces would ‘give a festive air to Park Square, they’re fun and interesting.’
- (23) a. The front door has a fresh coat of paint.
b. The kid with the German roots has a black eye.
c. Park Square has a festive air.

As Rappaport-Hovav & Levin (2008) note, these facts pose a serious challenge to AP approaches, since the PDC is simply not available on the caused possession interpretation. I suggest here that these facts can be handled in exactly the same way as the pseudo-non-alternating DOCs as discussed above. That is, for the *give*-class of verbs, even in the PDC, the IO has moved to Spec,Appl and as such is interpreted as a possessor/affected object, as illustrated in (24).

- (24) a. [_{VP} John gave [_{AppIP} ~~Mary~~ [_{VP} a present [_{PP} to Mary]]] = PDC
b. [_{VP} John gave [_{AppIP} Mary [_{VP} a present [_{PP} ~~to Mary~~]]] = DOC

What regulates the pronunciation of IO low (as complement of P) vs. high (in Spec,Appl) in the dative shift with *give*-class verbs? The prosodic facts discussed above as well as information structure as discussed in Wasow (1997, 2002), Rappaport-Hovav & Levin (2008), Bresnan & Nikitina (2008), Larson (forthcoming b) and references therein. One consequence of this approach is that regardless of whether the IO is pronounced in Spec,Appl or as the complement of the P, it is interpreted as possessor/affected object.

Regarding the *throw*-class, I postulate that the two interpretations can be account for straightforwardly on the present account. When in the DOC, the *throw*-class has the same structure as the *give*-class, as illustrated in (25a). In contrast, in the PDC, since the IO does not obligatorily receive a possessor/affect object interpretation, I propose the structure in (25b).

- (25) a. [_{VP} V [_{AppIP} IO Appl [_{VP} DO V [_{PP} ~~P-IO~~]]]]]

- b. [_{VP} V [_{VP} DO V [_{PP} P IO]]]]

The central difference between (25a) and (25b) is that there is no ApplP in (25b), in the PDC variant. If the interpretation of the IO as a possessor is a result of IO being in Spec,ApplP, then the lack of this interpretation of the IO with the *throw*-class verbs follows.

If this analysis is on the right track, we are in a position to offer an explanation for one asymmetry between these two classes of verbs, again, observed by Rappaport-Hovav (2008). They make note of the availability of sentences like the one in (26), from Rappaport-Hovav & Levin (2008:136) (bolding is J.MacDonald's)

- (26) Anne is curious as to why her father sent **her** a telegram to **America** to return home at once.

In terms of structure, we can accommodate these sentences as in (27) where the location *American* remains in situ, and the possessor *her* merges in Spec,Appl.

- (27) [_{VP} her father sent [_{AppIP} her [_{VP} a telegram [_{PP} to America]]]

In terms of interpretation, the complement of the *to* phrase can only be interpreted as a *location*, while the DP in Spec,Appl is interpreted as possessor/affect object. Recall the crucial distinction between the *give*-class and the *throw*-class of verbs on the present account: the IO of *give*-class verbs **always** moves to Spec,Appl. If this is the case, then we have the expectation that examples comparable to those in (39) should be ungrammatical because the IO moves to Spec,Appl precluding the merger of another DP. Observe below in (28), that this expectation is met. An example parallel to (26) is ungrammatical. Moreover, even when the complement to P is a potential possessor, as in (28b), the result is an ungrammatical sentence.

- (28) a. *Anne is curious as to why her father gave **her** a gift to **America** to return home at once.
b. *Anne's father gave **her** a present to **a friend** (to bring to her).

The present analysis offers a way to accommodate these facts. Nevertheless, the story may turn out to be more complex, given the existence of examples like (29).

- (29) Bill gave **him** a kick to **the head**.

One crucial difference between the examples in (28) and the one in (29) is that there is an inalienable possession relation between *him* and *the head*, where this is not the case between *her* and *America* nor between *her* and *a friend*. While I leave a detailed investigation of these facts for future research, structurally, the present analysis offers a starting point for their understanding. Importantly, AP approaches have very little to say here.

4. On the pronunciation of P – A PF constraint?

One important question that arises on this approach is related to the pronunciation of the preposition. Assuming that preposition incorporation is involved in the DOC variant, following Baker (1988), den Dikken (1995) and more recently Ormazabal & Romero (2010), the lack of pronunciation of the incorporated P might be a result of its incorporated status. I will assume so, although this assumption gives rise to further questions. If so, the following question arises: Why does the P have to be pronounced when the IO is pronounced low? While I cannot offer a concrete answer to this question at this time, I would like to suggest that its pronunciation is regulated by some post-syntactic constraint. Here I put forth one concrete proposal as way of illustration. Concretely, I discuss Anttila's (2008)

prosodic account of the dative alternation. Again, the suggestion is tentative. More research must be carried out.¹⁹

Anttila (2008) follows Grimshaw (2005) who observes that the core class of verbs that alternate between the DOC and the PDC have exactly one foot, whereas non-alternating verbs have two or more feet, as illustrated in (30).

- (30) a. They (gave) the church money.
b. *They (do)(nated) the church money.

As Anttila (2008) observes in a corpus search (www.blogspot.com), with one-foot verbs like *give*, the DOC and PDC are about equally common, whereas with two-foot verbs like *donate*, the PDC is strongly favored.²⁰

In order for his account to go through, he must make three assumptions. 1. A verb forms a prosodic phrase with an argument immediately on its right (Inkelas & Zec 1995); 2. Prosodic constituents are preferably binary. The outcome of these two assumptions is that (31a) should be prosodically superior to (31b) because (31b) contains a ternary prosodic phrase.

- (31) a. ((give) ([my sister])) ([the book]) binary phrase
b. *((do)(nate) ([my sister])) ([the book]) ternary phrase

The third assumption is that the DOC and the PDC have different phonological phrasings. This is illustrated below in (32).

- (32) a. *((do)(nate) (my sister)) (the money) a ternary constituent
b. ((do)(nate)) (the money) (to my sister) no ternary constituents

He captures this third assumption with the following undominated OT constraint.

- (33) PARSE(Goal):
 The goal NP must be prosodically parsed together with its syntactic head.

In (32a) PARSE(Goal) is satisfied by *my sister* and *donate* forming a prosodic phrase, which violates a preference for binary constituents. In (32b) PARSE(Goal) is satisfied by *my sister* and *to* forming a prosodic phrase, resulting in no ternary constituents. Now consider one way that undominated PARSE (Goal) plays a role in Anttila's (2008) account:

- (34) a. *John gave the book my sister.
b. John gave the book **to** my sister.

¹⁹ Another possibility is that the pronunciation of P is related to Case. Briefly, consider two implications of the analysis: 1. The IO gets two theta-roles; and 2. There appear to be two Cases available for the IO in the DOC. Consider the data from (26) and (29). The DPs *her* and *America* in (26) and *him* and *the head* in (29) must be Case licensed in these two positions. Assuming these sentences to have the same underlying structure as DOCs with a single IO, we might suppose that two Cases are available for the single DP. The existence of Case stacking structures are attested. See, for instance, Yoon (1996), Boeckx & Hornstein (2006) and references therein. The pronunciation of P might just be a morphological reflex. Hornstein et al. (2008) and Nunes (2008:136) claim that *to* is inserted post syntactically as "a last resort strategy for Case-marking...in the absence of a (local) Case-assigner." in passivized perception and causative constructions in English. Insertion is possible in a position where inherent case is licensed. Something similar may be happening here. Nevertheless, more investigation is required.

²⁰ Some alternating one-foot verbs from Anttila (2008): a(ccord), (bring), (lend), (phone), (cable), ad(vance), (give), (loan), (send), a(llot), (grant), (mail), (show), a(llow), (hand), (owe), (teach), a(ssign), (lease), (pass), (tell), a(ward), (leave), (pay), (write), (xerox). Some non-alternating two-foot verbs (Levin 1993): (con)(vey), (ex)(plain), (de)(liver), (pre)(sent), (dic)(tate), (re)(mit), (do)(nate), (re)(turn), (en)(trust), (trans)(fer). Some alternating two-foot verbs: (allo)(cate), (reco)(mmend), (cata)(pult), (sate)(llite), (conse)(crate), (sema)(phone), (garan)(tee), (tele)(cast), (nomi)(nate), (tele)(graph), (radi)(o), (tele)(phone)

The sentence in (34a) violates PARSE (Goal); the sentence in (34b) does not. It may be the case that what regulates the pronunciation of the P when the IO is pronounced low is a phonological constraint. PARSE (Goal) represents one execution of said constraint. Importantly, that a post-syntactic constraint is regulating the pronunciation of the P may very well be on the right track.

5. Brief conclusion

The main focus of this paper has been on two sets of facts that have been at center stage in the AP-T debate: so-called non-alternating DOCs and the distinct interpretations of the IO in the DOC and in the PDC. We have seen that pseudo-non-alternating DOCs can in fact alternate and surface in the PDC variant precisely when the IO is heavy. As we saw, it is not clear how AP approaches can handle the role of weight in these cases. In contrast, by assuming that the IO's first-merged position is the complement of a P after which it moves to Spec,Appl, the role of weight can be incorporated by adopting the copy theory of movement and the PLC. The IO is pronounced low to avoid violation of a PF constraint. Moreover, we saw that by abandoning the Theta Criterion, the AP argument based on the distinct interpretations of the IOs disappears. Additionally, we saw that for the *give*-class of verbs a possessor/affect object interpretation of the IO is available in the PDC variant as well, a fact that AP approaches cannot easily accommodate. In contrast, the present IO movement approach can handle them on the assumption that the IO moves to Spec,Appl for the possessor/affected object interpretation, but is pronounced low, due to prosodic (or information structure) reasons. Finally, I suggested that the reason the P must be pronounced on a low pronunciation of the IO results from some post-syntactic constraint, although the exact locus and nature of said constraint is yet to be determined.

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