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# **RECIPROCITY IN CAIRENE ARABIC**

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regarded as reflexive pronominals.

In this study, reciprocity has been studied in CA. It has been separated from the reflexives because it has a different structure. Unlike the reflexives, the reciprocal expression in CA is a quantificational nominal that may optionally carry pronominal inflection for the generation of a small pro. It is to be shown that this difference in the structure of the reciprocal reflects a semantic difference. A similar view has been held by Heim, Lasnik and May (1991) as regards the English reciprocal expression "each other". By probing into the syntactic and semantic fundamental properties of plural nominal expressions in general and by looking at the reciprocal expression each other in particular, Heim, Lasnik and May (1991) "call into question the assumption standard in most studies of plural anaphora that their binding properties can be identified with those of singular anaphors (and pronouns)." (1991:100). They believe that the reciprocal expressions in English are "quite distinct" because "any adequate treatment of anaphoric relations found in reciprocal sentences must be able to properly characterize the bound

variable/coreference distinction," (1991:84) which conveys the distributive and collective properties of reciprocals at LF. They show that this semantic difference of the reciprocal expression is derivable from its morpho syntactic properties, ie the meaning of the reciprocal expression in English (ie each other) is derivable from the compositional interactions of the meanings that their constituent parts have in isolation. The distributor each contributes the distinctness requirement (ie  $X_2 \neq X_2$ ) that is found in sentence (1).

(1) The men saw each other.

Heim, Lasnik and May (1991) go on to show that it is this bound variable/coreference distinction associated with the reciprocal expressions that allows them to have both wide and narrow scope interpretations, ie they "can be understood either to denote a collection of individuals or to quantify over the members of that collection" (1991:76). The collective reading (ie the "we reading") conveys the anaphoric reference; whereas the "I reading" "requires its values to vary as a function of values assigned to its antecedents" and in such a case "the plural pronoun

is a bound variable" (1991: 83). This bound variable/coreference distinction associated with reciprocals in English is demonstrated by sentence (2), with sentences (3) and (4) as wide and narrow scope interpretations respectively:

(2) They think that they saw each other.

(3) Wide scope

a) Mary thinks that Mary saw Anne.

b) Anne thinks that Anne saw Mary.

(4) Narrow Scope

a) Mary thinks that Mary and Anne saw each other.

b) Anne thinks that Anne and Mary saw each other.

Accordingly, they believe that "reciprocals contain both an anaphoric and a non-anaphoric part" (1991:69) because they are both "syntactically and semantically complex" (1991:92). This is due to the fact that "the other found in each other and one another has properties of the pronominal other." (Heim, Lasnik and May, 1991:69). As for each in each other, it "apparently can be launched



indinitely in search for a long distance antecedent so long as its trace independently satisfies Principle (A)" (1991:92). Therefore, it is really the "empty category that results from the movement of the distributor each that is governed by the binding theory and pertains to principle (A)" (199:92).

This view as regards the reciprocal expressions in English held by Heim, Lasnik and May (1991) is not shared by E. Williams (1991) because the latter linguist believes that "each in each other is not a quantifier" (Williams, 1991: 171) and that "the distributor that characterizes each other is exactly the distributor that characterizes the plural in general" (Williams, 1991: 163). It is in this respect that he sees the reciprocal each other as an atomic expression with no internal syntactic structure.

M., Dalrymple, S.A. Mchombo and S. Peters (1994) assume a completely different analysis for the Chickêwa reciprocals. They believe that it is wrong to analyze the Chickêwa reciprocals as an incorporated pronoun because the reciprocal affix (ie/-an/) does not fill a syntactic argument position nor can it be analyzed "as an anaphor

(or as containing an anaphor) that must be bound at D-structure, S-structure or L.F.". (1991:145). Rather, they regard /-an/ as "an intransitivizing morphological device, combining with a transitive verb stem to produce a new intransitive stem." (1994:152); ie the morphosyntax of the reciprocal verb in Chikêwa prevents it from taking an object because /-an/ is "an intransitivizing verbal affix" (1994;145). However, semantically they believe that the Chickêwa reciprocal takes an argument as an object NP; ie a variable "fill(s) the semantic argument role to which an object NP would have been linked if the verb had not contained /-an/" (1994:160). Furthermore, the meanings attributable to the Chickêwa reciprocals are derived from the constituent parts in isolation; i.e. "the non-identity requirement on the reciprocal argument" (1994:145) is derived by the verbal affix /-an/, which they call the RECIP and believe that it indicates quantification.

In the description and analysis of the reciprocals in CA, it is to be shown that the nominal /ba9d/, which means "some", is the reciprocal expression. Its status as a nominal is derived from the fact that it occupies the

object NP position and that it may carry pronominal inflection for the generation of a small *pro* along the lines proposed in H. Ghaly (1995a) as regards the pronominal inflections carried by the reflexive nominal /nafs/. It is also more restricted in its syntactic distribution than its related nominal the partitive quantifier ie /ba9d+PI/. It is in this respect that the reciprocal expression in CA is regarded as a quantificational nominal ie. /ba9d+PI/.

However, being a quantificational nominal, the reciprocal expression in CA is to be shown to display the bound variable/coreference distinction referred to by Heim, Lasnik and May (1991), as regards the English reciprocal expression. This is because it has both a non-anaphoric part; and an anaphoric part. Its non-anaphoric part is due to its bound variable interpretation and this is conveyed by its status as a quantificational nominal. Its anaphoric part is due to its coreference interpretation and this is due to its collective interpretation and the fact that it may optionally carry pronominal inflections, just as the reflexive pronominal /nafs/ does. In other words, the semantic complexity of the reciprocal expression in



CA is due to its syntactic complexity. This is again in keeping with Heim, Lasnik and May's (1991) findings as regards the English reciprocal expression.

The discussion of the reciprocal expression in CA is also in keeping with William's (1991) generalization that the distributor that characterizes the reciprocal expression in English is actually the distributor that characterizes the plural in general. But it is to be shown that the distribution that characterizes the plural in general in CA is different in type from that which characterizes its reciprocal expression. This is because the reciprocal expression's distributive interpretation must have the "distinct, requirement" referred to by Heim, Lasnik and May (1991) and Darlymple, Mchombo and Peters (1994). Moreover, it is the fact that the reciprocal expression in CA is itself a nominal of quantification that reinforces this "distinct requirement", which is also associated with reciprocal expressions in both English and Chichêwa.

However, the CA reciprocal expression differs from that of Chichêwa in that the former is a nominal that is

generated as the object NP; ie it is not only semantically a variable due to its status as a nominal of quantification but also syntactically a nominal occupying the object position. Moreover, even cases in which reciprocity may be indicated by a verbal affix as in the related Arabic dialect of Dar9eyya Arabic this verbal affix is not an intransitivizing device, as is the case with the Chichêwa verbal affix /-an/. In both cases, we have transitive verbs, as to be shown.

The transitivity of the verbal predicate that cooccurs with / /ba9d/ in CA is indicated by the fact that it is in complementary distribution with any nominal feasible of being generated as an object NP. And the nominal status of /ba9d/ is due to its complementary distribution with the reflexive nominal /nafs/; its capacity to carry pronominal inflections; and its displaying similar syntactic behaviour to its related nominal ie the partitive quantifier /ba9d +PI/. However, the syntactic distribution of the partitive quantifier in CA and its syntactic behaviour in general is different from that of the reciprocal expression ie the quantificational nominal /ba9d +(PI)/.



This is demonstrated by sentences(5)-(7); in which it is shown that the partitive quantifier may be generated as both the subject or the object NP; may carry a definite article and must carry pronominal inflections.

(5)i) /ʔil ba9d -i-minhum gih/ The some of them came.

Definite Article + /ba9d /+ epenthetic vowel + /min/ + Pl 3rd per pl + Pl 3rd per masc. sing + Perf. verb.

ii) /ʔufna - lba9d -i-minhum/ We saw the some of them

Pl 1st per pl. + perf. verb + Def. Art + /ba9d/ + epenthetic vowel + Pl 3rd per pl.

6) i) /ba9dihum gih/ Some of them came.

/ba9d/ +Pl 3rd per pl + Pl 3rd per masc. sing + Perf. verb.

ii) /ba9dina gih/ Some of us came

/ba9d/ + Pl 1st per pl + Pl 3rd per masc. sing + Perf. verb.

iii) /ba9d ikum gih/ Some of you (pl.) came.

/ba9d/ + Pl 2nd per pl. + 3rd per masc. sing + perf.  
verb.

iv) /<sup>v</sup>šufna ba9dihum/ We saw some of them.

Pl 1st per pl + perf. verb + /ba9d/ + Pl 3rd per pl.

7) i) \*/?ilba9d-i-gih/\* The some came

Def. Art + /ba9d/ + epenthetic vowel + Pl 3rd per  
masc. sing + perf. verb.

ii) \*/sufna -lba9d//\* We saw the some.

Pl 1st per pl + Perf. verb + Def. Art + /ba9d/ -

While all the CA subjects find sentences (7) as ill-formed, only very few of them found sentences (5) as sounding rather like Classical Arabic, which may be defined as pertaining to the Glorious Quran. As for sentences (6), there has been no disagreement about their being well-formed CA sentences with a partitive quantifier. These sentences demonstrate that the partitive quantifier in CA carries pronominal inflection and may be generated as either subject or object NPs. These sentences also

demonstrate that the partitive quantifier may also carry a definite article if it is followed by the preposition /min/, which in turn carries pronominal inflections.

Sentences (5) (i) and (6) (i) - (iii) also demonstrate that this /ba9d +PI/ requires its subject pronominal to have the features 3rd person, masculine and singular despite the fact that it itself must carry plural pronominals and may be of any person. This is because it is a quantifier, and as a quantifier it has its subject pronominal as its bound variable. This syntactic behaviour also points to the fact that the subject nominal as well as the full pronoun are generated outside IP; (cf. H. Ghally 1995a) ie they are generated in AGRcP; but the subject small pro of the verbal predicate is generated in AGRsP.

Having seen the syntactic behaviour of the partitive quantifier /ba9d +PI/, let us now compare it with that of the quantificational nominal ie /ba9d+(PI)/. Whereas the pronominal inflections are obligatory with the partitive quantifier, they are optional with the quantificational nominal. Secondly, whereas the partitive quantifier may be generated as either subject or object, the

quantificational nominal may only be generated as object. Thirdly, whereas the partitive quantifier must have a short epenthetic vowel intervening between /ba9d/ and the pronominal inflections, the quantificational nominal essentially requires a long epenthetic vowel intervening between /ba9d/ + the pronominal inflections. Otherwise, ambiguity occurs, as demonstrated by sentences(8)(iii):-

(8)i) /misikna ba9dihum/ We got hold of some of them

PI 1st per. pl. + perf. verb + /ba9d/ +short epenthetic vowel+ PI 3rd per pl.

ii) \*/misikna ba9diihum/\* We got hold of themselves

PI 1st per pl. + Perf verb + /ba9d/ + long epenthetic vowel + PI 3rd per pl.

iii) /ʃaafu ba9dihum/

PI 3rd per pl + perf. verb + /ba9d/ + short epenthetic vowel + PI 3rd per pl.

They saw some of them or they saw each other.

iv) /ʃaafu ba9diihum/ They saw each other.

PI 3rd per pl. + perf. verb /ba9d/ + long epenthetic



vowel + Pl 3rd per pl.

In sentence 8(iii), we have ambiguity because we have a short epenthetic vowel; but sentence 8(i) is not ambiguous because the difference in the pronominal features between the subject and those carried by /ba9d/ makes it clear that we have a partitive quantifier, rather than a quantificational nominal. Sentence 8(ii), on the other hand, is ill-formed because we have a quantificational nominal (ie it has a long epenthetic vowel) with no pronominal agreement between the subject and those carried by /ba9d/ . As for sentence 8(iv), it is not ambiguous because we have the quantificational nominal, and not the partitive quantifier. This is indicated by the long epenthetic vowel between /ba9d/ and the pronominal inflection. Therefore, the quantificational nominal not only differs from the partitive quantifier in its syntactic behaviour but also phonologically. It may be completely without pronominal inflections and when it carries pronominal inflections, it requires a long epenthetic vowel. Otherwise, ambiguity occurs. It is in this respect that we have regarded the structure /ba9d/+ii+(Pl)/ as a distinct nominal; ie it is a

quantificational nominal and it represents the reciprocal expression in CA. And as it displays "morphological economy" in comparison with the partitive quantifier and the reflexive nominal *ie/nafs/* (cf. H. Ghaly 1995a), it may be regarded as an anaphor by structure in accordance with Burzio's (1991) definition of an anaphor by structure.

However, before we proceed with our analysis of the reciprocal expression in CA in relation to the framework of Generative Grammar, let us have a more detailed look at its syntactic behaviour with simple and derived verbs, as shown by sentences(9).

(9) (i) /šufna ba9d/ (iina)/ We saw each other,

Pl 1st per pl + perf. verb + / ba9d/ + (long epenthetic vowel + Pl 1st per pl).

ii) /šaafu ba9d/ (iihum)/ They saw each other,

Pl 3rd per pl + perf verb + / ba9d/ + (long epenthetic vowel + Pl 3rd per pl)

iii) /šuftu ba9d/ (iikum)/ You (pl) saw each other,

Pl 2nd per pl. + perf verb + / ba9d/ + (long

epenthetic vowel + Pl 2nd per pl).

iv) \*/šufna ba9diihum/ \*We saw themselves.

Pl 1st per pl + perf verb + / ba9d/ + long  
epenthetic vowel + Pl 3rd per pl.

v) \*/šaafu ba9diina/ \*They saw ourselves.

Pl 3rd per pl + perf. verb + / ba9d/ + long epenthetic  
vowel + Pl 1st per pl.

(10) i) /nišuuf ba9d/(iina)/ We see each other

Pl 1st per pl + Imperf verb / ba9d/ + (long epenthetic  
vowel + Pl 1st per pl.

ii) /yišuufu ba9d/ (iihum)/ They see each other

Pl 3rd per pl + Imperf verb + / ba9d/ + (long  
epenthetic vowel + Pl 3rd per pl.

iii) /biyihibbu ba9d/(iihum)/ They love each other.

Pl 3rd per pl + Imperf verb + Progressive aspect  
marker + / ba9d/ + (long epenthetic vowel + Pl 3d  
per pl.)

iv) /habbeena ba9d/ (iina)/ We have loved each other

PI 1st per pl + perf verb + / ba9d/ + (long epenthetic vowel + PI 1st per pl.)

Sentences (9) (i)-(iii) are well-formed because we have the quantificational nominal / ba9d/+(ii + PI)/ and there is pronominal agreement between the subject pronominal and that optionally carried by / ba9d/ . Sentences (9) (iv) and (v), on the other hand, are ill-formed because there is no agreement.

Sentences (10) demonstrate that the quantificational nominal ie / ba9d/+ (ii) + PI)/ may be generated with the perfective or the imperfective verbs \*(1) in CA. That it may also be generated with derived verbs may be shown by sentences (11).

(11)(i)/kallimna ba9d/ (iina)/ We spoke to each other

PI 1st per pl + perf. verb + causative marker (2) + / ba9d/ + (long epenthetic vowel + 1st per pl).

ii) /9allimu ba9d/ (iihum)/ They taught each other

PI 3rd per pl + perf. verb + causative marker + / ba9d/ + (long epenthetic vowel + PI 3rd per pl).



(12)(a) (i)/biyikallimu ba9d/ (iihum)/ They speak to each other.

PI 3rd per pl + Imperfect verb + progressive aspect marker + causative marker + ba9d/ + (long epenthetic vowel + PI 3rd per pl.)

ii) /bini9allim ba9d/ (iina)/ We teach each other.

PI 1st per pl + Imperfective verb + progressive aspect marker + causative marker + /ba9d/ + (long epenthetic vowel + PI 1st per pl).

iii) /biyi9allimu ba9d/ (iihum)/ They teach each other.

PI 3rd per pl + Imperfective verb + progressive aspect marker + causative marker + /ba9d/ + (long epenthetic vowel + PI 3rd per pl).

In sentences (11), we have derived verbal forms with causative verbs, which behave like the simple verbs in that they take the quantificational nominal /ba9d/ (ii+PI)/ as the reciprocal anaphor. Likewise, sentences (11) are not ambiguous so long as the pronominal inflection is preceded by a long epenthetic vowel or if /ba9d/ is generated by itself.

Having looked at the structure of the reciprocal expression in CA and shown that it is a nominal of a restricted syntactic distribution and that it has morphological economy" in the sense that its pronominal inflections are only of an optional status, let us now look at its semantics. As proposed for the English reciprocal expression by Heim, Lasnik and May (1991), the semantics of the CA reciprocal expression likewise is dependent on its structure. Its bound variable interpretation (ie its distributive or the "I" reading) is brought about by the fact that it is a nominal of quantification; therefore, it has the "distinct requirement" associated with the reciprocal anaphors. As for its coreference interpretation (ie the collective or the "we" reading), this is brought about by the fact that its a plural nominal. It is to be noted, however, that the bound variable/coreference distinction associated with the CA reciprocal expression is not restricted to such expressions but that it characterizes plural nominals in general. Despite the fact that this is reminiscent of Williams (1991), yet the bound variable interpretation associated with plural nominals in CA in general is definitely different from that associated

with the reciprocal expression in particular. This semantic difference may be demonstrated by sentences (12)(b) and (13), in which we have reciprocal expressions as well as plural reflexives'.

(12)(b) i) /š<sup>∇</sup>aafu ba9d/ (iihum)/ They saw each other.

Pl 3rd per pl + Perf. verb + /ba9d/ + (long epenthetic vowel + Pl 3rd per pl).

ii) /š<sup>∇</sup>aafu nafsi(i)hum/ They saw themselves.

Pl 3rd per pl + perf. verb + /nafsi/ + either short or long epenthetic vowel in free variation + Pl 3rd per pl.

(13) i) /š<sup>∇</sup>aafu nafsi(i)hum filmiraaya/

Pl 3rd per pl + perf verb + /nafsi/ + free variation of either short or long epenthetic vowels + Pl 3rd per pl + prep /fi/ "in" + Def. Art + nominal + Pl fem. sing. They saw themselves in the mirror.

ii) /š<sup>∇</sup>aafu ba9diihum filmiraaya/

Pl 3rd per pl + perf verb + /ba9d/ + long epenthetic vowel + Pl 3rd per pl + prep /fi/ + Def. Art +

nominal + Pl fem. sing.

They saw each other in the mirror.

iii) /saafu ba9d-i-filmiraaya/ They saw each other  
in the mirror.

Pl 3rd per pl + perf verb + /ba9d/ + epenthetic  
vowel + prep "in" + Def Art + nominal + Pl fem.  
sing.

iv)/kulli waahid saaf nafsufilmiraaya/

universal quantifier "every" + epenthetic vowel +  
numeral "one" + Pl 3rd per masc sing. + perf verb  
+ /nafs/ + Pl 3rd per. masc. .sing. + perp/fi/ + Def.  
Art + nominal + Pl fem. sing.

Comparing sentences (12)/(i) and (ii), we find that  
the bound variable/coreference distinction is found in  
both of these sentences. As /nafs +Pl/ in sentence (12)(ii)  
is plural, it has the bound variable/coreference  
distinction; but one that is different in kind from that  
found in sentence 12(i). However, both these sentences  
are similar in their coreference interpretation. This is  
demonstrated by (14).



- (14) i) a)  $(x + y)$  saw  $(x + y)$   
               b)  $x$  saw  $y$ , and  $y$  saw  $x$
- ii) a)  $(x + y)$  saw  $(x + y)$   
               b)  $x$  saw  $x$ , and  $y$  saw  $y$   
                     (b)

Both sentences (12) (i) and (ii) are similar in their collective meaning, as can be seen from (14) (i) and (ii) (a); but they are different in their distributive interpretation, as can be seen from (14) (i) and (ii) (b). Therefore, despite the fact that plural nominals in general do have this bound variable/coreference distinction, yet it is only the reciprocal expression whose distributive interpretation requires the above mentioned "distinct requirement." And it is due to the structure of the reciprocal expression that we may have this "distinct requirement" associated with its bound variable interpretation; ie due to its being a nominal of quantification.

Looking now at sentences (13), we similarly find that sentences (13) (i) and (ii) are similar in their collective interpretation; but they differ in their distributive inter-

pretation. That it is the collective interpretation that is predominant in these sentences is indicated by the fact that the distributive interpretation of the latter sentence is best expressed by the bound variable structure in sentence (13) (iv). Moreover, the mere fact that the epenthetic vowels tend to be preferred to be long indicates that the collective interpretation is reinforced by the focalization of the pronominal inflection in both of these sentences. Apart from the reciprocal expression in which the long epenthetic vowel disambiguates the reciprocal anaphor from the quantifier, even the reflexive construction may optionally allow a long epenthetic vowel. This definitely brings to light the fact these pronominal inflections are focalized in the sense of Zribi-Hertz (1993). It is probably due to this focalization with the intention of emphasizing the collective interpretation that leads to the preference of the long epenthetic vowel before it. Therefore, it is believed that despite the fact the reciprocal expression / ba9d/ in CA displays the bound variable/coreference distinction in itself as it is a plural nominal, yet the optional generation of the pronominal inflection that it may carry is there as a kind of

focalization, and in turn an emphasis of its collective interpretation. Accordingly, in sentence (13) (ii), in which we have the collective interpretation predominant in this reflexive expression, the emphasis on the collective interpretation is indicated by the tendency to allow and in fact to prefer a long epenthetic vowel in this sentence. As a matter of fact, it is this predominance of the collective interpretation in sentence (13) (i) that makes sentence (13) (iii) sound a little bit odd. Sentence (13) (iii) is well-formed only if it is interpreted in its distributive interpretation which in turn is restricted to the situation in which each person only sees the other through the mirror.

This assumption that the optional generation of pronominal inflection carried by the reciprocal expression /ba9d/ in CA emphasizes its collective interpretation (as these pronominals may be viewed as a kind of focalization) may be further demonstrated by sentences (15) and (16).

(15) i) /habbeena ba9d iina/ We have loved each other.

Pl 1st per pl + perf verb + /ba9d/ long epenthetic

vowel + Pl 1st per pl.

ii) /habbeena nafsi(i)na/ We have loved ourselves.

Pl 1st per pl + perf. verb + /naf<sup>s</sup>/ + short or long epenthetic vowels in free variation + Pl 1st per pl.

(16) i) /binikallim ba9diina/ We are in touch.

Pl 1st per pl + Imperf verb + progressive aspect marker + causative marker + /ba9d/ + long epenthetic vowel + Pl 1st per pl.

ii) /binikallim ba9d/ We are on talking terms.

Pl 1st per pl + Imperf verb + progressive aspect marker + causative marker + /ba9d/

iii) /binikallim nafsi(i)na/ We talk to ourselves.

Pl st per pl + Imperf verb + progressive aspect marker + causative marker + /naf<sup>s</sup>/ + short or long epenthetic vowels in free variation + Pl 1st per pl.

It is to emphasize the collective interpretation that the well-known Egyptian singer "Shadia" chooses in her



well - known song the form of the reciprocal expression in CA that has a focalized pronominal form, as shown by sentence 15(i). And it is in its collective interpretation that sentence 15(ii) is similar to that of 15(i). Again this emphasis on the collectivism in sentence 15(ii) is indicated by its allowing (and indeed preferring in accordance with many subjects) to have a long epenthetic vowel following /nafs/.

Similarly, it is the presence of pronominal inflection carried by /ba9d/ in sentence 16(i) that allows us to translate it as such, as distinct from that of 16(ii). Since the act of talking to one another is shared by us (ie it is a mutual and a give and take process), sentence 16(i) has /ba9d/ with a focalized pronominal. But since the act of talking together is very limited, there is no sense of our togetherness in sentence 16(ii). Consequently, sentence 16(ii) is the only feasible answer to the question "Are you upset with one another?". Therefore, the semantics of the reciprocal expression in CA is definitely dependent on its structure.

Moreover, the assumption that the optional generation

of the focalized pronominal reinforces the collective interpretation of the reciprocal expression in CA helps us to maintain a symmetrical pattern between the reciprocal and the reflexive expressions in the syntax of CA. Since the reflexive pronominals may either be singular or plural and since the bound variable/coreference distinction of Williams (1991) is only associated with plural nominals, it follows that reflexivity is basically of collective coreference, and not of the bound variable interpretation. And as reflexive coreference is indicated by means of pronominals that are free in their minimal domains, it follows that for the emphasis of collective coreference in the reciprocal expression the same process applies; ie we have pronominal forms that focalize the quantificational nominal and which are to be shown to be free in their minimal domains nonetheless. In other words, the very same rule is at work in both reflexivity and reciprocity when they have similar semantic interpretation, ie when we have the collective interpretation. This seems to demonstrate that it is the collective coreference that is the unmarked form of coreference in CA and that it is basically conveyed by

means of pronominals that are free in their minimal domains whether for reflexivity or reciprocity. With the former these pronominals are by themselves (cf. H. Ghaly (1995a)); but with the latter they focalize the quantificational nominal. This not only points to the structural complexity of the reciprocal expression in CA but also to its semantic complexity. Accordingly, it can be said that reciprocity in CA represents the marked coreference in comparison with reflexivity as the unmarked one, ie the former is not only structurally complex but always semantically complex as it must always have this bound variable / coreference distinction referred to by Heim, Lasnik and May (1991). As for the latter, it may have this bound variable/coreference distinction only when it is plural. Moreover, it is only the reciprocal that has the "distinct requirement" associated with its bound variable interpretation, as shown by Heim, Lasnik and May (1991) and Darlymple, Mchombo and Peters (1994). Therefore, the unmarked coreference in the sense of a collective interpretation is indicated in CA basically by means of pronominals that are free in their minimal domains; whereas the marked coreference in the sense of



having both the distributive with the "distinct requirement" and the collective interpretations is indicated by means of a complex structure i.e. a quantification nominal and a pronominal, justifying its status as the marked form of coreference in CA. In either the unmarked or the marked forms of coreference in CA, the same rule is maintained; ie pronominals free in their minimal domains are basically associated with the collective interpretation of coreference.

However, the semantic complexity of the reciprocal expression in CA is not only a reflection of its structural complexity. This is because we have this bound variable/coreference distinction associated with reciprocal expressions even when we have the quantificational nominal by itself, ie without the optional pronominal. This semantic complexity is due to the fact that the quantificational nominal itself is a plural nominal and the fact that it is a nominal of quantification, in turn, it denotes the bound variable interpretation with the distinct requirement. But as we have seen for the emphasis of the collective interpretation the optional

pronominal is generated focalizing this quantificational nominal, making it also complex in structure.

We have seen that these coreferential pronominals whether indicating reflexivity or focalizing the quantificational nominal in reciprocity are always free in their minimal domains and that this is in accordance with principle (B) of the Classical Binding Theory of Chomsky (1982a). We would like now to determine the status of this nominal (ie the quantificational nominal) used as the reciprocal expression in CA. In other words, does it subsume to principle (C), (B) or (A) of the Classical Binding Theory of Chomsky (1982a)? Being a nominal, it should subsume to principle (C); but being a nominal of "morphological economy" it may subsume to principle (A) of the Classical Theory of Binding. Assuming that it does subsume to principle (A) of the theory of Binding, then we have a violation of Principle (A) when this nominal has a focalized pronominal. This is because in such a case its minimal domain is the NP in which it and its focalized pronominal are generated. In turn, this anaphor (ie /ba9d/) will be free in its minimal domain in violation

of principle (A). Moreover, if we maintain that /ba9d/ indeed is an anaphor and that it subsumes to principle (A) of the theory of Binding, then again we have a violation of principle (A) in long distance reciprocals in CA. This is demonstrated by sentences.(17)

(17) i) /biyi9tagidu ?innihum <sup>√</sup>šaafu ba9d/(iihum)/

PI 3rd per pl + Imperfective verb + progressive aspect marker + Comp/ ?inn/ + PI 3rd per pl + PI 3rd per pl + perfective verb + /ba9d/ + (long epenthetic vowel + PI 3rd per pl)

ii) /humma fakriin ?innihum <sup>√</sup>šaafu ba9d/(iihum)/

FP 3rd per pl + active participle + PI pl + Comp + PI 3rd per pl + PI 3rd per pl + Perfective verb + /ba9d/ + (long epenthetic vowel + PI 3rd per pl).

iii) /humma fakriin ?innihum biyihibbu ba9d/? (iihum)/

FP 3rd per pl + active participle + PI pl + Comp + PI 3rd per pl + PI 3rd per pl + Imperfective verb + progressive aspect marker + /ba9d/+? (long epenthetic vowel + PI 3rd per pl).

iv) /humma fakriin ?innihum fahmiin /ba9d/? (iihum)/

FP 3rd per pl + active participle + PI PI + Comp +  
 PI 3rd per pl + active participle + PI pl + /ba9d/  
 + ? (long epenthetic vowel + PI 3rd per pl).

Granted that /ba9d/ subsumes to principle (A) of the Classical Theory of Binding of Chomsky (1982a), then we have a violation of principle (A) in sentences (17) because it is not simply bound in its governing category. If we take /ba9d/ by itself without the optional pronominal inflections, we find that it is not simply bound in its governing category which is the embedded clause but it is also coreferential with the pronominal inflection carried by the complementizer /?inn/ as well as with the subject of the matrix clause. For example, in sentence 17(i) /ba9d/ is bound in the /ʒaafu/ predicate as well as being coreferential with the /?inn/pronominal inflection and the subject of the matrix clause. Similarly, in sentence 17(ii) we have the same thing except that the matrix clause has a nominal predicate, which requires an overt or full pronoun form. In sentence 17(iii), the matrix clause also has a nominal predicate with a full pronoun. Again /ba9d/ is bound in its governing category ie the



/biyihibbu/predicate; but it is nevertheless coreferential with the pronominal in the complementizer /?inn/ and the subject of its matrix clause. And finally in sentence 17(iv) /ba9d/ is bound in its governing category, which is in this case a nominal predicate ie the /fahmiin/predicate. But it is also coreferential with the pronominal inflection of the complementizer /?inn/ and the subject of the matrix clause. Therefore, even with the generation of /ba9d/ by itself there is a violation of principle (A) in sentences (17) because it is also bound outside its governing category.

Furthermore, with the generation of the optional pronominal inflection carried by /ba9d/ we also have a violation of principle (A) of the theory of Binding of Chomsky (1982a). This is because the governing category for /ba9d/ in this case is the NP in which it as well as its focalized pronominal are generated. And as /ba9d/ is not bound in its governing category ie that NP, we have a violation of principle (A). Therefore, when /ba9d/ in sentences (17) has a focalized pronominal we have violation of principle (A) due to long distance reciprocity,



in the manner demonstrated above, as well as due to the fact that the governing category in these cases is the NP, rather than the embedded clause.

It is also to be noted that in sentences (17) (iii) and (iv) it is the quantificational nominal by itself that is preferred ie without the pronominal inflections. This is because it is the bound variable interpretation with the distinct requirement associated with reciprocals that is predominant in these sentences. For example, the implication in sentences (17) (iii) and (iv) is that they really do not love each other nor do they understand each other as they imagine they do. In other words, the pronominal inflections are not required because it is not the collective interpretation that is intended but the distributive interpretation. This is clear if we compare these sentences with those of (15) (i) and (16) (i). In sentence 15(i), the collective interpretation is there because we know that we share our love with one another.

Sentences (17) (iii) and (iv) also demonstrate that the active participle (3) is a nominal predicate in that it requires a full pronoun as its subject, rather than a small

pro that is locally determined by heavy inflections as is the case with verbal predicates(4). It is only the pronominal inflection, carried by the complementizer /?inn/in sentence (17)(iv) that locally determines for a subject small pro for the nominal predicate; ie the /fahmiin/ predicate. Nonetheless, whether we have a nominal predicate or a verbal predicate in sentence (17) there is a violation of principle (A) of the Classical Binding Theory of Chomsky (1982a).

Accordingly, it is in this respect that it is more feasible to regard this nominal, of quantification, as subsuming to principle (B) of the Classical Binding Theory of Chomsky (1982a), rather than to principle (A). Moreover, Chomsky (1982b) says that "principle (C) can be entirely eliminated" (1982b: 36); therefore, /ba9d/ being a quantificational nominal may now subsume to principle (B), instead of principle (C). This nominal is not only an R-expression but also a variable and the fact that it is a variable is indicated by its capacity to have an A' - antecedent, ie it may have the pronominal inflections carried by the complementizer /?inn/ as its antecedent, as shown by

sentences (17). But as it now subsumes to Principle (B) of the Binding Theory in accordance with Chomsky (1982b), it must be shown that it is simply free in its governing category (ie its minimal domain) but may have an antecedent outside that domain. In other words, it behaves like the coreferential pronominals of H. Ghaly (1995a) conveying reflexivity. Therefore, it remains for us to show how /ba9d/ subsumes to principle (B) of the theory of Binding of Chomsky (1982b) and how also its focalized pronominals subsume to the same principle (ie principle (B) of the theory of Binding of Chomsky (1982(a) and (b)).

However, before we discuss these queries let us first have a very quick look at reflexivity and reciprocity in a related dialect i.e. Dar9eyya Arabic. This dialect of Arabic is spoken by old-aged people living in Dar9eyya, a small village near Riyadh; i.e. the capital of Saudi Arabia. It is believed that Dar9eyya is the home town of the Saudi Royal Family and that due to the ease of transportation nowadays and the present day Cosmopolitan society of Riyadh, this dialect of Arabic is dying out (cf. H. Ghaly (1988)). The importance of this very brief look at Dar9eyya

Arabic (ie DA) in this study of Cairene Arabic (ie CA) is that by way of comparison the notion of unmarked and marked forms of coreference in Arabic in general become more evident. Again the unmarked form of coreference is represented by reflexivity; whereas the marked form is represented by reciprocity. This may be demonstrated by sentences (18).

(18) i) /yitatayyibuun/ They fix themselves up.

Pl 3rd per pl + Imperfective verb + causative marker  
+ verbal affix /-ta-/.

ii) /yitatayyib lil9irs/ He fixes himself for the wedding.

Pl 3rd per masc. sing. + Imperfective verb +  
causative marker + verbal affix /-ta-/ + prep/li/  
"for" + Def. Art + nominal + Pl masc. sing.

iii) /yitazayyinuun/ They decorate themselves .

Pl 3rd per pl + Imperfective verb + causative marker  
+ verbal affix/-ta-/.

iv) /yitazayyin lil9irs/ He decorates himself for the wedding.



Pl 3rd per masc. sing + Imperfective verb +  
causative marker + verbal affix /-ta-/ + prep/li/+  
Def. Art + nominal + Pl mas. sing.

(19) i)

/tatayyabaw lil9irs/ They fixed themselves up  
for the wedding.

Pl 3rd per pl + perfective verb + causative marker  
+ verbal affix/-ta-/ + prep/li/+ Def. Art + nominal  
+ Pl masc. Sing.

ii) /tazayyanaw lil9irs/ They decorated themselves  
for the wedding.

Pl 3rd per pl + perfective verb + causative marker  
+ verbal affix/-ta-/ + prep/li/+ Def Art + nominal  
+ Pl masc. sing.

iii) /tazayyan lil9irs/ He decorated himself for the  
wedding.

Pl 3rd per masc. sing + perfective verb + causative  
marker + verbal affix/-ta-/ + prep /li/ + Def. Art  
+ nominal + Pl masc.sing.

(20) i) /yizayyinuun ba9δ/ They decorate each other.

PI 3rd per pl + Imperfective verb + causative marker + /ba9δ/

ii) /zayyanaw ba9δ/ They decorated each other, PI 3rd per pl + perfective verb + causative marker+ba9δ/

(21) i) /yizayyinuun ilbeet/ They decorate the house.

PI 3rd per pl + Imperfective verb + causative marker + Def Art. + nominal + PI masc. sing.

ii) /yitugguun 9iylaanhum/ They beat their children.

PI 3rd per pl. + Imperfective verb + nominal +PI masc. sing + PI 3rd per pl.

(22) i) /yitatugguun/ They beat each other.

PI 3rd per pl + Imperfective verb + verbal affix/-ta-/.

ii) /yitugguun ba9δ/ They beat each other.

PI 3rd per pl + Imperfective verb + ba9δ/

Sentences(18) and (19) demonstrate that DA indicates coeference by means of the verbal affix/-ta-/.

It is an inflex with the Imperfective verb, as shown by sentences (18). It is a prefix with the perfective verb, as shown by sentences (19). And by comparing sentences (18) and (19) with those of (21), it becomes clear that that the verbal affix /-ta-/ is in complementary distribution with the object NP; ie once we have an object NP, this verbal affix /ta-/ disappears. Similarly, it is in complementary distribution with the quantificational nominal ie /ba9δ/ in DA(5). Therefore, both the quantificational nominal ie /ba9δ/ as well as any other nominal feasible of being generated as the object NP are in complementary distribution with the verbal affix /-ta-/ in DA.

It is to be noted that this is not in keeping with Dalrymple, Mchombo and Peter's (1994) belief that the verbal affix /-an/ in Chichêwa is an intransitivizer. Unlike their analysis of Chichêwa, the analysis proposed here for DA is that this verbal affix (ie/ta-/) is in complementary distribution with the object NP. In other words, the  $\theta$  grid of these verbs with or without the verbal affix /-ta-/ is that of a transitive verb. This is

reinforced by sentences (22).

Sentences (22) also raise the question as to whether the verbal affix /-ta-/ in DA is really a reflexive marker. As a matter of fact, it does seem to be the case by looking at these very limited data of DA that this verbal affix ie /ta-/ is simply a marker of coreference and that this coreference is interpreted to be reciprocal in sentence (22)(i), and not reflexive, due to semantic restrictions imposed on that particular lexical item ie this verb /tugg/. "to beat". Otherwise, when there are no such semantic restrictions, it is interpreted as reflexivity, as shown by sentences(18) and (19). In other words, this verbal affix in DA is actually the unmarked form of coreference in DA; this unmarked form is interpreted as reflexive if the semantics of the predicate in question does not impose idiosyncratic properties. This is why it is interpreted as reflexive in sentences (18) and (19) but as reciprocal in sentence (22) (i). Furthermore, as the reflexive has basically the collective interpretation specially with the singular forms, it may be assumed that the verbal affix/-ta-/ in DA essentially conveys the collective



interpretation. This accounts for the difference between sentences (22) (i) and (ii): the former conveys reciprocity with the collective interpretation predominant, while the latter conveys reciprocity with the distributive interpretation predominant, which is brought about by the fact that /ba9δ/ is a quantificational nominal in turn allowing for the "distinct requirement" associated with the reciprocal expressions. Therefore, the former interpretation (ie the collective one) may be regarded as the unmarked form of coreference in DA; whereas the latter interpretation may be regarded as the marked form: the former is indicated by the verbal affix /-ta-/ but the latter by the quantificational nominal /ba9δ/.

In the light of this very brief discussion of coreference in DA, it may be said that CA analogously also has a marked and an unmarked form of coreference. The unmarked form of coreference in CA is indicated by means of pronominal forms that are free in their minimal domains; and as these pronominals may be either singular or plural, they are basically associated with the collective interpretation. Moreover, when they assume the bound

variable interpretation, they have to be plural in form and they do not have the "distinct requirement" On the other hand, the marked form of coreference in CA is that with the quantificational nominal ie /ba9d/, whose distributive inter-pretation with the distinct interpretation is predominant due to its having properties of the quantifier. And when we have the quantificational nominal as well as its optional pronominal inflection ie /ba9d+ (PI)/, we have a complex structure which focalizes the pronominal for the emphasis of the collective interpretation. It is a structurally complex form that, in turn, conveys semantic complexity; ie the bound variable interpretation conveyed by /ba9d/ and the collective inter-pretation conveyed by the pronominal inflection.

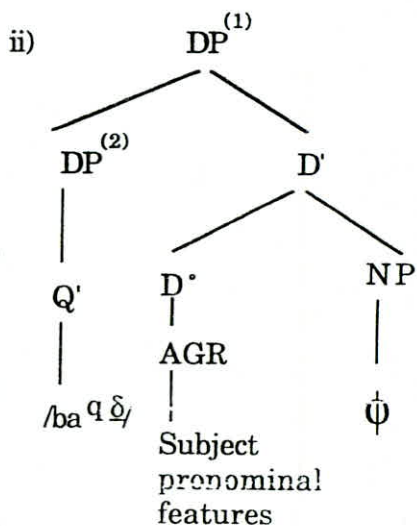
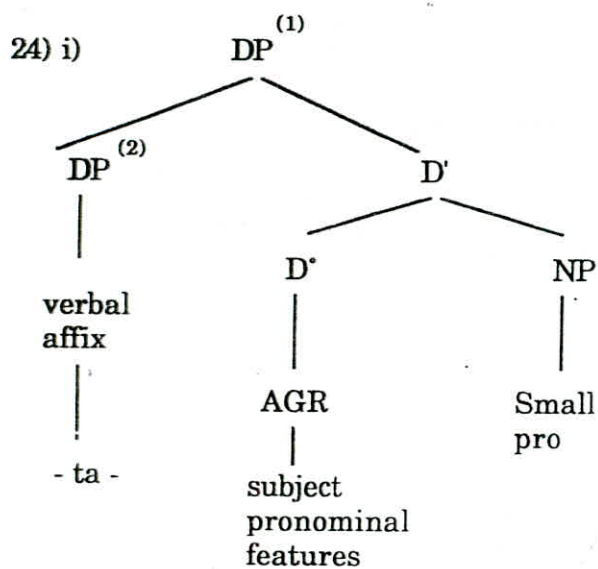
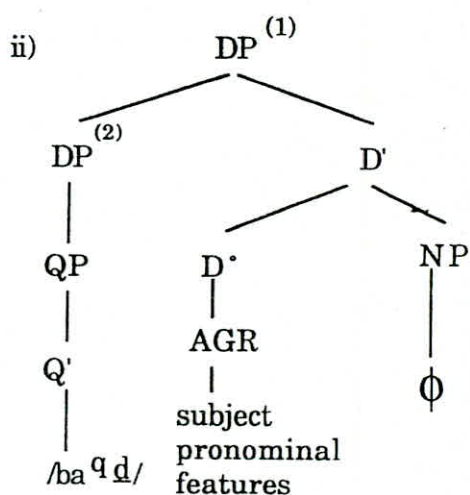
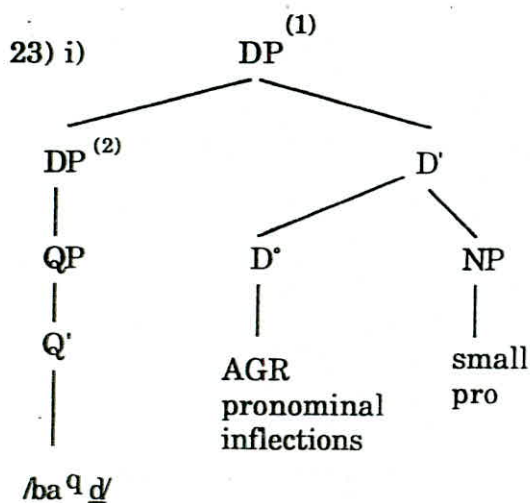
It is to be noted that this is nonetheless in keeping with William's (1991) generalization that the bound variable/coreference distinction is a general property of the plural nominals. This is because this distinction in plural nominals in general is due to a semantic complexity of the concept of plurality itself; ie it is not the result of a structural complexity. Therefore, with the reciprocal

expression in CA this distinction is basically due to a structural complexity, leading to a semantic complexity. It is the fact that reciprocity is indicated by a nominal of quantification for the denotation of the bound variable interpretation with the distinct requirement and also the fact that the reciprocal expression in CA may be of a complex structure in which we have the quantificational nominal as well as pronominal inflections that indicates that the bound variable/coreference distinction in the reciprocal expression in CA is structurally based. It is in this respect different from the bound variable/coreference distinction that is associated with the plural nominals in general. This is definitely reminiscent of Heim, Lasnik and May's (1991) analysis of the reciprocal expression in English, ie its semantic complexity is derivable from the compositional interactions of the meanings that their constituent parts have in isolation.

Having shown the parallelism between the CA and the DA reflexive and reciprocal coreference and that they both display marked and unmarked forms of coreference, let us now attempt to show how both forms of coreference

may be shown to subsume to principle (B) of the Classical Binding Theory of Chomsky (1982a) and (1982b), ie how they must be free in their governing categories but may have antecedents outside these minimal domains. This is demonstrated by (23) and (24):





In accordance with Zribi-Hertz' (1993) analysis of the possessive expression "own" in English, we have maintained that DP(1) incorporates the NP and its (pre) determiners. In (23)(i), /ba9d/ is generated as the specifier of DP(1); And as it carries pronominal inflections that locally determine the generation of a small pro, this small pro is generated as the complement of D° in DP(1), Being the complement of D°, small pro is properly governed in accordance with Chomsky (1982b) and its application in Arabic in H. Ghaly (1988). D° itself has the agreement features of the antecedent of this reciprocal expression and which is outside this minimal domain. These agreement features have been overtly manifested in (23)(i) because these pronominal inflections are the local determiners for this small pro in NP. In other words, whether these agreement features are overtly manifested or not they are always there in D° as an anaphoric NP is a defective NP that requires an antecedent for its semantic interpretation (cf. Reinhert and Reuland 1993). Accordingly, D° also governs its specifier ie /ba9d/.

It is to be noted that despite the fact that both /ba9d/

and small pro in (23)(i) are in the same domain and yet they both subsume to principle (B) of the Classical Binding Theory of Chomsky (1982b). This is actually maintained if we regard /ba9d/ as denoting the bound variable interpretation with the distinct requirement and its small pro as denoting the collective interpretation. In other words, both /ba9d/ and its small pro are of disjoint reference in the same domain which is a syntactic predicate as defined in H. Ghaly (1995a). Accordingly, they subsume to Principle (B) of the reformulated Binding Theory by H. Ghaly (1995a) to account for the syntactic behaviour of the disjoint reference of (pro)nominals in CA. They also subsume to Principle (B) of the Classical Binding Theory of Chomsky (1982b) as they are nonetheless free in their governing categories ie their minimal domains which are DP(1). But they have antecedents outside these domains. It is in this respect that they also subsume to Principle (A) of the reformulated Binding Conditions of H. Ghaly (1995a) to account for coreferential pronominals in CA. This in turn also allows us to show that we have a general symmetrical pattern for the syntactic behaviour of pronominals in CA including the reciprocal expression

/ba9d+(PI)/.

In (23) (ii), we have a semantic predicate unlike in (23) (i), in which we have a syntactic predicate. In H. Ghaly (1995a) a semantic predicate has been defined as a one argument predicate in the sense that we have a head with one argument. on the other hand, the syntactic predicate has been defined as a two argument predicate in the sense that we have one head and two arguments both of which are of disjoint reference, as shown in 23(i). Having only one argument and its head in (23)(ii), we have a semantic predicate in which this argument is /ba9d/ must be free in accordance with Principle (A) of the reformulated Binding Conditions of H. Ghaly (1995a) to account for coreferential pronominals in CA. This in turn is in keeping with Principle (B) of the Classical Binding Theory of Chomsky (1982b) because /ba9d/ is only free in its governing category ie its minimal domain which is DP(1); but may have an antecedent outside that domain. That DP(1) is the governing category of /ba9d/ in 23(ii) is shown by the fact that it is generated as the specifier in DP(1) on analogy of (23)(i). Also its D°



analogously has the agreement features of the antecedent of this reciprocal expression; therefore,  $D^0$  governs its specifier ie /ba9d/. This analysis not only helps maintain that this reciprocal expression subsumes to the Classical Binding Theory of Chomsky (1982b) as regards its Principle (B) but also helps us to maintain a general pattern in CA for coreferential (pro) nominals including its reciprocal expression.

Analogously, a similar analysis may be maintained for the DA reciprocal expression ie /ba9&/. It is generated as the specifier in DP(1) in 24 (ii) and it is governed by its  $D^0$ , which again has the agreement features of its antecedent. Again as DP(1) in 24(ii) is a one argument predicate, we have a semantic predicate and in accordance with Principle (A) of the reformulated Binding Conditions of H. Ghaly (1995a), it should be free in this minimal domain ie DP(1). It actually is free in that minimal domain but has an antecedent outside that domain. Therefore, it also subsumes to principle (B) of the Classical Binding Theory of Chomsky (1982b).

In a similar respect, the verbal affix/-ta-/ in 24(i) is

regarded as the specifier in DP(1). However, as the verbal affix /-ta-/ is not of an argument status, it is just a device triggering a rule that requires the agreement features in  $D^0$  to locally determine for the generation of a small pro as the complement of  $D^0$ . Again these agreement features are those of the antecedent of this anaphoric pronominal ie small pro. But being a pronominal, again it is free in its minimal domain ie DP(1) in accordance with Principle (A) of the reformulated Binding Conditions of H. Ghaly (1995a). This minimal domain is a semantic predicate as we only have one head and an argument ie small pro in 24(i). In turn, this pronominal ie small pro in DA subsumes to the Classical Binding Theory of Chomsky (1982b) in terms of its Principle (B).

It is to be noted that the small pro locally determined by the /-ta-/ verbal affix along with that locally determined by the pronominal inflections carried by /ba9d/ in CA are the complements of  $D^0$  in (23) (i) and (24) (i). Being a complement, these small pros are generated in an A-position. They are similar in this respect to the small pro locally determined by pronominal inflections carried

by the reflexive nominal /nafs/ or any other nominal for that matter. Accordingly, they are assigned genitive case along the lines proposed by H. Ghaly (1995a). Similarly, they also have a focalized  $\theta$  role in accordance with Zribi-Hertz (1993).

### Conclusions :

In this study of reciprocity in CA, we have seen that the reciprocal expression in CA is composed of the quantificational nominal /ba9d/, which is distinct from the partitive quantifier ie /ba9d + i + Pl/. It is not only different in its syntactic distribution as the former is restricted in its syntactic distribution to the object position but also phonologically, ie the quantificational nominal has a long epenthetic vowel intervening between it and the pronominal inflections that it optionally carries. ie /ba9d + ii + (Pl)/. It also differs from the reflexive nominal /nafs/ in that the latter nominal obligatorily carries pronominal inflections and is not restricted in its syntactic distribution to that of object position. It is in this respect that the reciprocal expression in CA differs from those indicating reflexivity; and it is accordingly



believed that the reciprocal expression in CA displays more "morphological economy" of Burzio (1991) than the reflexive ones do. This is why the reciprocal expression in CA is closer to Burzio's definition of an anaphor by structure. As a result, it could be assumed that the reciprocal expression in CA subsumes to Principle (A) of the Classical Theory of Binding by Chomsky (1982a) and (b); whereas the reflexive expressions in CA have been shown in H. Ghaly (1995a) to subsume to Principle (B) of the Classical Binding Theory.

However, this conclusion faces several difficulties. The first is that the reciprocal expression in CA does not always display "morphological economy" as it may also carry pronominal inflections on an optional basis. When it does carry pronominal inflection, both the quantificational nominal ie /ba9d/ and the small pro that is locally determined by its pronominal inflections form a syntactic predicate in which they are both of disjoint reference. The former conveys the distributive interpretation with the distinct requirement associated with reciprocal expressions; while the latter conveys the



collective interpretation. And being of disjoint reference with one another and in turn free in their minimal domain, they may have an antecedent outside that domain. Therefore, /ba9d/ would not be bound within its governing category in accordance with Principle (A) of the Classical Binding Theory of Chomsky (1982(a) and (b)), leading to its violation. The second difficulty is found in long distance reciprocity, in which again we would have a violation of Principle (A) of the Theory of Binding of Chomsky (1982a).

Accordingly, it has been shown in this study of reciprocity in CA that the reciprocal expressions /ba9d/ and /ba9d + PI/ subsume to Principle (B) of the Binding Theory of Chomsky (1982b), rather than to Principle (A). It is in this respect similar to its reflexive counterparts (cf. H. Ghaly 1995a). In both cases, we have (pro) nominals that are free in their minimal domains so that they may have antecedents outside these domains. These minimal domains have been regarded as their semantic predicates in the sense of a one argument predicate. And even when we have the minimal domain of a syntactic predicate in the sense of a two argument predicate, these (pro)nominals

are nonetheless free within their minimal domain, apart from their being of disjoint reference with one another in this minimal domain as it is a syntactic predicate. Therefore, in addition to subsuming to Principle (B) of the Binding theory of Chomsky (1982b), these reciprocal expressions also subsume to Principles (A) and (B) of the reformulated Binding Conditions of H. Ghaly (1995a) to account for the coreferential (pro) nominals in CA. This analysis, in turn, allows us to maintain a general pattern or principle underlying coreferential (pro) nominals in CA whether those indicating reflexivity or those indicating reciprocity. This is consequently in keeping with the standard assumption that the Binding Conditions account for both reflexivity and reciprocity (cf. Chomsky 1982(a), (b) - 1986). In other words, despite the distinct structure of the reciprocal expressions from the reflexive structures in CA, yet they have been shown to subsume to the same principles; ie Principle (B) of the Classical Binding Theory of Chomsky (1982b) and these of H. Ghaly (1995a).

This study of reciprocity in CA in the light of its comparison with some of the coreference that we have in

a related dialect of Arabic (i.e. DA) has demonstrated that there are unmarked and marked forms of coreference in these two dialects of Arabic. The unmarked coreference in CA is indicated by means of pronominals that are free within their minimal domains (i.e. their semantic predicates); and these basically convey the collective interpretation of coreference. And as these pronominals may be singular or plural in form, this type of coreference indicates essentially reflexivity (cf. H. Ghaly 1995a). The marked coreference in CA is indicated by means of a nominal of quantification, which is nonetheless free in its minimal domain (ie the semantic predicate). Being the marked form of coreference, this nominal of quantification in CA is assumed to be basically associated with the bound variable interpretation which has the "distinct requirement". Accordingly, in the CA reciprocal structure in which we also have an optional pronominal, we have a marked structure in which we have both the marked form of coreference as well as its unmarked form. This in turn demonstrates its structural as well as its semantic complexity. Apart from its capacity to convey the collective interpretation as it in itself has a plural nominal



(ie the nominal of quantification), this complex reciprocal structure reinforces this collective interpretation by focalizing a pronominal which is again free in its minimal domain as it represents the collective interpretation and that of the nominal of quantification represents the distributive interpretation with the "distinct requirement". This complex structure of reciprocity in CA comprises both the marked form of coreference in CA as well as its unmarked form; both forms of coreference of which subsume to Principles (A) and (B) of the reformulated Binding Conditions of H. Ghaly (1995a). And as both these principles account for the syntactic behaviour of (pro)nominals in CA whether that of coreference or disjoint reference, they in turn cohere with Principle(B) of the Classical Binding Theory of Chomsky (1982b).

This pattern of unmarked/marked coreference in CA is also reflected in DA as the former form of coreference in DA is conveyed by a verbal affix; whereas the latter form of coreference is conveyed by its nominal of quantification. This analysis of DA maintains a general principle of coreferential (pro) nominals in both CA and DA (ie in both



dialects of Arabic); but it differs from Darlymple, Mchombo and Peter's (1994) analysis of Chickêwa as well as Reinhart and Reuland's (1993) intrinsically reflexive predicates in that the verbal affix in DA is not an intransitivizer nor does it changes the  $\theta$  grid of its predicate, by absorbing one of its  $\theta$  roles.

However, the analysis of the CA complex reciprocal structure has shown that its semantics is derivable from its parts and that it has both an anaphoric as well as a non-anaphoric part. This is similar to Heim, Lasnik and May's (1991) analysis of the English reciprocal expression each other. In CA, the anaphoric part of this complex reciprocal structure is the focalized pronominal; and the non-anaphoric part is the quantificational nominal, giving it its variable quality with the "distinct requirement". Despite the fact that this study of reciprocity has shown that William's (1991) generalization that the bound variable/coreference distinction is a general property that characterizes plural nominals in general is maintained in CA, yet it has also shown that the bound variable interpretation that characterizes

reciprocity is different from that that characterizes plural nominals in general. It is only the bound/

variable interpretation that is associated with reciprocity that has the "distinct requirement," referred to by Heim, Lasnik and May (1991) and Darlymple, Mchombo and Peters (1994). Therefore, despite the fact that the reciprocals in CA have been shown to subsume to the same general principles, yet they are justly separated as a distinct subclass in this general class of coreferential NPs in CA syntax.

## End Notes:

- (1) For a description of the Perfective and Imperfective verbs in Arabic see H. Ghaly (1988 and 1994 (a) and (b)).
- (2) For a discussion of causativization in CA see H. Ghaly (1994b).
- (3) For a discussion of the nominal status of the active participle in CA see H. Ghaly (1994a).
- (4) For a discussion of the syntactic distribution of small pro in Arabic see H. Ghaly (1988) and (1994a).
- (5) The emphatic /d/ in the CA /ba9d/ is pronounced as the emphatic /ð/ in DA; ie the voiced, dental emphatic stop in the former is a voiced, interdental emphatic fricative in the latter. For further discussion of DA see H. Ghaly (1988)

## NOTATION

### I) VOCALIC PHONEMES:

/i/ and /ii/ high front, unrounded short and long vowels respectively.

/u/ and /uu/ high back, rounded short and long vowels respectively.

/e/ and /ee/ mid front, unrounded short and long vowels respectively.

/o/ and /oo/ mid back, rounded short and long vowels respectively.

/a/ and /aa/ low central unrounded short and long vowels respectively.

There are a great variety of allophonic realizations of each phoneme but they are not our concern in this study.

### II) CONSONTANTAL PHONEMES:

#### i) Stops :

/b/ voiced bilabial stop



/t/ and /d/ voiceless and voiced apical dental stops.

/k/ and /g/ voiceless and voiced velar stops.

/ʔ/ voiceless glottal stop.

/g̊/ voiceless uvular stop.

## ii) Fricatives :

/f/ voiceless labiodental fricative.

/s/ and /z/ voiceless and voiced dental grooved fricatives.

/ʃ/ and /h/ voiceless palatal and glottal fricatives.

/x/ and /ɣ/ voiceless and voiced uvular fricatives.

/ħ/ and /ʕ/ voiceless and voiced pharyngeal fricatives.

## iii) Emphatics

/t̤/ and /d̤/ voiceless and voiced emphatic fricatives

/s̤/ dental emphatic fricative.

## iv) Resonants

/r/ and /l/ trilled and lateral resonants.

## v) Nasals

/m/ and /n/ bilabial and dental nasals.

## vi) Semi-Vowels

/w/ and /y/ velar and palatal semi vowels.

It is to be noted that /g<sup>o</sup>/ has been regarded as a phoneme in CA because there are some words in this dialect of Arabic that can only have /g<sup>o</sup>/ and not /ʔ/; for example, /g<sup>o</sup>aahira/ "Cairo" and /g<sup>o</sup>ur`ʔan/"Quran".

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رقم الايداع

١٩٩٥ / ٧١

جامعة عين شمس

كلية الآداب



# حوليات كلية الآداب

المجلد الثالث والعشرون  
الجزء الأول

١٩٩٤ - ١٩٩٥