Binding as Co-indexing vs. Binding as Movement: Evidence from Personal Datives

YOUSSEF A. HADDAD
University of Florida

1. Introduction

Several languages license structures known as personal dative constructions (PDCs); e.g., sentences (1) through (4). These are constructions that contain a pronoun, normally dative, that is not related to the valency of the verb.

(1) *Southern American English*
Sue bought **her** a nice truck.

(2) *Lebanese Arabic*
Nadīya ʃtarīt- la kam hdiyye
Nadia bought-her.DAT a few gifts
‘Nadia bought her a few gifts.’

(3) *French* (from Boneh and Nash 2011:61 (3a))
Jeanne s'est couru trente km.
Jeanne her-ran thirty km
‘Jeanne ran her thirty kilometers.’

(4) *Modern Hebrew* (from Zahre and Boneh 2010:2 (2))
Salma rakda  la
Salma danced her.DAT
‘Salma (just) danced (it’s a minor issue).’
‘Salma danced (she indulged in it with some delight).’

PDs are problematic from a syntactic perspective because they seem to violate Condition B of Binding Theory without leading to ungrammaticality. Condition B states that a pronoun should be locally free. Therefore, by allowing a pronoun to be coreferential with a local c-commanding antecedent, PDCs are expected to induce a violation, but they don’t. How can syntactic theory account for these facts in a principled way?
Two relatively recent approaches may help account for this apparent violation: BINDING BY A FUNCTIONAL HEAD (Kratzer 2009) and MOVEMENT AND ANTI-LOCALITY (Grohmann 2003). I explore the two approaches in Sections 3 and 4, focusing on Southern American English and Lebanese Arabic. Both analyses indicate that PDs fall outside the constraints of Binding Theory, which explains why their realization as free pronouns does not lead to ungrammaticality. However, I show that the latter approach is superior as far as PDCs are concerned.

A point that will be relevant to the discussion of Kratzer’s and Grohmann’s approaches in relation to PDCs is the merging site of PDs. I discuss this point first in Section 2. Section 5 addresses an important question: If PDs are not subject to Condition B, how do they determine their antecedent? Section 6 is a conclusion.

2. Where Do PDs Merge?

As I mentioned in the introduction, a PDC contains a non-truth conditional pronoun, usually dative case marked that does not belong to the thematic grid of the predicate. Proof that this is the case comes from the fact that the deletion of the pronouns in boldface in (1) through (4) above does not alter the truth conditions of the sentences. In other words, (1) would still mean that Sue bought a nice truck after the deletion of her, and (2) would still mean that Nadya bought a few gifts after the deletion of -la. It should be noted, however, that PDs do make a non-truth-conditional, pragmatic contribution, underscoring or understating the importance of the accomplishment depicted by the predicate. For example, the PD in (1) highlights the import of Sue’s accomplishment (Horn 2008), while the PD in (2) makes Nadia’s accomplishment sound insignificant (Zahre and Bonneh 2010).

In addition, PDs are neither beneficiaries or recipients. For example, (1) and (2) above may be realized as (5) and (6) with the son and the kids as the beneficiaries respectively.

(5) **Southern American English**
Sue bought her a nice truck for her son.

(6) **Lebanese Arabic**
Na:dy$a \ f\tarit-la \ kam \ hdiyye \ la-l-wle:d
Nadia bought-her.DAT a few gifts for-the-kids
‘Nadia bought her a few gifts for the kids.’

Further evidence that PDs fall outside the thematic domain of predicates comes from the fact that PDs may not be questioned or negated (see Bosse, Bruening, and Yamada 2012). As the following examples from Southern American English illustrate, only events may be questioned (7) or negated (8). In (7) the speaker asks the addressees if they ever loved a woman. The question is not about whether loving a woman brought the addressees the expected satisfaction. Simi-
larly, in (8) the speaker says that she or he does not want the red sauce. The speaker does not mean that she or he wants the red sauce without the satisfaction it brings (see Horn 2008:182-184).

(7) Have you ever loved a woman?
(8) I don’t want me any of that red sauce.

The same observation applies to Lebanese Arabic, as (9) and (10) illustrate. In (9) the question is about whether Nadia passed at least one exam this year, with the implication that even if she did, her success wouldn’t be significant. The question is not about whether Nadia’s experience of passing an exam was insignificant. In (10) the sentence is about Ziad not holding a job; it is not about Ziad holding a job though not for the sake/benefit/satisfaction/etc. of the speaker.

(10) Ziya:d ma: byaśmil-li la: ‘ʕaygle wa-la ʕamle si-t–me.DAT Ziad NEG do-me.DAT no job and-no task sit-me.DAT in-the-house all the-day ‘Ziad has no job; he stays home all day. This is unacceptable.’

The fact that PDs fall outside the scope of negation and that they do not alter the truth condition of PDCs indicates that PDs are more likely to merge as high applicative heads (Pylkkänen 2008). For the sake of this paper, let us assume that PDs merge immediately above vP; that is, between vP and IP, as in (11). See Roberge and Troberg (2009:251) and Boneh and Nash (2010) for a similar suggestion. Let us also assume that the subject in both languages under examination moves or may move from Spec-vP to Spec-IP. In this case, the PD becomes an intermediate site between Spec-vP and Spec-IP, as (11) illustrates. That is, the movement of the subject would violate minimality since the PD is closer to Spec-IP and should thus be a better candidate for movement. Closer examination, however, shows that the PD in (11) is not an appropriate candidate for movement to Spec-IP. The reason is that PDs are heads rather than phrasal structures, as Cuervo (2003) also observes (see also Haddad 2011). According to the Structure Preservation Hypothesis (Emonds 1976), only phrasal structures can move to specifier positions; heads may only move to head positions.

---

1 (7) and (8) were retrieved on 01/04/13 from the following websites respectively:
http://www.youtube.com/watch?v=U7aQZZsEpmA
http://www.urbanspoon.com/r/89/817026/restaurant/Baldys-BBQ-Bend-Westside-Bend
If this is correct, this means that the subject in Spec-vP is the closest appropriate candidate for movement to Spec-IP; it may move over the PD without violating minimality. Now we turn to Kratzer’s approach to Binding Theory.

3. Binding as Co-indexing

Condition B of Binding Theory states that a pronoun should be locally free. By allowing a pronoun to be coreferential with the subject, which is a local c-commanding antecedent, PDCs should induce a violation of Condition B. Of course, this should be the case if we assume that subjects are binders. This problem may be solved, however, if we assume with Kratzer (2009:191) that “binders for pronouns are provided by verbal inflectional heads, rather than by ‘antecedent’ DPs.” More specifically, Kratzer holds that v and C are the true syntactic binders for pronouns. A pronoun is bound by the closest v or C via two operations: predication (12; in original 18) and feature transmission (13; in original 60).

(12) Predication (Specifier-Head Agreement under Binding)
When a DP occupies the specifier position of a head that carries a λ-operator, their φ-feature sets unify.

(13) Feature Transmission under Binding
The φ-feature set of a locally bound pronoun unifies with the φ-feature set of the head that hosts its binder.

What (12) and (13) amount to is that the proper binder of the reflexive pronoun in a structure like (14) is v; v shares all the phi-features of the subject in its specifier position via predication, and the reflexive and v share all the phi-features via feature transmission.
If this approach to binding is on the right track, it explains why PDs are not realized as reflexive pronouns. PDs undergo first merge outside the thematic domain of the predicate in PDCs. This means that they are not c-commanded by v; therefore, they are not bound although they have a local antecedent DP. For example, sentences (15a) and (16a) each contain a reflexive pronoun and a PD. As (15b) and (16b) illustrate, only the reflexive pronouns are bound by v; the PDs will eventually be c-commanded by subject DPs after they move to Spec-IP, but they will not be bound by a functional head.

(15) a. I need me a little more time for myself. (from Horn 2008:172 (9c))

\[
\begin{array}{c}
\text{Predication} \\
\text{Feature Transmission}
\end{array}
\]

b. \([\text{IP}_{AppP}\text{me}\ [\text{vp} v \text{ need a little more time for myself}]])

(16) a. Na:dya ʃtarit-la hdiyye syi:re la- ha:l-a:
Nadia bought-her.DAT gift small for-self-her
‘Nadia bought her a small gift for herself.’

\[
\begin{array}{c}
\text{Predication} \\
\text{Feature Transmission}
\end{array}
\]

b. \([\text{IP}_{AppP}\text{la}\ [\text{vp} \text{Nadia v ʃtarit hdiyye syi:re la- ha:l-a:}]]\]
\([\text{IP}_{AppP}\text{her}\ [\text{vp} \text{Nadia v bought a small gift for herself}]]\)

This analysis seems to explain why PDs are realized as free pronouns. One problem remains, however. According to Kratzer, two functional heads qualify as binders and pronoun makers: v and C. This predicts that if a PD has an antecedent DP in Spec-CP, such as a wh-element or a quantifier, it must be realized as a bound reflexive pronoun. This prediction is not borne out. For example, sentences (17) and (18) from Southern American English contain CP elements; still, a PD is possible. Sentences (19) and (20) are similar examples from Lebanese Arabic.²

² (17) and (18) were retrieved on 05/18/12 from the following websites respectively:
http://www.gamespot.com/forums/topic/26754355/the-quotsay-something-true-about-yourselfquot-thread.-?page=318
An alternative to Kratzer’s approach is the movement approach to Binding, which I explore in the next section.

4. Binding as Movement

Within the framework of the Minimalist Program, several researchers have suggested reducing binding construal and the relation between reflexive pronouns and their antecedents to movement. This idea was probably initiated by Hornstein (2001); see also Kayne 2002. According to Hornstein, the derivation of (21a) looks roughly like (21b): John starts out as the object of loves before it moves to Spec-vP and occupies the subject position. Details aside, the lower copy is realized as a reflexive pronoun. Movement is assumed to be restricted, which normally means that it is subject to locality constraints or the maximum distance a syntactic object may move.

(21) a. John loves himself.
    b. [CP[IP John [vP John^{02} [VP loves John^{01}]明确规定]]]

Grohmann (2003) adopts Hornstein’s reductionist approach to construal as movement and argues that movement is subject, not only to locality constraints, but also to anti-locality constraints or the minimal distance an object is allowed to move. He holds that a clause is divided into three Prolific Domains: (i) the Θ-Domain or vP which is responsible for thematic relations; (ii) the Φ-Domain or IP which is responsible for agreement information; and (iii) the Ω-Domain or CP which is in charge of discourse information. Movement may not take place within the same Prolific Domain, a restriction that Grohmann calls the Condition on Domain Exclusivity (CDE).

It may be readily noted that the movement of John in (21b) violates the CDE since it takes place within the Θ-Domain. According to Grohmann, such movement is allowed only if it results in the spell-out of a copy, not only in the final

\[\text{(19)} [\text{CP } \text{mi:n } \text{C } [\text{IP } \text{ʕimil-lo} \text{ ʃaɣle btinfaʕ lyo:m}]]\]

Who did something useful today?’

\[\text{(20)} [\text{CP } \text{kil tilmi:z } \text{C } [\text{IP } \text{daras-lo} \text{ nisʕ seːʕa }]]\]

‘Everyone studied for a half hour.’
landing site, but also in the launching site (2003:108). That is (21b) must be phonologically realized as (22).

(22) John₁ loves John₂.

One problem with the above proposal is that multiple copy spell-out is restricted by Kayne’s (1994) Linear Correspondence Axion and Nunes’s (2004) conditions on linearization. According to Kayne, linear order in a structure is a precedence relation that is regulated by hierarchical structure. If a non-terminal X c-commands a non-terminal Y, this means that X – as well as every terminal that is dominated by X – precedes Y and the terminals that are dominated by Y. This means that two copies xᵃ and xᵇ of the same syntactic object x may not be both pronounced if they are in a c-command relation, or if they are dominated by non-terminal nodes X and Y that are in a c-command relation. If both copies are phonologically realized, the structure cannot be mapped into a linear order at PF. This is exactly the case of the two copies of John in (22).

One way to salvage the derivation in (22) is through the deletion of the lower copy, assuming that this is the copy with fewer checked features (Nunes 2004). The deletion of the lower copy, however, means a violation of the CDE. This is so because the movement of John took place within the same Prolific Domain: the Θ-Domain. In this case, the CDE requires multiple spell-out of the moving object. According to Grohmann, the computational system may circumvent this problem by replacing the lower copy by “an item from the inventory” of the language – “a (default) filler” – that looks phonologically different but is interpreted as the original copy. Reflexive pronouns, Grohmann suggests, are such fillers; “they are treated as the Copy Spell Out of the moving element … repair[ing] an otherwise illicit movement,” thus satisfying the CDE (2003:107-112).

Therefore, sentence (21a) above has the derivation in (23). The derivation starts with the numeration in (23a). John and love undergo first merge, (23b). In (23c), vP projects, but there is no item in the numeration that can merge in Spec-vP. This is why John moves to Spec-vP and the lower copy is marked for deletion. This movement violates the CDE because it takes place within the same Prolific Domain. This is when the self anaphor is inserted as a default filler in order to repair an illicit movement, (23d). The structure converges as (23e).

(23) a. LA = {John, love, v, V, I}       b. [vP loves John]
    c. [vP John [vP loves John]]       d. [vP John [vP loves himself]]
    e. [CP[IP John [vP John [vP loves himself]]]]

One problem with this approach, as Grohmann (2003:296) himself points out, is that it may be taken to violate the Inclusiveness Condition (Chomsky 2000:113). The Inclusiveness Condition indicates that no new features or items...
other than those in the numeration may be introduced during the derivation. Beyond Grohmann's suggestions for a way out, I suggest that one way to circumvent this problem is to consider self anaphors on a par with dummy do which is inserted as a default filler to save the derivation – arguably in line with Hornstein's (2001) and Grohmann's (2003) conception of “grammatical formatives”.

Back to PDCs! We saw in Section 2 that PDs merge above vP or the Θ-Domain and as such fall outside the thematic grid of the predicate.

(24)

If this is correct, it explains why PDs are realized as free pronouns although they are coreferential with a c-commanding subject within the same clause. Take the PDCs in (25) and (26), for example. Both have the derivation in (27). The subject John/Jamil undergoes first merge in Spec-vP, while the PD him/-lo undergoes first merge in ApplP above vP. John/Jamil moves to Spec-IP. After that, C₀ projects and the structure converges. Note that the verb may undergo head merge with the PD for the purpose of cliticization.

(25) John bought him a nice car for his daughter

(26) žami:l štare:-lo sayya:ra hilwe la-bint-o
    Jamil    bought-him.DAT car nice for-daughter-his
    ‘Jamil bought him a nice car for his daughter.’

(27)
The PD him/-lo in (25) and (26) is coreferential with John/Jamil and, under usual assumptions, is expected to be realized as a locally-bound reflexive pronoun. However, we learnt in this section that reflexive pronouns are not the result of locality; they are the result of movement and the anti-locality restrictions on movement. The derivation in (27) shows that him/-lo and John/Jamil are not related through movement. More specifically, no movement of the PD within the same Prolific Domain is involved. Therefore, no reflexive pronoun is needed to salvage the derivation.

Compare (25) and (26) to (28) and (29). The latter contain a reflexive pronoun each. As (30) shows, John/Jamil starts out as an internal argument of bought/ʃtara before it moves to Spec-vP where it takes on the external theta role of the predicate. This movement takes place within the same Prolific Domain, the Θ-Domain, which is a violation of the CDE. In order for the derivation to be salvaged, the lower copy of John/Jamil needs to be pronounced. However, pronouncing the lower copy along with the copy of the subject, which eventually lands in Spec-IP, is a violation of the Linear Correspondence Axiom. One way around this problem is by substituting for the lower copy of John/Jamil with a default filler: an element that phonologically looks different but that may be interpreted the same. This filler is the self anaphor himself/ha:ž-o.

(28) John bought himself a car.
(29) żami:l ʃtara la- ha:ž-o sayya:ra
   Jamil bought for-self-his car
   ‘Jamil bought himself a car.’
(30) a. [vP J [vP bought [J] [a car]]]
   b. [CP[IP J [vP J [vP bought [himself] [a car]]]]]

Once PDs are freed from binding restrictions, the choice of antecedent becomes a purely pragmatic decision that may be subject to other syntactic constraints. The following section explores this possibility.

5. Attitude Datives, Intersubjectivity, and Accessibility

PDs may be considered as epistemic pronouns, similar in several ways to epistemic modals. For example, both PDs and epistemic modals seem to merge above vP; they both are speaker-oriented and both are situated in the speech time. Also, they both express the attitude of the speaker given what s/he knows about the subject and the vP event (see Hacquard 2010). For example, by using the epistemic modal had to, the speaker of (31) expresses the following: Given what I know now about John and the situation last night, I believe that John was at home last night.

(31) John had to be home last night.
Similarly, by using a PD, the speaker of (32) expresses the following: Given what I know about John, his daughter, and the buying event, I believe that the purchase gave John satisfaction and a sense of accomplishment.

(32) John bought him a nice car for his daughter.

The same sentence in Lebanese Arabic possesses a different conventional implicature. A Lebanese speaker of (32) would be saying: Given what I know about John, his daughter, and the buying event, I believe that John’s accomplishment was insignificant; for example, John is so rich that buying his daughter a car is not a challenge.

In this sense, PDs assume a role that goes beyond the referential role normally attributed to pronouns and make a pragmatic contribution. One way to explain this multi-functional role is through the theory of (inter)subjectivity as proposed by Traugott (2003, 2009). Building on Lyons (1982), Traugott (2003) holds that intersubjectivity is the way a language allows its speakers to express their awareness of their own and the addressee’s attitudes and beliefs. When examined from the perspective of this definition, PDs may be defined as linguistic markers that index (inter)subjectivity (Traugott 2009:32). They are the result of what Traugott calls semantic polysemy, whereby an element acquires a pragmatic (inter)subjective meaning in addition to – or in place of – its original meaning. In the case of the dative pronouns under examination, the two meanings they have are the following: (i) a purely referential meaning, and (ii) a pragmatic meaning.

Of course, an important question follows: How is the referential meaning determined? In other words, how do these dative pronouns determine their referent as the subject? I suggest that an answer may be found in Accessibility Theory as proposed by Ariel (1988, 1991, 2001).

Accessibility Theory “offers a procedural analysis of referring expressions,” such as r-expressions and reflexive pronouns, and argues that the choice of a referring expression depends on the degree of salience of its referent or antecedent, whereby salience may be linguistic and sentential or extra-linguistic, discoursal, and extra-sentential (Ariel 2001). Ariel further argues that shorter and less stressed referring expressions are higher accessibility markers as they take salient entities – i.e., entities with high degree of accessibility, such as discourse topics – as referents or antecedents. Ariel (1991, 2001:31) puts forth an accessibility marking scale; the following rank ascendingly as the highest accessibility markers: Unstressed pronoun > cliticized pronoun > verbal personal inflections > zero.

PDs are clitics. This makes them high accessibility markers that require a salient antecedent. Salience is related to the status of the referent as topic; “most High Accessibility markers refer to unmarked, contextually salient entities (especially discourse topic)” and sentential subjects (1988:71, 82–83; 2001:32). Rizzi and Shlonsky hold that “subjects … share an interpretive property of topics, the
‘aboutness’ relation linking subjects and predicates as well as topics and comments” (2007:118). This means that subjects make good candidates as antecedents for unstressed, cliticized pronouns like ADs.

Sentential subjects are not the only salient discourse elements. Other salient discourse elements are speech event participants: speaker and addressee (Ariel 2001:32). This may be the case because they are constantly available in the speech event and because the pronouns used to refer to the speaker and hearer, namely, I/me and you, are only sensitive to speech roles; they are normally dissociated from their referent. In other words, I/me refers to the person speaking regardless of her/his identity. This is why languages tend to use appositives for identifying the referents of I/me and you; for example, I, Jean Do, ... (Bhat 2004:10, 38–40). This characteristic of I/me and you makes them salient discourse elements that are structurally available in CP, albeit unpronounced, and function as antecedents. (See Collins and Postal 2012 and Sigurðsson 2012 and works cited within for proposals that speech participants are syntactically present in the left periphery. Also see Borer and Grodzinsky 1986 for a unified analysis of subject-oriented datives and speaker/hearer-oriented datives.) Therefore, the prediction is that what we have been referring to as Personal Datives do not have to be subject oriented; they may be speaker or hearer oriented. This prediction is born out for Lebanese Arabic, as (33) illustrates.

(33) Ziya:d byis'rif-li/lik/lak kil maSa:j-o
Ziad spend-me/you.FEM/you.MAS.DAT all salary-his
3a-l-tye:b w-l-d'ahra:t
on-the-clothes and-the-going.out
‘Ziad wastes all his money on clothes and going out.’

These speaker- and hearer-oriented datives are also epistemic in the sense that they express the speaker’s attitude towards the event depicted by the predicate. However, unlike PDs, these datives express an attitude that is based, not on the speaker’s knowledge of the subject per se, but on the speaker’s knowledge of the cultural norms of her/his community and what is considered acceptable or unacceptable. For example, in (33), Ziad’s behavior is considered unwise regardless of who does it (see Haddad 2013, 2014 for a more detailed analysis of these pronouns).

In addition to subjects and speech participants, research on the left periphery tells us that topics are other salient discourse elements. Consider for example a situation where two people are talking about a woman, Layla. Layla is married to a man who is cheating on her. The speaker may say something like (34).
Youssef A. Haddad

(34) ha-l- mʕatra Layla žawz-a byidˤhar-la kil yo:m
this-the-poor Layla husband-her go.out-her.DAT every day
maʃ wiħde (w-hiyye ya ʔe:fil ?ilak ?alla:)
with one.FEM (and-she has.no.idea)
‘Poor Layla, her husband goes out with a different woman every day (and
she has no idea).’

Note that the dative in (34) does not have to depict Layla as a real affectee;
she may be blissfully ignorant about the situation, as the parenthetical part in (34)
indicates. In this case, the dative expresses an attitude of empathy on the part of
the speaker. The speaker believes that Layla would feel awful if she knew and in
this sense the dative depicts Layla as a potential affectee and experincer from the
perspective of the speaker. Of course, this judgment depends on the speaker’s
knowledge of, not only cultural norms, but also Layla and her reactions to similar
situations. The speaker will not use the topic-oriented dative if s/he knows that
Layla would not care what her husband does when she is not around.

The choice between subject, topic, or speech participants as antecedents of ep-
istemic dative pronouns depends on the salience of these entities as sentential or
extra-sentential elements that are present, overtly or covertly, in the left periphery.
At the same time, the choice depends on the pragmatic meaning that these datives
express. When a speaker uses a subject-oriented dative, s/he assumes a dismissive
attitude towards the depicted event and its subject. For example, in (35) the atti-
tude of the speaker towards the event as insignificant is crucially based on her/his
familiarity with Ziad and the fact that Ziad can hold his liquor. The same number
of drinks may be considered just enough if someone else drank them, in which
case, no PD would be used.

(35) Ziya:d Ŧrib-lo ke:se:n
Ziad drank-him.DAT two.drinks
‘Ziad had a couple of drinks; nothing significant.’

On the other hand, if the speaker uses a topic-oriented dative, s/he expresses
an attitude of empathy towards the topic. And finally, when speakers use speak-
er/hearer-oriented datives, the attitude they express depends on their familiarity
with the culture of the community and what is considered acceptable or unac-
ceptable. By using a dative that refers to one of the speech event participants,
speakers appoint themselves and their addressees as representatives of the culture
and as judges of what may be considered laudable or reprehensible. See Haddad
2013, 2014 for more details.
6. Conclusion

In this article, I presented structures known as Personal Dative Constructions licensed in Southern American English and Lebanese Arabic. These are constructions that contain non-thematic, subject-oriented dative pronominal clitics. These datives are problematic because they are locally c-commanded by a coreferential subject, yet they are realized as free pronouns in violation of Condition B of Binding Theory. I looked for an explanation for this apparent violation in two places: binding by a functional head (Kratzer 2009) and binding as movement (Grohmann 2003). Both approaches show that subject-oriented datives are allowed to be realized as free pronouns because they are not subject to the syntactic restrictions that normally apply to bound reflexive pronouns. However, I show that the movement approach is able to account for a wider range of data.

If subject-oriented datives are freed from binding restrictions, the choice of antecedent becomes determined pragmatically rather than syntactically. This seems to be the case since the dative pronouns I examined here do not have to be subject oriented; they may also be speaker, hearer, or topic oriented. Accordingly, I suggested that these datives, as attitude holders, may be considered as high accessibility linguistic markers that index intersubjectivity.

7. References


Borer, Hagit, and Yosef Grodzinsky. 1986. Syntactic cliticization and lexical clitic-
Youssef A. Haddad


58


Youssef A. Haddad
University of Florida
Department of Languages, Literatures, & Cultures
357 Pugh, PO Box 115565