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# FOCUS AND ACCUSATIVE PRONOUNS IN ARABIC\*

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#### **1** Introduction

What I propose in this squib is a short and, I hope, sweet, analysis of Arabic accusative pronouns, and the conditions that determine whether the strong or weak form of the pronoun will appear.

Like pronouns in other languages, Classical Arabic accusative pronouns occur in complementary distribution with full DPs. However, they do not generally appear in the same syntactic positions that a full DP would. Instead, they must affix to the verb, wherever it might be. This is reminiscent of verbal agreement morphology in Romance languages like French (Kayne 1975), and fellow Semitic languages like Hebrew (Arad 2005) and Amharic (Kramer 2009). Under contrastive focus, however, the strong forms of these pronouns are obliged to appear, and they do have the syntax of a normal DP.

In section 4, I give an optimality-theoretic (Prince and Smolensky 1993/2004) analysis of the choice between strong and weak forms, and the associated choice between competing syntactic structures. Part of what makes this competition interesting is that morphological and syntactic structures must be evaluated in parallel.

#### 2 Basic Syntax of Accusative Pronouns

Under normal sentential focus, when a verb in Classical Arabic takes a pronominal object, that object is realized as a suffix on the verb. While the default word order in the absence of a pronoun is V-S-O (1a), a pronominal direct object gives V=O, regardless of where any other arguments sit (1b). The pronoun cannot, for instance, simply remain in situ and lean leftward onto the subject (1c). It must appear with the verb in  $T.^1$ 

- (1) a. ?arsala l-mudarris-u r-risa:lat-a ?ila l-muħarrir(-i) sent.3msS DEF-teacher-NOM DEF-message-ACC to DEF-editor(-GEN)
   'The teacher sent the message to the editor.' (V-S-DO-IO)
  - b. ?arsala-ha: l-mudarris-u ?ila l-muħarrir(-i) sent.3msS-3fs.ACC DEF-teacher-NOM to DEF-editor(-GEN) 'The teacher sent it to the editor.' (V=DO-S-IO)
  - c. \*?arsala l-mudarris-u-ha: ?ila l-muħarrir(-i) sent.3msS DEF-teacher-NOM-3fs.ACC to DEF-editor(-GEN) Intended: 'The teacher sent it to the editor.' (\*V-S=DO-IO)

<sup>\*</sup>Thanks to the audience at the Oct. 23, 2007, UCSC Syntax Circle. Thanks also to Susan Steele and Matt Tucker for helpful reviews. Lastly, thanks to Jorge Hankamer for giving me the opportunity to torture undergraduate Morphology students with this problem.

<sup>&</sup>lt;sup>1</sup>A note on the examples in (1) and throughout: Utterance-final case and indefinite marking are generally left unpronounced, hence the parentheses. These features are present morphosyntactically, but unrealized phonologically.

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Accusative pronouns are in complementary distribution with full accusative DPs. This is the principal criterion for differentiating pronominal affixes from verbal agreement affixes, which can occur alongside coreferent full DPs (Browne 1974; Kayne 1975). For example, in Swahili, an object agreement affix can occur either with a full DP correspondent (2a) or without one (2b) (Vitale 1981). This is expected if the affixes are not themselves arguments of the verb, and if objects can undergo pro-drop.

- (2) Swahili object agreement
  - a. ni-li-**mw-**ona Mohamedi 1sS-PAST-3sO-see Mohamedi 'I saw Mohamedi.'
  - b. ni-li-**mw-**ona 1ss-PAST-3sO-see 'I saw him.'

In Arabic, on the other hand, the rough correspondents of this object agreement morphology—i.e., accusative pronominal affixes—cannot cooccur with full DP arguments; the two are mutually exclusive.

- (3) Arabic accusative pronouns
  - a. ra?aytu(\***-hu**) muħammad(-a-n) saw.1sS(\*-3ms.ACC) Muhammad(-ACC-INDEF) 'I saw Muhammad.'
  - b. ra?aytu-hu (\*muħammad-a-n) saw.1sS-3ms.ACC (\*Muhammad-ACC-INDEF)
    'I saw him.'

Because they are in complementary distribution with full DP arguments, they cannot be agreement affixes of the normal variety.

A second reason to believe that these are pronouns, and not verbal agreement affixes, is that they don't always suffix to verbs. They can also suffix to complementizers<sup>2</sup>. Many complementizers assign accusative case, and require an accusative to appear immediately to their right, either in the specifier of T (4a), or else suffixed to the complementizer itself, possibly via the specifier of T (4b).

- (4) a. lam ?ataṣawwar ?anna l-ħaya:t-a sawfa tukaððibu li-ya ?umm-i: NEG.PST imagine.1sS C DEF-life-ACC FUT contradict.2fsS to-1s.GEN mother-1s.GEN bi-ha:ðihi s-surʕa(t-i) with-this DEF-speed(-GEN)
  'I didn't imagine that life would so quickly prove to me that my mother was wrong.' (As-Saʕdāwi 1999:25)
  - b. ?inna\*(-**hu**) ∫ay?-u-n mu?lim-u-n cţiddan C\*(-3ms.ACC) thing-NOM-INDEF painful-NOM-INDEF very 'It's a very painful thing.' (As-SaŞdāwi 1999:57)

But it is not just verbs and complementizers. In obscure corners of the grammar, accusative pronouns can even take nouns as hosts. This can only happen in the event that a noun takes an accusative complement, as is sometimes true of the active (or imperfect) participle. The active participle is morphologically clearly a noun, requiring case and (in)definiteness marking. Active participles *optionally* retain the case assignment properties of the verb from which they derive, although this is the less usual option taken.

 $<sup>^{2}</sup>$ A reviewer has rightly noted that weak pronouns are also selected as affixes to prepositions; however, these are not accusative, but genitive pronouns.

- (5) Active participles with genitive<sup>3</sup> versus accusative objects (examples and judgments of rarity from Fischer 2002:113)
  - a. da:rib -Ø -i: hit.ACT.PRT -NOM -1s.GEN 'hitting me' (more common)
  - b. da:rib -u **-ni**: hit.ACT.PRT -NOM -1s.ACC 'hitting me' (less common)

Despite the fact that (5b), where the participle retains the case assignment properties of the verb *daraba* 'strike', represents the less common option, the fact that it is a possibility at all shows that the accusative pronominal suffix is not restricted to verbs and complementizers as hosts.

Indeed, any head that assigns accusative case will suffice. The fact that this is normally limited to verbs and complementizers is not due to properties of the affixes, but to properties of their potential hosts.

This is already overwhelming evidence, in my view, that we are dealing with pronouns, which we expect to be vaguely more promiscuous in their choice of host than verbal agreement affixes.

But there is more evidence. Like other pronominal affixes cross-linguistically, Arabic accusative pronouns appear in both a weak form and a strong (i.e., stressable) form. Under contrastive focus, a pronoun must be stressable, and therefore must appear as a full prosodic word. These strong form pronouns are uniformly analyzable into an apparently meaningless, stress-bearing string, *?iyya:*, followed by a recognizable accusative pronominal suffix; to simplify things for the moment, I will treat these strong forms as morphologically simple.

- (6) a. ?aħabba l-muʕallim-u ?iyyá:-ha: loved.3msS DEF-professor-NOM ?iyya:-3fs.ACC
  'The professor loved [her]<sub>FOC</sub>.' (V-S-O)
  - b. ?aħabba**-ha:** l-muʕallim(-u) loved.3msS-3fs.ACC DEF-professor(-NOM) 'The professor loved her.' (V=O-S)

By giving the pronoun contrastive focus, the speaker conveys to the listener that the referent of the pronoun is new to the common ground. The accusative pronoun in (6b) is subject to an opposing information-structural force: old information should be prosodically weak, else risk giving rise to a contrastive focus interpretation. Agreement affixes are not generally subject to this sort of strong-weak alternation; even under contrastive focus, it would be unusual to find a strong form of an agreement affix that differs in any way other than stress.

Thus, these accusative affixes must indeed be pronouns, and not agreement afffixes. Nonetheless, as I will argue in the next section, they differ from normal pronouns in one key respect: they lack syntactic category.

## **3 Lexical Structure**

I propose that Arabic accusative pronouns are exceptional in that they do not bear syntactic category information. They do, however, bear case and thematic roles (following Jaeggli (1982, 1986); Borer (1984)); correspondingly, they reduce the valency of their host. This valency reduction accounts for the fact that

 $<sup>^{3}</sup>$ As happens in the genitive example, the nominative affix /-u/ surfaces as null before another vowel. The first person singular is the only pronoun which does not show case syncretism between accusative and genitive, hence the choice of this contrasting pair.

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accusative pronouns and full DP objects are mutually exclusive. This does not require accusative pronouns to be base-generated in the complement of V position, as full DP objects are. In fact, since accusative pronominal affixes have no syntactic category, they are not potential syntactic words, and cannot be merged as the complement of V.

A lexical entry for a representative affix is shown in (7). accusative pronouns subcategorize for zero-level hosts (any X, in fact—not just V or C) with full prosodic word status. Affixation does not change the syntactic category of the host, but does reduce its valency.

(7) Lexical entry for *-ha*:

Phonological form:	/-ha:/
Morphosyntactic features:	{3rd, feminine, singular, accusative}
Subcategorization:	$[X^0 ] X^0$

There are three types of head that are likely to be represented by  $X^0$ —those which most generally assign accusative case: complementizers, monotransitive verbs, and ditransitive verbs.<sup>4</sup> But this is not to say that accusative pronouns actually select for verbs or complementizers. Instead, verbs and complementizers select for accusative pronouns (or any other accusative, for that matter). In leaving the category of the host entirely open, I am claiming that accusative pronouns are actually not very selective at all. All that matters is the projection level of the host.

The tree in (8) illustrates the morphological structure associated with my lexical analysis of accusative pronouns.

(8) V V Aff | | ?arsala -ha: sent.3msS -3fs.ACC 'He sent it (f.).'

Affixation of *-ha:* occurs in the morphology, and is opaque to syntax. In this case, a ditransitive verb is thereby reduced to a monotransitive, requiring only an indirect object to saturate it. The indirect object ('to the editor') is introduced in the syntax, and the verb's needs are satisfied.

- a. ?aîta: -ka -ha: gave -2ms.ACC -3fs.ACC
  'He gave her to you.'
  \*?aîta: -ha: -ka gave -3fs.ACC -2ms.ACC
  Intended: 'He gave you to her.'
  - c. ?asta: -ha: ?iyya: -ka gave -3fs.ACC ?iyya: -2ms.ACC
    'He gave you to her.'

<sup>&</sup>lt;sup>4</sup>There are interesting affix ordering issues with ditransitives. While it is possible to attach two accusative pronouns to a single verb, their order is fixed according to a person hierarchy, such that 1st person precedes 2nd or 3rd, and 2nd precedes 3rd (Fischer (2002:144); see also Fassi Fehri (1993)). At the same time, the affix nearest the verb is always interpreted as the indirect object (there is no morphological differentiation between indirect and direct objects). In the unmarked case, where the direct object is lower in the person hierarchy than the indirect object. But in the marked case, where the direct object is hierarchy than the indirect object. But in the marked case, where the direct object is hierarchy than the indirect object, there is a conflict between the verb template, which prefers 2nd to precede 3rd, and the interpretive mechanism which requires indirect objects to precede direct. This conflict can only be resolved by using the strong form of one of the pronouns.

This leaves open the question of how best to analyze the semantically vacuous string *?iyya:* which appears in all strong pronouns. Since I have proposed that the accusative pronominal suffixes themselves are without syntactic category (and therefore cannot be merged directly into a syntactic structure), it would be quite reasonable to propose that the string *?iyya:* has only one morphosyntactic feature, namely the category D. It is semantically vacuous, but it effectively contributes syntactic word status to the strong form of each accusative pronoun.

(9) Lexical entry for *?iyya*:

Phonological form:	/?iyya:/	
Morphosyntactic features:	{D}	
Subcategorization:	(none)	

The dummy string itself does not select the affix; in fact, it selects nothing at all. Rather, the two are allowed to freely combine, with the result being an acceptable syntactic word that can be merged as the object of a verb, or any other accusative-assigning element.

Since this is a full prosodic word (see discussions on minimum word size in McCarthy and Prince 1986 and McCarthy 1993), it can also take contrastive focus<sup>5</sup>.

#### 4 Optimality-Theoretic Analysis of Contrastive vs. Normal Focus

Because the proposed lexical analysis of strong and weak forms implies a difference in corresponding syntactic structure, this is a domain in which syntax and morphology would seem not to be determined sequentially—at least, not in the sequence (1) syntax, (2) morphology (the sequence proposed in Anderson 1992; Halle and Marantz 1993; Hankamer and Mikkelsen 2005, and others). Instead, it seems we need to evaluate both in parallel, as a single complex structure, along the lines of Sadock (1991), Jackendoff (1997), and others. Optimality Theory (Prince and Smolensky 1993/2004) provides a useful framework for this sort of parallel analysis, which is why I employ it here.

I follow Jackendoff (1997) and Grimshaw (1997) in assuming that the input to a parallel evaluation must be something like a lexical-conceptual structure. The output structures are evaluated on syntactic, morphological, and phonological grounds simultaneously (here, phonology is relevant inasmuch as focus imparts a pitch accent).

The analysis first requires constraints that evaluate the soundness of the mapping of pitch accent to the prosodic constituents. In the absence of contrastive focus, of course, the whole sentence serves as the domain of accent; and in Arabic, that accent will fall on the rightmost phrase, in satisfaction of HEAD-RT (11). All optimal candidates considered here satisfy this constraint.

<sup>&</sup>lt;sup>5</sup>I am aware that in English even an affix can bear focus: 'I'm not happy, I'm UNhappy.' This may also have been possible in Classical Arabic, but given the available option between weak and strong pronouns, I assume there would have been no reason to adopt that strategy here. This avoids violations of highly ranked stress-alignment constraints.

(11) ALIGN(I, R, HEAD(I), R) (HEAD-RT) (Samek-Lodovici 2005): Align the right boundary of every intonational phrase with its head.

When there *is* a contrastive focus, we should of course expect the pitch accent to fall on the focused constituent. I propose that the constraint responsible for this should relate to the information-structural differences implied by the choice of strong or weak pronoun: i.e., strong indicates new information, while weak indicates old. Since the phonological correlate of that strength is focal pitch accent, I propose the constraint in (12).

(12) FOCUS ↔ NEW: If and only if a constituent bears focal pitch accent, it conveys discourse-new information.

The biconditional formulation of this constraint is important for the analysis to come: not only must the pitch-accented constituent convey new information, but new information must (notwithstanding the effects of other constraints) bear a pitch accent.

Lastly, the dispreference for the strong form of the accusative pronoun, in the default context, could be encoded in terms of the constraint FULL-INT, which punishes semantically vacuous lexical items, such as *?iyyar*.

(13) FULL INTERPRETATION (FULL-INT) (Grimshaw 1997): Lexical conceptual structure is parsed [i.e., 'no semantically vacuous lexical items'—DT].

On to the analysis, then. We will take the minimal pair from (6), repeated in (14). The analysis needs to be able to force the strong form to appear under contrastive focus, and to block it when there is no such focus.

- (14) a. ?aħabba l-muʕallim-u **?iyyá:-ha:** loved.3mss DEF-professor-NOM ?iyya:-3fs.ACC 'The professor loved [her]<sub>FOC</sub>.' (V-S-O)
  - b. ?aħabba**-ha:** l-muʕállim(-u) loved.3msS-3fs.ACC DEF-professor(-NOM) 'The professor loved her.' (V=O-S)

To ensure that the strong form appears under focus, we will need the ranking FOCUS  $\leftrightarrow$  NEW  $\gg$  FULL-INT. To satisfy FOCUS  $\leftrightarrow$  NEW, the discourse-new information must be assigned a pitch accent, and to do so it must be a full prosodic word (the domain of pitch accent assignment). Thus, a pronoun will be constrained to appear in its strong form when it bears focus; and it will be constrained to appear in its weak form when not under focus. The ranking argument is illustrated in (15).

The input is, as mentioned, a lexical-conceptual structure, and the output is a complex of syntactic, morphological, and phonological structure, all evaluated in parallel. When the pronoun is meant to bear focus, it is labeled as (discourse-)NEW in the lexical-conceptual structure.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup>For other analyses involving parallel evaluation in OT, see the following: Golston 1995; Szendrői 2001; Büring 2001; Dehé 2005; Samek-Lodovici 2005.

PAST(love(the.professor, her <sub>NEW</sub> ))		$Foc \leftrightarrow$	FULL	
			NEW	-Int
÷	a.	TP		*
T VP				
		$V_i$ T DP V'		
		[PAST] V DP		
		?aħabba l-muSallim-u t <sub>i</sub> ?iyyáː-haː		
	b.	TP	*!	
T VP				
		V <sub>i</sub> T DP V		
		?aħabba-ha: [PAST] l-muʕállim(-u) t <sub>i</sub>		

(15) Contrastive focus, strong pronoun

Matt Tucker has suggested to me that a third candidate, that in (16), should actually win under this ranking. Here the affix itself bears focal prominence.

 (16) \*?aħabba-há: l-muʕallim(-u) loved.3msS-3fs.ACC DEF-professor(-NOM)
 Intended: 'The professor loved [her]<sub>FOC</sub>.' (V-S-O)

The reason that this candidate fails is that it violates a high-ranking stress placement constraint, NONFINALITY, which is only violable in Arabic when the final syllable is superheavy. Hence, we infer that NONFINALITY outranks FULL-INT.

- (17) NONFINALITY (Hung 1994): The final syllable of a prosodic word should not bear stress.
- (18) Contrastive focus, strong pronoun

		PAST(love(the.professor, her <sub>NEW</sub> ))	Non	Foc $\leftrightarrow$	Full
			Fin	NEW	-Int
ġ	a.	?aħabba l-muʕallim-u <b>?iyyá:-ha</b> :		ı I	*
	b.	?aħabba <b>-ha:</b> 1-muʕállim(-u)		*!	
	c.	?aħabba- <b>há:</b> 1-muʕallim(-u)	*!	1	

The ranking I propose further ensures that *?iyya:* is not available more generally: in the absence of contrastive focus, the strong form is blocked not only by FULL-INT, but by the higher-ranking FOCUS  $\leftrightarrow$  NEW. When the pronoun is discourse-old, attempting to place focal stress on it violates this constraint. Hence, the strong form is in fact harmonically bounded with respect to the constraints under consideration here (although, of course, every structure violates *some* constraint).



#### (19) Sentential focus, weak pronoun

Importantly, this ruling out of a strong form when the pronoun is discourse-old is predicted even when we ignore FULL-INT. This should allow us to account for similar strong-weak pairs in languages where there is no obvious semantically vacuous lexical item to punish. For instance, there is no such vacuous item in the English strong form *HIM*, as contrasted with the weak form '*im*. FOCUS  $\leftrightarrow$  NEW bears sensibly on this contrast, preferring '*im* when the pronoun is discourse-old and *HIM* when the pronoun is discourse-new.

An important implication of this analysis is that pronouns cross-linguistically—which by virtue of their meanings, most commonly convey old information—should show an incredibly high likelihood of becoming prosodically dependent. Other words can of course convey context-old information, but perhaps none so reliably as pronouns. We also would expect to find numerous languages with patterns of strong-weak contrasts among pronouns similar to that in Arabic. And, of course, we do.

## **5** Conclusion

What I would like readers to take away from this squib is that there may be some evidence from Arabic accusative pronouns for parallel evaluation of different linguistic modules: syntax, morphology, and phonology. Choice of syntactic structure, pitch accent assignment, and morphological form are mutually interdependent in an interesting way. Whether this is taken as evidence for strong parallelism depends on the success of the lexical analysis proposed in section 3. If it is accepted that Arabic accusative pronouns are not base-generated as determiners, but are lexically affixed and therefore 'invisible' to syntax, then the structures associated with weak and strong forms of these pronouns are very different indeed, and thus co-vary with the choice of pronominal form.

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