Double Object Constructions in Syrian Arabic Peter Hallman

Abstract. This paper documents double object constructions in contemporary Syrian Arabic and presents an analysis of the case frame alternations found there. Some double object verbs assign accusative case to their indirect object (IO), as in English, while others assign it dative, as in German. Yet, for both verb types, the double object frame productively alternates with a frame in which the IO occurs in a prepositional phrase. Consequently, dative has properties of both a lexical case (it is contingent on its lexical environment) but also properties of a structural case (it is suppressed in the prepositional frame). Further, restrictions on cliticization, animacy and idiom patterns indicate that the prepositional frame of verbs displaying a double object frame is derived from the underlying double object frame. An analysis is presented in which D-feature checking enforces the IO>DO order in the double object frame regardless of the case of the IO, and the alternation between dative, accusative and the prepositional frame is contingent on properties of the applicative head that theta-licenses the indirect object.

1. Introduction

This paper presents an analysis of double object constructions in contemporary Syrian Arabic. What is interesting about them from a syntactic perspective is that some double object verbs in this language assign accusative case to their indirect object, as we find in English, while other verbs assign dative to it, as we find in, for example, German. That is, there is a lexically conditioned alternation between two typologically different case frames. Further, both dative and accusative assigning verbs admit a prepositional frame in which the indirect object occurs in a prepositional phrase. Dative case is not overridden in the passive. Yet, it is not inherent in the recipient theta role, since it is contingent on its lexical context (some verbs assign accusative instead). My goal in this paper is to develop an analysis that captures the particular constellation of properties found in Syrian Arabic and the manner in which they interact. The analysis combines elements of the approach to dative case in McGinnis 1996, 1998, Cuervo 2003a,b and Woolford 2006 with elements of Harley's (2002, 2007, 2012, 2015) distributed morphology analysis of complex predicate constructions and Hallman's (2015) analysis of the double object alternation.

Section 2 motivates the empirical state of affairs in Syrian Arabic in detail, an effort that is complicated by the fact that the preposition that occurs in the prepositional frame of the double object construction is homophonous with what I claim is a dative case marker in other contexts, a situation found in certain other languages as well. Section 3 describes similarities between Syrian Arabic and other languages, and sections 4 and 5 provide an analysis of the Syrian Arabic facts.

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2. Double object constructions in Syrian Arabic

A class of ditransitive verbs in Syrian Arabic, including *Sata* 'give', display a double object alternation that bears a striking resemblance to English.¹ In example (1a), the recipient and theme arguments of *Sata* follow the verb in that order in what I call the DP+DP frame. In this frame, the initial DP (the recipient argument) has some properties associated with direct objecthood, that is, properties associated with the direct object of a monotransitive verb. For one, it is the argument that promotes to subject in passive contexts (1b) (passive is marked by the verb prefix *n*- or *t*- in Syrian Arabic depending on morphological properties of the base verb). Additionally, it cliticizes to the verb (1c) in the same morphological paradigm as the object of a monotransitive verb. I call this paradigm 'accusative' and list it in the table in (2) together with what I will later analyze as the corresponding dative clitic paradigm.²

- (1) a. Leyla Sat-it Xālid l-ktāb. Leyla gave-3FS Khalid the-book 'Leyla gave Khalid the book.'
 - b. Xālid n-Sata l-ktāb.
 Khalid PASS-gave the-book
 'Khalid was given the book.'
 - c. Leyla Sat-it-u l-ktāb. Leyla gave-3FS-ACC.3MS the-book 'Leyla gave him the book.'

(2)		Accusative Clitic	Dative Clitic
	1 S	-ni	-li
	1 P	-na	-lna
	2ms	-ak	-lak
	2fs	-ik	-lik
	2р	-kun	-lkun
	3ms	-hu	-lu
	3fs	-ha	-la
	3p	-hun	-lun

The DP+DP frame alternates productively with a frame in which the order of arguments is reversed and the recipient is marked by the particle la-(3). Again, the first DP (this time the theme) has direct object properties: it undergoes promotion to subject in the passive (3b) and cliticizes to the verb in the accusative paradigm (3c).

(3) a. Leyla Sat-it l-ktāb la-Xālid. Leyla gave-3FS the-book to-Khalid 'Leyla gave the book to Khalid.'

¹Other verbs in this class include hada 'give (as a present)', mana \hbar 'award', $S\bar{a}r$ 'lend', dayyaf 'offer', sallam 'hand', ?azzar 'rent', $b\bar{e}S$ 'sell', farza 'show', sa?al 'ask', xabbar, 'tell', and others.

²The /h/ onset in the last three accusative forms disappears when the clitic follows a consonant, and the /u/ rhyme of the 3MS clitic *hu* disappears when the clitic follows a vowel. The clitic pronouns shift the main word stress to the syllable preceding the clitic.

- b. L-ktāb n-Sata la-Xālid.
 the-book PASS-give to-Khalid
 'The book was given to Khalid.'
- c. Leyla Sat-it-u la-Xālid. Leyla gave-3FS-ACC.3MS to-Khalid 'Leyla gave it to Khalid.'

I gloss the particle *la*- as the English preposition *to* on the basis of its use in unambiguously directional locative examples like those in (4) (the first cited from Choueiri 2013), where *la*- introduces a location that marks the endpoint of a path. Consequently, I refer to the complement frame in (3) as the DP+PP frame. We will see in section 4, however, that though the sentences in (3) and (4) share the same preposition, they do not share the same syntactic structure.

- (4) a. Leyla wassal-it l-ūlād la-?āxir t-tarī?. Leyla accompanied-3FS the-children to-end the-road 'Leyla accompanied the children to the end of the road.'
 - b. Leyla sā?-it s-siyyāra min ħalab la-∫-∫ām.
 Leyla drove-3FS the-car from Aleppo to-the-Damascus 'Leyla drove the car from Aleppo to Damascus.'

While word order in Syrian Arabic is somewhat more flexible than in English in general, for the *Sața* 'give' type verbs the reversal of arguments in both frames is ungrammatical, shown in (5). The ungrammaticality of (5b) can be mitigated by certain prosodic factors, discussed in more detail below, but the context must meet conditions that do not restrict the canonical order.

- (5) a. *Leyla Sat-it l-ktāb Xālid.
 Leyla gave-3FS the-book Khalid
 (Lit. 'Leyla gave the book Khalid.')
 - b. *Leyla Sat-it la-Xālid l-ktāb.
 Leyla gave-3FS to-Khalid the-book (Lit. 'Leyla gave to Khalid the book.')

However, another class of ditransitive verbs in Syrian Arabic, including *waffar*, meaning 'make available' or 'provide', departs partially from this pattern.³ On one hand, the frame in which the recipient follows the theme in a *la*-phrase functions exactly like we see for *Safa* 'give' in (3).

(6)	a.	Leyla w	affar-it	l-ktāb	la-Xālid.
		Leyla pı	rovided-3FS	the-bool	k to-Khalid
		'Leyla p	provided the	book to	Khalid.'
	b.	L-ktāb	t-waffar	la-X	Kālid.
	0.	the-bool	k PASS-prov	vided to-H	Khalid
		'The bo	ok was prov	vided to k	Khalid.'
	c.	Leyla w	affar-it-u		la-Xālid.
		Leyla pı	rovided-3FS	-ACC.3N	1S to-Khalid
		'Leyla p	provided it t	o Khalid.	,

³Other verbs in this class include baSat 'send', zatt 'throw', $fa\hbar an$ 'ship', katab 'write', tarak 'leave', warrat 'bequeath', $?\bar{e}l$ 'say', $z\bar{a}b$ 'bring', qaddam 'submit', and others.

But waffar 'provide' does not license a DP+DP frame in which the initial DP has direct object properties along the lines of what we see in (1), as (7) makes clear. Note that unlike English *provide*, the theme DP of *waffar* is never marked with a preposition. That is, appending *bi*- or *ma*?, both meaning 'with', to *l*-*ktāb* 'the book' in the examples in (7) does not improve things.

- a. *Leyla waffar-it Xālid l-ktāb. Leyla provided-3FS Khalid the-book ('Leyla provided Khalid with the book.')
 - b. *Xālid t-waffar l-ktāb. Khalid PASS-provided the-book ('Khalid was provided with the book.')
 - c. *Leyla waffar-it-u l-ktāb. Leyla provided-3FS-ACC.3MS the-book ('Leyla provided him with the book.')

Further, waffar 'provide' allows the recipient to precede the theme when it is marked by the particle *la*-, again unlike *Sața* 'give'; compare (8) with (5b). The gloss for (8) foreshadows the conclusion I will draw below that in this case, *la*- functions as a dative case marker rather than a preposition, and the *Sața* 'give' type verbs differ from the waffar 'provide' type verbs in whether they license accusative or dative on the initial DP in the DP+DP frame.

Leyla waffar-it la-Xālid l-ktāb.
 Leyla sent-3FS DAT-Khalid the-book
 'Leyla provided Khalid with the book.'

The examples (8) and (6a) appear at first glance to be simple word order permutations of one another. However, several observations support the claim that (8) instantiates the DP+DP frame (with a dative initial DP) while (6a) instantiates the DP+PP frame. Consequently, (8) differs from the analogous structure for *Sata* 'give' in (1a) only in the case the first DP bears, while (6a) is syntactically identical to the analogous structure for the prepositional frame of *Sata* 'give' in (3a). That is, (8) differs from (6a) in the same way as (1a) differs from (3a).

The first observation suggesting that the *la*-phrase in (8) is not a prepositional phrase is that the occurrence of the *la*-phrase between the verb and theme in (8) is not typical of prepositional phrases in Arabic, as Choueiri (2013) demonstrates for the closely related Lebanese dialect. She points out that locative prepositions like *bi*- 'in' (or 'with') in (9) or *la*- itself, when used directionally, as in (10), repeated from (4a) above, may not immediately precede a theme in the neutral intonation.

- (9) a. Leyla hatt-it l-ktāb bi-tſ-tʃanta. Leyla put-3FS the-book in-the-bag 'Leyla put the book in the bag.'
 - b. *Leyla ħaṭṭ-it bi-tʃ-tʃanta l-ktāb.
 Leyla put-3FS in-the-bag the-book ('Leyla put the book in the bag.')
- (10) a. Leyla waṣṣal-it l-ūlād la-?āxir ṭ-ṭarī?. Leyla accompanied-3FS the-children to-end the-road 'Leyla accompanied the children to the end of the road.'

b. *Leyla waṣṣal-it la-?āxir ṭ-ṭarī? l-ūlād. Leyla accompanied-3FS to-end the-road the-children ('Leyla accompanied the children to the end of the road.')

The behavior of *Sata* falls under this generalization (5b). This means that if the *la*-phrase in (8) is a PP, it is a special kind of PP with a distribution unlike any other type of PP. But if the *la*-phrase in (8) is a DP, then the complement frame of *waffar* in that example is simply the DP+DP frame we observe with *Sata* 'give', but with a distinct morphological case on the first DP.

I add here, picking up a promissory note from the discussion of the *Sata* examples in (5), that the ungrammaticality of the order in which the PP precedes the theme there and in (9) and (10) can be mitigated by two factors. One is heavy NP-shift, where a prosodically heavy direct object shifts to the right of other dependents of the verb, as illustrated in (11a). The other is when the direct object bears focal stress, as when it is contrasted with another potential value for its semantic role, as illustrated in (11b).

- (11) a. Leyla hatt-it bi-tf-tfanta l-ktāb wa-d-dafātir. Leyla put-3FS in-the-bag the-book and-the-notebooks 'Leyla put in the bag the book and the notebooks.'
 - b. Leyla hatt-it bi-tf-tfanta l- $kt\bar{a}b$, mu d-dafātir. Leyla put-3FS in-the-bag the-book, not the-notebooks 'Leyla put the *book* in the bag, not the notebooks.'

The critical observation for the analysis of the *la*-marked constituent in (8) is that the word order seen there does not demand the presence of any mitigating circumstances. The *la*-marked constituent in (8) therefore does not pattern like the bona fide prepositional phrases we see in (3a) and (5b) (the *la*-phrase found with *Sata* 'give') or in (9) and (10).

An additional consideration that points to the conclusion that (1a) and (8) both exemplify the DP+DP frame, with an accusative recipient in the first case and a dative recipient in the second, is the fact that both display frozen scope, which in English is typical of the DP+DP frame (Aoun and Li 1989, Larson 1990, Bruening 2001). Beginning with the DP+DP (recipient+theme) frame for *Sata* 'give', a universal quantifier theme cannot have inverse scope over an indefinite recipient (12a). As in English, no reading is available for (12a) in which the universal quantifier distributes over the indefinite, that is, where each book goes to a different child, spelled out in (12a-ii). In the corresponding DP+PP frame, however, both the surface scope reading and the inverse scope reading are available, as in English (12b).

- (12) a. Leyla Saț-it walad kill ktāb Sa-r-raff. Leyla gave-3FS child every book on-the-shelf 'Leyla gave a child every book on the shelf.'
 (i) ∃x[child(x) & ∀y[book(y) → gave(leyla, x, y)]]
 (ii) *∀y[book(y) → ∃x[child(x) & gave(leyla, x, y)]]
 b. Leyla Saț-it ktāb la-kill walad fi-ṣ-ṣaff. Leyla gave-3FS book to-every child in-the-class 'Leyla gave a book to every child in the class.'
 - (i) $\exists y[book(y) \& \forall x[child(x) \rightarrow gave(leyla, x, y)]]$
 - (ii) $\forall x [\text{child}(x) \rightarrow \exists y [\text{book}(y) \& \text{gave}(\text{leyla}, x, y)]]$

The facts are the same with *waffar* 'provide' when the recipient precedes the theme (this time as a *la*-phrase). In (13a), no inverse scope reading is available where the books all go to different children (13a-ii). When the recipient follows the theme (also in a *la*-phrase), parallel to (12b), both scope interpretations for the universal quantifier are available (13b).

- a. Leyla waffar-it la-walad kill ktāb Sa-r-raff. Leyla provided-3FS DAT-child every book on-the-shelf 'Leyla provided a child with every book on the shelf.'
 (i) ∃x[child(x) & ∀y[book(y) → provided(leyla, x, y)]]
 (ii) *∀y[book(y) → ∃x[child(x) & provided(leyla, x, y)]]
 b. Leyla waffar-it ktāb la-kill walad fi-s-saff.
 - b. Leyla waffar-it ktab la-kill walad fi-s-saff.
 Leyla waffar-3FS book to-every child in-the-class
 'Leyla provided a book to every child in the class.'
 - (i) $\exists y [book(y) \& \forall x [child(x) \rightarrow provided(leyla, x, y)]]$
 - (ii) $\forall x [child(x) \rightarrow \exists y [book(y) \& provided(leyla, x, y)]]$

The order in which the recipient precedes the theme patterns the same with respect to scope freezing for the two verbs. These observations indicate that what we are looking at in (8) is the same DP+DP frame seen in (1a), except that the first DP in (8) has a different case, marked by la-, than the first DP in (1a).

A final set of observations supporting the claim that the *la*-phrase in (8) (with the order *la*-DP DP) is different from the *la*-phrase in (6a) (with the order DP *la*-DP) is found in cliticization patterns. The waffar 'provide' type verbs accept an enclitic form of the *la*-phrase that preserves the characterizing *l* onset (14a), while *Sata* 'give' type verbs, which do not canonically allow the *la*-DP DP order, do not (14b). The *Sata* type verbs allow their recipient argument to cliticize to the verb, but in the accusative paradigm, illustrated in (1c).

(14) a. Leyla waffar-it-lu l-ktāb. Leyla provided-3FS-DAT.3MS the-book 'Leyla provided him with the book.'
b. *Leyla Saṭ-it-lu l-ktāb. Leyla gave-3FS-DAT.3MS the-book ('Leyla gave him the book.')

The clitic -lu in (14a) cannot be a clitic form of the *la*-phrase found in the DP+PP frame in (6a), because *Sața* 'give' admits the DP+PP frame, too (3a), but not the clitic (14b). If -luin (14a) were a clitic form of the PP, then we would expect (14b) to be grammatical as well. The -lu in (14a) must therefore instead be a clitic form of the immediately post-verbal *la*-phrase in (8), which does not occur with *Sața* (5b). The claim that the *la*-phrase in (8) is not a PP at all, but rather a distinctly marked DP, explains this difference between *waffar* and *Sața* in the possibility of cliticizing the *la*-phrase to the verb. On this view, the PP has no clitic counterpart. Only a DP may cliticize to the verb, and the morphological case of the DP source is reflected in the morphological form of the clitic. On analogy to languages like German, Icelandic, Russian, Japanese and others that morphologically differentiate direct and indirect objects, I refer to the *la*marker of DPs immediately following *waffar* and similar verbs as a dative case marker. The conclusion that the DP *la*-phrase may be cliticized to the verb in Syrian Arabic but the PP *la*-phrase may not is corroborated by evidence from other dialects of Arabic, where, it appears, the PP *can* be cliticized to the verb. In Syrian Arabic, the verb may only bear one enclitic pronoun. In Maltese and certain other dialects, though, the verb may bear two enclitics. As Sadler and Camilleri (2013) and Camilleri et al. (2014) report, when the verb bears two enclitics in these dialects, they occur in the fixed order accusative>*la*-clitic. Maltese *ta* 'give' appears at first glance to pattern like its Syrian Arabic cognate *Sata* (see (14b)) in failing to allow a clitic *la*-phrase (15a). However, when the accusative object cliticizes to the verb in Maltese, the *la*-phrase may as well, following the accusative clitic (15b). The *la*-phrase may also cliticize to the verb when the accusative object is promoted to subject by passivization, shown in (15c). The glosses here reflect the conclusion I will draw below.

(15) Maltese

- a. *Joseph ta-lha l-ktieb. Joseph gave-DAT.3FS the-book ('Joseph gave her the book.')
- b. Joseph ta-hu-lha.Joseph gave-ACC.3MS-PREP.3FS'Joseph gave it to her.'
- c. L-ktieb in-għata-lha. the-book PASS-gave-PREP.3FS 'The book was given to her.'

Like Syrian Arabic, Maltese allows the *la*-phrase clitic with *bagħat* 'send'—a waffar type verb—even when a direct object follows, as (16a) shows, unlike with *ta* 'give', as (15a) shows.

(16) Maltese

- a. Joseph bagħat-ilha l-ktieb. Joseph sent-DAT.3FS the-book 'Joseph sent her the book.'
- b. Joseph bagħat-u-lha.
 Joseph sent-ACC.3MS-PREP.3FS
 'Joseph sent it to her.'
- c. L-ktieb int-bagħt-ilha. the-book PASS-sent-PREP.3FS 'The book was sent to her.'

I interpret these facts to mean the following: above and beyond the fact that Syrian only allows one enclitic and Maltese two, Maltese differs from Syrian in allowing a *la*-PP to cliticize to the verb, in the same morphological paradigm as the dative clitic. In Maltese as in Syrian, *ta* 'give' does not take a dative indirect object. But unlike Syrian, the PP *la*-phrase in Maltese may in principle cliticize to the verb. But cliticization of the PP *la*-phrase is subject to minimality, and the direct object represents an intervener, since it is hierarchically superior to the PP in the DP+PP frame, ruling out (15a). Cliticization of the PP to the verb is only successful if the direct object is 'moved out of the way' first, either by itself cliticizing to the verb (15b), or by being promoted to subject under passivization (15c). The intervention effect in (15a) is similar to that described

by Anagnostopoulou (2003) for Greek double object constructions. There, a direct object in the DP+DP frame (the second DP) may cliticize to the verb only when the indirect object (the first DP) does so as well, or at least is doubled by a clitic (the indirect object bears an inherent Case in Greek and so does not promote to subject in the passive).

Note as a control, that the *la*-phrase that follows the theme of *Sața* 'give' in the DP+PP frame in Syrian Arabic still cannot be cliticized to the verb when it is the only clitic on the verb and the intervening direct object is moved out of the way by passivization (17). What rules out (17) is the fact that only DPs may cliticize to the verb in Syrian Arabic, not PPs. Anagnostopoulou claims that while cliticization of the direct object is subject to minimality in Greek, a PP indirect object does not have a clitic pronoun counterpart at all, in which respect Syrian Arabic resembles Greek in contrast to Maltese.

(17) *L-ktāb n-Satā-lu. the-book PASS-give-PREP.3MS ('The book was given to him.')

These facts reinforce the claim that in Syrian Arabic (as in Maltese), the *la*-phrase functions as a PP when it follows the direct object and as a dative DP when it precedes the direct object. For the sake of completeness, note that the grammaticality of the dative clitic construction with *waffar* 'provide' in (14a) survives promotion of the theme to subject in passive, as (18a) shows, indicating that promotion of the theme to subject over an intervening dative clitic is possible, as in Greek, as mentioned above. The corresponding promotion of the direct object over an accusative indirect object with *Sata* is ungrammatical, presumably because the indirect object in this case has structural accusative case rather than lexical dative and so is itself an intervening candidate for promotion to subject. I discuss case assignment in more detail in section **5**.

a. L-ktāb t-waffar-lu. the-book PASS-provided-DAT.3MS Lit. 'The book was provided him.'
b. *L-ktāb n-Saţā-h. the-book PASS-gave-ACC.3MS (Lit. 'The book was given him.')

I draw the conclusion from this discussion that a phrase like la-Xālid (literally 'to Khalid') can in principle be parsed as either a dative DP, as illustrated in (19a) or as a PP consisting of the preposition la and a DP complement, as in (19b), contingent on its syntactic context. Though morphological cases other than dative la- are not marked overtly in Syrian Arabic, pronominalization paradigms indicate that the DP complement of the preposition la- bears genitive case, as described below.

(19) a. [_{DP} la-Xālid_{DAT}] b. [_{PP} [_P la-] [_{DP} Xālid_{GEN}]]

Just as the pronominal object of a verb encliticizes to the verb in Syrian Arabic, the pronominal object of a preposition encliticizes to the preposition. The object of the preposition appears in the genitive case paradigm, which differs from the accusative only in the first person singular inflection, which is -i in the genitive paradigm but -ni in the accusative. The fact that *la* takes

an enclitic in the genitive paradigm is shown in (20), where both objects in the DP+PP frame are pronominalized. The second cliticizes to *la* itself, which resyllabifies as *il* in this case. Since the first person singular form of the PP is *il-i* and not *il-ni* with the accusative clitic (in the one case where we can differentiate genitive and accusative), I conclude that the preposition *la*-, like other prepositions, assigns genitive case to its DP complement.

- (20) a. Xālid Saṭā-h il-i. Khalid gave-ACC.3MS to-GEN.1S 'Khalid gave it to me.'
 - b. Xālid waffar-u il-i. Khalid provided-ACC.3MS to-GEN.1S 'Khalid provided it to me.'

To complete the pronominalization paradigm, note that if we pronominalize both objects in the DP+DP frame, the first object cliticizes to the verb in either the accusative or dative paradigm depending on the verb, and the second, accusative, object is affixed to the pleonastic host $y\bar{a}$ that is inserted for this purpose, as shown in (21).

(21) a. Xālid Saṭā-ni yā-h. Khalid gave-ACC.1S yā-ACC.3MS 'Khalid gave me it.'
b. Xālid waffar-li yā-h.

Khalid provided-DAT.1S yā-ACC.3MS 'Khalid provided me with it.'

In conclusion, Syrian Arabic distinguishes two types of double object verbs. The *waffar* 'provide' type verbs select a dative indirect object and the *Sata* 'give' type verbs select an accusative indirect object. Both are compatible with a prepositional frame, where the complement of the preposition receives genitive. The situation we see in Syrian Arabic is a mixture of two well documented types of double object construction. The 'give' type verbs behave as in English, while the 'provide' type verbs behave as in a variety of languages in which the indirect object receives a lexical case that cannot be withdrawn in the course of the derivation (as the impossibility of promoting the dative object of *waffar* to nominative seen in (7b) shows) and the direct object receives structural accusative Case. Among these languages, the Syrian Arabic 'provide' type verbs bear a particularly close resemblance to the situation described in the literature on Japanese, Greek and Spanish. In these languages, the dative DP in the DP+DP frame is morphologically indistinguishable from the PP in the DP+PP frame, so that these can only be distinguished on distributional and interpretational grounds. I discuss these parallels in more detail in the following section.⁴

(i) Leyla sāwi-t-lu ?awhe leyla made-3FS-DAT.3MS coffee

⁴I focus in this paper on transfer of possession verbs and, later, locative constructions. In Syrian Arabic, what are arguably fundamentally monotransitive verbs may sometimes take a dative argument referring to a beneficiary, as in (i) below, an 'external possessor' (related to another nominal but not functioning as an argument of the verb), as in (ii), or an 'attitude holder', as in (iii). The latter two examples are cited from Haddad 2016, who treats such constructions in the related Lebanese dialect in detail in Haddad 2014, 2016 and forthcoming. I refer to those works for discussion of additional uses of dative not covered in the present paper.

3. Syrian Arabic in Typological Perspective

The idea that Syrian Arabic *la*- instantiates itself as a dative case marker or as a preposition depending on context has some precedent in the literature on double object constructions in other languages. In Japanese, a recipient marked by the post-position *ni* may precede or follow the theme, as illustrated in (22) (Miyagawa and Tsujioka 2004). Miyagawa and Tsujioka claim that this word order alternation is parallel to the English double object alternation, though they gloss *-ni* as dative in both cases.

- (22) a. Taroo-ga Hanako-ni nimotu-o okutta. Taro-NOM Hanako-DAT package-ACC sent 'Taro sent Hanako a package.'
 - b. Taroo-ga nimotu-o Hanako-ni okutta. Taro-NOM package-ACC Hanako-DAT sent 'Taro sent a package to Hanako.'

As Hoji (1985) shows, (22) exhibits a set of scope inversion asymmetries parallel to those seen for Arabic in (12) and (13). Scope is frozen in what Miyagawa and Tsujioka analyse as the double object construction in (22a) but free in the inverse order in (22b), which parallel the English double object and prepositional constructions in this respect. Watanabe (1996), Miyagawa (1997) and Miyagawa and Tsujioka (2004) also show that as originally observed by Haig (1980), a numeral quantifier may float from the *-ni* phrase when it precedes the direct object but not when it follows, conforming to the independent observation that a numeral quantifier may float off its host when the host is a DP but not when it is a PP (Shibatani 1978, Miyagawa 1989). Following Marantz 1993, Harley 1996, 2002 and others, they refer to the low *ni*-phrase following the theme as a locative 'goal' while the high *ni*-phrase preceding the theme is a possessive 'goal'. According to Miyagawa and Tsujioka (2004) and others, the two kinds of *ni*-phrases in Japanese instantiate two different structures, with dative *ni* hierarchically higher than the prepositional *ni*.

This situation is analogous to what Anagnostopoulou (2006) describes for Greek, where the particle *se* may be prefixed to a DP in a high position, where it corresponds to what she calls a 'beneficiary', which subsumes recipients, or to a DP in a low position, where it corresponds to what she calls a 'goal'.

- (23) a. O Jianis estile s-tin Maria to yrama. The Janis.NOM sent.3s to-the Maria.ACC the letter.ACC 'John sent Mary the letter.'
 - b. O Jianis estile to yrama s-tin Maria. The Janis.NOM sent.3S the letter.ACC to-the Maria.ACC

'Leyla made him coffee.'

- (ii) Ziyād yassal-la s-sayyāra. Ziad washed-DAT.3FS the-car 'Ziad washed her car.'
- (iii) Ziyād b-?aḍḍī-la kill wa?t-u nāyim.
 Ziad IND-spend-DAT.3FS all time-his sleeping
 'Ziad spends [her] all his time sleeping.'

'John sent the letter to Mary.'

Unlike Syrian Arabic, both Japanese and Greek allow the low goal to precede the theme. This is seen in clear cases of PPs that unambiguously denote locations, as in (24a) for Greek (from Anagnostopoulou 2006) and (24b) for Japanese (from Miyagawa and Tsujioka 2004). As Miyagawa and Tsujioka point out, the PP status of the *ni*-phrase in (24b) in Japanese is confirmed by the fact that the numeral quantifier cannot be displaced (24c), as is typical for DPs embedded in PPs, as discussed above.

- (24) a. Estila s-tin Γalia ena ðema. sent.1s to-the France a parcel.ACC 'I sent a parcel to France.'
 - b. Daitooryoo-ga futa-tu-no-kokkyoo-ni heitai-o okutta. president-NOM 2-CL-GEN-borders-to soldiers-ACC sent 'The president sent soldiers to two borders.'
 - c. *Daitooryoo-ga kokkyoo-ni futa-tu heitai-o okutta. president-NOM borders-to 2-CL soldiers-ACC sent (Lit. #'The president sent two borders soldiers.')

Spanish has also been claimed to display a pattern similar to Japanese and Greek above, where the particle *a* marks the recipient in contexts parallel to both the English double object frame and the English prepositional frame. The trigger for the frame alternation, though, is not word order but clitic doubling (Masullo 1992, Demonte 1995, Cuervo 2003a). The order DP+PP in (25a) is argued in this literature to correspond to the English DP+PP frame, among other reasons on the basis of the fact that it displays free quantifier scope. The DP+DP frame in Spanish is argued to be represented by the clitic doubling construction in (25b), where the *a*-phrase still follows the direct object, but obligatorily scopes over it. That is, the pre-verbal clitic signals scope freezing in the scopal order indirect object > direct object, which is characteristic of the DP+DP frame in English and other languages.

- (25) a. Juan dio el libro a María. Juan gave the book to Maria 'Juan gave the book to Maria.'
 - b. Juan le dio el libro a María. Juan DAT.3S gave the book DAT Maria 'Juan gave Maria the book.'

There is, therefore, some precedent for the conclusions reached in section 2 on Syrian Arabic, that the particle *la*- may function as a preposition or as a dative case marker depending on context. The interesting thing about Arabic is that this situation co-exists with the English-type system, where the first DP in the DP+DP frame receives accusative but also alternates with a *la*-marked constituent in the DP+PP frame. I address below the relevance of this situation to the results of typological studies on the distribution of the double object alternation across languages.

Siewierska (1998) observes that in a large sample of languages "no language which has dative marking of recipients, i.e. marking which does not double up as either allative or some type of locative marking, exhibits alternative patient-like encoding of recipients in ditransitive clauses" (p. 180). That is, one finds alternations in which the object of an (allative or locative) preposition

occurs alternatively as a direct object (as in the English double object construction), but not alternations where a 'true' dative DP (one that is demonstrably not an allative or locative PP) occurs alternatively as a direct object. Siewierska concludes that "it appears that the term dative-shift is truly a misnomer", because true dative itself never alternates with accusative; only PPs do. On one hand, the Syrian Arabic dative marker *la-* is homophonous with an allative preposition. However, the discussion in section 2 is intended to demonstrate that its occurrence as a dative marker indeed represents 'true' dative; it does not function as a preposition there. Siewierska's remarks are intended to exclude English PPs like 'to John' from the category 'dative', where they are often placed, as evidenced by the phrase 'dative shift' as applied to English, and this is why she calls 'dative shift' is a misnomer. If we exclude *to*-phrases from the category 'dative', then no alternation between dative and accusative is found in the world's languages.

The Syrian Arabic facts show that both dative and accusative alternate with a PP. Further, the language shows both dative encoding of recipients and accusative encoding of recipients. However, dative encoding of recipients does not **alternate** with accusative encoding of recipients in the same contexts. No verb admits both dative and accusative recipients, meaning no transformation maps a dative recipient to an accusative one or vice versa. In light of this, Arabic conforms to Siewierska's generalization. Conversely, Siewierska's generalization strengthens the conclusion in section 2 that the *la*-phrase that alternates with accusative for the *Sata* 'give' type verbs is not a dative DP, but a PP.

Gerdts (1993), Siewierska (1998) and Levin (2006) consider the dative vs. accusative encoding of recipients to be part of a language's typological profile. Here too, Syrian Arabic is revealing. It shows that the dative vs. accusative encoding of recipients is not necessarily what Baker (1996, 2008) and Roberts (2012) call a "macroparameter", that is, a parameter with a fixed value throughout the language, but may manifest itself as a "microparameter", that is, a parameter whose value is selected by a particular class of words, here the *Sata* 'give' class vs. the *waffar* 'provide' class. Thus, the typological profile of a language may be compatible with both dative and accusative recipients, but these are still in complementary distribution within the language.

The parallels between dative and accusative recipients in Syrian Arabic described in section 2 support the general idea advocated by Hudson (1992), Siewierska (1998), Levin (2006) and others that dative recipient DPs (in languages that have them) are comparable to accusative recipient DPs (in languages that have them) are comparable to accusative recipient DPs (in languages that have them). Both dative and accusative recipients in Syrian Arabic cliticize to the verb, have frozen scope with respect to the theme, and alternate with prepositional encoding. These parallels suggest that dative and accusative recipients bear essentially the same grammatical function. Neither is a direct object, not even the accusative recipient that promotes to subject in the passive. Another point supporting the characterization of both as indirect objects in contrast to direct objects is that neither may host a secondary depictive predicate, while the direct object always can. Neither the accusative recipient of *Sata* 'give' in (26a) nor the dative recipient of *razzaî* 'return'—a *waffar* 'provide' type verb—in (26b) may host the secondary predicate *sikrāne* 'drunk', but the theme may host the secondary predicate *mihri* 'damaged' in both examples.⁵

⁵Another place to look for parallels between dative and accusative recipients would be their behavior in nominalizations. But while Arabic has paradigms for deriving nouns from verbs, and nominalizations are commonly found in Standard Arabic texts, they are not used in colloquial Syrian Arabic, where finite verb forms are employed in their stead. Since Standard Arabic does not have dative case, we cannot look for parallels between accusative and dative recipients in nominalizations even there.

- (26) a. Xālid Sata Leyla, l-ktāb, mihri, /*sikrān-e,
 Khalid gave Leyla the-book damaged / *drunk-FS
 'Khalid gave Leyla, the book, damaged, / *drunk,.'
 - b. Xālid razza Γ la-Leyla_i l-ktāb_j mihri_j / *sikrān-e_i. Khalid returned DAT-Leyla the-book damaged / *drunk-FS Lit. 'Khalid returned Leyla_i the book_i damaged_i / *drunk_i.'

These facts underscore a general similarity between the DP+DP frame with dative and accusative first DPs, supporting the cross-linguistic generalization discussed above that dative and accusative recipients may alternate with a prepositional encoding but not with each other. Rather than being alternants of each other, they are essentially the same frame. Of course, a syntactic analysis of the double object construction in Syrian Arabic must explain certain differences between dative and accusative recipients, foremost the fact that they bear different cases as well as the fact that only the latter promotes to subject in the passive, while both alternate with a DP+PP frame. I flesh out such an analysis in the following two sections.

4. Derivation vs. Representation in the Double Object Alternation

There are three logical possibilities for the analysis of pairs of sentences like (27), each of which has some precedent in the literature. Either the double object frame in (27a) is derived from the prepositional frame in (27b) (Perlmutter and Postal 1984, Larson 1988, 1990, 2014, Ormazabal and Romero 2010), or vice versa (Bowers 1981, Dryer 1986, Aoun and Li 1989, Kitagawa 1994, Hallman 2015), or the two are not transformationally related (Pinker 1989, Bowers 1993, Hale and Keyser 1993, den Dikken 1995, Pesetsky 1995, Basilico 1998, Bruening 2001, Pylkkänen 2002, Hale and Keyser 2002, Anagnostopoulou 2003, Harley 2002, 2004, 2007, 2012, Harley and Jung 2015, Beck and Johnson 2004, Ramchand 2008, among others). Though the current conventional wisdom appears to lean toward the last view, often called the 'alternative projection' analysis, I will endeavour to demonstrate that the Arabic evidence best supports the second view, that the double object frame is the derivational base for the prepositional frame. I consider each of these three possibilities below, beginning with the 'Larsonian' view that the DP+DP frame is derived from the DP+PP frame.

- (27) a. Leyla gave Khalid the book.
 - b. Leyla gave the book to Khalid.

Larson (1988, 1990, 2014) proposes that the English double object frame in (27a) is derived from the prepositional frame in (27b) through omission of the preposition from the base structure and raising of its object to a position superordinate to the theme, a transformation he and others call 'dative shift' (as I will call it here, in spite of misgivings expressed in section 3; Larson (2014) calls it 'A[pplicative]-Shift'). The base order of internal arguments in this analysis is always theme>recipient. This view is compatible with the analysis of scope freezing due to Antonyuk (2015), who claims that cross linguistically, scope freezing between two quantifiers arises when one quantifier moves over another. If the DP+PP frame is basic, then movement of the recipient argument out of the PP over the theme is correctly expected to result in frozen scope between the two arguments.

An initial challenge for a dative shift analysis of Arabic, though, lies in the fact that the DP+PP frame in Syrian Arabic corresponds to two different DP+DP frames, one with a dative initial DP

and one with an accusative one. One implementation of dative shift is that the two arguments are generated without case in the order theme>recipient, then the recipient raises across the theme to either an accusative or dative case position, whichever the verb makes available. This view admits 'raising to dative' in the context of the *waffar* type verbs, which conflicts with the cross linguistic generalization that dative is not accessible via syntactic transformations, which is where it gets its reputation as an 'inherent case'. In Syrian Arabic, for example, we might expect the dative case assigned by *waffar* 'provide' to be available to the direct object in the DP+PP frame, where the indirect object occurs in the PP. This expectation is particularly conspicuous in the passive, where the accusative case that the direct object usually bears is withdrawn. In the passive of *waffar*, the caseless theme DP in the DP+PP frame would be closer to the dative case position associated with *waffar* (which is VP-internal) than to the nominative subject position (which is VP-external) and might be expected to raise to dative rather than nominative, if raising to dative is possible. This would leave the construction subjectless, but subjectless impersonal passive constructions are found in Syrian Arabic precisely in circumstances where no internal argument is available to raise to the vacated subject position, illustrated in (28).⁶

- (28) a. N-ra?as ktīr bi-l-ħafle.
 PASS-danced a lot at-the-party Lit. '[It] was danced a lot at the party.'
 b. N-katab San hāy l-laħza min
 - N-katab San hāy l-laħẓa min zamān.
 PASS-wrote about this the-moment from time
 Lit. '[It] has been written about this moment [in history] for a long time.'

The fact that Syrian Arabic tolerates subjectless passives sets up the expectation that the direct object of *waffar* might raise to dative in the passive of the DP+PP frame, while the subject position goes unoccupied or is occupied by a covert pleonastic subject. This structure, illustrated in (29), is sharply ungrammatical, however. I discuss inherent case in more detail in section 5.

(29) *T-waffar la-l-ktāb la-Xālid. PASS-provided DAT-the-book to-Khalid ('[It] was provided the book to Khalid.')

The analysis of Russian in Bailyn 1995, 2012 and Antonyuk 2015 provides another possible version of the dative shift approach to Syrian Arabic. They claim that Russian ditransitives are generated in the base order accusative>dative, and the dative recipient may optionally scramble around the accusative theme. A natural adaptation of this view to Syrian Arabic has the recipient base generated with dative case in the context of the *waffar* 'provide' type verbs but caseless in the context of the *Sata* 'give' type verbs. In Syrian Arabic, the recipient moves obligatorily to a position preceding the theme. Here, the recipient receives 'primary' accusative (the case that is withdrawn in passive) if it is caseless in the base structure but is unaffected when it receives dative in the base structure. If the recipient receives primary accusative, the theme receives a 'secondary' accusative case (neither dative nor primary accusative), while if the recipient is dative, the theme receives primary accusative (promoting to nominative in passive, for example). While this analysis does not involve raising to dative, it raises the question of how the presence or absence of dative

⁶Since unfocused nominative pronouns are covert in Arabic, it is hard to tell if these structures contain a covert pleonastic subject or no subject at all.

case regulates whether the theme receives primary or secondary accusative. I return to this version of the dative shift analysis in section 5.5 below, where I compare this view to a concrete alternative analysis. I tentatively conclude that these considerations reflect at least somewhat unfavourably on a dative shift account of Syrian Arabic insofar as an alternative analysis can be constructed that does not share these liabilities. To this end, I turn to the other two analytical options mentioned above.

The alternative projection approach to the double object alternation is motivated primarily by semantic differences found between the double object and prepositional frames. These differences are argued in the literature mentioned above to implicate two separate base structures for the two frames. For example, Syrian Arabic resembles English and other languages in that the first argument in the DP+DP frame may never be a location name, while the corresponding argument in the DP+PP frame may name a location under some circumstances (Green 1974, Oehrle 1976). Syrian Arabic *baSat* 'send'—a *waffar* 'provide' type verb—exemplifies this generalization like its English counterpart: the PP *la*-phrase in (30a) may contain a place name, but the dative DP *la*-phrase in (30b) may not.

- (30) a. Leyla baSat-it t-tarid la-London. Leyla sent-3FS the-parcel to-London 'Leyla sent the parcel to London.'
 - b. *Leyla basat-it la-London t-tarid. Leyla sent-3FS to-London the-parcel (*'Leyla sent London the parcel.')

Green (1974), Oehrle (1976), Harley (1996, 2002, 2007, 2012) and others claim that the animacy requirement on the indirect object in the DP+DP frame derives from the fact that the DP+DP frame asserts possession. The first DP has the possessor theta role (it is a 'recipient' only in virtue of the fact that the possession relation is externally caused) and the second the theme/possessum role.⁷ The acceptability of the location name in the DP+PP frame in (30a) and its counterpart in other languages has in turn been taken to support the notion that prepositional phrases in double object constructions introduce a location argument, not a possessor per se. On this view, the fact that names of both locations and humans may occur in this PP, as the pair in (31) shows, means that humans may function as locations (but locations may not function as possessors). That is, the fact that (31a) implies that Khalid is in possession of the parcel is an inference based on the proximity of the parcel to Khalid.

- (31) a. Leyla baSat-it t-tarid la-Xālid. Leyla sent-3FS the-parcel to-Khalid 'Leyla sent the parcel to Khalid.'
 - b. Leyla baSat-it t-tarid la-London. Leyla sent-3FS the-parcel to-London 'Leyla sent the parcel to London.'

This view associates the double object frame with a change of possession semantic schema and the prepositional frame with a change of location semantic schema. However, as Levinson (2005),

⁷As is often remarked, a location name like *London* can occur as a possessor to the extent it can be personified as the relevant individual(s) in London.

Rappaport Hovav and Levin (2008) and others show, the possibility for a place name to occur in the prepositional frame is not inherent to the frame itself but determined by the choice of verb. In Syrian Arabic, none of the *Sata* 'give' type verbs allow a place name to occur in a *la*-phrase (32a). This is exactly the contrast we see with the accusative indirect object illustrated in (32b). This pattern mirrors what we see in the English translations in (32).

- (32) a. *Leyla Sat-it t-tarid la-London. Leyla gave-3FS the-parcel to-London (*'Leyla gave the parcel to London.')
 - b. *Leyla Sat-it London t-tarid. Leyla gave-3FS London the-parcel (*'Leyla gave London the parcel.')

Thus, for the *Sata* type verbs, the selectional restrictions that apply to the indirect object DP in the double object frame extend to the PP in the prepositional frame. Neither may be a location. Among the *waffar* 'provide' type verbs, only *baSat*, other 'verbs of sending' such as *faħan* 'ship', and verbs of ballistic motion such as *zatt* 'throw', allow a location name in the PP along the lines of what we see in (30a). Like the *Sata* 'give' type verbs, the other *waffar* 'provide' type verbs do not allow a location name in the PP, as *warrat* 'bequeath' illustrates in (33a) and *waffar* itself in (33b). What goes wrong in (32) and in (33) is that London cannot easily be construed as a possessor of a parcel or of Leyla's worldly possessions.

(33)	a.	Leyla warrat-it	amlāk-a	la-ibn-a	/ *la-London.
		Leyla bequeathed-3F	s possessions-GEN.31	FS to-son-GEN.3	FS / *to-London
		'Leyla bequeathed he	er possessions to her s	on / *to London	,
	b.	Leyla waffar-it	amlāk-a	la-ibn-a	/ *la-London.
		Leyla provided-3FS possessions-GEN.3FS to-son-GEN.3FS / *to-London 'Leyla provided her possessions to her son / *to London.'			/ *to-London

These considerations suggest that, aside from verbs of sending and verbs of ballistic motion, the selectional restrictions accruing to the indirect object in the DP+DP frame are the same as those that accrue to the PP in the DP+PP frame. The fact that the two positions are subject to the same selectional restrictions indicates that they are the same argument of the verb, namely possessor. The examples giving the impression that the prepositional frame may host a location argument involve only verbs of sending and verbs of ballistic motion. The following considerations reinforce the point that something about these verbs is special, and that as a general rule, the indirect object in a ditransitive alternation may not denote a location, whether it occurs in the DP+DP frame or the DP+PP frame.

Above, I proposed that in general, the indirect object represents the same argument of the verb (possessor) regardless of the complement frame it occurs in, and that something is special about verbs of sending and verbs of ballistic motion. This idea replicates in Syrian Arabic considerations that Rappaport Hovav and Levin (2008) claim support what they call a 'verb sensitive approach' to double object constructions. Some double object verbs are compatible with a change of possession event schema regardless of syntactic frame, while others also allow a change of location event schema, but only in the DP+PP frame. In Syrian Arabic, there are, as in English, verbs that occur only with the DP+PP frame, and have a genuinely locative meaning, that is, the PP denotes a

location. A variety of locative prepositions occur in such constructions, including la- 'to' in its directional signification, as in (10), repeated in (34a). In clear cases of the locative use of la- as in (34a), where it introduces an inanimate location that functions as the goal of motion, la- is interchangeable with the preposition fala 'to' or 'on' (often shortened to fa-, particularly before a consonant cluster).

(34)	a.	Leyla wassal-it l-ūlād la- / Sala ?āxir t-tarī?.
		Leyla accompanied-3FS the-children to / to end the-road
		'Leyla accompanied the children to the end of the road.'
	b.	Leyla sā?-it s-siyyāra min ħalab la- / ʕa-ʃ-ʃām.
		Leyla drove-3FS the-car from Aleppo to / to-the-Damascus
		'Leyla drove the car from Aleppo to Damascus.'

The preposition la- may also be replaced by Sala in the context of verbs of sending or ballistic motion when these have a place name in the PP (35).

(35)	a.	Leyla basat-it t-tarid Sala London.
		Leyla sent-3FS the-package to london
		'Leyla sent the package to London.'
	b.	Levla zatt-it t-tābe Sa-l-baranda.

b. Leyla zatt-it t-tabe Ya-I-baranda. leyla threw-3FS the-ball on-the-balcony 'Leyla threw the ball onto the balcony.'

But these verbs do not accept *Sala* in the context of a human indirect object, even when this follows the theme.

- (36) a. *Leyla baSat-it t-tarid Sala Xālid. Leyla sent-3FS the-parcel to Khalid ('Leyla sent the parcel to Khalid.')
 - b. *Leyla zatt-it t-tābe Sala Xālid. leyla threw-3FS the-ball to Khalid ('Leyla threw the ball to Khalid.')

Further, none of the *Sata* 'give' type verbs are compatible with *Sala* in their prepositional frame, for example *Sata* itself in (37a). Nor are any *waffar* 'provide' type verbs other than verbs of sending and verbs of ballistic motion, as *waffar* itself illustrates in (37b).

(37) a. *Leyla Sat-it l-ktāb Sala Xālid. Leyla gave-3FS the-book to Khalid ('Leyla gave the book to Khalid.')
b. *Leyla waffar-it l-ktāb Sala Xālid. Leyla provided-3FS the-book to Khalid ('Leyla provided the book to Khalid.')

This pattern is replicated in the distribution of the preposition Σ ind 'at', which in combination with a human complement names the location that that human occupies either currently (where they are now) or typically (their home). As a place name, Σ ind $X\bar{a}lid$ 'at Khalid' is compatible with *la*- in the context of a locative verb such as *wassal* 'accompany' (38a), or a verb of sending or

ballistic motion such as *baSat* 'send' (38b), but not with a change of possession verb such as *Sata* 'give' or *waffar* 'provide' (38c), since these do not have a location argument, but only a possessor.

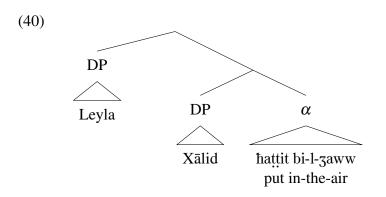
- (38) a. Leyla wassal-it l-ūlād la-Sind Xālid. Leyla accompanied-3FS the-children to-at Khalid 'Leyla accompanied the children to Khalid's place.'
 - b. Leyla baSat-it t-tarid la-Sind Xālid. Leyla sent-3FS the-package to-at Khalid 'Leyla sent the package to Khalid's place.'
 - c. *Leyla Sat-it / waffar-it l-ktāb la-Sind Xālid. Leyla gave-3FS / provided-3FS the-book to-at Khalid (*'Leyla gave/provided the book to Khalid's place.')

Thus, while the DP+DP frame for *Sata* and *waffar* alternate with a DP+PP frame, that frame does not accept location names (including those formed with *Sind* 'at') nor the locative preposition *Sala*. As a locative marker, the preposition *Sala* shows us where a locative construal of the PP is available, and particularly, that no locative construal is available for *Sata* 'give' type verbs or any *waffar* 'provide' type verbs other than verbs of sending or ballistic motion. This pattern undermines the view that the DP+PP frame is always locative. If humans could act as locations in the DP+PP frame, we would expect them to be compatible with the DP+DP frame expresses change of possession and is transformationally related to a DP+PP frame that, by virtue of the transformational relation, also expresses change of possession. But independently of this alternation, a locative DP+PP frame not related to the possessive DP+DP frame is available for verbs of sending and verbs of ballistic motion. As a result, some verbs (*baSat* 'send' but not *Sata* 'give') display two DP+PP frames; one that stands in a transformational relationship with the DP+DP frame and has the same (possessive) semantic profile, and another that does not and has a different (locative) profile.

Idiomatic predicates in Syrian Arabic support this conclusion. As in other languages, Syrian Arabic has idioms in the locative prepositional frame, where the verb and PP together form an idiom to the exclusion of the direct object, as in (39).

(39)	a.	Leyla ħaṭṭ-it Xālid bi-l-ʒaww.	
		Leyla put-3FS Khalid in-the-air	
		Lit. 'Leyla put Khalid in the air.'	= 'informed him about what's going on'
	b.	Leyla fawwt-it Xālid bi-l-hīț.	
		Leyla go _{CAUSE} Khalid in-the-wall	
		Leyla made Khalid go into the wall.'	= 'caused him to be confused'

Here, the idiom consists of the verb and the lowest argument, constituting the consituent α in (40). This reinforces the point that locative PPs are lower than the theme in the base structure. The verb raises to the left of the theme in the surface structure.

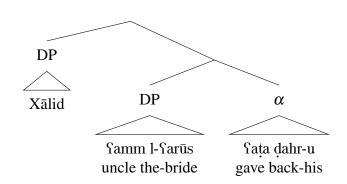


Syrian Arabic also has expressions with Sata in the double object frame that do not assert literal giving, as in (41)

(41)	a.	Xālid Sata Samm l-Sarūs dahr-u.	
		Khalid gave uncle the-bride back-his	
		'Khalid gave the uncle of the bride his back.'	= 'turned his back on him'
	b.	Xālid Saṭa ʃaɣl-u kill ∫i yi?dir Saley-h.	
		Khalid gave job-his every thing is.capable of-it	
		'Khalid gave his job every thing he was capable of.'	='gave his job his all'

Each of these cases occur in the DP+DP frame but they do not involve literal possession. The uncle of the bride does not come into possession of Khalid's back by virtue of what (41a) asserts. Similarly in (41b), where Khalid's job does not literally come into possession of everything Khalid is capable of. In these cases, the theta role that the indirect object receives is not 'possessor' but a composite role corresponding to the property 'having someone's back turned on one' or 'being done with conviction'. In these examples, the constituent denoting this property corresponds to α in the tree below for (41a), a constituent that excludes the indirect object but includes the verb and direct object (the verb raises subsequently).

(42)



These examples alternate naturally with the DP+PP frame, as shown in (43).

- (43) a. Xālid Sata dahr-u la-Samm l-Sarūs.
 Khalid gave back-his to-uncle the-bride
 Lit. 'Khalid gave his back to the uncle of the bride.'
 - b. Xālid Sata kill ∫i yi?dir Saley-h la-∫ayl-u. Khalid gave every thing is.capable of-it to-job-his

Lit. 'Khalid gave every thing he was capable of to his job.'

The view that the DP+PP frame is uniformly locative must characterize the examples in (43) as locative constructions, but the format of the idiom does not match the format of the bona fide locative idioms in (39). In the locative idioms in (39), the verb and PP form an idiom, while in the examples in (43) with *Sața* 'give', the verb forms an idiom with the direct object to the **exclusion** of the PP. This makes sense if the DP+PP frame of *Sața* is derived from its DP+DP frame, where, as illustrated in (42), the verb forms a structural unit with the theme to the exclusion of the indirect object—the constituent that occurs in the PP in (43). The idiomatic reading of the base is preserved in the transform.

All in all, these observations implicate the following situation: some verbs have a possessive DP+DP frame (Sata 'give', waffar 'provide'), and this DP+DP frame functions as the base for a DP+PP derivative (the mirror image of 'dative shift'), where the possessor occurs in the PP (called 'Class I' in (44)). Other verbs, such as $\hbar att$ 'put' and $s\bar{a}$? 'drive' are purely locative; they do not occur in the DP+DP frame, but rather only the DP+PP frame, where the PP-internal DP is a location, not a possessor (called 'Class II' in (44)). Still other verbs, though, such as basat 'send' and zatt 'throw', are structurally ambiguous between the possessive DP+DP frame (Class I) and the locative DP+PP frame (Class II). Because here, too, the possessive DP+DP frame may be transformed into a possessive DP+PP frame, the DP+PP frame of these verbs is ambiguous between a base generated locative DP+PP structure and a derivative of a possessive DP+DP structure. The structures differ in behavior though: only the base generated locative DP+PP frame is compatible with a location name or the unambiguously locative preposition Sala 'to/on'. Only the derivative possessive DP+PP frame is compatible with a human name or an idiomatic interpretation of the verb and direct object to the exclusion of the PP. This analysis amalgamates a transformational account of the double object alternation for Class I verbs like Sata 'give' and waffar 'provide', with an alternative projection account of verbs like basat 'send' and zatt 'throw', which are ambiguous between Class I and Class II, and have distinct base structures on their two readings (change of possession and change of location). The DP+PP frame for such verbs is ambiguous between a transformational derivative of the change of possession Class I structure and the change of location Class II structure.

(44) Class I (*Sata* 'give', *waffar* 'provide') $DP+DP \xrightarrow{\text{optional}} DP+PP$ Class II (*hatt* 'put', *sā*? 'drive') DP+PP

Note for clarification that Class II contains no alternating verbs. These are locative only. All alternating verbs belong to Class I. However, some verbs are ambiguous between Class I and Class II, meaning they have both a base generated locative DP+PP frame and one derived from the possessive DP+DP frame. The ambiguous verbs can be characterized as either 'verbs of sending' or 'verbs of ballistic motion'. The Class I/Class II distinction is different from the distinction between what I call the *Sața* 'give' type verbs and the *waffar* 'provide' type verbs. These verbs all belong to Class I. The characterizing feature of the *Sața* 'give' type verbs is that their indirect object in the DP+DP frame is accusative, while the indirect object of the *waffar* 'provide' type verbs is dative. The DP+DP frame alternates with the DP+PP frame designating transfer of possession regardless of whether its indirect object is dative or accusative. I turn now to a syntactic analysis of this state of affairs.

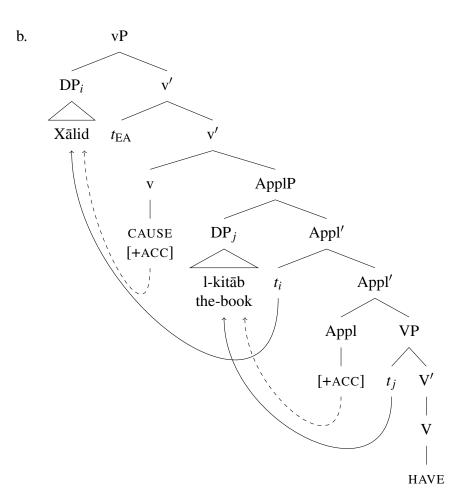
5. Analysis

An analysis of the pattern described here for Syrian Arabic must achieve two things. It must clarify the relationship in which the possessive DP+PP frame stands to the DP+DP frame, which I characterized as 'transformational'. And it must accommodate the fact that the indirect object in the DP+DP frame may have either accusative or dative case, depending on the choice of verb. I address the first issue in connection with an analysis of the English-like *Sața* 'give' type verbs below and turn to the second issue in connection with the *waffar* 'provide' type verbs.

5.1 Class I 'accusative' (Sata 'give' type) verbs

For verbs analogous to English *give*, I follow Chomsky 1995, Kratzer 1996 and many others in generating the external argument in the specifier of a dedicated projection 'little-vP', and Marantz 1993 and many others in generating the possessor argument in the specifier of a dedicated projection 'Appl[licative]P'. I follow Harley 1996, 2002, 2012, Harley and Jung 2015 and others in decomposing the 'give' relation as 'cause to have', where little-v signifies CAUSE and big-V HAVE. I follow Ura 1996, Collins 1997, McGinnis 1998 and Hallman 2015 in claiming that each of the functional projections vP and ApplP case-marks the nearest DP in its c-command domain by attracting it to its 'outer specifier' (Chomsky 1995, 2000, 2001, 2004). The designation [+ACC] refers to a head's potential to check accusative case on the DP in its outer specifier. This mapping is illustrated in (45b) for example (1a), repeated in (45a). Movement is illustrated by solid arrows, case assignment by broken arrows. The symbol t_{EA} represents the trace of the external argument, which has raised to a nominative position not shown. I claim in section 5.2 that vP and ApplP also license a D-feature in their outer specifier, but defer further discussion until then.

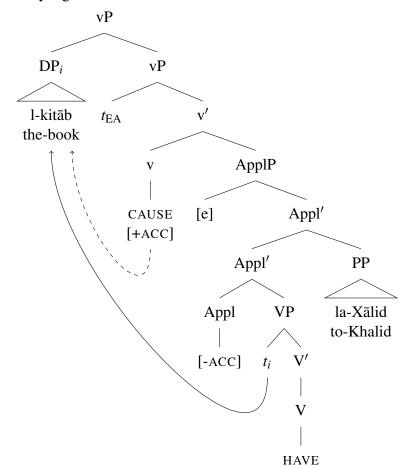
(45) a. Leyla Saṭ-it Xālid l-ktāb. Leyla gave-3FS Khalid the-book 'Leyla gave Khalid the book.'



To capture the relationship between the possessive DP+PP frame and the base DP+DP frame, I apply Bruening's (2013) analysis of the relation of English by-phrases to the corresponding direct argument in passive constructions to the derivation of the possessive DP+PP frame. Bruening claims that the prepositional phrase adjoins to the constituent that the corresponding DP argument would be the inner specifier of, and transfers to it the theta role it would normally receive in that inner specifier. In this case, the preposition is la- 'to', its adjunction site is Appl', and the theta role it transfers is that assigned by Appl, namely 'possessor'. Just as the standard model of passivization connects demotion of the external argument into a PP to the absorption of accusative case (Jaeggli 1986, Baker et al. 1989), I claim the DP+PP frame arises when Appl (optionally) fails to license accusative case in its outer specifier. In this situation, the second DP in the DP+DP frame cannot receive case in the usual way (that diagrammed in (45b)). But demotion of the possessor into a *la*-PP allows promotion of the theme to vP, where it receives accusative case. In this usage, *la*- is semantically vacuous, serving only to assign case to its complement and transfer the theta role assigned by Appl to it. The '[e]' (for 'empty') symbol marks the surface position normally occupied by the theme in the DP+DP frame, which goes unoccupied in the DP+PP frame because Appl is specified [-ACC], which signifies the fact that it does not assign accusative to its outer specifier. On this view, example (3a), repeated in (46a), has the structure in (46b).

(46) a. Leyla Sat-it l-ktāb la-Xālid. Leyla gave-3FS the-book to-Khalid 'Leyla gave the book to Khalid.'

b.



I assume a Distributed Morphology implementation of the composition of the prosodic word corresponding to the verb in the examples above (Halle and Marantz 1993, Harley 2007, 2012). On this view, the heads V, Appl, and v are concatenated under head movement, and the resulting complex is replaced by a word drawn from the lexicon in a lexical insertion process that derivationally follows all syntactic procedures. Differences between various transfer of possession verbs are related to differences in the manner of causing or in the manner of possessing, or the presence of other pieces of meaning represented in the syntax. I claim in the following section that lexical insertion may also be sensitive to the case values of the case assigning heads v and Appl.

5.2 Class I 'dative' (waffar 'provide' type) verbs

The waffar 'provide' type verbs differ from the *Sata* 'give' type verbs in that their indirect object bears dative case in the DP+DP frame, but they share the alternation with the DP+PP frame. Recall, too, that in the DP+DP frame—where the first DP is dative—the second DP raises to subject in the passive, illustrated in (18a), repeated in (47) below, suggesting that this DP receives case from the same source as other direct objects, including the first DP in the DP+DP frame of *Sata* type verbs.

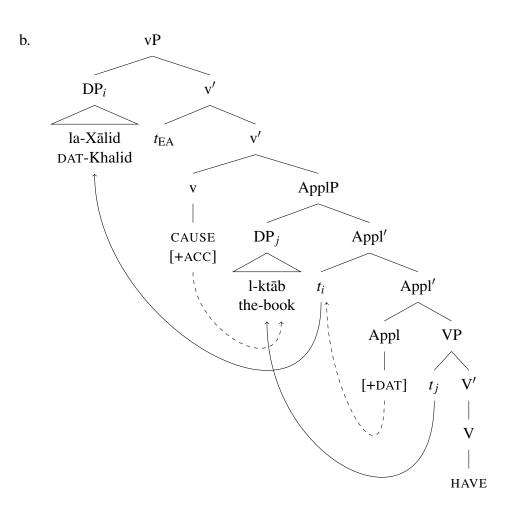
That source is vP in the analysis of Sata above.

(47) L-ktāb t-waffar-lu. the-book PASS-provided-DAT.3MS Lit. 'The book was provided him.'

I conclude that little-v is [+ACC] in the DP_{DAT}+DP_{ACC} frame and consequently that that dative is associated with Appl, in agreement with McGinnis 1996, 1998, Cuervo 2003a,b, Anagnostopoulou 2003, Woolford 2006 and others. But on the assumption that case is licensed by raising to outer specifiers, this state of affairs (accusative comes from little-v, dative from Appl) is expected to generate a frame in which the first DP (possessor) gets accusative from little-v and the second (theme) gets dative from Appl, which is the reverse of the case pattern attested for *waffar*. I therefore claim instead, again following McGinnis, Cuervo and Woolford, building on Zaenen et al. 1985, Andrews 1990, Frieden and Sprouse 1991, Chomsky 1981, 1986, 1995, 2000, 2004 and others, that dative case is assigned to the possessor in its base position, here the inner specifier of Appl. Accusative case, on the other hand, is assigned to the theme through a dependency extending downward from little-v. Chomsky (2000, 2001, 2004) claims that downward case assignment of this kind is subserved by the 'Agree' relation, in which a 'probe' (the case assigning head) searches its syntactic domain for a closest suitable 'goal' (an unmarked DP) and, if it finds one, both matches it in morphological ϕ -features and transfers case to it.

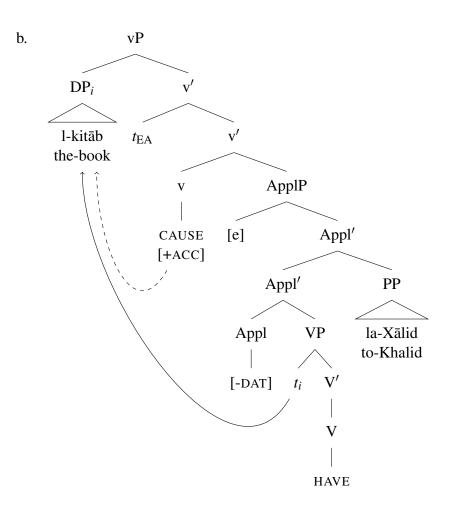
The discussion in section 2 shows that the DP+DP frame has the same syntactic behavior for the two verb types, that is, regardless of whether the first DP receives dative or accusative case. This frame feeds cliticization of the first DP, puts the possessor and theme in the same linear order, and is subject to scope freezing regardless of the case of the first DP. I infer from this that the syntactic structure of the two cases is fundamentally the same, which is to say that for both waffar 'provide' type verbs and Sata 'give' type verbs, the possessor DP raises to the outer specifier of vP and the theme DP raises to the outer specifier of ApplP (illustrated in (45b) for Sata and in (48b) below for waffar). But this mapping cannot be motivated solely by case considerations, since the dative DP receives case in its base position and the accusative DP receives case from vP, as argued above, though it does not occur there in the surface structure according to this hypothesis. It seems that some force other than case assignment is at work enforcing the syntactic uniformity of the double object frame for the two verb classes. Drawing on Chomsky 1995, Holmberg 2000 and others, I propose that the displacement of DPs to their surface positions in both verb classes is guided in the first instance by a licensing requirement related to 'DP-ness' itself, namely that the 'DP-ness' of a DP, which I refer to as its 'D-feature' must be matched against a corresponding capacity of little-v or Appl to check this feature, and this checking dependency holds in the (outer) specifier-head configuration. This requirement applies to dative and accusative DPs alike, but not PPs. Case checking and movement for D-feature checking in (8), repeated in (48a), is illustrated in (48b). Appl assigns dative case to (the trace in) its inner specifier and little-v assigns accusative downward through the Agree relation to the direct object, which has moved to the outer specifier of ApplP for the purposes of D-feature checking.

(48) a. Leyla waffar-it la-Xālid l-ktāb. Leyla provided-3FS DAT-Khalid the-book 'Leyla provided Khalid with the book.'



The DP+PP frame for verbs like *waffar*, repeated in (49a) below, arises in the same manner as for verbs like *Sața*, namely through the loss of case in ApplP, signified by the [-DAT] specification of Appl in the tree in (49b). Instead of receiving dative case in the inner specifier of ApplP, the possessor DP *Khalid* appears in a PP headed by the preposition *la*- and adjoined to Appl', and satisfies its case and D-checking requirements within the PP. The theme DP *l-ktāb* 'the book', on the other hand, raises to the outer specifier of vP, where it checks its D-feature and receives accusative case from little-v, just as in the tree for *Sața* in (46b). The only difference between (46b) and (49b) is that it is dative that is lost in (49b), not accusative.

(49) a. Leyla waffar-it l-ktāb la-Xālid.
 Leyla provided-3FS the-book to-Khalid
 'Leyla provided the book to Khalid.'

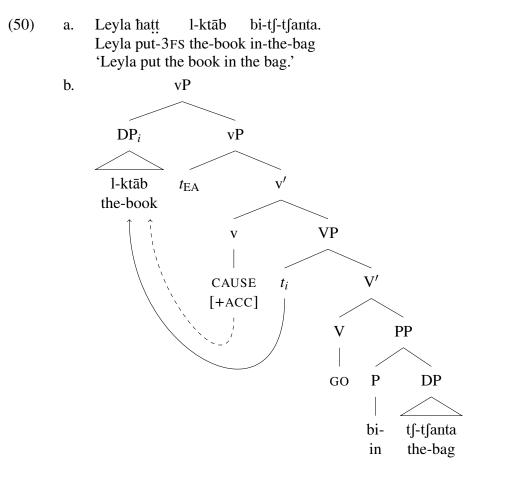


The general syntactic difference, then, between *Sata* 'give' and *waffar* 'provide' is that at the lexical insertion stage, *Sata* replaces a head complex containing a $[\pm ACC]$ Appl while *waffar* replaces a head complex containing a $[\pm DAT]$ Appl. Consequently, dative occurs in the environment of a specific set of lexical items—just those that replace a head complex containing a [+DAT] Appl at the lexical insertion stage. Dative case can be said to be 'lexical' in this sense. Further, though, dative is assigned to an inner specifier, while accusative is assigned to an outer specifier. Inner specifiers act as base generation sites for DPs while DPs raise to outer specifiers. Consequently, a DP bears dative in its base position, while it must acquire accusative by raising. Dative can be said to be 'inherent' in this sense—it is assigned in the base structure. Nonetheless, dative and accusative differ fundamentally in distribution in just this respect—dative is assigned to an inner specifier. Since dative case is assigned in a specific configuration distinct from the configuration in which accusative is assigned, it can also be said to be a 'structural' case as much as accusative is. In this analysis, therefore, different aspects of the the distribution of dative can be characterized as lexical, inherent and structural without contradiction.

5.3 Class II verbs

As schematized in the idiom structure in (40), the PP in genuinely locative constructions found with verbs like $\hbar a t t$ 'put' is base generated lower than the theme. I attribute the structure in (50b) to such predicates, where little-v is causative as before, but VP describes directed motion, rather

than possession, and the PP is the complement of V. The absence of ApplP means that in such semantically locative predicates no DP+DP frame is available and there is no opportunity for dative case to occur.



The main difference between this locative structure and the possessive DP+PP frames seen in (46b) and (49b) is that the locative preposition is low in the structure, base generated under the theme, while the possessive PP in (46b) and (49b) is relatively high in the structure, roughly where the indirect object DP in the corresponding DP+DP frame is generated. In that case, the DP inside the possessive PP receives the same theta role as the corresponding indirect object DP, capturing interpretational parallels between the DP+DP frame and the possessive DP+PP frame. The *la*-in the possessive PP is semantically vacuous, while the preposition in the locative PP in (50b) designates a locative juxtaposition in relation to its complement denotation (*bi*- 'in', *Sala* 'on/to', *la* 'to', etc.).

5.4 Verbs of sending and ballistic motion

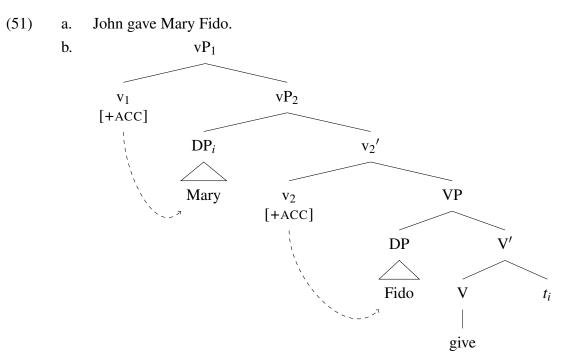
Lastly, verbs of sending, like baSat 'send', and verbs of ballistic motion, like *zatt* 'throw', are simply structurally ambiguous between the base structure for Class I verbs shown in (48b) and the base structure for Class II verbs shown in (50b). By virtue of allowing the double object structure in (48b), they also allow what I analyse here as its prepositional derivative in (49b). In terms of the distributed morphology framework adopted here, this means that a verb like baSat 'send' is compatible not only with head complex containing a [±DAT] Appl but also with a head complex

that lacks Appl altogether and contains only a causative little-v, and motion-denoting big-V. In this case, as with the other Class II verbs, the preposition is semantically contentful and introduces the goal of the path of motion introduced by big-V.

5.5 Comparison with dative shift

In section 4, I sketched an alternative dative shift analysis of Syrian Arabic, where the two arguments of the a ditransitive verb are systematically generated in the order theme>possessor, rather than possessor>theme as above. The DP+PP order is generated by adding a preposition to the base structure, while the DP+DP order is derived by raising the possessor over the theme. I expand here on the difficulty I claimed such an analysis faces, which lies in capturing dative and accusative encoding of possessors in one language.

Larson (2014, p. 115-116) presents a dative shift analysis of English double object constructions in which the possessor and theme originate as the specifier and complement of a lexical head V dominated by two instances of the functional projection vP. In the sentence in (51a), the lower of the two, v_2 , checks the case of the theme *Fido* under the Agree relation. The possessor *Mary* moves to the specifier of vP₂, where its case feature is checked by under Agree by v_1 . The resulting configuration, illustrated in (51b), is somewhat similar to that posited here for the double accusative construction in Syrian Arabic in (45b), except that in the analysis proposed here, there is no trace of the possessor in the domain of the theme.



Suppose now that in the dative-accusative double object frame in Syrian Arabic, the possessor *Mary* receives inherent dative case in its base position, and that raising to a position local to v_1 is motivated by D-feature checking, as in the present analysis. The question this configuration raises is why the theme now receives primary accusative case from v_1 instead of the secondary case it receives from v_2 in (51b), which should still be available, since the configuration is the same as in (51b). That is, how does this analysis connect the case of the theme (primary or secondary)

accusative) to the case of the possessor (dative or primary accusative)?

Larson (2014, p. 122-125) addresses this issue in connection with the analysis of dativeaccusative structures in Japanese, and applies Harada and Larson's (2009) analysis to them. According to this analysis, vP_2 —the source of secondary accusative—is absent in dative-accusative constructions. The dative marker in Japanese, for its part, does not function as a case marker. Rather, it has the function of converting a DP into a constituent that is case-licensed by agreement with another DP in its syntactic domain rather than directly by a case-checking head. In dative-accusative constructions, the theme receives accusative case from v_1 and the dative possessor agrees with the accusative theme. Strictly speaking, then, the dative-marked DP bears accusative case, though it shows no morphological reflex of this. Setting aside suspicions about this lack of overt morphological agreement, this analysis can be extended to the situation in Syrian Arabic if the *Sața* 'give' type verbs contain the secondary case-assigning vP_2 while the *waffar* 'provide' type verbs do not. The dative marker, then, is inserted in the latter case as a last resort strategy, so that the possessor, for which otherwise no case licenser is available, can be licensed through agreement with the theme.

In the analysis I have presented above, the connection between the (un)availability of dative and the (un)availability of secondary accusative is captured by the fact that ApplP (corresponding to the lower vP_2 in Larson's analysis) is the source of both. The head Appl licenses dative in its inner specifier and secondary accusative in its outer specifier. But if it assigns dative, it does not assign accusative, nor vice versa. Suppose this complementarity has the status of a syntactic principle, stated in (52).

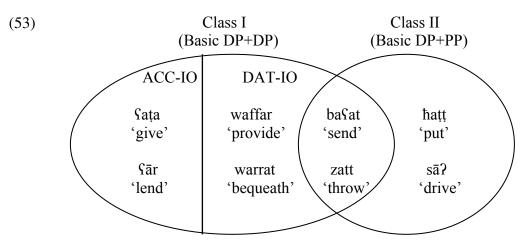
(52) A functional head may case-mark either its inner specifier or its outer specifier, but not both.

Then, if a head assigns case to its inner specifier, that case functions as an inherent 'base structure' case, since DPs are generated in inner specifier positions. If it assigns case to its outer specifier, that case functions as a structural case, since DPs raise to outer specifier positions. If (52) is true, then the presence of an inherent case will in general block a lower DP from locally receiving case; the lower DP will have to associate with a higher case position, if one is available. In double object constructions with dative possessors, that higher case assigner is v_1 in both this analysis and Larson's. Testing the full generality of (52) goes beyond the scope of this work, but I suggest it holds potential as a point of cross-constructional and cross-linguistic parametric variation in the distribution of inherent and structural case.

6. Conclusion

Syrian Arabic presents us with a picture of a language that has both an English-like double accusative DP+DP frame as well as a dative+accusative DP+DP frame of the kind seen in Japanese and many other languages. The morphological case of the first DP in the DP+DP frame is contingent on the choice of verb—accusative for *Sata* 'give' type verbs and dative for *waffar* 'provide' type verbs. Both verb types alternate with a DP+PP frame. However, this DP+PP frame is not the locative DP+PP frame seen with purely locative verbs like *hatt* 'put', but rather is an alternate syntactic realization of the DP+DP frame that preserves the possessive semantic relation between the two DPs. There are verbs, however, such as *baSat* 'send', that are structurally ambiguous between the double object structure of verbs like *waffar* 'provide' and the locative structure of verbs like *hatt* 'put'. The DP+PP frame of such verbs is ambiguous between the alternative syntactic realization of the possessive DP+DP frame and the basic locative DP+PP frame.

These verb classes and their interrelatedness are illustrated in the diagram in (53). The diagram illustrates two classes of double complement verbs: the double object verbs (Class I) and the locative verbs (Class II). The double object verbs include verbs whose indirect object is accusative (labelled ACC-IO, what I have been calling the *Sața* 'give' type verbs), including *Sața* 'give' and $S\bar{a}r$ 'lend', and verbs whose indirect object is dative (labelled DAT-IO, what I have been calling the *waffar* 'provide' type verbs), including *waffar* 'provide' and *warrat* 'bequeath'. All of the Class I verbs have a thematically synonymous DP+PP frame. The PP in this frame is different from the semantically locative PP displayed by locative (Class II) verbs like *hațt* 'put' or *sā*? 'drive'. Some verbs, though, are ambiguous between the double object verbs (Class I) and locative verbs (Class II), including *bafat* 'send' and *zatt* 'throw'. These verbs display two different DP+PP frames: one is the basic locative DP+PP frame and the other is derived from the basic possessive DP+DP frame.



On the analysis presented here, the dependency between the verb and the case of the indirect object arises because *Sata* type verbs replace a verbal head complex containing a [\pm ACC] Appl and *waffar* type verbs replace a verbal head complex containing a [\pm DAT] Appl. Dative and accusative are structurally distinguished on this account in that dative is assigned to the inner specifier of ApplP and accusative to the outer specifier. This distinction in turn also captures the 'inherent' character of dative case, namely the fact that a DP may not acquire dative case in the course of a derivation (because there is no raising to an inner specifier) and the fact that dative cannot be overridden in the course of a derivation (because it is assigned in the base position of the dative-bearing DP). Yet, both accusative and dative indirect objects may surface in a prepositional phrase when Appl has a 'minus' case specification, in which case the theme argument promotes to direct object. In this analysis, dative case is not inherent in the possessor theta role, but is nonetheless 'lexical' in the sense that it is assigned in a specific syntactic configuration (inner specifier of ApplP) and may be withheld by the assigning head. In this manner, this analysis reconciles lexical and structural properties of dative case in Syrian Arabic.

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