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Clitic-Doubled Arguments*

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0. Introduction

The purpose of this paper is to investigate the phenomena which have been regrouped under the titles of 'clitic doubled constructions', 'clitic doubling', or 'argument doubling'. These phenomena have been the subject of extensive discussions in contemporary linguistic studies. I believe that their interest ultimately resides in the fact that they open a window on the formation of arguments; they allow us to better understand how argument structures are formed and how they are syntactically projected.

In sentences involving doubling, the complementary distribution between clitics and lexical complements breaks down: the clitic and the lexical element co-occur:

(1) head + clitic lexical NP

Some of the main questions in this context focus on the relation between the clitic or the complex head+clitic and the lexical NP and on the status of this doubled NP. What is the nature of this relation? Is it a head-complement relation? Is the lexical NP generated in the same argument position regular complements are generated in? It comes as no surprise that the possible answers to these questions have been put forward in the relevant literature (see Aoun 1979, 1981, Borer 1983, 1986, Dobrovie-Sorin 1990, Everett 1984, Franco 1991, Hurtado 1984, Jaeggli 1982,

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1986, Iatridou 1991, Schneider-Zioga 1990, 1993, Sportiche 1992, Suñer 1988, 1992).

In this work, I propose a novel analysis of doubling based on the working of this phenomenon in Lebanese Arabic (henceforth, LA). I suggest that doubling in this language is to be viewed as a means for forming new functional structures. Specifically, I argue that in LA, doubled elements are not generated in complement positions. Rather, the doubled element is to be analyzed as a subject in a complex predication relation holding between the doubled element and the minimal complete functional complex (CFC) containing the clitic. In this predication relation, the clitic-*pro* complex, i.e. the clitic and the non-overt pronominal coindexed with it, plays the role of predicate-variable. It is the open position which makes the CFC a one-place predicate:

(2) [[CFC [.... clitic-*pro*]] doubled element]

Unlike standard subjects in LA, the doubled element always appears to the right of the predicate it is associated with, and c-commands the arguments contained within this predicate; thus, apparently violating the Linear Correspondence Axiom of Kayne (1994). I will provide evidence showing that doubled elements, like other subjects in LA, are underlyingly generated to the left of the predicate they are construed with. Furthermore, I will show that the relation between the doubled element and the pronominal clitic is subject to the standard disjointness effect applying to pronominals. This disjointness effect highlights the non-complement status of doubled elements and distinguishes them from non-doubled elements. In this account, doubling is a means LA uses to create non-standard argument relations, to superimpose new functional structures on conventional ones.

1. Word-order in Lebanese Arabic

I will start by providing some information regarding structural aspects of Lebanese Arabic which will be relevant in the discussion of argument doubling. LA is a null subject language as illustrated in (3a-b):

(3) a. kariim ʔakal suufi
 K. ate.3MS sushi
 'Karim ate sushi.'

 b. ʔakal suufi
 ate.3MS sushi
 'He ate sushi.'

Furthermore, the word order on a sentential level may be SVO, as in (3a) or VSO as in (4a). The order VOS is also available (4b); however, it is less common, and a pause is necessary before the subject:

- (4) a. ʔakal kariim suufi
 ate.3MS K. sushi
 'Karim ate sushi.'
- b. ʔakal suufi kariim
 ate.3MS sushi K.
 'Karim ate sushi.'

2. Distribution of clitics

In LA, a pronominal clitic appears with a verb (5a), a noun (5b), or a preposition (5c). In (5a-c), the clitic is in bold (irrelevant details omitted).

- (5) a. kariim ʃeef-**o**
 K. saw-him
 'Karim saw him.'
- b. kariim ʃeef kteeb-**o**
 K. saw book-his
 'Karim saw his book.'
- c. kariim raaf maʕ-**o**
 K. left with-him
 'Karim left with him.'

As illustrated in (5a-c), each pronominal clitic appears on the head it is selected by. In this respect, cliticization is a local phenomenon in Lebanese Arabic which does not have a process of 'clitic climbing' such as the one found in various Romance languages (see Kayne 1975, 1984, Rouveret and Vergnaud 1980, and the references mentioned there). The local nature of cliticization in LA will be discussed further in section 5.

A morphological distinction exists for some persons between accusative clitics, dative clitics, and genitive clitics attached to a noun or a preposition. This distinction can be seen, for instance, in examples (6a-d) involving a first person singular clitic:

- (6) a. kariim ʃeef-**ne**
 K. saw-me
 'Karim saw me.'
- b. kariim hʔakee-**le** hkeeye
 K. told-me story
 'Karim told me a story.'

c. kariim ʃeef kteeb-**e**
 K. saw book-my
 'Karim saw my book.'

d. kariim raafɯ maʃ-**e**
 K. went with-me
 'Karim went with me.'

3. What can be doubled?

All the clitics discussed in the previous section can be doubled. That is, an accusative clitic (7a), a dative clitic (7b), a genitive clitic attached to a noun (7c), or a preposition (7d), can be doubled. The doubled element and the doubling clitic are in bold in (7).

(7) a. kariim ʃeef-**o** **la-saami**
 K. saw-him to-S.
 'Karim saw Sami.'

b. kariim ɸəkee-**lo** **la-saami** ɸkeeye
 K. told-him to-S. story
 'Karim told Sami a story.'

c. kariim ʃeef kteeb-**o** **la-saami**
 K. saw book-his to-S.
 'Karim saw Sami's book.'

d. kariim raafɯ maʃ-**o** **la-saami**
 K. went with-him to-S.
 'Karim went with Sami.'

As illustrated in (7a-d), the doubled element appears with the preposition *la* ('to'), thus conforming to Kayne's generalization informally stated in (8) (see Aoun 1981, Jaeggli 1982, 1986, Borer 1983, 1986, Dobrovie-Sorin 1990, and the references mentioned there).

(8) *Kayne's Generalization*

A lexical NP may be doubled by a clitic only if this clitic is preceded by a (prepositional) case assigner. T

¹The pronominal element following the marker *la* is a dative pronoun that does not seem to be cliticized onto *la*, as evidenced by the fact that, contrary to other clitics, it can be conjoined:

(i) a.* kariim ɸəkee-**lo** w **la** ɸkeeye
 K. told-him and her story
 'Karim told him and her a story.'

-
- b. kariim həkee-**lun** **laʔəlo** w **ʔəla** hkeeye
K. told-them to-him and to-her story
 'Karim told him and her a story.'

In LA, clitics may attach to prepositions (see section 2). The fact that the pronominal elements cannot cliticize to the doubling marker *la* suggests that this marker is not to be analyzed as a preposition. It may be considered as a non-prepositional case-marker. J. Ouhalla (personal communication) suggests that this marker may be considered as a focus marker akin to the focus marker *la* found in Standard Arabic.

- (9) a. kariim jeef-**o** **la-ʔəlo**
 K. saw-him to-him
 'Karim saw him.'
- b. kariim həkkee-**lo** **la-ʔəlo**hkeeye
 K. told-him to-him story
 'Karim told him a story.'
- c. kariim jeef kteeb-**o** **la-ʔəlo**
 K. saw book-his to-him
 'Karim saw his book.'
- d. kariim raafh maʕ-**o** **la-ʔəlo**
 K. went with-him to-him
 'Karim went with him.'

In (7a-d) and (9a-d), I gave examples where the complements of a verb, noun, or preposition are doubled. Subjects cannot be doubled as illustrated in (10-11):

- (10) (*la)-kariim neem
 to-K. slept.3MS
 'Karim slept.'
- (11) neem (*la)-kariim
 slept.3MS to-K.
 'Karim slept.'

Sentences (10) and (11) indicate that the subject in SV or in VS sentences cannot be doubled. In Exceptional Case-marking constructions, however, the subject can be doubled:

- (12) badde-**yee** yruufh **la-kariim**²
 want.1S-him go.3MS to-K.

²In a sequence of two clitics, the second clitic appears with y in LA:

- (i) ʕTayt-**o-yee**
 gave.1S-it-him
 'I gave it to him.'

- 'I want Karim to go.'
- (13) allayt-**o** yruuḥ **la-kariim**
 let.1S-him go.3MS to-K.
 'I let Karim go.'

It is worth mentioning that doubling is optional. In all the examples discussed, the clitic can appear by itself. Alternatively, the lexical NP can also appear by itself. In this case, the preposition *la* cannot occur with the non-doubled NP unless this NP is a dative complement as in (15):

- (14) kariim ʃeef (*la)-saami (see 7a)
 K. saw.3MS *(to)-S.
 'Karim saw Sami.'
- (15) kariim ḥəke *(la)-saamiḥkeeye (see 7b)
 K. told *(to)-S. story
 'Karim told Sami a story.'
- (16) kariim ʃeef kteeb (*la)-saami (see 7c)³
 K. saw.3MS book *(to)-S.
 'Karim saw Sami's book.'
- (17) kariim raah maḥ (*la)-saami (see 7d)
 K. went with *(to)-saami
 'Karim went with Sami.'
- (18) badde kariim yruuḥ (see 12)
 want.1S K. go.3MS
 'I want Karim to go.'
- (19) alleet kariim yruuḥ (see 13)
 let.1S K. go.3MS
 'I let Karim go.'

The previous examples illustrated the syntactic positions (complements of V, N, P, and subjects of ECM complements) that can be doubled.

³(16) is acceptable with the reading where *la-saami* is not the complement of book, but rather a benefactive: 'Karim saw a book for Sami.'

4. Interpretation of doubled elements

In the previous section, we saw what elements can be doubled. In the following sections, I will discuss how to structurally represent doubled elements. First, I address the question of whether doubled elements are interpreted in the same position as non-doubled elements.

4.1. Doubled adnominals

Consider a sentence such as (20):

- (20) *ʃəft Suurit waladeen (mən hal-wleed)*
saw.1S picture boy.dual (of these-the-boys)
'I saw a picture of two (of these) boys.'

Sentence (20) is ambiguous. The quantificational expression *waladeen* ('two boys') may have wide scope (or a distributive reading): 'I saw two pictures, each representing one boy'. The wide scope reading may be highlighted by adding the following paraphrase to the sentence in (20): *wəfde mənun keenit maχzuuʔa* ('one of them was torn'). It may also have narrow scope: 'I saw one picture representing two boys' (Fiengo and Higginbotham 1981, May 1985, and Aoun and Hornstein 1985).

In contrast to sentence (20), sentence (21) in which the whole NP *Suurit waladeen* ('a picture of two boys') is doubled is not ambiguous: the quantificational element has only an internal, narrow scope reading:

- (21) *ʃəft-a la-Suurit waladeen (mən hal-wleed)*
saw.1S-it to-picture boy.dual (of these-the-boys)
'I saw a picture of two (of these) boys.'

The contrast between sentences (20) and (21) indicates that a quantificational element cannot be extracted at LF, out of a doubled element, hence, the non-ambiguity of (21). The contrast between the two sentences above, may be made clearer with the following pair: since a back (bone) cannot be common to two persons, sentence (22b) is unacceptable.

- (22) a. *fəfəSt Dahr waladeen (mən hal-wleed)*
examined.1S back boy.dual (of these-the-boys)
'I examined the back of two (of these) boys.'

b.* fahāSt-o **la-Dahr waladeen (mən hal-wleed)**
 examined.1S back boy.dual (of these-the-boys)
 'I examined the back of two (of these) boys.'

In brief, in a configuration such as (23a), the quantificational element may have a wide and a narrow scope reading, and in a configuration such as (23b), it has only a narrow scope reading:

- (23) a. V [N QP]
 b. V + **clitic** **la-**[N QP]

Consider now the following representation:

- (23) c. V + **clitic** **la-N + clitic la-QP**

Representation (23c) contains two doubled elements: the object of the verb and the adnominal complement have been doubled. If the doubled QP in (23c) were in the same position as the non-doubled QP in (23b), we would expect the doubled QP to only have narrow scope. The fact is that in a configuration like (23c), the doubled QP must have wide scope: in sentence (24), which corresponds to (23c), the quantificational element must have wide scope:⁴

(24) **fəft-a la-Suurit-un la-waladeen (mən hal-wleed)**
 saw.1S-it to-picture-them to-boy.dual (of these-the-boys)
 'I saw a picture of two (of these) boys.'

The contrast between (21) and (24) indicates that the doubled adnominal quantifier is not interpreted in the same position as the non-doubled adnominal quantifier: it is in a position higher than the non-doubled element.

⁴Once again, the wide scope reading may be highlighted by the acceptability of the following sentence (see 22a-b):

(i) ? fahāSt-o **la-Dahrnla-waladeen (mən hal-wleed)**
 examined.1S-itto-back-their to-boy.dual (of these-the-boys)
 'I examined the back of two (of these) boys.'

There is another more natural form for inalienables. It is given in (ii):

(ii) fahāStəllun **Dahrn la-waladeen (mən hal-wleed)**
 examined.1S-to them back-their to-boy.dual (of these-the-boys)
 'I examined the back of two (of these) boys.'

For completeness, I provide sentence (25), in which the adnominal quantificational element is doubled. This doubled quantificational element may have wide scope:

- (25) *ʃəft Suurit-un la-waladeen (mən hal-wleed)*
 saw.1S picture-their to-boy.dual (of these-the-boys)
 'I saw a picture of two (of these) boys.'

4.2. Doubled accusatives and doubled obliques

The previous discussion highlighted the fact that a doubled adnominal complement is not interpreted in the position of a non-doubled adnominal complement. A similar argument can be constructed for doubled accusatives, as well as doubled prepositional complements (obliques).

- (26) a.* *mʃalləmt-[o]_i ʔaaSaSit [kəll walad]_i*
 teacher-his punished.3SF every boy
 'His teacher punished every boy.'
- b. *mʃalləmt-[o]_i ʔaaSaSit-o la- [kəll walad]_i*
 teacher-his punished.3SF-him to every boy
 'His teacher punished every boy.'
- (27) a.* *abbart mʃalləmt-[o]_i ʃann [kəll walad]_i*
 told.1S teacher-his about every boy
 'I told his teacher about every boy'
- b. *abbart mʃalləmt-[o]_i ʃann-o la- [kəll walad]_i*
 told.1S teacher-his about-him to every boy
 'I told his teacher about every boy'
- (28) a.* *ʃəft l-mara yalli htammit fi-[i]_i ʃadd [kəll walad]_i*
 saw.1S the-womanthat cared.3SF in-him next every boy
 'I saw the woman that took care of him next to every boy.'
- b. *ʃəft l-mara yalli htammit fi-[i]_i ʃadd-o la- [kəll walad]_i*
 saw.1S the-womanthat cared.3SF in-him next-him to every boy
 'I saw the woman that took care of him next to every boy.'

In (26a), as in (27a) and (28a), the bound reading of the pronoun contained within the DP *mʃalləmt* ('his teacher'), as well as the pronoun contained within the relative clause *yalli htammit fii* ('that took care of him'), cannot obtain. Assuming the c-command requirement on bound

anaphora, the ungrammaticality of (26a-28a) may be attributed to the failure of c-command to hold between the QP *kəll walad* ('every boy') and the pronoun. In contrast, in (26b), (27b), and (28b), the bound reading is available, which indicates that the doubled QP *kəll walad* ('every boy') is able to c-command the pronoun within the DP *mʃalləmtə* ('his teacher') and the relative clause *yalli htammit fii* ('that took care of him'), respectively. The contrast observed between the (a) sentences in (26-28) and the (b) sentences leads to the conclusion that doubled accusative complements, as well as doubled prepositional complements are interpreted in a position higher than that of their corresponding non-doubled arguments.⁵

5. Doubling, predication, and disjoint reference

The question that can now be raised is the following: why can't the doubled element be interpreted in the same position as the non-doubled element? A natural answer would be to say that the complement position is already filled. What are the likely candidates to occur in this position? At this point, it is possible to assume that the complement position is filled by the pronominal clitic, which gets incorporated into the head selecting it (29-30) (see Kayne 1975).

(29) X clitic *la* NP

(30) X + clitic_i t_i *la* NP

⁵It cannot be said that in (26b-27b), the null pronominal coindexed with the clitic attached to the verb *ʔaaSaSət* ('punished'), or the prepositions *ʃan* ('about') and *ʃadd* ('next to'), respectively, c-commands the pronoun within the DP *mʃalləmtə* ('his teacher') or within the relative clause *yalli htammit fii* ('that took care of him'). If this were the case, we would expect the following sentences to be ungrammatical, as they would violate principle C of the binding theory. This is contrary to fact:

- (i) a. *mʃallmit kariim_i ʔaaSaSət-[o]_i*
 teacher K. punished.3SF-him
 'Karim's teacher punished him.'
- b. *abbart mʃallmit kariim_i ʃann-[o]_i*
 told.1S teacher kariim about-him
 'I told Karim's teacher about him.'
- c. *ʃəft l-mara yalli htammit bi kariim_i ʃadd-[o]_i*
 saw.1S the-womanthat cared.3SF in K. next-him
 'I saw the woman that took care of Karim next to him.'

Another possibility would be to assume that the clitic is not generated by movement. Rather, it is coindexed with a non-overt pronominal in the complement position (31) (as argued in Chomsky 1982, Jaeggli 1986, Sportiche 1992, Kayne 1994):

(31) X + clitic_i *pro*_i *la* NP

According to the analysis in (29-30), the clitic itself is a pronominal element and according to the one in (31), the clitic is coindexed with a non-overt pronominal and is not a true argument. There are reasons to favor the analysis in (31) over the one in (29-30):

(i) as mentioned earlier, cliticization in Lebanese Arabic has a strictly local character (see Mohammad 1990): the clitic is attached to the element it is selected by: clitics corresponding to a complement of a noun, a verb, or a preposition get attached to this noun, verb, or preposition, respectively (32a-c). There is no process of 'clitic climbing' in this language as opposed, for instance, to Romance languages such as French, Spanish, and Italian, where the clitic does not necessarily appear attached to the head that selects it (see Kayne 1975, 1984, Rouveret and Vergnaud 1980):

(32) a. V + clitic b. N + clitic c. P + clitic

(ii) It is also the case that a clitic in LA may co-occur with an overt non-doubled argument. This is illustrated in (34): as argued in Benmamoun (1992) for Arabic and Shlonsky (1991) for Hebrew, the nominal element in (34a) occurs in the specifier of the quantifier and enters into Spec-Head agreement with this quantifier (see also Sportiche 1992 and Koopman 1991). This accounts for the occurrence of the agreeing clitic in (34a). If clitics were arguments, we would not expect them to co-occur with another argument; otherwise, we would have a violation of the Thematic Theory (see Chomsky 1991, chapter 2): two arguments would share a unique thematic role.

(33) *ʃəft* *kəll* *l-wleed*
 saw.1S all the-boys
 'I saw all the boys.'

(34) a. *ʃəft* [_{QP} [_{Spec} *l-wleed*] [_{Q'} *kəll-un*]]
 saw.1S the-boys all-them
 'I saw all the boys.'

(iii) Finally, two clitics may correspond to a unique argument, as illustrated in (34b) where the clitic attached to the verb and the one attached to the noun correspond to the same argument (see Benmamoun 1992 for an analysis of these constructions):⁶

⁶More generally, the distribution of clitics in LA may be accounted for if clitics are heads

- (34) b. $\int\text{əft-un}$ $[\text{QP } \text{kəll-un}]$]
saw.1S-them all-them
'I saw all of them.'

that enter into a checking relation with a nominal element (Benmamoun 1992). In (34a), for instance, the clitic enters into a checking relation with the DP *l-wleed* ('the boys'). In (34b), the clitic attached to the quantifier and the one attached to the verb enters into a checking relation with a non-overt pronominal element, as argued for in Benmamoun (1992) for Standard Arabic and Moroccan Arabic.

Representation (31) captures the fact that the doubled element does not occur in the same position as the non-doubled complement. There is a pronominal element, the non-overt *pro*,⁷ obligatorily coindexed with the doubled element, which is generated in the argument position.

5.1. Doubling and predication

Since doubled elements are not generated in the same position as non-doubled elements, one may wonder how they get interpreted. There are two means for an argument to be interpreted: an argument may be interpreted by virtue of receiving a thematic role from a head X^0 that governs it or by virtue of being coindexed with a predicate. The first situation obtains with complements which get their thematic roles directly from the head selecting them. The second situation obtains with subjects which get interpreted with respect to a predicate. As in Williams (1980), the predicate may be a simple predicate; in this case, the subject is the external argument of the head of the predicate and appears outside the maximal projection of the head, as in (35). In (35), the subject is underlined:

(35) John [_{VP} ate my lunch]

The predicate may also be complex. In Williams (1980), it is indicated that sentences function as complex predicates when they contain a 'predicate variable' linked to the subject of predication. According to Williams (1980), the predicate variable is the open position in the sentence which makes it a one-place predicate. This predicate variable may be a pronominal (PRO or *pro*) (see Williams 1980, Rothstein 1983, Browning 1987, and Iatridou 1991). The structural relation that must hold between the predicate and its subject is mutual c-command.

⁷This non-overt pronominal may end up in the Specifier of the clitic if the clitic is analyzed as a head whose Specifier gets filled with the element it agrees with as in Chomsky (1991), Franco (1991), and Sportiche (1992) (see also footnote 6). In Browning (1987), it is argued that non-overt operators are pure pronominals, *pro*. Even though her analysis does not mean that every *pro* is to be characterized as a non-overt operator, it raises the possibility of treating the *pro* coindexed with the clitic as a non-overt operator. In this paper, further discussion of this possibility will not be entertained. Some relevant considerations may be found in Schneider-Zioga (1993).

Returning to doubling in LA, the doubled element in LA is not in a complement position; it has to be interpreted with respect to a predicate. The forced co-indexing between the doubled element and the clitic-*pro* complex may be viewed as resulting from the predication relation holding between the doubled element and the phrase it is attached to. In other words, I am suggesting that the doubled element has the role of a subject of predication, the phrase it is attached to is a predicate and the *pro* argument provides the open position, or the predicate variable.⁸

5.2. Doubling and disjoint reference

Assuming that the doubled element is obligatorily coindexed with a null pronominal element leads us to expect a disjointness effect to exist between the null pronominal and the doubled element. I will argue here that this is indeed the case.

In Lebanese Arabic, disjointness holds between a subject and an object, or between a subject and certain prepositional complements. In sentences (36a-c), the pronominal object and the subject must be disjoint in reference:

- (36) a. kariim ʃeef-o
 K. saw.3SM-him
 'Karim saw him.'
- b. kariim ʃəkee-lo ʃkeeye
 K. told.3SM-him story
 'Karim told him a story.'
- c. kariim ʃəke maʃ-o

⁸Our analysis of doubling is parallel to the analysis of Modern Greek clitic-left-dislocation in Iatridou 1991, which is accounted for in terms of predication. In Schneider-Zioga (1993), it is argued that the disjointness analysis we put forward accounts for the distribution of clitics as well as the behavior of clitic doubling in Modern Greek.

The relation between the doubled element and the predicate it is related to is reminiscent of that found in complex adjectival constructions such as the following:

- (i) John is easy [_{CP} Op_i [PRO to please e_i]]

In both constructions, the argument (the subject 'John' in the English adjectival construction and the doubled element in LA) is not in a thematic position and is interpreted with respect to a complex predicate. In Chomsky (1992), complex adjectival constructions are viewed as involving generalized transformations. Such an approach readily extends to doubled constructions in LA.

K. spoke.3SM with-him
'Karim spoke with him.'

In these sentences, an anaphor bound to the subject can occur in object position:

- (37) a. kariim jeef haalo
K. saw.3SM himself
'Karim saw himself.'
- b. kariim həkee la-haalo hkeeye
K. told.3SM to-himself story
'Karim told himself a story.'
- c. kariim həke maɸ-haalo
K. spoke.3SM with-himself
'Karim spoke with himself.'

It goes without saying that an object or a prepositional complement can be coreferential with another noun phrase when a subject intervenes between them. In (37a-c), the matrix subject and the embedded pronoun can be coreferential:

- (38) a. kariim ʔaal ʔənno zeena jeefət-o
K. said.3SM that Z. saw.3SF-him
'Karim said that Zeina saw him.'
- b. kariim ʔaal ʔənno zeena həkɣit-lo hkeeye
K. said.3SM that Z. told.3SF-him story
'Karim said that Zeina told him a story.'
- c. kariim ʔaal ʔənno zeena həkɣit maɸ-o
K. said.3SM that Z. spoke.3SF with-him
'Karim said that Zeina spoke with him.'

On the other hand, disjointness does not hold between an adnominal complement and a subject:

- (39) kariim jeef Suurt-o
K. saw.3SM picture-his
'Karim saw his picture.'

An anaphor cannot occur in an adnominal complement position:

- (40) * kariim jeef Suurit haalo

K. saw.3SM picture himself
 'Karim saw a picture of himself.'

As a descriptive generalization, there are at least two domains in which a pronoun has to be free: the minimal phrase containing a subject or the minimal noun phrase in which it is contained. We will refer to these domains as Complete Functional Complexes or CFCs (see Chomsky 1986).

Returning to doubling in LA, I would like to argue that a disjointness effect regulates the relation between a doubled element and the doubling clitic-*pro*. We have already seen that noun phrases, and minimal phrases containing a subject constitute CFCs. Prepositions such as *hadd* ('next to') or *ʔədeem* ('in front of') also constitute CFCs. Thus, the null pronominal complement of *hadd* ('next to') or *ʔədeem* ('in front of') in (41) below can be coreferent with the subject *Karim*. Furthermore, as (41a-b) show, and anaphor related to the subject may not occur in the complement position of such prepositions. Henceforth, I refer to prepositional phrases which constitute a CFC as Complex PPs.

- (41) a. kariim_i ʔaʕʕad marwaan hadd-[o]_i / *h_{aalo}_i
 K. sat.3SM M. next-him himself
 'Karim sat Marwan next to him'
- b. kariim_i jeef hayye ʔəddeem-[o]_i / *h_{aalo}
 K. saw.3SM snake in-front-him himself
 'Karim saw a snake in front of him.'

However, all PPs do not constitute CFCs (I will henceforth refer to such prepositional phrases as Simplex PPs), as evidenced by the ungrammaticality of the following sentences:

- (42) a.* kariim_i həke ʕann-[o]_i
 K. talked.3SM about-him
 'Karim talked about him.'
- b.* kariim_i həke maʕ-[o]_i
 K. talked.3SM with-him
 'Karim talked with him.'

In contrast with (41a-b) above, the pronominal complement of a preposition such as *ʕan* ('about') or *maʕ* ('with') cannot be coreferent with the subject in (42a-b).

Assuming that doubled elements enter into disjointness with the clitic-*pro* complex, they have to occur outside the CFC containing this clitic-*pro* complex. Otherwise, a non-well-formed predication results (43), and the doubled element fails to be interpreted:

- (43) * [CFC *pro*_j doubled element_i]

With this in mind, consider the following sentences:

- (44) **ʃəft** **ʔəmm-o** **la-kariim** mbeerifh
 saw.1S mother-his to-K. yesterday
 'I saw Karim's mother yesterday.'

In sentence (44), the doubled element, the doubling clitic, and the element this clitic is attached to (the host), can be Clitic-Left-Dislocated: they can appear at the beginning of the clause and be coindexed with a clitic, as in (36) (see Cinque 1990, Iatridou 1991, Demirdache 1991):

- (45) **ʔəmm-o** **la-kariim** ʃəft-a mbeerifh
 mother-his to-K. saw.1S-heryesterday
 'Karim's mother, I saw her yesterday.'

They can be also pied-piped by wh-movement as in (46). Under standard assumptions according to which extraction processes affect single constituents, it is safe to conclude that in (44-46), the clitic, its host, and the doubled element, form a single constituent:

- (46) **ʔəmm-o** **la-ʔayya walad** ʃəft mbeerifh
 mother-his to-which boy saw.2MS yesterday
 'Which boy's mother did you see yesterday?'

Sentences (47-48) lead to the same conclusion:

- (47) a. **ʔəddem-o la-kariim** ʃəft ʔayye mbeerifh
 near-him to-K. saw.2MS snake yesterday
 'Near Karim you saw a snake yesterday.'
- b. **ʔəddem-o la-kariim** weeʔif rə eel Tawiil
 front-him to-K. standing.Mman tall
 'A tall man is standing in front of Karim.'
- (48) a. **ʔəddem-o la-ʔayya walad** ʃəft ʔayye mbeerifh
 near-him to-which boysaw.2MS snake yesterday
 'Near which boy did you see a snake yesterday?'
- b. **ʔəddem-o la-ʔayya walad** weeʔif rə eel Tawiil
 front-him to-which boystanding.Mman tall
 'In front of which boy is a tall man standing?'

In (47-48), the preposition, the clitic and the doubled element may be treated as a single constituent, and fronted by wh-movement. We have already seen that noun phrases and PPs headed by *ħadd* ('next to') or *ʔəddeem* ('in front of') form CFCs. The grammaticality of (45-46) and (47-48) goes to show that the doubled element can be attached to, and form a constituent with these CFCs.

Consider now the following paradigm:

- (49) a. * *ʕann-o* / *maʕ-o* **la-kariim** *ħkiit*
 about-him with-him to-K. spoke.2SM
 'About/With Karim you spoke.'
- b. * *ʕann-o* / *maʕ-o* **la-ʔayya walad** *ħkiit*
 about-him with-him to-which boyspoke.2SM
 'About/With which boy did you speak?'

Since PPs headed by *ʕan* ('about') or *maʕ* ('with') do not form a CFC, the doubled element cannot be attached to these phrases and be topicalized or extracted by wh-movement. Hence the ungrammaticality of (49)

Note that if the prepositional clitic in (49) is further embedded within a DP, as in (50), (wh-)extraction becomes possible again:

- (50) a. *ʕann* / *maʕ* *ʔəmm-o* **la-kariim** *ħkiit*
 about with mother-his to-K. spoke.2SM
 'About/With Karim's mother you spoke.'
- b. *ʕann* / *maʕ* *ʔəmm-o* **la-ʔayya walad** *ħkiit*
 about with mother-his to-which boyspoke.2SM
 'About/With which boy's mother did you speak?'

The sentences in (50) clearly pattern with those in (47-48): in these sentences, the doubled element is attached to an opaque domain, i.e. the noun phrase which contains the doubling clitic-*pro*.

Summarizing the results in this section, doubled elements are interpreted as subjects, with respect to a complex predicate. This predicate contains a null pronominal which is generated in argument position and is coindexed with the doubled element. As a consequence of the disjointness requirement holding between the null pronoun in argument position and the doubled element, this predicate must be a CFC. In LA, nominal phrases, prepositional phrases headed by *ħadd* ('next to') or *ʔəddeem* ('in front of'), and minimal phrases containing subjects were identified as CFCs.

6. What constitutes a complex predicate?

In what follows, I will provide evidence that the complex predicate with which doubled arguments enter into a predication relation is in fact the **minimal** CFC containing the predicate variable. The evidence is based on the binding properties of doubled adnominals and doubled obliques attached to complex PPs.

6.1. Doubled adnominals

We saw that doubled adnominals are in a position higher than that of non-doubled adnominals (section 4.1.) and that they can form a constituent with a DP containing the doubling clitic.

With this in mind, consider the following sentences:

- (51) a. [kəll bənt]_i ʃatit l-mudiir ʃalemeeto la - ayy-[a]_i
every girl give.3SF the-principal grades-his to-brother-her
'Every girl gave the principal her brother's grades.'
- b. ʃatiit [kəll bənt]_i l-mudiir ʃalemeeto la - ayy-[a]_i
gave.3SF every girl the-principal grades-his to-brother-her
'Every girl gave the principal her brother's grades.'
- c. l-mudiir ʃaTa [kəll bənt]_i ʃalemeeto la- ayy-[a]_i
the-principal gave.3SM every girl grades-his to-brother-her
'The principal gave every girl her brother's grades.'

In all the above sentences, the bound reading of the pronoun within the doubled adnominal is available. (51a-b) show that the preverbal subject, as well as the postverbal subject can c-command this pronoun, and (51c) illustrates the same point for the direct object. The paradigm in (51) indicates that the pronoun contained within the doubled adnominal is in a position which can be c-commanded by the arguments of the clause within which the doubled element occurs. The paradigm in (51) may be accounted for if doubled adnominals **can** form a constituent with the minimal DP containing the doubling clitic, i.e. the DP ʃalemeeto ('his grades') in (51a-c). As such, they will be lower than the other arguments (subject, object) of the clause.

The above conclusion can be strengthened. It is possible to show that doubled adnominals **must** form a constituent with the minimal DP containing the doubling clitic. Consider the following paradigm:

- (52) a.* far eet ʃalemeet-[o]_i la-ʔəmmo la-[kəll walad]_i
showed.1S grades-his to-mother-his to- every boy
'I showed his grades to every boy's mother.'

b.* $\text{\textcircled{a}Tit}$ $\text{m\textcircled{f}all\textcircled{e}mt-[o]_i}$ l-mudiira $\text{\textcircled{f}alemeeto}$ $\text{la-[k\textcircled{e}ll walad]_i}$
 gave.3SF teacher-his the-principal grades-his to-every boy
 'The teacher gave the principal every boy's grades.'

c.* $\text{m\textcircled{f}all\textcircled{e}mt-[o]_i}$ $\text{\textcircled{a}Tit}$ l-mudiira $\text{\textcircled{f}alemeeto}$ $\text{la-[k\textcircled{e}ll walad]_i}$
 teacher-his gave.3SF the-principal grades-his to-every boy
 'The teacher gave the principal every boy's grades.'

(52a-c) are all ungrammatical under the intended bound reading. In (52a), the pronoun contained within the direct object *\textcircled{f}alemeeto* ('his grades') cannot be bound by the doubled adnominal QP *k\textcircled{e}ll walad* ('every boy'). In (52b) and (52c), the pronoun contained within the postverbal subject and the preverbal subject respectively, cannot be bound by this doubled adnominal either.

Consider now the following sentences:

(53) a. far eet $[\text{\textcircled{f}alemeeto}$ $\text{la-[k\textcircled{e}ll walad]_i}$] la-?amm-[o]_i
 showed.1S grades-his to- every boy to-mother-his
 'I showed every boy's grades to his mother.'

b. $\text{\textcircled{a}Tit}$ $\text{m\textcircled{f}all\textcircled{e}mt\textcircled{o}}$ $\text{la-[k\textcircled{e}ll walad]_i}$ l-mudiira $\text{\textcircled{f}alemeet-[o]_i}$
 gave.3SF teacher-his to-every boy the-principal grades-his
 'Every boy's teacher gave the principal his grades.'

c. $\text{m\textcircled{f}all\textcircled{e}mt\textcircled{o}}$ $\text{la-[k\textcircled{e}ll walad]_i}$ $\text{\textcircled{a}Tit}$ l-mudiira $\text{\textcircled{f}alemeet-[o]_i}$
 teacher-his to-every boy gave.3SF the-principal grades-his
 'Every boy's teacher gave the principal his grades.'

Sentences (53a-c) minimally contrast with those in (52a-c). Clearly, sentences (52a-c) could not have been derived from sentences (53a-c) otherwise, we would expect sentences (52a-c) to display the same binding possibilities as the ones displayed in sentences (53a-c).⁹

The unavailability of a bound reading in (52a-c) illustrates a standard weak crossover violation: we saw in section 4.1. that the doubled adnominal can have scope outside the DP it is attached to. At LF, the variable of the QP left by QR will be coindexed with a pronoun to its left. In (53a-c), no weak crossover configuration arises: the variable of the doubled adnominal precedes the bound pronoun.

⁹Alternatively, even if we were to assume that sentences (52a-c) are derived from sentences (53a-c), we would have to conclude that the doubled element in (52a-c) cannot be interpreted in the original position from which it was extracted.

Finally, consider the following sentences:

- (54) a. [far ayto ʃalemeet-[o]_i] **la-[kəll walad]_i**
 showed.1S-him grades-his to- every boy
 'I showed his grades to every boy.'
- b. [ʃaTito mʃalləmt-[o]_i l-ʃalemeet] **la-[kəll walad]_i**
 gave.3SF-him teacher-his the-grades to-every boy
 'His teacher gave every boy his grades.'
- c. [mʃalləmt-[o]_i ʃaTito l-ʃalemeet] **la-[kəll walad]_i**
 teacher-his gave.3SF-him the-grades to-every boy
 'His teacher gave every boy his grades.'

In sentences (54a-c), the doubled element can bind the adnominal pronoun contained within the direct object in (54a), or the subject in (54b-c).¹⁰ In (54a-c), the clitic attached to the verb may be taken to be the doubling clitic. The CFC containing this doubling clitic is the whole clause. This CFC and the doubled element are in a predication relation: the doubled element c-commands the whole complex predicate, and, as such, also c-commands the adnominal clitic contained within the complex predicate.¹¹

The fact that the doubled QP can bind the pronoun in (54a-c) but not in (52a-c) indicates that a doubled element has to be generated with the minimal CFC containing the doubling clitic. In (52a-c), the minimal CFC containing the doubling clitic is the DP and in (54a-c), it is the clause. Summing up, the interpretive facts involving doubled adnominals illustrate the following generalizations:

- (55) a. Doubled adnominals are attached to the minimal CFC, i.e. the DP, which contains the null argument coindexed with the doubling clitic.

¹⁰The fact that sentences (54a-c) do not display weak crossover effects is accounted for in section 7. There it is argued that, at LF, the whole CFC to the left of the doubled element reconstructs to a position lower than the doubled element. After reconstruction, the variable of the doubled QP will precede the bound pronoun in (54a-c).

¹¹Note that in (54a), the pronoun within the DP object *ʃalemeeto* ('his grades') may be taken to be the predicate variable coindexed with the doubling clitic *-o*. In that case, the minimal CFC containing the doubling clitic is the DP *ʃalemeeto* ('his grades'). The doubled argument would then be attached to and interpreted with respect to this DP. However, under this derivation the QP is not able to bind the dative pronominal in (54a). In other words, (54a) would pattern with (52a).

- b. Doubled adnominals cannot bind a pronoun contained within a preceding argument of the minimal clause in which they appear.

6.2. Doubled obliques attached to Complex PPs

Turning to Complex PPs headed by prepositions such as *ħadd* ('next to') or *ʔədeem* ('in front of'), if, as suggested earlier, these Complex PPs are also CFCs, then we expect a doubled oblique related to these Complex PPs to have a behavior similar to a doubled adnominal related to a DP. This expectation is borne out, as demonstrated by the following sentences:

- (56) a.* *ʔəmm-[o]_i ĩeefit ĩayye ĩaddo la-[kəll walad]_i*
 mother-his saw.3SF snake next-him to-every boy
 'His mother saw a snake next to every boy.'
- b.* *ĩeefit ʔəmm-[o]_i ĩayye ĩaddo la [kəll walad]_i*
 saw.3SF mother-his snake next-him to-every boy
 'His mother saw a snake next to every boy.'

Just like doubled adnominals, the doubled complement of *ħadd* ('next to') cannot bind a pronoun contained within a subject in the clause in which this doubled element occurs. The paradigm in (56), like the paradigm in (52), is accounted for if the doubled complement of the preposition *ħadd* ('next to') is attached to the minimal CFC -the Complex PP headed by *ħadd* ('next to')- containing the doubling clitic.

Furthermore, as was the case for doubled adnominals (51), the doubled complement of *ħadd* ('next to') can be bound by the preverbal and postverbal subjects (57a-b).

- (57) a. *[kəll bənt]_i ĩeefit ĩayye ĩaddo la- ayy-[a]_i*
 every girl saw.3SF snake next-him to-brother-her
 'Every girl saw a snake next to her brother.'
- b. *ĩeefit [kəll bənt]_i ĩayye ĩaddo la- ayy-[a]_i*
 saw.3SF every girl snake next-him to-brother-her
 'Every girl saw a snake next to her brother.'

Finally, if the doubled prepositional complement of *ħadd* ('next to') is attached to the Complex PP headed by this preposition, then we expect the doubled element to be able to bind a pronoun contained within the 'subject' of that PP. This is indeed the case, as illustrated in (58):¹²

¹²We are assuming that the subject of the PP and the PP form a CFC -a small clause (see Schein (1982), Stowell (1981, 1991), and Williams (1975, 1983), for different analyses of small clauses). The PP subject need not be within this PP Giorgi (1984), as evidenced by the fact that

the PP can be moved without its subject, as illustrated in (i):

- (i) *ħaddo la-[kəll walad]; ĩeefit zeena ʔəmm-[o];*
next-him to-every boysaw.3SF Z. mother-his
'Next to every boy, Zeina saw his mother.'

Since the subject need not form a constituent with the PP, it can bind a pronoun within a doubled element attached to this PP (ii):

- (ii) *zeena ĩeefit [kəll walad]; ĩadda la-ʔəmm-[o];*
Z. saw.3SF every boynext-her to-mother-his
'Zeina saw every boy next to his mother.'

In (ii), it is possible to assume that the PP contains a non-overt category coindexed with its subject *kəll walad* ('every boy').

- (58) zeena ʃeefit ʔəmm-[o]_i ħaddo **la-[kəll walad]_i**
 Z. saw.3SF mother-his next-him to-every boy
 'Zeina saw his mother next to every boy.'

The contrast between sentences (55a-b) and sentence (58) can be accounted for if doubled elements related to an oblique clitic are attached to the minimal CFC -in this case, the Complex PP- which contains the oblique clitic. To sum up, the interpretive facts involving doubled complements of prepositions such as *ħadd* ('next to') are parallel to those involving doubled adnominals:

- (59) a. Doubled obliques associated with complex PPs are attached to the minimal CFC -the Complex P.
 b. Doubled obliques attached to complex PPs cannot bind a pronoun contained within a

7. Generation of doubled elements

In the previous section, we suggested that doubled elements function as subjects that enter into a predication relation with the minimal CFC containing the predicate variable:

- (60) [[CFC *pro_i*] doubled element_i]

Representation (60), which, incidentally, violates the Linear Correspondence Axiom (LCA) of Kayne (1994), raises the following question: Subjects in LA are usually to the left of their predicate (see Aoun, Benmamoun, and Sportiche 1994). If indeed the doubled element functions as the subject of a complex predicate, why is it generated to the right of its predicate?

A possible answer to the question raised above, is to assume that representation (60) is a derived representation. An obvious candidate for the representation underlying (60) is the one in (61):

- (61) [doubled element_i [CFC *pro_i*]]

We now discuss some evidence suggesting that (61) may indeed be the representation underlying (60).

Notice first, that a representation such as (60) cannot be adopted as the representation for all doubled accusatives. That is, it cannot be suggested that doubled accusatives always appear in a right c-commanding position with respect to the CFC to which they are related. There are constructions in which doubled accusatives are clearly lower than the constituents to the right of which they appear. One such construction is exemplified by doubled accusatives in Exceptional Case Marking contexts, such as (62) (see Sportiche 1992):

- (62) a. zeena alləto **la-kariim** yruuħ ʃal-madrəse

Z. let.3SF-him to-K. go.3SM to-the-school
 'Zeina let Karim go to school.'

b. ʔəmm-[o]_i alləto la-[kəll walad]_i yruuħ ʕal-madrəse
 mother-his let.3SF-him to-every boy go.3SM to-the-school
 'His mother let every boy go to school.'

In (62a), the doubled accusative occurs between the matrix verb and the embedded clause. Nevertheless, the doubled accusative can bind a pronoun contained within the preverbal subject, as in (62b). In brief, sentences such as (62) raise a problem for an analysis that assumes that (60) is the non-derived representation of doubled accusatives.

No problem arises, however, in case representation (61) is assumed to be the underlying representation for doubled accusatives. From this underlying representation, two possible types of derivation are available. In the first type (type a), the whole CFC is raised to the left of the doubled element. In the second type (type b), individual elements within the CFC are raised to the left of the doubled element.¹³

To illustrate, consider doubled accusatives in ECM contexts. The underlying representation for these constructions will be as in (63):

(63) [doubled element_i [_{CFC} subject V ... [embedded clause]]]

The whole CFC in (63) could be raised to the left of the doubled element, thus generating (60). Alternatively, the subject and the verb may be raised by distinct operations to the left of the doubled element, thus generating (64a) or (64b):

¹³The doubled element always appears to the right of the doubling clitic. This is captured by assuming a raising analysis for the complex predicate or the host containing the clitic. One may assume that when no raising of the predicate or the host containing the clitic takes place, the sentence ultimately generated will be a clitic-left-dislocated sentence. In other words, I am surmising that both clitic-left-dislocated structures and clitic-doubling will be generated from the same underlying representation. In Kayne (1994), it is assumed that clitic-doubled constructions underly clitic-left-dislocated constructions.

- (64) a. subject_i ... V_j doubled element_i [CFC t_i ... t_j [embedded clause]]
 b. V_j subject_i ... doubled element_i [CFC t_i ... t_j [embedded clause]]

The specific examples (65a-b) and (62a-b) correspond to representations (60) and (64a), respectively:

- (65) a. zeena alləto yruuħ ʕal-madrəse **la-kariim**¹⁴

¹⁴In sentences (65a-b), the subject can also be analyzed as a clitic-left-dislocated element. In that case, this clitic-left-dislocated element which is outside the CFC can bind a pronoun contained within this doubled element as in (i):

- (i) kəll mʕallme_i allayto yin aħ **la-təlmiiiz-[a]_i**
 every teacher let.1S-him pass.3SM to-student-her
 'Every teacher, I let her student pass.'

It goes without saying that the object QP in (ii) cannot be so analyzed. As such, it cannot bind the doubled element:

- (ii) * [allayto yirsum kəll mʕallme] **la-təlmiiiz-[a]_i**
 let.1S-him draw.3SM every teacher to-student-her
 'I let her student draw every teacher.'

The object QP in (ii) is raised with the whole CFC and, as such, does not c-command the doubled element.

Z. let.3SF-him go.3SM to-the-school to-K.
'Zeina let Karim go to school.'

- b. ʔəmm-[o]_i alləto yruuħ ʕal-madrəse la-[kəll walad]_i
mother-his let.3SF-him go.3SM to-the-school to-every boy
'His mother let every boy go to school.'

Certain binding facts follow in case the analysis outlined in (60-64) is adopted. For instance, the surprising fact that the pronoun contained within the preverbal subject can be bound by the doubled element in ECM contexts can now be treated in terms of reconstruction: the preverbal subject reconstructs to its trace position -below the doubled element-. As such, the doubled element can bind a pronoun contained within this subject.

More generally, the above analysis predicts the existence of the following generalization:

- (66) doubled accusatives, doubled datives and doubled obliques attached to simplex PPs (henceforth, doubled obliques) can bind a pronoun contained within a preceding or following argument of the minimal clause in which they appear.

According to the analysis outlined in (62-66), a doubled element is higher than the arguments contained within the minimal CFC that functions as its complex predicate. Any argument of this complex predicate which precedes the doubled element must have been raised from a position below this doubled element. As such, this argument can reconstruct to this lower position, and a pronoun contained within this reconstructed argument can be bound by the doubled element. In a sentence like (62b), the subject can reconstruct to its trace position which is c-commanded by the doubled element (see 64a). In a sentence such as (65b), the whole CFC can reconstruct to its underlying position which is c-commanded by the doubled element (see 60-61).

The following examples provide further illustration of the empirical validity of the generalization in (66):

doubled accusatives

- (67) a. abbarta la-kəll bənt_i ʕan ʔəmm-[a]_i
told.1S-her to-every girl about mother-her
'I told every girl about her mother.'
- b. abbarta ʕan ʔəmm-[a]_i la-kəll bənt_i
told.1S-her about mother-her to-every girl
'I told every girl about her mother.'

doubled datives

- (68) a. far ayto la-kəll walad_i ʕalemeet-[o]_i

showed.1S-him to-every boy grades-his
 'I showed every boy his grades.'

- b. far ayto ʃalemeet-[o]_i **la-kəll** **walad_i**
 showed.1S-him grades-his to-every boy
 'I showed every boy his grades.'

doubled obliques

- (69) a. abbart l-mara yalli htammit fiy-[a]_i ʃanna **la-kəll** **bənt_i**
 told.1S the-womanthat cared.3SF in-her about-her to-every girl
 'I told the woman that took care of her about every girl.'
- b. abbart ʃanna **la-kəll** **bənt_i** l-mara yalli htammit fiy-[a]_i
 told.1S about-her to-every girl the-womanthat cared.3SF in-her
 'I told about every girl the woman that took care of her .'

8. Other Accounts of Doubling

We are now in a position to briefly discuss various accounts of doubled elements put forward in the relevant literature. These accounts essentially can be regrouped into two main classes. The first assumes that doubled elements are generated in the same argument position in which standard complements are generated (see Jaeggli 1982, Borer 1983, among many others). An interesting variant assumes that doubled elements are generated in the regular complement position (DP*) and are then raised to the Specifier position (DP^) of the clitic which is treated as a head (see Franco 1991, Sportiche 1992). In this approach, clitic doubled constructions differ from non-doubled constructions in that DP* is overt in the first ones, and covert in the second ones (see Sportiche 1992):

- (70) [DP^ [[clitic] DP*]]

The second assumes that doubled elements occupy the position of right-dislocated phrases (Hurtado 1984). For the sake of completeness, let me mention that a hybrid proposal is put forward in Aoun (1981), where it is argued that, cross-linguistically, some doubled elements are to be treated as arguments, and some are not, even though the exact position of non-argument doubled elements is not made explicit. In this paper, I am not in a position to discuss the cross-linguistic adequacy of each account. The behavior of doubled elements across various languages is not uniform. For instance, a reflexive anaphor can be doubled in various Romance languages (see the above-mentioned references). This is not the case in LA, as we mentioned earlier. It may very well be the case that the various proposals, ultimately, will turn out to be necessary to account for the differences between doubled elements across languages.

My purpose is to review the various proposals in the light of the working of doubled elements in LA. I will investigate the adequacy of the various proposals for LA. I will discuss three alternative analyses for doubled elements in LA:

- (71) (i) The doubled element in LA is generated in argument position (DP* in (70)) and it stays in this position in Syntax.
(ii) The doubled element in LA is generated in argument position (DP* in (70)) and then is overtly moved to the Specifier position of the clitic (DP^ in (70)). This possibility is the one explicitly assumed in Sportiche (1992) for LA.
(iii) The doubled element is directly generated in the Specifier of the clitic (DP^ in (70)).

The major problem all three analyses face in LA is the problem of disjointness between the doubled element and the pronominal clitic-*pro* sequence. As mentioned in the previous section, the doubled element can only attach to the minimal complete functional complex dominating the clitic. This accounted for the fact that doubled elements can form a constituent and be pied-piped only with phrases that form an opaque domain. In particular, this accounted for the contrast between sentences (49a-b) and (47a-48a), repeated below:

- (49) a.* $\text{ʕann-o la-kariim ʕkiit}$
about-him to-K. spoke.2SM
'About Karim, you spoke.'
b.* $\text{ʕann-o la-ʔayya walad ʕkiit}$
about-him to-which boyspoke.2SM
'About which boy did you speak?'
- (47) a. $\text{ʕadd-o la-kariim ʕəft ʕayye mbeerif}$
near-him to-K. saw.2MS snake yesterday
'Near Karim you saw a snake yesterday.'
- (48) a. $\text{ʕadd-o la-ʔayya walad ʕəft ʕayye mbeerif}$
near-him to-which boysaw.2MS snake yesterday
'Near which boy did you see a snake yesterday?'

Such contrasts are problematic for analyses (i-iii), which assume that doubled arguments are in the regular complement position. The problem is compounded by the fact that a regular non-doubled complement corresponding to (49a-b) forms a constituent with the preposition and can be pied-piped along with the preposition as illustrated in (73a-b). It is not clear how to account for the difference between (49a-b) and (73a-b) in case any of the analyses in (69) is adopted: why is it possible to pied-pipe a doubled element with the prepositional phrase in (47a-48a), but not with the one in (49)?

- (73) a. ζ ann kariim \hbar kiit
 about K. spoke.2SM
 'About Karim, you spoke.'
- b. ζ ann ?ayya walad \hbar kiit
 about which boyspoke.2SM
 'About which boy did you speak?'

9. Conclusion

Let us recapitulate the main features of the analysis advocated so far:

- (74) **Analysis**
- The doubled element is to be analyzed as a subject in a predication relation holding
 - The doubled element, like all subjects in LA, is generated to the left of the complex
 - A standard disjointness effect exists between the doubled element and the pronominal

This analysis accounts for the following descriptive generalizations:

- (75) **Generalizations**
- The doubled element is not generated in the argument position selected by the head to
 - The doubled element is generated in a position higher than this argument position (see
 - The doubled element can form a constituent with a DP or a complex PP but not with a simplex PP (see section 5.2.).
 - Doubled adnominals cannot bind a pronoun contained within a preceding argument of
 - Doubled obliques attached to complex PPs cannot bind a pronoun contained within a
 - Doubled accusatives, doubled datives, and doubled obliques can bind a pronoun

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As stated in the introduction, these constructions are of interest in that they open a window on the formation of argument structures: they allow us to better understand how some argument relations are formed and how they get to be syntactically projected. Doubling in LA is used to form new functional structures. It is to be viewed as a means to create non-standard argument relations, to superimpose new functional structures on conventional ones.¹⁵

¹⁵In this respect, doubling is similar to the process of clitic-left-dislocation (see Cinque 1990, Iatridou 1991, Demirdache 1991). It is to be added to the list of mechanisms grammars use to create new arguments, such as benefactive dative constructions, benefactive applicative

constructions, etc.... (see Borer and Grodinsky 1986, Baker 1988; see also Vergnaud and Zubizarreta 1992 for relevant discussions concerning the projection of argument structures). It is interesting to note in this connection that doubled elements, like benefactive datives, are marked datives. This may be taken to suggest that dative is a way to mark the occurrence of non-conventional subjects. That is, along the lines of Kayne (1984) and Aoun and Li (1989), datives are to be analyzed as secondary-subjects (see footnote 1 for a different suggestion concerning the function of the dative marker *la*).

References

- Aoun, Joseph. 1979. On Government, Case Marking, and Clitic Placement. Ms., MIT, Cambridge, Mass.
- Aoun, Joseph. 1981. The Formal Nature of Anaphoric Relations. Doctoral Dissertation, MIT, Cambridge.
- Aoun, Joseph and Norbert Hornstein. 1985. Quantifier Types. *Linguistic Inquiry* 16, 623-637.
- Aoun, Joseph. 1993. The Syntax of Doubled Arguments. *International Journal of Basque Linguistics and Philology* 27, 709-730.
- Aoun, Joseph, Elabbas Benmamoun, and Dominique Sportiche. 1994. Agreement, Word Order, and Conjunction in Some Varieties of Arabic. *Linguistic Inquiry*, 195-220.
- Aoun, Joseph, and Y. A. Li. 1989. Constituency and Scope. *Linguistic Inquiry* 20, 124-172.
- Baker, M. 1988. *Incorporation: A Theory of Grammatical Function Changing*. Chicago: University of Chicago press.
- Benmamoun, E. 1992. Functional and Inflectional Morphology: Problems of Projection, Representation, and Derivation. Doctoral Dissertation, USC, Los Angeles, California.
- Borer, H. 1983. *Parametric Syntax*. Dordrecht: Foris.
- Borer, H. 1986. The Syntax of Pronominal Clitics. In *Syntax and Semantics 19: The Syntax of Pronominal Clitics*, ed. H. Borer. New York: Academic Press.
- Borer, H., and Y. Grodinsky. 1986. Syntactic Cliticization and Lexical Cliticization: The Case of Hebrew Dative Clitics. In *Syntax and Semantics 19: The Syntax of Pronominal Clitics*, ed. H. Borer. New York: Academic Press.
- Browning, M. A. 1987. Null Operator Constructions. Doctoral Dissertation, MIT, Cambridge, Mass.
- Chomsky, N. 1982. *Some Concepts and Consequences of the Theory of Government and Binding*. Cambridge, Mass.: MIT Press.
- Chomsky, N. 1986. *Knowledge of Language: Its Nature, Origin, and Use*. New York: Praeger.
- Chomsky, N. 1991. Some Notes on the Economy of Derivations and Representations. In *Principles and Parameters in Comparative Grammar*, ed. R. Freidin. Cambridge, Mass.: MIT Press.
- Chomsky, N. 1992. A Minimalist Program for Linguistic Theory. *MIT Occasional Papers in Linguistics* 5, 1-52.
- Cinque, G. 1990. *Types of A'-Dependencies*. Cambridge, Mass.: MIT Press.
- Demirdache, H. 1991. Resumptive Chains in Restrictive Relatives, Appositives and Dislocation Structures. *Linguistic Inquiry* 22, 1-27.
- Dobrovie-Sorin, C. 1990. Clitic-Doubling, Wh-Movement, and Quantification in Romanian. *Linguistic Inquiry* 21, 1-27.
- Everett, Dan. 1984. Piraha: Clitic-Doubling and the Parametrization of Nominal Clitics. Ms., MIT and SI.
- Fiengo, R., and J. Higginbotham. 1981. Opacity in NP. *Linguistic Analysis* 7, 1-27.
- Franco, J. 1991. Spanish Object Clitics as Verbal Agreement Morphemes. *MIT Working Papers in Linguistics* 14, 99-114. Cambridge, Mass.
- Giorgi, Alessandra. 1984. Towards a Theory of Long Distance Anaphors: a GB Approach. *The Linguistic Review* 3, 307-361.
- Hurtado, A. 1984. Clitic Chains. Ms., Simon Fraser.
- Iatridou, S. 1991. Clitics and Island Effects. Ms., MIT, Cambridge, Mass.
- Jaeggli, O. 1982. *Topics in Romance Syntax*. Dordrecht: Foris.
- Jaeggli, O. 1986. Three Issues in the Theory of Clitics: Case, Double NPs, and Extraction. In *Syntax and Semantics 19: The Syntax of Pronominal Clitics*, ed. H. Borer. New York: Academic Press.
- Kayne, R. 1975. *French Syntax: The Transformational Cycle*. Cambridge, Mass.: MIT Press.

- Kayne, R. 1984. *Connectedness and Binary Branching*. Dordrecht: Foris.
- Kayne, R. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Koopman, H. 1991. Restrictions on Spec Positions. Ms., UCLA, California.
- May, R. 1985. *Logical Form: Its Structure and Derivation*. Cambridge, Mass.: MIT Press.
- Mohammad, M. 1990. The Sentence Structure of Arabic. Doctoral Dissertation, USC, Los Angeles, California.
- Rothstein, S. 1983. The Syntactic Forms of Predication. Doctoral Dissertation, MIT, Cambridge, Mass.
- Rouveret, A., and J.-R. Vergnaud. 1980. Specifying Reference to the Subject. *Linguistic Inquiry* 11.
- Schein, Barry. 1982. Small Clauses and Predication. Ms., MIT, Cambridge, Mass.
- Schneider-Zioga, P. 1990. Double Object Constructions and Small Clauses. Ms. USC, Los Angeles, California.
- Schneider-Zioga, P. 1993. The Syntax of Clitic Doubling in Modern Greek. Doctoral Dissertation, USC, Los Angeles, California.
- Shlonsky, Ur. 1991. Quantifiers as Functional Heads: A Study of Quantifier Phrases and Quantifier Float. *Lingua* 84, 159-180.
- Sportiche, Dominique. 1992. Clitic Constructions. Ms., UCLA, California.
- Stowell, T. 1981. Origins of Phrase Structure. Doctoral Dissertation, MIT, Cambridge, Mass.
- Stowell, T. 1991. Small Clause Restructuring. In *Principles and Parameters in Comparative Grammar*, ed. R. Freidin. Cambridge, Mass.: MIT Press.
- Suñer, M. 1988. The Role of Agreement in Clitic Doubled Constructions. *NLT* 6, 391-434.
- Suñer, M. 1992. Two Properties of Clitics in Clitic Doubled Constructions. In *Logical Structure and Linguistic Structure: Cross Linguistic Perspectives*, eds. J. Huang and R. May. Reidel.
- Vergnaud, J.-R., and M.-L. Zubizarreta. 1992. The Definite Determiner and the Inalienable Constructions in French and English. *Linguistic Inquiry* 23, 595-652.
- Williams, E. 1975. Small Clauses in English. In *Syntax and Semantics 4*, 249-273, ed. J.P. Kimball. New York: Academic Press.
- Williams, E. 1980. Predication. *Linguistic Inquiry* 11, 203-238.
- Williams, E. 1983. Against Small Clauses. *Linguistic Inquiry* 14, 287-308.