

TENSE OR ASPECT: IS ARABIC PAST TENSE AN IMPLICATURE?

A controversy prevails in the study of Semitic languages, both ancient and modern, namely, whether their verbal morphologies mark tense (e.g., past vs. non-past) or aspect (perfective vs. imperfective) or some combination of both. Mood and modality are also something of an issue, but usually not as problematic (or problematic in different ways) as tense and aspect. A proposal made by Dahl (1985) regarding the cross-linguistic typology of T(M)A systems incorporates the notion of pragmatic implicature into the traditional taxonomy, and the current study is an attempt to examine Dahl's observations in light of data from spoken Arabic dialects of the Mashriq (the Eastern Arab World, from Egypt to the Persian Gulf).

Arabic is consistent with other Semitic languages in its non-concatenative morphology. Verbal and nominal forms alike are typically formed by interdigitation of consonantal roots (ideally, consisting of three radicals) and vocalic templates, either with or without affixes. Verbs have historically been classified as "perfect" and "imperfect", using a loose correlation between aspectual meaning and the morphological forms which were perceived as conveying them. In this study, for the sake of accuracy and clarity, morphological forms will be referred to by labels reflecting the types of affixes that characterize them. The following examples (from Classical Arabic) are derived from the consonantal root \sqrt{qtl} in the first *binyan* (verbal template), meaning 'to kill'.

- (1) *yaqtul*, *taqtul*, *taqtulna*, etc.: prefix conjugation
3m.sg. 3f.sg/2m.sg 3f.pl.
- (2) *qatalat*, *qatalu*., *qatalunna*, etc.: suffix conjugation
3f.sg. 3m.pl. 2f.pl

While verbs of both conjugations may have suffixes denoting such elements as number and mood, only verbs of the type in (1) may, and in fact always do, have prefixes, and only verbs of the type in (2) *always* have suffixes. In the controversy mentioned in the outset of this paper, the prefix conjugation is described as either "imperfect" or "non-past" (or occasionally "present/future"), and the suffix conjugation is known as either "perfect" or "past".

Given the time and space limitations of this paper, it will only concentrate on the supposed correlation between the suffix conjugation and past tense. I will try to test a hypothesis that this correlation is not an inherent part of Arabic morpho-syntactico-semantic, but rather a type of implicature.

Dahl (1985:11ff) discusses "secondary meanings", "secondary foci" and "the conventionalization of implicatures" as potentially pertaining to grammatical categories such as tense and aspect. He defines *implicature* in this sense as "something that can be inferred from the use of a certain linguistic category or type of expression, although it cannot be regarded as belonging to its proper meaning." In his analysis of the various categories available in the languages in his study, he often distinguishes between those that are overtly *marked* and others that are merely implicated. Such an account, if found

theoretically and empirically sound, may further the resolution of the controversy regarding the Semitic verbal system.

For the purpose of this study, six native speakers of Arabic, all of whom are currently students in the Philadelphia region, were interviewed for their reactions on a number of utterances previously recorded in Tel Aviv-Jaffa, Israel, of native speakers of the local dialect of Jaffa. The original recordings were made between 1996 and 1999 and consisted of a sociolinguistic interview with a man in his sixties and of two women in their twenties responding to an adaptation of Dahl's TMA Questionnaire. The current informants were read these utterances by the author of this paper and were asked to place them in time (e.g., past, present, future) and in various cases to provide alternatives in their own vernacular, which would either mean the same as the original utterance or change its meaning to or from past tense. A second component of the interview was in fact a fragment of the Dahl questionnaire, in which they were asked to translate three similar English narratives into their vernacular. As in the original questionnaire developed by Dahl and his colleagues at Göteborg University, the crucial verbal forms in the text to be translated was given in ALL CAPS and in base form (e.g., TAKE, rather than "took" or "have taken", etc.), as to reduce interference of English grammar on the translation into Arabic.

The subjects are distributed as follows:¹

- DE, f, 21, Cairo, Muslim, Penn undergrad
- HD, f, 19, Jordanian-Palestinian, Muslim, Penn undergrad
- JK, f, 23, Northern Lebanon (urban), Greek Orthodox, Arcadia grad student
- KH, m, 20, Kuwait, Muslim, Penn undergrad
- MK, m, 20, Bethlehem/Jeddah (Palestinian), Christian, Penn undergrad
- YE, f, 21, Amman, Muslim, Penn undergrad

The data on which the subjects were asked to comment included the following passages (suffix conjugation verbs underlined):

Part I: Naturally occurring speech

- (3) ʾamma halli ʿa:š hadik-i-l-fatra, w-ʿa:š [...] mažd-a w-hada
 as for REL live-3m.sg. that the period and live-3m.sg. glory-her and this
 bʾdar-š yinkar-ha, gašban ʿanno.
 IND-be able-3m.sg.-NEG SUBJV-deny-3m.sg.-ACC3f.sg. like-it-or-not

‘As for whoever lived in that period, and lived through its (Jaffa’s) glory and all that, well he cannot deny it, like it or not.’

¹ Some of the informants’ (linguistic) biographies are more complex. All have been in the Delaware Valley for over a year now. Some have traveled quite extensively as children with their families. Two have one non-Arab parent each: DE’s mother is Russian; HD’s mother is Iranian.

- (4) l-luġa l-ʔarabiyye [...] ʔadxalu ʕale:ha kalima:t
 the language the-Arabic-f.sg. insert-3pl on-her words
 ‘The Arabic language, they inserted words into it.’
- (5) u-tinsa:š waʔt ma ka:n i-l-itiḥad-i-sovye:ti mawžu:d,
 and forget-3m.sg.-NEG time COMP be-3m.sg. the union the-Soviet existing-m.sg.
kan yaʕti minah- i-kti:r la-ṭ-ṭullab yru:ḥu
 be-3m.sg. SUBJV-give-3m.sg. scholarships many to the students SUBJV-go-3pl.
 yʕallamu
 SUBJV-study-3pl.
 ‘And don’t forget, when the Soviet Union was around, they would give
 scholarships to students so that they would go and study.’
- Part II: Data elicited via Dahl’s TMA Questionnaire:
- (6) ka:n ʕamma:l-o yiktab maktu:b
 be-3m.sg. PROG-3m.sg.SUBJV-write-3m.sg. letter
 ‘He was writing a letter’.
- (7) i-l-malik sa:r wa:šil
 the-king INCH-3m.sg. PRTCPL-arrive-3m.sg.
 ‘The king has arrived.’
- (8) law axad-i-l-maša:ri, ka:n šara hadiyye.
 COND take the-money be-3m.sg. buy-3m.sg. gift
 ‘Had he taken the money, he would have bought a gift.’
- (9) ʔara ha:da l-kita:b (min ʔawwalo laʔaxi:ro)
 read-3m.sg. this the-book from beginning-his to-end-his
 ‘He read the book (from its beginning to its end)’.
- (10) miš min zama:n šattat / mšattye
 NEG from time it-rained it-has-rained(?)
 ‘Not long ago it (has) rained.’

- (11) rah ‘a-s-su’ yištri / uštara tuffa:ḥ
 go-3m.sg. to-the-market SUBJV-buy-3m.sg. and-buy-3m.sg. apples
 ‘He went to the market to buy / and bought apples.’

The subjects’ reactions to these sentences were fairly uniform. All suffix conjugations were consistently interpreted as denoting actions in the past. In the cases where the auxiliary verb *ka:n* ‘to be’ was juxtaposed to a prefix conjugation verb (e.g., *ka:n yaʿṭi* ‘used to give’), it was interpreted as modifying an aspectual (in this case, continuous) verb, again, denoting a situation or process in the past. Most of the subjects’ comments had to do with lexical choices, pronunciation and marginal morphological structures. All informants agreed that the verb meaning ‘read’ in (9) is to be understood as ‘read from cover to cover’, even without the adverbial phrase explicating that, ruling out a Slavic-type perfective interpretation of the suffix conjugation.

There was also a consensus as for the *yištri-uštara* contrast in (11). The former, agreed all six subjects, contains no information as to whether the subject of the sentence has actually bought the apples. Only an explicit suffix conjugation verb following a conjunction indicates that the purchase has indeed taken place.

The use of participial forms (e.g., *wa:šil* in (7) and *mšattye* in (10) as denoting a sort of present perfect, i.e., an action in the past bearing consequences for the present, was controversial. Several subjects rejected it altogether. In some cases subjects argued that even a simple suffix conjugation (rather than a complex auxiliary + participle) would entail that the action or state described has bearing on the present.

The second part of the interview yielded somewhat more interesting results. While some speakers showed little variation across contexts, others differed quite radically when shifting from a narrative situated “yesterday” through one pertaining to “what just happened to me” to a narrative describing a distant past habitual.

The texts translated into Arabic were as follows:

- (12) Do you know what happened to me yesterday? I WALK in the forest. Suddenly I STEP on a snake. It BITE me in the leg. I TAKE a stone and THROW at the snake. It DIE.
- (13) Do you know what just happened to me? I WALK in the forest. Suddenly I STEP on a snake. It BITE me in the leg. I TAKE a stone and THROW at the snake. It DIE.
- (14) I’ll tell you what happened to me sometimes, when I was a child and was walking in the forest. I WALK in the forest. Suddenly I STEP on a snake. It BITE me in the leg. I TAKE a stone and THROW at the snake. It DIE.

In the translations, the verbs occurred in the following forms:

- Suffix conjugation, e.g., *ma:tat* ‘died’.
- “Be” (in the suffix conjugation) + participle, e.g., *kunt ma:šye* ‘I was walking (f)’.

- “Be” (in the suffix conjugation) + prefix conjugation, e.g., *kunt amši* ‘I was walking’.
- Participle, e.g., *ma:ši* ‘walking (m)’.
- Prefix conjugation, e.g., *armi* ‘I throw’.

There seems to be a scalar hierarchy to these forms with respect to their proximity to an actual suffix conjugation. An index of 1 to 5 was therefore applied to these verb types, with a score of 5 attributed to the suffix conjugation, a 1 attributed to the prefix conjugation, and intermediate scores for the verb types in between, in the (ascending) order listed above. With this numerical representation of the various verbal forms, we may now examine the entire data set on two levels.

Figure 1 compares the means of the verb type indices for each translated verb across speakers. While there is a great deal of convergence at the 5.0 level, consistent with the use of the suffix conjugation to talk about events in the past, there is quite some variation, especially with the verbs of movement ‘walk’, ‘step’, ‘bite’ and ‘throw’. The only verb occurring in the prefix conjugation (index of 1.0) is ‘know’. Which is not part of the narrative, and normally would not have been included in the analysis at all. Yet one speaker, JK, used it in the suffix conjugation in both its occurrences. When asked about it, she was able to cite a few other stative verbs (e.g., *fhimet?* ‘do you understand?’), which may be used in this form without any temporal reference to the past. This is consistent not only with the situation in other Semitic languages (cf. Hebrew *katonti* ‘I am too small; I am at loss’), but is in fact a relic of Proto-Semitic, where presumably suffixes were productively indicative of stative verbs, as is the case in the oldest attested Semitic language, Akkadian.

Figure 1: Mean verb type by speaker

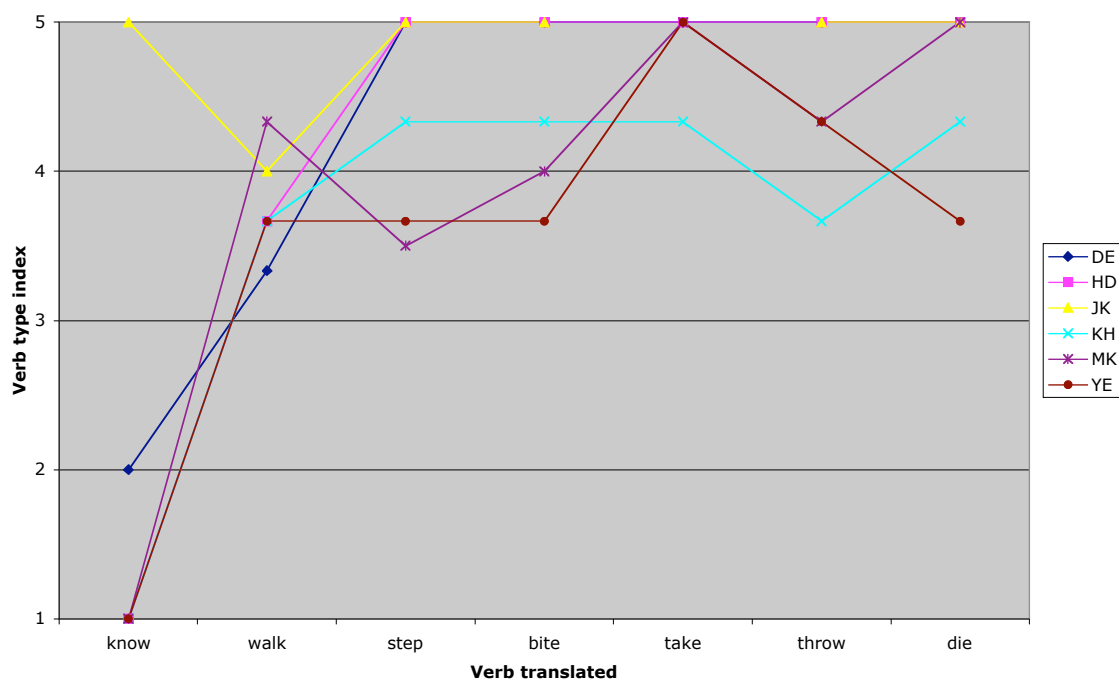
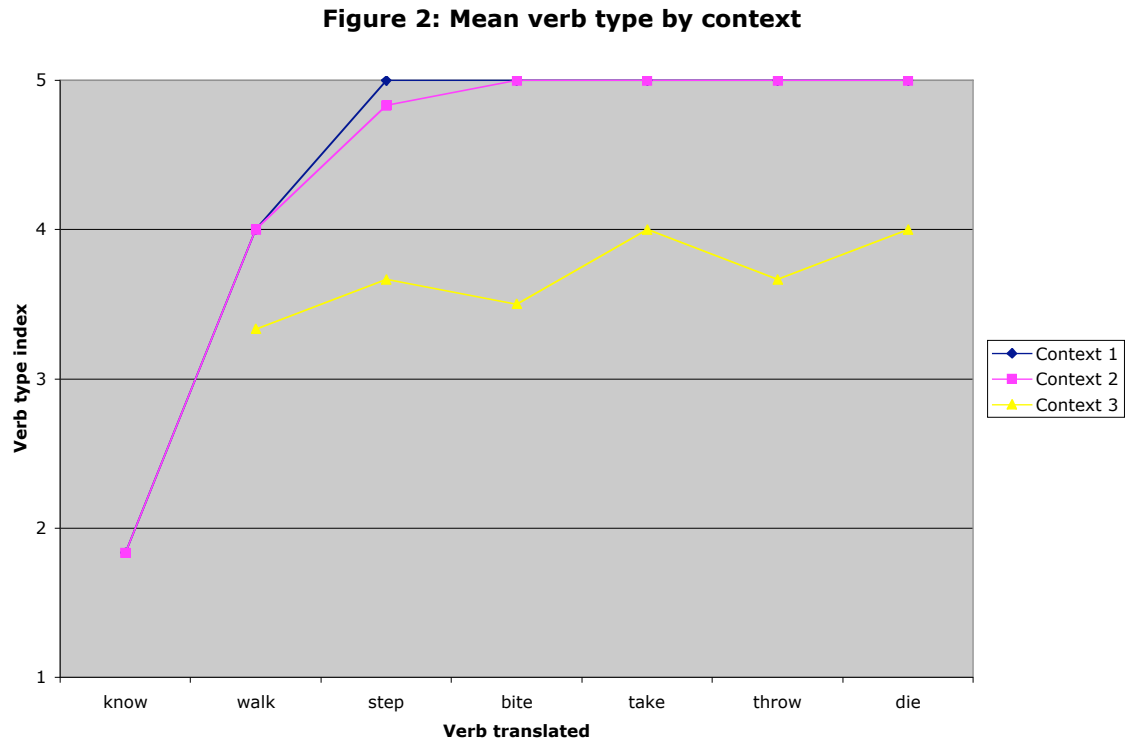


Figure 2 pools all six speakers and compares their mean verb type indices across contexts. The first two contexts do not differ much from one another, but the third context clearly stands out. Index means between 3 and 4 are consistent with the use of various intermediate forms, including complex forms which include the verb *ka:n* ‘be’, conjugated in the suffix conjugation.



Let us pause and see what is going on. On the one hand, we have a great deal of instances where the suffix conjugation is consistent with an action in the past. Moreover, in many cases where the subjects were asked to provide an alternative form while preserving the meaning, they argued that it was impossible to do so. On the other hand, we have a limited number of stative verbs, which may occur in the suffix conjugation without reference to the past. We also have contexts in which the suffix conjugation may be used interchangeably (for some speakers) with a participle to denote a “perfect”, a present result of a past occurrence. And finally, we have the auxiliary verb *ka:n* ‘be’ modifying various other forms (e.g., participles and prefix-conjugated verbs), for instance to place a continuous or habitual action in the past. It therefore seems plausible to conclude that the suffix conjugation has more than just one meaning. It is not just a past tense form. Not only that, but given the wide variety of uses that the *prefix* conjugation has, with various shades of imperfectivity (inchoativity, habituality, continuous actions, to name a few), it all but makes sense to attribute the converse aspect notion, perfectivity, to the suffix conjugation.

In the preface to his edited volume on Semitic languages, Semitic linguist Robert Hetzron quotes another Semiticist, Chaim Rabin, who said in a lecture, “Semitic has either aspects that express tenses or tenses that express aspects” (Hetzron 1997:xvi). The

question remaining now is whether from a pragmatic point of view, what we have here is indeed an implicature, as proposed by Dahl for similar cases across the world's languages. Levinson, in his chapter on grammar and implicature, argues that "the relation between syntax and pragmatics is of a fundamentally different kind than the semantics/pragmatics interface, for it is indirect" (Levinson 2000:261). If we accept the notion that the further from pragmatics our facts are, the harder it is to incorporate pragmatic theory into our analysis, then in the case of verbal morphology, we are in an even tougher situation than with the sentential anaphora phenomena examined in Levinson's chapter.

Elsewhere (Levinson 1983:77-78), he follows Lyons in distinguishing between M(etalinguistic)-Tensed and L(anguage's)-Tenses, acknowledging that one reason for the two not being entirely compatible with one another has to do with the latter "nearly always endod[ing] additional *aspectual* and *modal* features too." Things like *used to give scholarships* implicating *no longer gives scholarships* (cf. (5) above) are said to be "permeated by Gricean mechanisms" (Levinson 2000:180) due to the opposition between used and unused temporal references. This may not be compatible with Sadock's (1978) critical view of the testability of implicatures for their conversational nature. Yet we recall that Dahl's argument on TMA categories was that they may be subject to the "conventionalization of implicatures", in which case the need to calculate maxim violations, as is the case for conversational implicatures, may not be necessary.

What we seem to be left with is an open door for further research. Clearly, the data provided here is but the tip of the iceberg, and there is need for a more extensive corpus to be examined and for a more thorough review of the literature, spanning from morphology through syntax and semantics into classic and more contemporary pragmatics. It is also unclear to me whether the proper methodology exists for testing hypotheses regarding the pragmatic status of conventionalized grammatical manifestations like the ones dealt with here. Native speakers clearly have intuitions about what denotes what, but for some reason – perhaps due to simplification of grammatical explanations in schools – speakers rarely go beyond labeling the forms they use using a temporal terminology. Notions like "perfective" and "imperfective", which for linguists may be, at least for some languages, part and parcel of the verbal system (cf. Comrie 1976:16), are often neglected or misunderstood, and it is therefore up to us to try and devise ways to circumvent our informants' lack of expertise.

Yet it is not all bad news. This small-scale experiment indicates that despite quite some dialectal differences, there is a certain degree of stability in the verbal systems of Arabic dialects. This may have to do with the fact that the suffix conjugation, on which this paper has concentrated, has never in the history of Arabic been too complex. The prefix conjugation, if closely examined, will most likely turn out to be far more complex and quite more variable. What I envision as a proper way to attack this problem on a larger scale is a combination of a corpus based quantitative analysis and a carefully constructed language-specific questionnaire, designed to be exhaustive enough for Arabic (in this case) yet remaining relevant to the language or dialect at hand as to not include Slavisms and Turkisms and the like, which are incorporated into broader, cross-linguistic surveys like that described by Dahl.

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