

# On the syntax of hearer-oriented clitics in a rural Jordanian variety

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This paper examines the categorial status of hearer-oriented clitics in a rural Jordanian Arabic variety and how they are derived in syntax. Using several diagnostics, it will be argued that such clitics, which must be attached to verbs, are inflectional affixes rather than pronominal elements. This sort of clitics will be analyzed as adjunct applicatives that are projected in a separate, adjunct plane before being incorporated into the primary plane/structure (Haddad 2014). It will be proposed that such applicatives enter the derivation with unvalued phi-features and therefore must establish an agreement relation with a hearer argument in order to value their features. For such agreement relation to proceed in the syntax, I assume, following Sigurðsson & Maling (2010), that a second person pronoun (a logophoric patient =  $\Lambda_p$ ) situated within the complementizer phrase (CP) is contextually controlled by the hearer argument from discourse, and that  $\Lambda_p$  serves as a goal that values the uninterpretable features of the probing applicative. Finally, it will be further argued that the hearer-oriented applicatives are exempt from binding, presumably because they are inflectional affixes, not pronouns.

KEYWORDS: Jordanian Arabic, hearer-oriented clitics, adjuncts, pragmatics, syntax.

## 1. Introduction

The study of bound pronominal clitics has received significant attention in the Arabic linguistics literature. Previous research has mostly concentrated on the syntax of pronominal clitics that are part of the verb's argument structure, such as bound subject/object pronouns affixed to verbs as well as those attached to the complementizer *?inna/?anna* 'that' (see Fassi Fehri 1993, 2012; Mohammad 1990, 2000; Roberts & Shlonsky 1996; Shlonsky 1997; Ouhalla 2001; Jarrah 2019, 2020; among others). Nevertheless, Arabic pronominal clitics that are external to the verb phrase (namely, applicative morphemes/dative clitics) are understudied. To my knowledge, only a small number of studies have investigated the non-core dative clitics in Arabic, particularly in Lebanese Arabic (Haddad 2014, 2016a, 2016b, 2018, 2019a, 2019b, 2020). Haddad, who heavily focused on the sociopragmatics as well as the syntactic derivation of different types of dative clitics (e.g. personal/attitude and hearer-oriented clitics), analyzed such clitics as dative pronouns. To illustrate, Haddad,

for example, argues that the second person dative *-lak* 'you' in (1) below (from Haddad 2014: 66) is a free pronoun coreferential with the hearer, namely that it pragmatically expresses the speaker's viewpoint that the event described may somehow affect the hearer.

- (1) *Zijaad biʔaḏḏi-lak kil waʔt-o neejim.*  
Ziyad spend-2.M.SG all time-his sleeping  
'Ziyad spends-[you] all his time sleeping.'

It must be noted here that hearer-oriented clitics are also found in Jordanian Arabic (henceforth, JA), as in (2).

- (2) *fuft-lak ʔifi yariib eljoom.*  
saw.1.SG-2.M.SG thing strange today  
'I saw-[you] a strange thing today.'

Pragmatically, the usage of *-lak* '2.M.SG' in (2) is possible in JA when the speaker presumes that the event highly interests the hearer, along similar lines with the Lebanese example in (1). In JA, however, such clitics are used among interlocutors only in informal contexts as a way to attract the hearer's attention and/or add excitement to the event described. Another pragmatic function of such clitics in JA, which Haddad has not discussed in Lebanese Arabic, is inclusiveness/exclusiveness; that is to say, the hearer-oriented clitics may be used as a restrictive marker to address a particular person from a group to the exclusion of the other group members. As far as the syntactic category is concerned, Haddad argues that dative clitics like *-lak* 'you' in (1) are free pronouns and cannot participate in any binding relation because they do not undergo A(argument)-movement, a point which I will return to shortly. In this paper, in contrast, I will instead argue that such dative clitics in JA are not pronouns but rather inflectional (agreement) affixes. I will also provide diagnostics in order to support this argument, relying on data from JA as well as Classical Arabic. Moreover, drawing on Pesetsky & Torrego (2007), Sigurðsson & Maling (2010, 2012), Haddad (2014, 2019a, 2020) and others, I will explicate how the agreement relation between the clitic and the hearer is achieved in syntax. I will show that the hearer to which the second person inflectional affix (the head of the applicative phrase; see Pykkänen 2008; Boneh & Nash 2011; Haddad 2014, 2016a) is contextually linked belongs to the domain of discourse. Furthermore, I will argue that the inflectional affix is an adjunct applicative initially located in a separate, adjunct plane but later integrated into the primary plane by way of late merge (Haddad 2014, 2019a, 2020), and that the applicative is endowed with uninterpretable features which it will value by establish-

ing an agreement relation with the logophoric patient (=  $\Lambda_p$ ) which is located in the left periphery (within the CP) but contextually controlled by the hearer from the discourse domain (Sigurðsson & Maling 2010).

This paper is organized as follows. Section 2 discusses the hearer-oriented clitics in JA in light of binding, paying attention to previous arguments made by Haddad (e.g. 2014, 2016a). Section 3 sheds light on the categorial status of such hearer-oriented clitics, arguing that they are inflectional rather than pronominal affixes, contra Haddad (2014, 2016a). Section 4 explains how the inflectional affixes under investigation are derived in syntax. Finally, Section 5 summarizes the main arguments.

## 2. *Setting the stage*

As alluded to earlier, hearer-oriented clitics in JA are commonly used in informal situations (e.g. expressing suspenseful events, targeting one or more hearers to the exclusion of others), especially in the rural dialect spoken in Inba, a village that is part of the Northern Al-Mazar District in the north-western part of Jordan.<sup>1</sup> Below are more illustrative examples.<sup>2</sup>

- (3) a. *smiſit-lak xabar kwajjis eljoom.*  
 heard.1.SG-2.M.SG news good today  
 ‘I heard-[you] good news today.’
- b. *rasamit-lak jaḡarah embaareh.*  
 drew.1.SG-2.M.SG tree yesterday  
 ‘I drew-[you] a tree yesterday.’
- c. *ſtareeti-lku sajjarah hilwah.*  
 bought.1.SG-2.M.PL car nice  
 ‘I bought-[you] a nice car.’
- d. *ſmilti-lku ʔakleh zaakjeh.*  
 made.1.SG-2.M.PL meal delicious  
 ‘I made-[you] a delicious meal.’

Putting aside the beneficiary reading for now, the second person clitics in (3a-d) are non-core arguments, namely that they are not part of the verb’s argument structure. There are three pieces of evidence supporting this point (Haddad 2016a: 46; see also Boneh & Nash 2011 for a similar view on non-core datives in French). First, none of the clitics in (3a-d) contributes to the truth condition of the sentence. This is confirmed by the fact that the sentences will still have the very same meaning if the clitics are deleted, as demonstrated below.

- (4) *smiſit xabar kwajjis elyoom.*  
 heard.1.SG news good today  
 ‘I heard good news today.’

Second, these clitics cannot be considered a beneficiary or a recipient, which is borne out by the following data.

- (5) a. *ftareeti-lku sajjarah la-ʔaxuu-j.*  
 bought.1.SG-2.M.PL car for-bother-my  
 'I bought-[you] a car for my brother.'
- b. *ʕmilti-lku ʔakleh zaakjeh la-ʕaaħb-i.*  
 made.1.SG-2.M.PL meal delicious for-friend-my  
 'I made-[you] a delicious meal for my friend.'
- c. *ʔaʕteeti-lku maʕaari la-l-walad.*  
 gave.1.SG-2.M.PL money for-the-boy  
 'I gave-[you] money to the boy.'

Clearly, the beneficiary arguments in (5) are those embedded in the prepositional phrases. Third, the personal clitics under study are not part of the verb's thematic argument structure since they can neither be negated nor questioned (see also Bosse, Bruening & Yamada 2012).

Another peculiar property distinguishing hearer-oriented clitics from other bound (subject/object) pronouns is that the former, unlike the latter, cannot participate in any binding relation. Compare, for instance, the examples in (6) with those in (7).

- (6) a. *ʕawwaft-ak<sub>1</sub> ħaalak<sub>1</sub>.*  
 made.exhaust.1.SG-you.M.SG yourself  
 'I made you<sub>1</sub> exhaust yourself<sub>1</sub>.'
- b. *garraft-ak<sub>1</sub> ħaalak<sub>1</sub>.*  
 made.hate.1.SG-you.M.SG yourself  
 'I made you<sub>1</sub> hate yourself<sub>1</sub>.'
- (7) a. \**ʕawwaft-lak<sub>1</sub> ħaalak<sub>1</sub>.*  
 made.exhaust.1.SG-2.M.SG yourself  
 \*\*'I made-[you<sub>1</sub>] exhaust yourself<sub>1</sub>.'
- b. \**garraft-lak<sub>1</sub> ħaalak<sub>1</sub>.*  
 made.hate.1.SG-2.M.SG yourself  
 \*\*'I made-[you<sub>1</sub>] hate yourself<sub>1</sub>.'

As can be seen above, the hearer-oriented clitics in (7), unlike the accusative direct object pronominal clitics in (6), cannot bind the reflexive anaphor, causing ungrammaticality (as indicated by the asterisks), even though both types of clitics are situated within the smallest tense phrase (TP). Haddad (2014, 2016a) analyzes such clitics as pronouns freed from the binding theory.<sup>3</sup> That is, Haddad adopts Hornstein's (2001) and Kayne's (2002) 'binding-by-movement' approach by suggesting that attitude dative clitics like those in (7) are base-generated as the head of ApplP (applicative phrase) and do not undergo any A(argument)-movement whatsoever; accordingly, they are free pronouns/arguments

and thus cannot participate in any binding relation, irrespective of whether they are the binder or the bindee. For this reason, sentences like (7), for example, are predicted to be ungrammatical, according to Haddad. This is so because the ‘binding-by-movement’ approach necessitates that binding result from A-movement; accordingly, since *-lak* ‘2.M.SG’ in (7) is not originally merged as the complement of the verb and since there is no A-movement involved, it cannot bind the reflexive anaphor even though both the antecedent and the anaphor are located in the same binding domain. To clarify Haddad’s point further, consider the following example in (8a) and its syntactic representation in (8b).

- (8) a. *el-walad<sub>i</sub> labbas haaluh<sub>i</sub>.*  
the-boy dressed himself  
‘The boy<sub>i</sub> dressed himself<sub>i</sub>.’  
b. [el-walad T [<sub>vp</sub> el-walad v-labbas [<sub>vp</sub> labbas el-walad]]]

Under Hornstein’s (2001: 166-167) view, the subject argument (*el-walad* ‘the boy’) of the reflexive verb in (8a) starts out in a complement position and then moves to the subject position for Case, as represented in (8b). In other words, *el-walad* receives two theta-roles: first, it is assigned Patient in its base-generated position as the complement of the verb, and then moves to the specifier position of the verb phrase (Spec-vP), where it gets assigned Agent, before it further moves to Spec-TP to check its nominative Case against that of ‘T’. Finally, in order for the derivation to converge in structures like (8b), the reflexive *haaluh* ‘himself’, in Hornstein’s sense, is inserted in the complement position to replace the R-expression *el-walad* ‘the boy’, where it finally checks its accusative Case against that of the verb, as in (8a).<sup>4</sup> Haddad (2014, 2016a) has adopted Hornstein’s account provided in (8b) in order to explain why dative clitics like those in (7) cannot be involved in any binding relation. It must be noted here, however, that deriving binding through movement may be justifiable in situations like (8), but does not seem to be generalizable to constructions like (7) above or (9) below in which *haalha* ‘herself’ is bound by the object *el-bint* ‘the girl’.

- (9) *Ramzi ḡahhak el-bint<sub>i</sub> ([<sub>pp</sub> Sala haalha<sub>i</sub>]).*  
Ramzi caused.to.laugh the-girl on herself  
‘Ramzi made the girl<sub>i</sub> laugh (at herself<sub>i</sub>).’

To start with, the construction in (8) considerably differs from those in (7) or (9) in that the former involves middle voice, but the latter two do not. In fact, it has been argued that middle voice, as in (8), is similar to passive voice in the sense that what appears to be the external argument

of the verb is originally merged as the internal argument (see, for example, Alexiadou & Doron 2012). For this reason, binding is argued to be derived through movement in constructions like (8). In active voice constructions like (7) or (9), in contrast, the external argument is base-generated in Spec-vP, but not in the complement position of the verb. More importantly, even if we adopt Grohmann's (2003) anti-locality approach to binding which allows for anaphoric dependencies in both inherent reflexives and non-inherent reflexives (active voice sentences), as just mentioned above, it is not clear how the binding-by-movement approach can capture cases like (9) wherein a complement DP binds an adjunct anaphor. More precisely, Haddad's binding-by-movement approach would force us to claim that *el-bint* 'the girl' in (9) is first merged as the object of the adjunct preposition and then undergoes movement to the complement position of the verb. Such a syntactic movement/operation is, however, not attested in natural languages and goes against the standard assumption that direct objects are generated in a complement position rather than in an adjunct position. In other words, Grohmann (2003) and Hornstein (2001) have specifically dealt with anaphoric dependencies of argument DPs, but the situation becomes tricky when it comes to the binding of an adjunct anaphor, as in (9), or its lack thereof, as in (7), since arguments and adjuncts are base-generated in different positions. Another argument, unrelated to binding, that Haddad (2014, 2019a, 2020) has made about the applicative clitics like the ones in (3) is that these pronouns enter the derivation with unvalued phi-features which they value by establishing a relation with a goal from the discourse domain (I will explain this in more detail later). Such an assumption, nonetheless, seems problematic in itself, simply because pronouns are generally considered to have valued phi-features. In the next section below, I will instead offer an alternative account which capitalizes on the idea that such clitics are inflectional affixes rather than free pronouns, contra Haddad (2014, 2016a, 2019a, 2020). This will allow us to capture the non-applicability of binding principles to constructions with hearer-oriented/non-core argument clitics like (7) above. In addition, it will provide more legibility for Haddad's idea that those types of clitics act as probes to value their phi-features, which I will adopt and pursue in Section 4.

### 3. The categorial status of hearer-oriented clitics in JA

Before shedding light on the categorial status of the hearer-oriented clitics in question, something needs to be said about their morphological structure. Up to this point, I have followed Haddad's (2014, 2016a, 2018, 2019a, 2020) hypothesis by analyzing those clitics (e.g. *-lak*

‘2.M.SG’) as one morpheme. However, another possible, alternative hypothesis that might be entertained here, as was drawn to my attention by a reviewer, is to decompose such clitics into the applicative morpheme/preposition *l-* ‘to/for’ and the suffixal clitic itself (e.g. *-ak* ‘2.M.SG’). This analysis, as pointed out by the reviewer, is corroborated by the observation that the corresponding accusative clitic and beneficiary/recipient clitic may appear without the preposition *l-* ‘to/for’ in JA, as shown in (10-11), which were provided by the reviewer.

- (10) *Farah*    *ʃaafat-ak*    *fi-l-maʃam.*  
Farah    saw-you    in-the-restaurant  
‘Farah saw you in the restaurant.’
- (11) *Ahmad*    *ʔaʃta-ak*    *sajjaarah.*  
Ahmed    gave-you    car  
‘Ahmed gave you a car.’

When the direct object follows the indirect object, as in (11), no preposition is required. Nevertheless, if the direct object precedes the indirect/recipient object, the preposition *l-* is obligatory, as in (12), also provided by the reviewer.

- (12) *Ahmad*    *ʔaʃta*    *sajjaarah*    *\*(l)-ak/EEK.*  
Ahmed    gave    car    to-you  
‘Ahmed gave a car to you.’

Furthermore, the preposition *-l/la*, as mentioned earlier (see (5) above), can also increase the verb’s valency. Yet, perhaps, a third hypothesis could be that the clitic at hand could have started out as two morphemes but became fused together in time, forming one entity. While all the above three hypotheses seem plausible, at this point there appears to be no conclusive/direct evidence on the hearer-oriented clitic per se, favoring one hypothesis over the others, as this requires a diachronic study of this phenomenon, which lies beyond the scope of this paper. I will therefore leave it open whether those clitics consist of one morpheme or two (the applicative *l-* and the clitic) or whether they were originally bimorphemic but became monomorphemic over time. For simplicity’s sake, and following Haddad (2014, 2016a, 2018, 2019a, 2020) as well as other previous authors (e.g. Boneh & Nash 2011, Horn 2008) who treat similar (non-core) applicatives in other languages as one morpheme (see the examples in (16-17) below) despite the possibility that such applicatives may be comprised of two morphemes, I will consistently represent such clitics as one morpheme, but I will refer to their (decomposable) morphological structure during the discussion whenever relevant, particularly in this section.

Let us now consider the categorial status of the hearer-oriented clitics under consideration. There are diagnostics supporting the argument that the hearer-oriented clitics in question are inflectional agreement affixes rather than pronominal clitics. First, inflectional affixes typically strictly select their host, but pronominal clitics have more flexibility in this respect (Zwicky & Pullum 1983, Fuß 2005). If we compare the hearer-oriented clitics at hand with other pronominal clitics in JA, we find that the former (if treated as one morpheme) can only cliticize to verbs; alternatively, if the clitic is bimorphemic, then the second morpheme strictly cliticizes to the applicative morpheme *l-*, and then the bimorphemic clitic as a whole must cliticize to verbs. In any case, no element other than the verb and *l-* is capable of hosting the clitic, as exemplified in (13).

- (13) a. *tʃarraǧit-lak*                      *ʕala film*                      *mumtaaz.*  
 watched.1.SG-2.M.SG            on    movie                      excellent  
 'I watched-[you] an excellent movie.'
- b. \**tʃarraǧit-ʔil-ak*                      *ʕala film*                      *mumtaaz.*  
 watched.1.SG-to-2.M.SG        on    movie                      excellent  
 Intended: 'I watched-[you] an excellent movie.'
- c. \**tʃarraǧit*                              *ʕala film-lak*                      *mumtaaz.*  
 watched.1.SG                      on    movie-2.M.SG            excellent  
 \*'I watched an excellent movie-[you].'

Note that (13a) is well-formed because the host of the clitic is either the verb or *-l-* that is in turn hosted by the verb, but (13b-c) are ill-formed since the host is a preposition other than *-l-* in the former but a noun in the latter, respectively. Bound pronouns, on the other hand, can freely cliticize to verbs, (different) prepositions, nouns, or even quantifiers, as demonstrated by the data in (14).

- (14) a. *rasamt-ha.*  
 drew.1.SG-her  
 'I drew her.'
- b. *tʃarraǧit*                      *ʕalee-ha.*  
 watched.1.SG    on-her  
 'I watched her.'
- c. *tʃarraǧit*                      *ʕala*                      *film-ha.*  
 watched.1.SG    on                      movie-her  
 'I watched her movie.'
- d. *ʃuft*                              *l-banaat*                      *kull-hen.*  
 saw.1.SG                      the-girls                      all-them.F  
 'I saw all the girls.'

In fact, hearer-oriented clitics like the one in (13), unlike regular bound pronouns like those in (14), can even attach to copulas, as in (15), which is only a property of inflectional affixes in Arabic like the

subject agreement inflection/marker, such as the first person singular marker *-t-* also given in (15).

- (15) *kun-t-lak*                      *bi-l-mool*      *embaareh.*  
 COP.PAST-1.SG-2.M.SG    in-the-mall    yesterday  
 'I was-[you] at the mall yesterday.'

The restriction imposed by *-lak* '2.M.SG' on the type of the host it can attach to, whether affixed to verbs as in (13) or to copulas as in (15), suggests that it is an inflectional affix. At this point, one could alternatively argue, as suggested by a reviewer, that if *l-* hosting the clitic *-ak* '2.M.SG' is an applicative morpheme, as discussed earlier, then it becomes obvious why these clitics are restricted in their distribution as verbal suffixes. Thus, the applicative morpheme licensing the clitics can only be attached to verbs because it is a verbal suffix. While this argument seems appealing, cross-linguistic evidence shows that applicatives are not necessarily verbal suffixes but can rather be independent morphemes, as demonstrated below.

- (16) French  
*La tête lui tourne.*  
 the head 3.SG.DAT turns  
 'His head spins (on her/him).' (Boneh & Nash 2011: 60)

- (17) German  
*Helf mir mal deinem Vater in der Küche.*  
 help me.DAT a.minute your father in the kitchen  
 'Go help your father in the kitchen for a minute for me.' (Horn 2008: 186)

Further evidence against the assumption that applicatives are necessarily verbal affixes comes from the fact that the equivalent applicatives in Classical/Qur'anic Arabic must be attached only to distal demonstrative pronouns, as we will see toward the end of this section. The situation in JA, however, is rather different since the applicatives must obligatorily be suffixed to the verb. Therefore, such facts about both Jordanian and Classical Arabic support the argument that applicatives/hearer-oriented clitics in these varieties strictly select their respective hosts, which is in turn a property of inflectional affixes.

Second, arbitrary gaps are more associated with inflectional affixes than with clitics (Zwicky & Pullum 1983, Rizzi 1986, Fuß 2005). With that being said, the hearer-oriented clitics under study, for example, may appear in indicative clauses but not in subjunctive or interrogative clauses, as evidenced by the following examples.<sup>5</sup>

- (18) a. *fufit-lak*                      *?asad.*  
 saw.1.SG-2.M.SG lion  
 'I saw-[you] a lion.'
- b. *\*baddi*                      *?afuuf-lak*                      *?asad.*  
 want.1.SG                      1.SG.see-2.M.SG lion  
 Intended: 'I want to see-[you] a lion.'
- c. *\*leef*                      *el-walad*                      *?aʕtaa-lak*                      *el-bint*                      *maʕaari?*<sup>6</sup>  
 why                      the-boy                      gave.3.SG-2.M.SG                      the-girl                      money  
 Intended: 'Why did the boy give-[you] the girl money?'

Additionally, such clitics cannot be affixed to future verbs, as exemplified in (19).

- (19) *\*ha-fuuf-lak*                      *?asad.*  
 FUT-1.SG.see-2.M.SG                      lion  
 Intended: 'I will see-[you] a lion.'

Crucially, no such arbitrary gaps are found with pronominal clitics in JA since they can surface in any type of clause without any restrictions, as shown in (20) below.

- (20) a. *fufit-ha*                      /                      *ba-fuuf-ha*                      /                      *ħa-fuuf-ha.*  
 saw.1.SG-her /                      PRS-see.1.SG-her /                      FUT-see.1.SG-her  
 'I saw her/see her/will see her.'
- b. *baddi*                      *?afuuf-ak.*  
 want.1.SG                      1.SG.see-you  
 'I want to see you.'
- c. *leef*                      *el-walad*                                           *?aʕtaa-hum*                      *maʕaari?*  
 why                      the-boy                                           gave.3.SG-them                      money  
 'Why did the boy give them money?'

Third, if bound object pronouns appear in applicative constructions, they must follow, but must not precede, the hearer-oriented clitic, as demonstrated in (21-22).<sup>7</sup>

- (21) a. *smiʕit-lak-jaaha*                      *tyanni*                      *elyoom.*  
 heard.1.SG-2.M.SG-her                      sing                      today  
 'I heard-[you] her sing today.'
- b. *fufit-lak-jaaha*                      *timfi*                      *embaareħ.*  
 drew.1.SG-2.M.SG-her                      walk                      yesterday  
 'I saw-[you] her walk yesterday.'
- (22) a. *\*smiʕit-ha-lak*                      *tyanni*                      *elyoom.*  
 heard.1.SG-her-2.M.SG                      sing                      today  
 \*'I heard her-[you] sing today.'
- b. *\*fufit-ha-lak*                      *timfi*                      *embaareħ.*  
 saw.1.SG-her-2.M.SG                      walk                      yesterday  
 \*'I saw her-[you] walk yesterday.'

It is well known that inflectional morphology in natural languages cliticizes to verbs before pronominal clitics, i.e. the former is closer to the verb stem than the latter. Consider (23) below.

- (23) a. *hum simʕ-uu-ha.*  
 they heard-3.M.PL-her  
 ‘They heard her.’  
 b. \**hum simʕ-ha-uu.*  
 they heard-her-3.M.PL  
 Intended: ‘They heard her.’

Setting aside level-one/non-concatenative morphology which comprises derivational morphemes (the root and pattern, e.g. *simʕ* ‘heard’ in (23)), level-two/concatenative morphology which consists of inflectional affixes must be attached to the stem/word – the output of level-one morphology (Watson 2002). In the case of (23a), the first person plural inflectional morpheme *-uu-* must also linearly appear before the direct object clitic, on a par with the hearer-oriented affixes in (21). If the order is reversed, as in (23b), then ill-formedness immediately arises, as is also the case in (22). Therefore, the fact that the hearer-oriented clitics must precede any other pronominal elements, as shown in (21-22), strongly suggests that they are inflectional morphemes. This is of course motivated by the fact that the linear order of two bound pronouns suffixed to a verb can be changed without affecting the grammaticality of the sentence, as in (24).

- (24) a. *hum ʔaʕʔuu-k-jaaha.*  
 they gave-you-her  
 ‘They gave her to you’ (literally, ‘They gave you her.’)  
 b. *hum ʔaʕʔuu-ha-lak.*  
 they gave-her-you  
 ‘They gave her to you.’

The verb *ʔaʕʔuu* ‘gave’ in (24) is a ditransitive predicate taking two pronominal object arguments which can be reordered with respect to one another (see Zwicky & Pullum 1983).<sup>8</sup>

Let us now go back to the point raised in note 3. I mentioned above that the same clitic, as a reviewer pointed out, could induce two readings. To illustrate further, see the following examples.

- (25) a. *ʕtareet-lak sajjarah hilwah.* (*lak* = beneficiary)  
 bought.1.SG-you car nice  
 ‘I bought you a nice car.’  
 b. *ʕtareet-lak sajjarah hilwah.* (*lak* = hearer-oriented clitic)  
 bought.1.SG-2.M.SG car nice  
 ‘I bought-[you] a nice car.’

Now, we need to investigate whether the two clitics in (25a–b), which have a syncretic form, should both be classified as inflectional affixes, and whether they display the same binding behavior. To start with, I am assuming that the beneficiary clitics are pronominal elements, but the non-hearer clitics are inflectional affixes. Evidence substantiating this assumption comes from the criteria we just discussed above to distinguish pronominal from inflectional clitics. First, beneficiary clitics, unlike their hearer-oriented counterparts, may optionally cliticize to verbs, as exemplified in (26).

- (26) a. *ftareet-lak sajjarah hilwah.*  
 bought.1.SG-you car nice  
 'I bought you a nice car.'  
 b. *ftareet sajjarah hilwah lak.*  
 bought.1.SG car nice you  
 'I bought a nice car for you.'

Another reason is that beneficiary clitics do not exhibit any arbitrary gaps; i.e. they can occur in indicative, subjunctive, and interrogative clauses in any timeframe, as demonstrated below.

- (27) a. *ftareet-lak / ha-jiftarii-lak sajjarah hilwah.*  
 bought.1.SG-you / FUT-buy.1.SG-you car nice  
 'I bought/will buy a nice car for you.'  
 b. *baddi ?astarii-lak sajjarah hilwah.*  
 want.1.SG 1.SG.buy-you car nice  
 'I want to buy a nice car for you.'  
 c. *leef ?abuu-k ?iftaraa-lak sajjarah hilwah?*  
 why father-your bought-you car nice  
 'Why did your father buy a nice car for you?'

Yet another reason is that beneficiary clitics may have a free linear order in relation to other bound pronominals, as seen in (28).

- (28) a. *ftaraa-lak-jaaha.*  
 bought.3.SG-you-it  
 'He bought it for you.'  
 b. *ftaraa-ha-lak.*  
 bought.3.SG-it-you  
 'He bought it for you.'

Finally, beneficiary clitics cannot co-occur with another argument that has the same theta role, as (29) shows.

- (29) \**ftareet-lak sajjarah hilwah la-?axuu-j.*  
 bought.1.SG-you car nice for-brother-my  
 \*'I bought you a nice car for my brother.'

The forgoing discussion manifestly shows that beneficiary and hearer-oriented clitics display distinct behaviors. That is, given the disparities between the two types of clitics, it seems plausible to propose that the beneficiary clitics are pronominals with already valued phi-features, while their hearer-oriented counterparts are inflectional affixes whose phi-features need to be valued via agreement with a pronoun from discourse, the hearer in our case (I will elaborate on this point in Section 4). Lastly, if we consider the binding behaviors of the two types of clitics, we will indeed see that beneficiary and hearer-oriented clitics (which have a syncretic form) exhibit asymmetrical behaviors, as evidenced by the following sentences.

- (30) a. *ʃtareet-lak<sub>i</sub> ktaab la-taṭwiir haalak<sub>i</sub>* (*lak* = beneficiary)  
 bought.1.SG-you book for-improvement yourself  
 ‘I bought you a book for the improvement of yourself.’  
 b. \**ʃtareet-lak<sub>i</sub> ktaab la-taṭwiir haalak<sub>i</sub>* (*lak* = hearer-oriented clitic)  
 bought.1.SG-2.M.SG book for-improvement yourself  
 \*‘I bought-[you] a book for the improvement of yourself.’

Notice that the binding of the reflexive by the clitic is permitted in (30a) but leads to ill-formedness in (30b). Obviously, the construct-state DP *taṭwiir haalak* ‘improvement of yourself’ does not appear to contain a subject PRO like the one suggested by Chomsky (1986: 167) in his “PRO in NP” analysis. This is so because if PRO exists in (30a-b), we will predict both constructions to be grammatical, given that PRO would bind the reflexive in both cases. This is, however, contrary to the facts (for a similar view against the presence of PRO in such DPs, see Al-Raba’a 2017, 2021; Al-Raba’a & Kitagawa 2022).

It has become clear now that the hearer-oriented clitics in question display peculiar behaviors, which make such clitics pattern with inflectional affixes. In fact, these types of clitics, as previously alluded to, are not only found in JA but also in Classical Arabic (henceforth, CA). They have been specifically used in many verses of the Qur’an, as illustrated in (31). The English translations of all the verses in (31a-e) are adapted from Abdel Haleem (2005: 191, 192, 95, 305, 205-206), respectively. Abdel Haleem has not included the non-core second person clitics in his translation since they do not semantically contribute to the truth value of the sentences, but I included them between square brackets.<sup>9</sup>

- (31) a. *kaḏaalik-a qaala rabbu-ka.*  
 this-2.M.SG said Lord-your.M.SG  
 ‘This-[you] is what your Lord has said.’ (The Qur’an, Chapter 19, verse 8-9, p. 305)  
 b. *kaḏaalik-i qaala rabbu-ki.*  
 this-2.F.SG said Lord-your.F.SG  
 ‘This-[you] is what your Lord has said.’ (The Qur’an, Chapter 19, verse 20-21, p. 306)

- c. *ʔalam ʔanha-kumaa ʃan tilku-maa ʃ-ʃaḡarati?*  
 Q forbade.1.SG-you.DL about that-2.DL the-tree  
 'Did I not forbid you from that-[you] tree?' (The Qur'an, Chapter 7, verse 21-22, p. 152)
- d. *ðaalik-um Allahu rabbu-kum.*  
 this-2.PL God Lord-your.PL  
 'Such/this-[you] is God your Lord.' (The Qur'an, Chapter 40, verse 61-62, p. 474)
- e. *wa-ʔanaa ʃalaa ðalik-um mina ʃ-ʃaahideen.*  
 and-I on that-2.PL from the-witnesses  
 'And I am a witness to this-[you].' (The Qur'an, Chapter 21, verse 55-56, p. 326)

The Almighty God inclusively addressed Zachariah and Maryam (peace be upon them) in (31a-b), respectively, which explains why the second person singular clitic is masculine in (31a) but feminine in (31b). On the other hand, the Almighty God has addressed Adam and Eve (peace be upon them) in (31c) but all human beings in (31d), which justifies the use of the second person dual and plural clitics, respectively. Finally, Abraham (peace be upon him) has specifically addressed his own people in (31e), and hence the use of the second person plural clitic. Interestingly, the hearer-oriented clitics, symbolizing exclusiveness or the importance of the topic to the addressees, are attached to singular demonstratives in CA but to verbs in JA. In both varieties, however, the hearer-oriented clitics strictly select their hosts. There is also strong reason to believe that the hearer-oriented clitics in (31a-e), which are seemingly pronominal, are inflectional. First, they leave gaps in the sense that they only cliticize to distal demonstratives. This assumption is based on the fact that there are no examples in the Qur'an in which such clitics are suffixed to proximal demonstratives like *haaḏaa* 'this.M.SG' or *haaḏihii* 'this.F.SG'.<sup>10</sup> Second, actual/true pronominal clitics in CA or Standard Arabic cannot be attached to demonstratives at all. This is borne out by the ungrammaticality of the following constructions.

- (32) a. *\*tilka-hum sajjarat-ii.*  
 this-them.M car-my  
 \*'This them is my car.'
- b. *\*Ramzi juhibbu tilka-ha s-sajjaarah.*  
 Ramzi like that-her the-car  
 \*'Ramzi likes that her car.'

The current assumption about the inflectional status of the hearer-oriented clitics in both JA and CA is in essence similar to Jarrah's (2019, 2020) proposal that the Arabic pronominal clitics attached to the complementizer *ʔinn(a)* are actually inflectional affixes. Consider the JA examples below.

- (33) a. *ʔif-fab*            *ʔiʕtaraf*    *ʔinn-ha*        *ʔil-bint*        *zarabat*    *ʔil-walad*.  
the-young.man    confessed    COMP-3.F.SG    the-girl        hit            the-boy  
‘The young man confessed that the girl hit the boy.’ (Jarrah 2019: 97)
- b. *ʔabuu-i*            *fakkar*        *ʔinn-ha*        *ʔis-sijjaarrah*    *ʔiz-zulum saragu-ha*.  
father-my            believed    COMP-3.F.SG    the-car        the-men stole-it  
‘My father believed that the car, the men stole it.’ (Jarrah 2020: 158)

Jarrah has indicated that if the clitic *-ha* in (33a-b), which are respectively coreferential with the immediately following R-expressions *ʔil-bint* ‘the girl’ and *ʔis-sijjaarrah* ‘the car’, are pronominal, this would then induce ungrammaticality due to the violation of Principle C of the binding theory since the R-expressions would be bound by the pronominal clitics. This is however contrary to fact as both of (33a-b) are grammatical. The major distinction, however, between Jarrah’s proposal and the current study is that Jarrah seems to assume that the same pronominal elements are classified as inflectional affixes only when suffixed to *ʔinn(a)*, as in (33), but as pronominal clitics elsewhere. The current study, in contrast, invariably treats the hearer-oriented clitics, whether in JA (as in (3)) or CA (as in (31)), as inflectional affixes, solely serving a pragmatic function, as previously discussed. What is important to us here is that the hearer-oriented clitics at hand and the clitics in (33) behave alike in the sense that they cannot be involved in any binding relations.

Finally yet importantly, it may be hypothesized that the hearer-oriented clitics could perhaps have started as independent pronouns but then have undergone weakening/cliticization before becoming inflectional affixes. This comports with Fuß’s (2005: 4) grammaticalization path which universally proceeds as follows (see also Lehmann 1988; Corbett 1995; Ariel 1998, 2000; among others):

- (34) Independent pronoun → weak pronoun → clitic pronoun → affixal (agglutinative)  
agreement marker → fused agreement marker → ∅

Exploring the diachronic aspects of such clitics falls outside the scope of this paper, so I will leave it for future research. The question arising here is: if analyzing the hearer-oriented clitics as inflectional affixes/agreement markers is on the right track, then how is their agreement derived in syntax? This will be the topic of the next section below.

#### 4. The syntactic derivation of hearer-oriented clitics in JA

We have established above that the hearer-oriented clitics in JA show properties characteristic of inflectional affixes. Moreover, such affixes do

not change the truth value of the sentence; they are thus discourse markers or pragmatic elements somehow incorporated into the syntactic structure of the sentence. In fact, it has been argued that extra-grammatical conditions should not be divorced from grammatical ones (see, for example, Ariel 2001 and the references therein). The incorporation of pragmatic conditions into the syntactic theory has led some linguists (e.g. Reinhart 1983, Levinson 1991, Huang 1994) to account for some binding phenomena in light of pragmatic principles. According to Ariel (2001), first and second person pronouns are highly accessible elements that are readily recoverable from context, which explains why some languages permit pronoun-dropping, such as dropping the second person pronoun in imperative constructions. Building on Ariel's (2001) argument about the division of labor between pragmatics and syntax, Sigurðsson & Maling (2010, 2012) contend that argument/pronoun drop may be governed not only by formal principles, as is the case with subject drop in Italian, but also by external factors like topic- and antecedent-linking which fall under context-linking, as in constructions involving object drop in Chinese, Japanese, and Hungarian. Context-linking also includes cases in which the first or second person pronoun is linked to the speaker or hearer, respectively. The speaker feature is described as the logophoric agent ( $\Lambda_A$ ) but the hearer feature as the logophoric patient ( $\Lambda_P$ ) (Sigurðsson 2004a, 2004b; Sigurðsson & Maling 2010, 2012). Given that, Sigurðsson & Maling propose that the domain of the complementizer phrase (CP) does not only involve a topic (Top) feature, as suggested by Rizzi (1997), but also speaker/hearer-oriented features, as sketched in (35), from Sigurðsson & Maling (2010: 61, 2012: 371).

(35) [<sub>CP</sub> ... Top ...  $\Lambda_A$  ...  $\Lambda_P$  ... [<sub>TP</sub> ...

Top,  $\Lambda_A$ , and  $\Lambda_P$ , according to Sigurðsson & Maling, are heads inside the CP domain in the left periphery. This context-linking model has been further generalized as follows:

- (36) a. Context-linking features of the C-domain include at least  $\Lambda_A$ ,  $\Lambda_P$  and Top.  
b. Any referential pronoun, overt or silent, positively matches a context-linking C-feature. (Sigurðsson & Maling 2010: 61)

Therefore, the features within the CP domain participate in two types of matching relations, the first relation with elements inside the clause, whether they are spelled out or not, and the second one with topics external to the clause or with the interlocutors involved in speech events. Such relations of context-linking are schematized as in (37), from Sigurðsson & Maling (2010: 61).

(37) Context  $\leftrightarrow$  C-features  $\leftrightarrow$  TP-internal elements

Taking Sigurðsson & Maling's approach as a point of departure, we could establish an agreement (Agree/Agr) relation between the discourse-linked hearer-oriented affixes at hand and the logophoric patient contextually/discoursally controlled by the hearer of the speech event. Such Agree relation is based on the fact that the affixes in question must agree with the hearer in gender and number, as demonstrated in (38).

- (38) a. *smiʃit-lak*                      *xabar*    *kwajjis*. (Hearer: Second person masculine singular)  
           heard.1.SG-2.M.SG    news    good  
           'I heard-[you] good news.'
- b. *smiʃit-lik*                      *xabar*    *kwajjis*. (Hearer: Second person feminine singular)  
           heard.1.SG-2.F.SG    news    good  
           'I heard-[you] good news.'
- c. *smiʃiti-lku*                      *xabar*    *kwajjis*. (Hearer: Second person masculine plural)  
           heard.1.SG-2.M.PL    news    good  
           'I heard-[you] good news.'
- d. *smiʃiti-lken*                      *xabar*    *kwajjis*. (Hearer: Second person feminine plural)  
           heard.1.SG-2.F.PL    news    good  
           'I heard-[you] good news.'

Any Agree mismatches between the affix and the hearer cause the derivation to crash, as shown below.

- (39) \**smiʃiti-lken*                      *xabar*    *kwajjis*. (Hearer: Second person masculine singular)  
           heard.1.SG-2.F.PL    news    good  
           'I heard-[you] good news.'

The questions arising here are: how can such an Agree relation proceed and how can it be incorporated into the syntactic structure of such constructions? To start with, following Pesetsky & Torrego's (2007) agreement model (see also Frampton & Gutmann 2006), the Agree relation in (38) is then subject to the following criteria of feature-sharing:

- (40) a. An unvalued feature F (*a probe*) on a head H at syntactic location  $\alpha$  ( $F_\alpha$ ) scans its c-command domain for another instance of F (*a goal*) at location  $\beta$  ( $F_\beta$ ) with which to agree.  
       b. Replace  $F_\alpha$  with  $F_\beta$ , so that the same feature is present in both locations.  
       (Pesetsky & Torrego 2007: 268)

The second person affixes in (38a-d) link the hearer to the entire event; so in each of the sentences in (38a-d) the speaker assumes that the event (having heard good news) as a whole interests the hearer. But before proceeding with the feature-sharing analysis, we need to look into the structural hierarchy of the applicatives under study in relation to other elements. Some linguists assume that heads estab-

lishing a linking relation between individuals and events are high applicative heads introduced between TP and vP (see Webelhuth & Dannenberg 2006, Horn 2008, Pylkkänen 2008, Boneh & Nash 2011, Haddad 2016a). However, Haddad (2014), suggests that such applicative heads in Lebanese Arabic are rather vP adjuncts belonging to a separate plane, along the lines of Chomsky's (2004) approach to adjuncts (see also Chametzky 2000, 2003; Uriagereka 2001, 2003; Irurtzun & Gallego 2007; Gallego 2010). In order to support the adjuncthood status of those applicatives, Haddad (2014: 93-94) provides five arguments, which I am also adopting here for the hearer-oriented affixes in JA. These arguments can be summarized as follows. First, the affixes under study are applicatives that are not included in the theta-grid of the predicate, as previously mentioned. Second, they solely serve a pragmatic function, as discussed earlier, which means that they behave as if they "are not there apart from pragmatic interpretation" (Haddad 2014: 93), similar to Chomsky's (2004: 117) view that adjuncts behave as if they are not "there apart from semantic interpretation." Third, they can cliticize to any type of verb (e.g. statives, unaccusatives, unergatives, etc.) without any restrictions, as indicated in (41).

- (41) a. *ʕrif-t-lak*                      *ʔiʃi*                      *muhiimm.*  
knew.1.SG-2.M.SG    thing                      interesting  
'I knew-[you] an interesting thing.'
- b. *wʕelt-lak*                      *el-madiineh*    *bi-l-leel.*  
knew.1.SG-2.M.SG    the-city                      at-the-night  
'I arrived-[you] to the city at night.'
- c. *majeet-lak*                      *mjaal.*  
walked.1.SG-2.M.SG    miles  
'I walked-[you] for miles.'

Fourth, more than one applicative can occur in the structure, which is a property of adjuncts. However, given that such applicatives only cliticize to verbs, they are thus only restricted by the number of verbs in a given clause. For instance, the following construction contains an auxiliary and a main verb, and can therefore have up to two applicatives.

- (42) a. *kunt*                                      *ʔatmafaa-lak*                      *bi-f-faariʕ.*  
AUX.PAST.1.SG                      walk.1.SG-2.M.SG                      in-the-street  
'I was walking-[you] on the street.'
- b. *kunt-lak*                                      *ʔatmafaa-lak*                      *bi-f-faariʕ.*  
AUX.PAST.1.SG-2.M.SG    walk.1.SG-2.M.SG                      in-the-street  
'I was-[you] walking-[you] on the street.'

Finally, another piece of evidence corroborating the adjuncthood of the applicatives at hand stems from ellipsis. On the one hand, arguments in elliptical clauses are subject to the identity condition (see, for example, Fiengo & May 1994, Huang 2000, Chung 2013), which means that if the target of ellipsis is a transitive VP, for instance, then the elided part must be both the verb and its complement, as evidenced by the Speaker B's responses to Speaker A below.

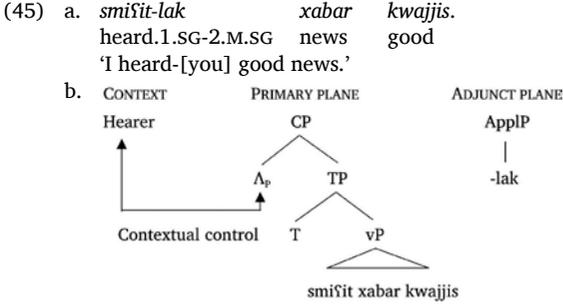
- (43) Speaker A:  
*ʔaʕteet-uh maʕaari.*  
 gave.1.SG-him money  
 'I gave him money.'  
 Speaker B:  
 a. *w-ʔana (ʔaʕteet-uh — maʕaari) kamaan.*  
 and-I gave.1.SG-him — money too  
 'And I (gave him money) too.'  
 b. *\*w-ʔana (ʔaʕteet — maʕaari) kamaan.*  
 and-I gave.1.SG — money too  
 '\*And I (gave money) too.'

On the contrary, the ellipsis of our adjunct applicatives is not constrained by the identity condition, as demonstrated in (44).

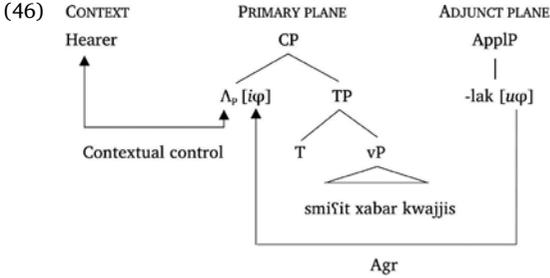
- (44) Speaker A:  
*ʕrift-lak sirr xaʕtir.*  
 knew.1.SG-2.M.SG secret dangerous  
 'I knew-[you] a dangerous secret.'  
 Speaker B:  
 a. *w-ʔana (ʕrift-lak — sirr — xaʕtir) kamaan.*  
 and-I knew.1.SG-2.M.SG — secret — dangerous too  
 'And I (knew-[you] a dangerous secret) too.'  
 b. *w-ʔana (ʕrift — sirr — xaʕtir) kamaan.*  
 and-I knew.1.SG — secret — dangerous too  
 'And I (knew a dangerous secret) too.'

Notice that the hearer-oriented applicative *-lak* '2.M.SG' in (44) may, but need not, be part of Speaker B's elided responses. This fact, as pointed out by Haddad (2014), suggests that such applicatives are placed in a separate plane, because if they indeed occupy the primary plane like the complement, then Speaker B's (b) response should not be possible; this is, nonetheless, contrary to fact.

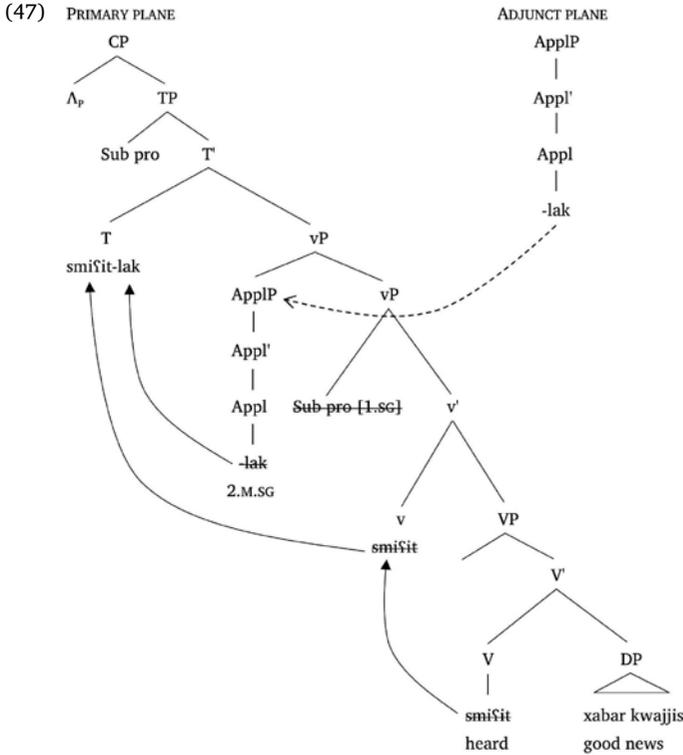
Given the above discussion, I, following Haddad (2014: 95), submit that the hearer-oriented applicatives are adjuncts. Accordingly, the sentence in (45a), for instance, can be structurally represented as (45b).



Notice that the  $\Lambda_p$  (the logophoric patient = the hearer feature) in the above schema is situated within CP and contextually linked to the hearer, along the lines of Sigurðsson & Maling’s (2010) representations given in (35-37) above (see also Haddad 2014: 97). Moreover, the ApplP (applicative phrase) initially occupies a separate, adjunct plane (Haddad 2014: 95; see also Chametzky 2000, 2003; Uriagereka 2001, 2003; Chomsky 2004; Irurtzun & Gallego 2007; Gallego 2010). Given that *-lak* ‘2.M.SG’ is assumed to be an inflectional affix under the current analysis, it acts as a probe in order to value its uninterpretable phi-features ( $u\phi$ ); it accordingly establishes an Agree relation with the  $\Lambda_p$  which has interpretable instances of the same phi-features ( $i\phi$ ). This probe-goal relation is schematized below.



After the phi-features are valued via agreement, the primary and adjunct planes collapse, resulting in the integration of the Appl into the syntactic structure. This operation can be sketched as follows:



Following Haddad (2014), I argue that *-lak* ‘-2.M.SG’ in (47) undergoes late merge in order to be incorporated into the vP. Such merge presumably takes place in the last minute, after the building of the syntactic structure is complete but before Spell-Out (Wurmbrand 2014: 21; see also Stepanov 2001, Chomsky 2004, Boeckx 2008). Subsequently, the applicative *-lak* ‘-2.M.SG’ and the verb *smiʃit* ‘heard’ move to T, where the former cliticizes to the latter, as indicated in (47).<sup>11</sup> While the above structure building in (45-47) is modeled on Haddad’s (2014) account of the syntactic derivation of applicatives in Lebanese Arabic, the two analyses differ in two main aspects. The first aspect is that Haddad treats such applicatives as pronouns, but I assume that hearer-oriented applicatives are inflectional affixes in JA, as has previously been argued for; this inflectional status of such applicatives also provides more legibility for the probe-goal relation indicated above, since inflectional elements, unlike pronominal ones which already carry valued phi-features, enter the computation/derivation with unvalued phi-features. The second one concerns the agreement relation in (46); on the one hand, Haddad, appeal-

ing to Branigan's (2011) provocation model of syntactic movement, argues that the applicative is a provocative probe and thus triggers movement of the hearer argument to its specifier position (Spec-AppP), which allows the Appl head to value its features by entering a Spec-head agreement relation with its goal (the hearer), after which both the Appl and the hearer in its Spec undergo late merge within the vP, followed by the movement of the Appl and the verb to T. Haddad further suggests that the applicative pronoun does not participate in any binding relation because he considers that binding is a result of A(argument)-movement, an approach that was first proposed by Hornstein (2001). In other words, since the applicative does not undergo A-movement, it must then be exempt from binding, as discussed earlier in Section 2. On the other hand, I argue that the applicative in (46) values its uninterpretable features against their interpretable instances of the  $\Lambda_p$  (the logophoric patient representing the hearer) via feature sharing (Sigurðsson 2004a, 2004b; Sigurðsson & Maling 2010, 2012). On this view, the hearer argument itself is not integrated into the primary plane via provocative movement but rather belongs to the domain of discourse. Moreover, I also showed in Section 2 that Hornstein's (2001) binding model strictly concerns constructions involving inherently reflexive verbs (e.g. *John dressed himself*) and should not be generalizable to other binding relations, contrary to Haddad. For instance, Haddad's account falls short of explaining the binding facts in examples like (48).

- (48) *Ramzi*      *ðihik*      ( $[_{PP} \textit{maʃ-ha}_1]$ )    ( $[_{PP} \textit{sala haalha}_1]$ ).  
 Ramzi    laughed    with-her      on      herself  
 'Ramzi laughed (with her<sub>1</sub> at herself<sub>1</sub>).'

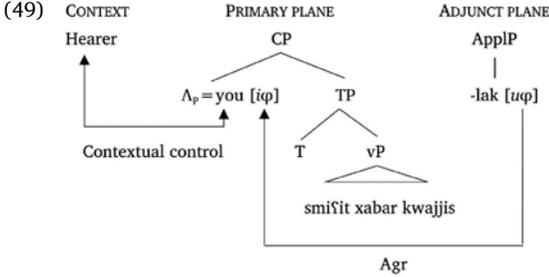
This is so because the pronoun *-ha* 'her' in (48) binds the reflexive *haalha* 'herself' even though they are both located inside adjunct prepositional phrases (PPs). Given that, I suggest, unlike Haddad, that the hearer-oriented applicatives at hand are exempt from binding due to their being inflectional (agreement) affixes, but not due to their adjunct-hood status.

Last but not least, the current syntactic analysis in this section, as suggested by a reviewer, has yet to clarify two things/points. The first one concerns whether agreement (the gender and number agreement which these clitics trigger with the hearer) should be defined between two distinct inflectional elements instead of between an argument (or an adjunct) and some inflectional feature, as is generally the case. The second one, on the other hand, is concerned with how the extra-

syntactic, non-argument/adjunct clitics under investigation can participate in the syntactic derivation (agreement, concord, etc.), given that they have actually the option of remaining extra-syntactic as indicated by the ellipsis phenomenon in (44) wherein the hearer-oriented clitic is not necessarily a part of the deleted material in the clause. Let us now clarify the above points, one by one. As regards syntactic agreement, while the non-argument clitics are indeed analyzed as inflectional affixes in this study, the logophoric patient feature may seem inflectional but it is actually not. Under Sigurðsson & Maling's (2010, 2012) approach, all pronominal elements/arguments are represented as bundles of features subject to syntactic computation, including pronominals inside the TP/IP domain and those inside the CP domain such as the logophoric speaker and hearer. In fact, Sigurðsson & Maling (2010: 68) contend that full-fledged pronouns "are not syntactic primitives or objects in the numeration." Their statement below clarifies this point:

The inventory of non-computed syntactic objects (the syntax lexicon) contains only abstract features and abstract roots ..., subject to matching and bundling up. These bundles of syntactic information do not have any phonological feature values, but may (or may not) be expressed or represented, more or less accurately, by complex symbols and structures in PF. Thus, the 'lexicon' in the traditional sense is not a syntactic but a phonological lexicon, stored on the PF side, where the syntactic message (the output of the computation) gets arbitrary phonological form. (Sigurðsson & Maling 2010: 68)

It is clear that it is the abstract features rather than the full-fledged (covert or overt) pronouns that are assumed to be input to syntactic operations in Sigurðsson & Maling's approach, since it rests on the idea that the PF lexicon/morphology is detached from syntax, something reminiscent of Distributed Morphology (Halle & Marantz 1993). Given that, the logophoric patient feature ( $\Lambda_p$ ) in Sigurðsson & Maling is by no means an inflectional morpheme but rather a bundle of features corresponding to the hearer's implicit pronoun *you*, which is a participant of the speech event. Accordingly, if we abstract away from Sigurðsson & Maling's idea that linguistic terms enter the derivation as abstract features, the schema in (46) may thus be reformulated as follows:



Now, assuming that the second person pronoun is situated inside the CP in the left periphery, as sketched in (49), it then follows that the Agree relation in (49) holds between the Appl inflectional head and the second person pronoun, which fares well with the standard assumption.

With reference to the second point (namely, how can extra-syntactic elements be part of the syntactic derivation?), it is true that the hearer-oriented clitic in (44), repeated below as (50), may optionally be part of the deleted material, as seen in Speaker B's responses.

- (50) Speaker A:  
*fɾift-lak*                      *sirr*                      *xat̪iir*.  
 knew.1.SG-2.M.SG    secret                      dangerous  
 'I knew-[you] a dangerous secret.'
- Speaker B:
- a. *w-ʔana*                      (*fɾift-lak* — *sirr* — *xat̪iir*)                      *kamaan*.  
 and-I                      knew.1.SG-2.M.SG — secret — dangerous    too  
 'And I (knew-[you] a dangerous secret) too.'
- b. *w-ʔana*                      (*fɾift* — *sirr* — *xat̪iir*)                      *kamaan*.  
 and-I                      knew.1.SG — secret — dangerous    too  
 'And I (knew a dangerous secret) too.'

This, however, can be justified if we consider the distinction between pragmatic and syntactic ellipsis (see Stanley 2000, Clapp 2005, Zheltova 2016). More specifically, pragmatic ellipsis, unlike its syntactic counterpart, is contextually anchored to the interlocutors' perceptions and thus involves a shift in perspective; accordingly, whether an adjunct is part of the elided material or not depends on whether or not the interlocutors hold the same attitude/perspective. With that being said, in the case of (50), the clitic *-lak* presumably has this option not because it is a so-called extra-syntactic element but rather because it is a pragmatic/perspectival element revolving around the speaker's stance in relation to the subject matter. In other words, the response in (a) is felicitous if Speaker B, for example, believes that the event highly interests the hearer, but its counterpart in (b) is felicitous if Speaker B does not hold this belief. As a matter of fact, this is not uncommon in the domain of prag-

matics, or more precisely, when it comes to pragmatic ellipsis; there are other constructions in which the deleted information is not required to be identical to its antecedent phrase/clause. This is actually confirmed by the following data.

(51) Speaker A:

*fuft hal-laʃiin Fahid.*  
 saw.1.SG that-cursed Fahid  
 'I saw that bastard Fahid.'

Speaker B:

- a. *w-ʔana (fuft hal-laʃiin Fahid) kamaan.*  
 and-I saw.1.SG that-cursed Fahid too  
 'And I (saw that bastard Fahid) too.'
- b. *w-ʔana (fuft Fahid) kamaan.*  
 and-I saw.1.SG Fahid too  
 'And I (saw (that) Fahid) too.'

(52) Speaker A:

*naaqaft raʔj-ij b-ʃaraahah biduun muʒaamaleh.*  
 discussed.1.SG opinion-my with-frankness without flattering  
 'I discussed my opinion frankly without flattering.'

Speaker B:

- a. *w-ʔana (naaqaft raʔj-ij b-ʃaraahah biduun muʒaamaleh)*  
 and-I discussed.1.SG opinion-my with-frankness without flattering  
*kamaan.*  
 too  
 'And I (discussed my opinion frankly without flattering) too.'
- b. *w-ʔana (naaqaft raʔj-ij b-ʃaraahah) kamaan.*  
 and-I discussed.1.SG opinion-my with-frankness too  
 'And I (discussed my opinion frankly) too.'

(53) Speaker A:

*gulti-lha taʃaal-i hoon.*  
 said.1.SG-to.her come-2.F.SG here  
 'I told her come here.'

Speaker B:

- w-ʔana (gulti-lha taʃaal-i hoon) kamaan.*  
 and-I said.1.SG-to.her come-2.F.SG here too  
 'And I (told her come here) too.'

Observe that the elided information in (51-53) may not necessarily be identical, depending on Speaker B's intention/presupposition. In (51), given that taboo expressions like *hal-laʃiin* 'that bastard' have to do with the speaker's perspective on a certain situation (Hess 2018), both of Speaker B's responses are possible, depending on whether or not he/she shares the same belief with Speaker A; that is to say, if Speaker B also perceives *Fahid* as a bastard, then the (a) response is felicitous, but if that is not the case, then the (b) response is the felicitous one. Comparably, Speaker B in (52)

may utter the (a) response if he/she, like Speaker A, presupposes that the hearer(s) is/are suspicious of his/her frankness; otherwise, the (b) response is the appropriate one. Lastly, the deictic expression *hoon* 'here' in (53) may have two different interpretations relative to the locations and intentions of the interlocutors; supposing that Speaker A asked a girl to come to his/her location, when Speaker B said *I did so too*, he/she may want that girl to come to Speaker A's location or to his/her (Speaker B's) location. Having seen some examples of how pragmatic ellipsis operates, I believe that all the perspectival expressions in (51-53) and the hearer-oriented clitics under investigation should be treated as adjuncts incorporated into the syntax by being on a separate plane and undergoing late merge (Stepanov 2001, Uriagereka 2003, Chomsky 2004), as sketched in (45-47) above, irrespective of whether these elements may or may not be part of the deleted information. This is inspired by the fact that such pragmatic elements rely on the social context and may involve a shift in perspective among the interlocutors. Additionally, evidence that adjuncts like the hearer-oriented clitics at hand or the adjunct elements in (51-53), which serve a pragmatic function, should at some point be part of the syntactic derivation stems from syntactic agreement/concord; one example is that the clitics under study must agree in phi-features with the hearer from discourse, as previously discussed; another example is that the adjunct *hal-laʕiin* 'that bastard' in (51) agrees in number and gender with the noun (*Fahid*) it modifies. Such agreement/concord cannot, in fact, be elucidated if we simply assume that *hal-laʕiin*, for instance, is an extra-grammatical element that does not participate in the syntactic derivation. Finally, the incorporation of pragmatic elements and the participants of the speech event into the syntactic theory, as mentioned earlier, is not a new claim, but rather has strongly been argued for in the literature (Reinhart 1983; Levinson 1991; Huang 1994; Ariel 2001; Sigurðsson & Maling 2010, 2012).

## 5. Summary

This study has investigated the categorial status and the syntactic derivation of second person (hearer-oriented) clitics in JA. The diagnostics used support the assumption that such clitics are inflectional affixes rather than free pronouns, which is contrary to Haddad's (2014, 2016a, 2019a, 2020) claim about dative clitics in Lebanese Arabic. Furthermore, it has been shown that the JA inflectional affixes in question are heads of applicative phrases that are initially projected in a separate adjunct plane but subsequently undergo late merge in order to be incorporated into the primary plane (Haddad 2014, 2019a, 2020). Such

applicative heads value their uninterpretable phi-features by probing the interpretable features on  $\Lambda_p$  which is situated in CP and contextually controlled by the hearer from the domain of discourse (Sigurðsson & Maling 2010, 2012). Finally, it has been proposed that those applicative (inflectional) heads are exempt from binding because they are not pronominal elements, contra Haddad.

### *Abbreviations*

1 = first person; 2 = second person; 3 = third person; AUX = auxiliary; CA = Classical Arabic; COMP = complementizer; COP = copula; DL = dual; F = feminine; FUT = future; IMP = imperative; JA = Jordanian Arabic; M = masculine; PAST = past; PL = plural; PRS = present; Q = question particle; SG = singular.

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### *Notes*

<sup>1</sup> It is worth mentioning that JA branches into three main regional varieties: Urban JA spoken in the main cities (e.g. Amman and Zarqa), Bedouin JA spoken in the north-eastern and southern parts of Jordan, and Rural JA spoken by inhabitants of the villages surrounding the north-western cities (Irbid, Jerash, and Ajloun). Each of these varieties also has sub-varieties. The current study focuses on one sub-variety of Rural JA.

<sup>2</sup> A reviewer brought to my attention the fact that the clitics in (3a-d) trigger two readings, one in which the clitics are selected beneficiary/recipient arguments and another one in which the clitics are non-arguments. For instance, (3c), as the reviewer indicated, may mean that the speaker bought the hearers a nice car, or that the speaker bought a nice car for him/herself and s/he wants to impress the hearers, believing that the hearers would think it is nice too (or something of this sort). I will return to this point and address it in due time after the reader gets more acquainted with the subject matter.

<sup>3</sup> The binding principles restricting the distribution of anaphora and pronouns are given in (i) (from Chomsky 1981: 188, Chomsky 1986: 166; see also Chomsky 1995).

(i) Binding theory

Principle A: An anaphor is bound in a local domain (its governing category).

Principle B: A pronominal is free in a local domain (its governing category).

Principle C: An R-expression is free.

The local domain for an anaphor is defined as the minimal category which contains the anaphor, its antecedent and its governor.

<sup>4</sup> This derivational approach to binding has also been developed and extended

by Grohmann (2003) in order to capture constructions other than inherent reflexive verbs (e.g. *dress, shave*), such as ditransitive constructions like *Sara showed Mike himself*. By dividing the sentence segments into three domains: the vP/theta-domain, the TP/phi-domain, and the CP/discourse domain, Grohmann argues for the anti-locality of anaphoric dependencies which bans a DP from moving to a higher position inside the same domain unless the lower copy of that DP is spelled out as a reflexive. Accordingly, the derivation of a sentence like \**Sara showed Mike Mike* with the intended meaning *Sara showed Mike himself* is doomed to crash at the interfaces since the lower copy of *Mike* is not overtly realized as a reflexive, in line with anti-locality (for more information, see Grohmann 2003).

<sup>5</sup> It must be noted that a reviewer who is a native speaker of another sub-variety of JA has indicated that the hearer-oriented clitics are acceptable in subjunctive, interrogative, and future clauses in his/her sub-variety, so it appears to be that we are dealing with some dialectal variation here. Crucially for us, though, the arbitrary gap test fully applies to the JA Arabic sub-variety under investigation.

<sup>6</sup> I would like to thank an anonymous reviewer for drawing my attention to the fact that the hearer-oriented clitics may also attach to verbs inflected for third person in another sub-variety of JA, as in (18c), as well as to verbs inflected for second person, as in (i) provided by the reviewer.

- (i) *?ihkii-lak kilmeh.*  
 say.IMP.2.M.SG-2.M.SG word  
 'Say-[you] a word!'

<sup>7</sup> As pointed out by a reviewer, one may wonder if *-jaaha* 'her' in (21a-b) is a free object pronoun since its corresponding clitic *-ha* is the pronoun that surfaces in sentences lacking the hearer-oriented clitic, as in (i).

- (i) *smiʕit-ha tyanni elyoom.*  
 heard.1.SG-her sing today  
 'I heard her sing today.'

Additionally, *-jaaha* 'her' does not necessarily have to be attached to the verb in sentences like (ii), provided by the reviewer.

- (ii) *?ana w-jaaha laʕib-na ʕatranʕ.*  
 I and-her played-1.PL chess  
 'She and I played chess' (literally, 'I and her played chess.')

Notice, however, that even in sentences wherein *-jaaha* 'her' is not attached to the verb it must cliticize to something like the conjunction *w-* 'and' in (ii). Free pronouns, in contrast, cannot cliticize to any other element, as evidenced in (iii).

- (iii) *\*?ana w-heeh laʕib-na ʕatranʕ.*  
 I and-she played-1.PL chess  
 Intended: 'She and I played chess' (literally, 'I and she played chess.')

Moreover, pronouns like *-jaaha* 'her', unlike free pronouns (e.g. *haaj* 'this'), cannot be separated from their host whether by intervening adverbs or by fronting, as respectively exemplified in (iv a-b).

- (iv) a. *?aʕtii-h bsurʕah haaj (el-luʕbah) / \*?aʕtii-h bsurʕah jaaha.*  
 give.IMP.2.SG-him quickly this the-toy / give.IMP.2.SG-him quickly her  
 'Give him this (toy) quickly / Intended: give it to him.'  
 b. *haaj ?aʕtii-h / \*jaaha ?aʕtii-h.*  
 this give.IMP.2.SG-him / her give.IMP.2.SG-him  
 'This, give him / \*It, give him.'

Such examples suggest that pronouns like *-jaaha* are clitics in JA, unlike in Standard/Classical Arabic in which they can stand alone independently of other elements (e.g. *?ijjaaka na?budu* ‘You, we worship’, The Qur’an, Chapter 1, verse 4-5, p. 1). The main point concerning us here is that the hearer-oriented clitic must precede any pronominal clitics, as in (21), unlike its corresponding beneficiary argument which has the same morphological form but may either precede or follow other pronominal clitics, as we will see in (28) below.

<sup>8</sup> Zwicky & Pullum (1983) mentioned other criteria that set apart inflectional affixes from pronominal clitics, such as morphophonological and semantic idiosyncrasies. Such criteria, nevertheless, are inapplicable to the Arabic clitics under study since no clitics show any of these idiosyncrasies.

<sup>9</sup> All the verses in (31a-e) are taken from the Qur’an that was printed in Cairo by daar ?ibn al-Jawzi in 2009.

<sup>10</sup> One may wonder why such clitics are not allowed with proximal demonstratives. The answer to this question will perhaps remain a mystery, since, first, there are no native speakers of this CA variety who have real intuitions of it, and second, this phenomenon, to the best of my knowledge, has never been addressed by traditional Arabic grammarians. Moreover, I am not aware of any non-standard Arabic variety which has this pattern of cliticization (the suffixation of non-argument clitics on demonstratives). Perhaps, the only thing we could say here is that such suffixation supports the inflectional status of those clitics, as stated earlier.

<sup>11</sup> It is worth mentioning that in Haddad (2019a, 2020) the timing of the merger of the Appl head into the structure depends on the type of the applicative clitic. That is, if the clitic is both speaker- and subject-oriented, then the clitic values its phi-features as soon as the subject is merged in the specifier position of vP (Spec-vP), which is immediately followed by the integration of the Appl into the matrix plane, the vP. If, however, the clitic is merely speaker- or hearer-oriented, the integration of the Appl into the vP is postponed until the CP layer is projected, namely, after the Appl values its phi-features by probing the participant of the speech event (the speaker or the hearer). In (46-47) I am adopting the latter syntactic process since we are only dealing with hearer-oriented clitics in JA.

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