

**The Development of Agreement Markers
in Standard Arabic**

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In this paper, I discuss the development of subject agreement markers (cf. table 1) in Standard Arabic (SA). The agreement morphemes discussed are used with perfective verb forms only. Inflectional morphemes⁽¹⁾ like these are claimed (Bybee 1985:38) to "have their origin in full words that develop a high frequency of use". The major goal of this paper is to provide answers to such questions as:

- (i) Do agreement markers in SA have their origins in full words? If so, what category of words are they derived from?
- (ii) What processes⁽²⁾ are used in the course of development?
- (iii) Are they synchronically or diachronically derived from their sources?

Before I embark upon answering these questions, I need to point out that agreement markers rise via the channel of personal pronouns in several languages (cf. Heine and Reh 1984:274); for example in *Kvwe*, a central Koisian language, personal pronouns are the sole source for the development of gender as well as number and person agreement through the application of "after thought".

Not all languages, however, observe this path of linguistic change. Personal pronouns may develop into grammatical markers other than agreement. In *Akha* (Willet 1987) the first person pronoun develops into "a visual evidential marker-na" (p.159).

In Dinka(Heine and Reh 1984:274), a third person singular pronoun develops into a relative pronoun, e.g. Yen'he' > relative pronoun.

The function of agreement affixes(Bybee 1985:22-23; Bybee 1987:14) is " to index the participants in the state or event described by the verb and has nothing to do with the inherent meaning of the verb". The agreement affixes are attached to the verb stem in SA:(3)

- (1) ḍarabi-i al-walad-a
hit-2s.F.the-boy-acc
'You,F.,hit the boy.'
- (2) ḍarab-ta al-walad-a
hit-2s m the ,boy-acc
'You(m.)hit the boy.'
- (3) ḍarab-na al-walad-a
hit-3pl the-boy-acc
'We hit the boy.'

I claim that SA agreement markers such as -ti, -ta and -na develop via the grammaticalization of the independent subject pronouns(ISP):Grammaticalization(Heine and Reh 1984) refers essentially to" an evolution whereby linguistic units(=ISP in SA) lose in semantic complexity, pragmatic significance, syntactic Freedom and phonetic substance, respectively" (p.15). Before discussing the nature of such an evolution in SA (i.e. synchronic or diachronic evolution⁽⁴⁾), I, here, substantiate the claim that SA agreement markers are related to the independent subject pronouns which are portmanteau morphemes expressing person, gender and number. This relationship can best be captured by examining the following table in which each agreement marker is

listed along with its alleged pronominal source:-

Table 1 : agreement markers vs. personal pronouns⁽⁵⁾

	<u>1st</u>	<u>2nd</u>		<u>3rd</u>	
agreement markers	-tu	m. -ta	F. -ti	m. ∅	F. -t
sg. pers.pro.	?ana	?anta	?anti	huwa	hiya
agreement markers		-tuma		-aa	-ataa
Dual pers.pro.		?antuma		humaa	
agreement markers	-na	-tum	-tunna	-u	-na
pl. pers.pro.	nahnu	?antum	?antunna	hum	hunna

Source : Ni'ma (1973:113-114)

Table(1), a few irregularities excluded, clearly shows that there is a systematic relationship between the agreement affixes⁽⁶⁾ and the independent forms: for example, -na, the 1p marker, also shows in the 1p of the independent form nahnu; -tuma, the 2d marker appears in the 2d of the independent pronoun ?antuma. Similarly, the 2p suffix -tum surfaces in the 2p masculine of the Free pronoun ?antum. Also, a reflex of -u, the 3p masculine suffix, occurs in the 3p of the independent pronoun hum.

The evidence discussed so far indicates, beyond any doubt, that there is clear phonological and semantic relationship between each agreement affix and its pronominal source. This is argued(Givon 1973) to be a natural consequence for the development of grammatical elements from full words:in his discussion

of the development of tense, aspect and modal morphemes from verbs, Givon (1973:921) suggests that

the grammatical meanings that these verbs develop are predictable to a large extent because they are part of the internal semantic structure present at the beginning of such development.

We are then confronted with two hypotheses concerning the nature of this relationship: the synchronic analysis and the diachronic analysis. The former suggests that the agreement markers are clitics (not suffixes) that are synchronically developed via the reduction of the independent forms. Such an analysis has been used in accounting for the phenomenon of clitics in English (Steele 1977:546):

- (4) 't sraining
- (5) I fought'em

Evidence that the clitics (=t, =em) in (4) and (5) are synchronically developed comes from the fact that they can not cooccur with the pronouns or nouns they represent, suggesting that they have not reached the status of inflections.

- (6)* It't is raining.
- (7)* I fought'em the boys.

Following Steele (1977:545), we can use the "co-occurrence test" as a criterion for determining the type of relationship (i.e., synchronic or diachronic) that holds between the agreement markers and their independent pronominal counterparts in SA :

If clitic pronouns are the synchronic reduction of independent pronouns, we would not expect the two to cooccur.

If SA agreement markers are clitics that are the product of the synchronic reduction of the independent forms, then they should not cooccur with the nouns or pronouns to which they refer; however, they do cooccur with the independent pronouns or nouns they refer to, (thus) indicating that, the synchronic analysis of SA agreement phenomenon is not viable:

(8) ḍarab-na nahnu al-walad-a
hit-1p we the-boy-acc
'We hit they boy'

(9) ḍarab-tum ?antum al-walad-a
hit-2p you(pl.) the-boy-acc
'You hit the boy.'

(10) ?a ?lam-u ?inna ar-riga:l-a ḍarab-u al-walad-a
Know-1s that the-men-acc hit-3p the-boy-acc
'I know that the men hit the boy.'

(8)-(10) are sentences in which the agreement suffix cooccurs with the independent pronoun or noun (cf. (8)) to which it refers. This situation indicates that the agreement affixes can not be the result of the synchronic reduction of independent forms, as in English or French (cf. Steel:1977:246). Before we proceed to discuss the other hypothesis, i.e., agreement affixes in SA are diachronically developed from the independent pronouns, it would be interesting to digress for a moment and consider an instance of synchronic development in SA .

SA has clitic object pronouns which may have developed from the independent object pronouns. That the two sets are related can be illustrated as in table 2 .

Table 2 :clitic objects vs.free object pronouns

	<u>1st</u>	<u>2nd</u>		<u>3rd</u>	
sg.clitic obj.	=ni	m. =ka	f. =ki	m. =hu	f. =ha
pers.pro.	I?yaaya	?iyaaka	?iyaaki	?iyaahu	?iyaaha
clitic obj.		=kuma		= humaa	
Du. pers pro.		?iyaakuma		?iyaahumaa	
clitic obj.	=na	=kum	=kun	=hum	=hunna
pl. pers pro.	?iyaana	?iyaakum	?iyaakun	?iyaahum	?iyaahunna

Source: Ni'ma-(1973:113-114)

As table(2) illustrates, each clitic object pronoun(except 1s form) is phonologically and semantically(i.e.,referential meaning) related to an independent form: in each case the clitic pronoun shows in the final syllable(s)of the independent object pronoun,the independent pronoun from which it has developed. We can give the scenario of this development as follows: Having been desemantized as object clitics, the independent object pronouns were subject to a phonetic process (i.e.syllabic erosion) such that their initial syllables are eroded: ?i-yaa-Ka > -Ka; ?i-yaa-Kum > -Kum etc.

These clitic object pronouns are considered clitics because they are unstressed and do not occur unless the verb is present. They are not considered inflections because they are not obligatory. If Full NPs for objects occur in the sentence, the clitic

pronouns must not appear, a fact which suggests that they are synchronically derived from the independent set:

(11) saraqā= hum al-liṣṣ-u
robbed-3p,m the-thief-nom
'The thief robbed them.'

(12)* saraqā= hum al-liṣṣ-u ar-rija: l-a
robbed.3p/m the-thief- nom the-men-acc
'The thief robbed the men.'

(13)(cf.) Saraqā al-liṣṣ-u ar-rija:l-a
robbed the-thief-nom the-onen-acc
'The thief robbed the men.'

This is distinct from the situation that obtains in Swahili(Heine and Reh 1982:238) where "bound(or clitical)object pronouns and free object pronouns coexist":

(14) ni-na-nw- ona-yeye
I-PRES-him see him
'I see him.'

indicating that clitics must have diachronically developed from the free object pronouns in this language.

Returning to the development of SA agreement forms, I discuss the other hypothesis which claims that these affixes are diachronically developed from the independent subject pronouns. The adequacy of this hypothesis is confirmed by the fact that the agreement forms can cooccur with the elements (nouns or pronouns) they refer to. The processes they have undergone(cf.Heine and Reh 1984) in the course of development are:(1) a functional process,(2) a phonetic process and (3) a morphosyntactic process. The Functional process is desemanticization" by which a lexical

item receives a second non-lexical function"(Heine and Reh 1982: 36) . Thus the independent subject pronouns in SA are desemantized in such a way that they came to encode information about the number, person and gender of the subject. As Heine and Reh (1984) show, the introduction of "desemanticization" does not necessarily mean that the lexical item affected by it disappears" (p.36). This is in stark contrast to what Bybee and Pagliuca (1986:72) predict when they claim that:

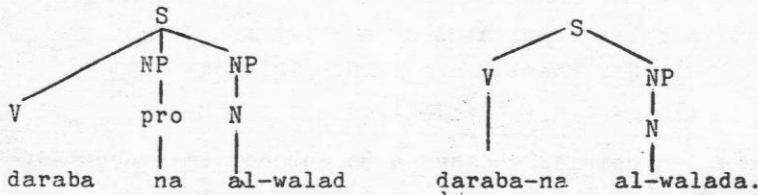
This emptying of lexical content is a prerequisite to grammaticization because grammatical functions in themselves are necessarily abstract.

SA Facts discussed here show that both the desemantized and the non-desemantized units may coexist (cf.clauses(8)-(10)).

After desemanticization had applied, a phonetic process came into the scene and applied its tools. This phonetic process is(syllabic) erosion which is" a process by which the phonological substance of a morpheme is reduced"(Heine and Reh 1982:21). Syllabic erosion has turned the bisyllabic and trisyllabic structure of the independent forms into monosyllabics and disyllabics, respectively, thus reducing them to clitics.

?anta	>	-ta
?anti	>	-ti
?antuma	>	-tuma
humaa	>	-aa
nahnu	>	-na
?antum	>	-tum
?antunna	>	-tunna
hunna	>	-na

The morphosyntactic process of affixation followed syllabic erosion in SA. Having been reduced in form via syllabic erosion, the subject pronouns were affixed to the preceding verb, as in:



The question which now arises is: Why does the grammaticized pronoun attach to the verb rather than the following noun? The answer is that, as Heine and Reh (1984) demonstrate, certain word categories (e.g. verbs) manifest "an attractive power on other categories or constituents to move next to them" (p.31). This explains why grammaticized pronouns tend to be affected by verbal attraction.

Note that the third person singular (masculine) marker is missing from the agreement paradigm given in table (1). How can we account for this? One might argue (cf. Hamou 1989) that the 3s masculine marker is not Zero-as I pointed out-but is realized by the suffix -a which is not analyzed as being part of the root: Hamou (1989:242) claims that "If the marker -aa refers to a 3 dual masculine subject, then -a is to be considered as referring to a 3s subject as in (15):

- (15) ḍarab-a ar-rajul-u al-bint-a
 hit-3s m. The-man-nom- the-girl-acc
 'The man hit the girl.'

According to Hamou(1989), -a in(15) is not part of the verb root but is a suffix indicating a 3s subject (ar-rajul-u). If this analysis were viable, we would expect -a to disappear in the absence of a 3s subject; in the following sentence, the singular subject of(15) has been replaced with a plural subject:

- (16) ḍarab-a ar-rija: l-u al-bint-a
hit-? the-men-nom the-girl-acc
'The men hit the girl.'

(16) shows that -a remains whether a 3s subject is present or not, thus indicating it is part of the verb root.

Thus the only plausible explanation for this situation is to claim that the third person singular masculine marker has disappeared via a phonetic process- loss. Loss, which may have applied after cliticization or affixation, is defined(Langacker 1977:68) as " the disappearance from a language of some element or grammatical device"(7). The loss of 3 person category is not uncommon in the world's languages. It has been related to the animacy hierarchy(Comrie 1981):the first and second person pronouns are human; the third person pronouns are often neither human nor even animate(cf.Biber 1984:55). The third person category refers to a non-participant in the speech act and, therefore, they are more likely to be lost.

Another explanation for the loss of 3s marker of the agreement paradigm in SA might be that 3s category is the most frequent of the paradigm. This is in line with the signal simplicity hypothesis of Langacker(1977:76) who claims that "languages will often exploit Zero for the member that is least marked or most frequent of a paradigm".

Thus agreement affixes in SA are shown to have been diachronically derived from independent subject pronouns. They therefore, underwent various processes, functional, phonetic and morphosyntactic. The functional process desemanticized the subject pronouns into agreement markers. Their syllabic shape, was, then, drastically reduced via syllabic erosion. Then a morphosyntactic process-affixation- applied to attach them to the verb stem. This can be given as in the following:-

personal pronouns	e.g.nahun(lp.subj.pro).
Desemanticization	ḍaraba nahun(agreement)
Erosion(syllabic)	ḍaraba na
Affixation	ḍarab-na
Agreement markers	-na(lp agreement markers).

NOTES

- 1- For a discussion on the distinction between types of expressions such as inflections, derivations etc, see Bybee 1985.
- 2- There are several types of grammaticalization processes utilized by languages (cf.Heine and Reh 1984):
 - (1) Phonetic processes:(a)Adaptation(b)Erosion(c)fusion(d)loss.
 - (2) Morphosyntactic processes:(a)Permutation(b) compounding
(c) Cliticization (d) Affixation (e) Fossilization.
 - (3) Functional processes:(a) Desemanticization (b) Expansion
(c) Simplification (d) Merger.
- 3- The following abbreviations have been used in this paper

acc	accusative	1	First person
d	dual	2	Second person
f	feminine	3	Third person
m	masculine		
nom	nominative		
NP	noun phrase		
p(l)	Plural		
pro	pronouns		
s(g)	singular		

- 4- Languages can be considered either as historically developing or as more or less static, synchronic objects of investigation (Hock 1986:30) It was Ferdinand de Saussur who successfully distinguished between the two dimensions of linguistic study: synchronic, in which languages are treated as self-contained systems of communication at a particular time and diachronic (= historical), in which the changes to which languages are subject in the course of time are treated historically (Robins 1967:200).
- 5- It is interesting to note that these alternations are being levelled in Colloquial Arabic (Cairo dialect)(cf. Abdel-Hafiz, in press). For example, the 1s and 2s masculine distinction no longer exists. Nor does the dual category have a place in the paradigm. This change applies equally to both the affixal set and the pronominal set(cf. Gary and Gamal-Eldin 1982).
- 6- Heine and Reh's (1982) criterion can not distinguish between affixes and clitics in SA. Heine and Reh(1982) claim that "affixes are associated with a specific word or word category, clitics are typically a feature of phrasal constituents"(p.32-33).

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In SA, both agreement affixes and object clitics are associated with verbs without which they can not be used. Only the "cooccurrence test" can differentiate between these linguistic units: while agreement affixes can cooccur with a noun or pronoun they refer to, clitical object pronouns can not.

7- Phonetic processes sometimes cause or trigger drastic changes in the linguistic system of a language, for example, in Cairene colloquial Arabic, loss is responsible for the disappearance of case morphemes; as a result, the word order has been changed from VSO ----> SVO (Abdel-Hafiz 1989).

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