On the Grammaticalization of Some Classical Arabic Nouns into Iraqi Arabic Degree Adverbs

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Previous work on grammaticalization in Arabic has focused on the development of a number of morphosyntactic features such as mood, tense and aspect, and to a lesser degree modal features and discourse features in verbs, prepositions and conjunctions in the modern Arabic vernaculars or in Standard Arabic. Using grammaticalization theory, this study demonstrates with diachronic data from Classical Arabic and synchronic data from Iraqi Arabic that some Classical Arabic nouns have evolved into Iraqi Arabic degree adverbs, and in some cases into indefinite quantifiers as well. The grammaticalized terms exhibit the characteristic outcomes of grammaticalization, namely semantic extension or bleaching, decategorization, and phonetic erosion. Reanalysis is shown to have played a decisive role in the development of the grammaticalized terms. Specific contexts of use of the Classical Arabic nouns are shown to have triggered the grammaticalization process. The proposed grammaticalization is shown to have been driven by two Minimalist economy principles. Data from neighboring Arabic vernaculars seem to validate the proposed analysis. The suggestion is made that the functional versatility of CA nouns might have contributed to their being the target of the proposed grammaticalization.

Keywords: *paths of change, intermediate stages, lexical ancestors, polyfunctionality, contexts of use*

1 Introduction

This paper investigates the evolution of some Classical Arabic (CA) nouns into Iraqi Arabic (IA) degree adverbs. It shows that the theoretical framework known in the literature as grammaticalization theory can elegantly explain how particular contexts of use of some CA nouns provided the trigger for what later became the exponents of degree adverbs in the modern variety of Arabic known as IA.

Grammaticalization is the process where lexical items (nouns, verbs, adjectives) assume, in certain contexts, grammatical functions, or when grammatical items, in certain contexts, assume more grammatical functions (Bybee et al. 1994; Hopper & Traugott 2003; Kuteva et al. 2019).

One of the most cited cases of grammaticalization in English is the grammaticalization of *going to* from a lexical verb to indicate movement in space to a purely grammatical expression that encodes the future time, as illustrated in the example in (1) and (2).

(1)   John is going to China.

(2)   John is going to go to China.

The examples in (1) and (2) provide evidence for the grammaticalization of *go*, as they include two tokens of *go*, one that retains the lexical meaning of *go*, and the other that has evolved to be the grammatical exponent of futurity.

The complex linguistic situation of Arabic, where two varieties of Arabic, a codified and officially recognized written Standard Arabic (SA) that makes up the main channel of communication in the public sphere, and a modern local variety of Arabic used in everyday informal communication, coexist makes grammaticalization as a theoretical framework a very strong candidate to be used as an explanatory tool. The authors believe that this framework is capable of accounting for the semantic, syntactic, morphological and phonological differences between the two coexisting varieties of Arabic. They also believe that the analysis offered in the present study, if proved to be accurate, can serve as an argument in support of the theory that CA is the ancestor of the modern vernaculars of Arabic (for such a claim, see Rabin 1955).

The last three decades have witnessed a surge in the use of grammaticalization as a framework utilized to account for various linguistic changes that distinguish the ancestral CA from the descendent modern vernaculars of Arabic. Yet, two observations can be made regarding this research. The first observation is that most of the studies on grammaticalization in Arabic focus on the evolution of verbs into the grammatical exponents of verbal features such as tense, aspect, mood and modality. The second observation is that some varieties of Arabic are represented more than others. The varieties that have been extensively investigated are Levantine and Gulf Arabic (see for example, Al-Najjar 1990 on Kuwaiti Arabic; Eades 2012 on Omani Arabic; Jarad 2013; Jarad 2014 on Syrian Arabic; Alsaeedi 2015 on Hijazi Arabic; Jarad 2015; Jarad 2017 on Emirati Arabic; Jaradat 2021 on Jordanian Arabic). One of the underrepresented varieties of Arabic in the literature on grammaticalization is IA. Against this backdrop, the present study aims to make a contribution by first, shifting the focus from the evolution of verbs to the evolution of nouns, and second, by investigating how grammaticalization works in an underrepresented modern variety of Arabic, namely IA.
The main research questions are:
(a) What is the lexical source of IA degree adverbs?
(b) What are the CA contexts of use that triggered the development of IA degree adverbs?
(c) Are the cross-linguistically attested outcomes of grammaticalization available in the development of IA degree adverbs?

The paper is organized as follows. Section 2 provides a literature review on grammaticalization in Arabic. Section 3 is the theoretical background in which the present study is couched. Section 4 is the methodology used in the study. Section 5 is an analysis of the data and the results obtained. Section 6 is an economy account of the grammaticalization in question. Section 7 provides evidence of potentially similar grammaticalization of degree adverbs in other modern Arabic vernaculars. Section 8 is a discussion of why nouns rather than other lexical categories have served as the trigger for the grammaticalization in question. Section 9 concludes the paper with some thoughts on the contribution of the study to the field of the history of the modern Arabic vernaculars and on how future research might benefit from the insights of the study.

2 Literature review

The bulk of the literature on grammaticalization in Arabic targets how Arabic lexical verbs evolved to become the grammatical markers of specific verbal features. Some of these studies claim that Arabic lexical expressions *ʔabi* 'I want' and *gaaʕid* 'sitting, remaining, or staying' changed over time to become the grammatical exponents of the Arabic future marker *b(i)* and the Arabic progressive aspect marker *gaaʕid* respectively (Al-Najjar 1991). Since then, similar

claims have been made for Omani Arabic (Eades 2012), Syrian Arabic (Jarad 2013; Jarad 2014), Emirati Arabic (Jarad 2015; Jarad 2017) and a range of modern Arabic vernaculars (Camilleri & Sadler 2017). In a study on the grammaticalization of two motion-denoting active participles in Moroccan Arabic, *ghadi* and *mashi* 'both meaning GO', Ouhalla (2014) takes a generative view to show that the process is characterized by semantic, morphosyntactic and phonological loss.

In another comprehensive study, some CA prepositions are shown to have developed into subordinators of causality and concession, and some nouns for body parts have evolved into prepositions (Esseesy 2010). In two other studies based on diachronic data from Andalusian Arabic and Maltese Arabic and synchronic data from Egyptian, Moroccan and Maltese Arabic, the claim is made that the post positional enclitic –*sh* found in most modern vernaculars of Arabic is a reanalyzed version of an old interrogative, which is claimed to have been derived either from Modern South Arabian, or from Semitic (Wilson 2013; Wilson 2017). In another study, the CA third person pronoun of separation (separating the subject from the non-verbal predicate) *huwa/hiya* is argued to have been evolved into a copular/linking verb both in SA and in Hijazi Arabic (Alsaeedi 2015).

Other studies on grammaticalization in Arabic include those that investigate the grammaticalization of Modern Arabic discourse markers in North African dialects of Arabic and Jordanian Arabic (Taine-Cheikh 2013; Jaradat 2021).

In the literature on grammaticalization in Arabic, there are very few studies that examine language change in IA, and apart from Leitner & Procházka (2021), where one grammaticalized degree adverb is discussed, namely the IA *fard* 'only', there are no studies that address the grammaticalization of degree adverbs. As far as grammaticalization in IA is concerned, there are only two studies. Hassan (2016) reports on the grammaticalization of Southern IA modal particles and shows that the grammaticalized modal particles in Southern IA share a number of structural characteristics, whereas Leitner & Procházka (2021) study shows how the noun *fard* 'individual' developed into a quantifier expressing singularity, an intensifier and the scalar adverb meaning 'only.'

In the spirit of this line of research, the present study is an attempt to target an area that has hardly received any attention in the literature on grammaticalization in Arabic, namely the grammaticalization of adverbs, and in particular degree adverbs. The study also investigates a modern variety of Arabic which is quite underrepresented in the literature on grammaticalization in Arabic, namely IA.

3 Theoretical framework

In the literature on grammaticalization (Bybee et.al. 1994; Hopper & Traugott 2003; Kuteva et al. 2019), there seems to be a consensus on a number of assumptions about the manner in which grammaticalization is manifested. The following is an overview of such assumptions.

The first shared assumption is that the following outcomes of grammaticalization are cross-linguistically attested.
• semantic extension: from specific meaning to generalized meaning
• desemanticization (semantic bleaching): the source term loses its source meaning
• decategorization: the source term undergoes a change in syntactic category
• phonetic erosion: the source term loses some phonetic substance

A second shared assumption is that the same mechanisms of grammaticalization are attested cross-linguistically, and these are the following.

(a) reanalysis
(b) semantic extension/generalization
(c) metaphorical extension
(d) analogy

Of the four mechanisms of change, the one that has proved to be most relevant for the present study is reanalysis. Harris & Campbell (1995: 61) define reanalysis as "a mechanism which changes the underlying structure of a syntactic pattern and which does not involve any immediate or intrinsic modification of its surface manifestation." They further explain that underlying structure includes the following components: (i) constituency, (ii) hierarchical structure, (iii) category labels, (iv) grammatical relations, and (v) cohesion. The authors illustrate changes in constituency and hierarchical structure in the reanalysis of the English *for + Noun phrase*, as shown in (3).

(3)   [it is bet for me] [to sleen my self than ben defouled thus] (Middle English)
        'It is better for me to slay myself than to be violated thus.' (Chaucer, cited from Ebert 1978, as cited in Harris & Campbell 1995: 62)

In (3), *me* is part of the surface constituent *for me* in the main clause, but it is also understood as the logical subject of the verb (to sleen) in the embedded clause. Later, *for + Noun phrase + infinitive* came to be reanalyzed as a constituent, witnesses the fact that it can be preposed, as can be shown in (4).

(4)   [For me to slay myself] [would be better than to be violated thus] Harris & Campbell 1995: 62)

As an example of category label change, the authors, citing the work of Li & Thompson (1974 a, b, as cited in Harris & Campbell 1995: 63), state that Old Chinese allowed serial verb constructions of the form S *bǎ* O V O, where *bǎ* was a verb meaning 'take hold of'. Such structures involved the use of two verbs and objects. Later, *bǎ* was reanalyzed as an object marker (i.e., a case affix marking the object) resulting in a radical word order change from SVO to SOV in Chinese.

In their description of a change in grammatical relations, Harris & Campbell (1995: 63) refer to an optional inversion rule in English in the expression *me thinks*, where *me* was the underlying object and the surface subject. In light of the later loss of case marking on nouns, the effects of such rules, when applied, became less apparent, and *me* came to be understood as both the surface and the underlying subject.

For the Harris & Campbell (1995: 63), cohesion relates to whether or not a linguistic sequence is a fully independent word, a clitic, an affix, or an unanalyzable part of a larger unit. As an example, they discuss the case of *nemi*, which is found in many varieties of Nahua (a branch of Uto-Aztecan). This expression used to be an independent word with the meaning of 'to live, to walk', which later developed into a verb clitic meaning 'go around doing', as shown in (5).

(5)   čoka-ti-nemi (Nahua)
        cry-CONNECTIVE-AMBULATIVE
        'He/she goes about crying.' (Langacker 1977, as cited in Harris & Campbell 1995: 64)

It is crucial to point out at this juncture, that a given reanalysis may primarily affect any one of the five components of underlying structure (Harris & Campbell 1995: 61). Put differently, it is not the case that any given reanalysis should exhibit all five components of change.

Apart from the four common assumptions offered above, the present study adopts the admittedly disputable assumption that in the case of Arabic, CA is the source of the grammaticalized forms used in IA, the variety of Arabic under investigation. Such an assumption was forced upon us by the fact that for every IA degree adverb examined in this study, it was possible to trace it back to a CA lexical ancestor. When it comes to identifying the ancestor of the modern varieties of Arabic, the jury is still out on this. Versteegh (1984: 17) claims that 'before the coming of Islam there was a single Arabic language, which was used both as a colloquial and literary language'. On this view, CA was both a spoken and a written language before the appearance of Islam in Arabia. The time of the Islamic conquests marked a decisive moment, according to this view, in the history of Arabic, as native Arab soldiers located in the military camps of present-day Iraq, Syria, Egypt and Tunisia were vastly outnumbered by populations whose first languages were Persian, Greek, Aramaic, Coptic and Berber. It was therefore the Arabic interlanguage of those populations rather than the Arabic language of the native Arab soldiers that served as the input from which the modern varieties of Arabic evolved.

Ferguson (1959), on the other hand, holds the view that CA was not the direct ancestor of the modern varieties of Arabic; rather, it was a koineized variety of Arabic that evolved out of the various varieties of Arabic spoken by Arab soldiers. According to this theory, Arab soldiers who were the natives of various parts of Arabia were brought together in the military camps of modern-day Iraq, Syria, Egypt and Tunisia established during the time of the Islamic conquests. During their time at these camps, differences between various varieties of Arabic were levelled out, and an Arabic koine developed, which later served as the ancestor of the modern varieties of Arabic.

A more recent view is that CA was a high register of Arabic at the time of the revelation of the Quran in the early to mid-seventh century, but by the time the medieval Arab grammarians of the mid eighth century codified the language, it was reduced to a rather ritualized language used mostly in poetry, soothsaying and other types of ritualized formal performance (Holes 2018: 4-7).

For the purpose of this study, and based on the data presented here, we claim that CA is the lexical ancestor of the modern varieties of Arabic while at the same time fully acknowledging that such an assumption might not turn out to be the right one (for a comprehensive discussion of the source of the modern varieties of Arabic, see Rabin (1955); Versteegh (1997); Holes (2004); Owens (2006); Al-Sharkawi (2010), among others).

4 Methodology

The IA data analyzed in the present study are all constructed by the first author, who is a native speaker of IA. It is worth pointing out in this respect that IA serves as a cover term for the variety observed in Baghdad, the capital of Iraq. Where CA examples are provided, they are

for the most part extracted from dictionaries of CA, and in one case only, the example was constructed by the first author of the paper, who is a proficient speaker of Modern Standard Arabic, which shares most of the semantic, morphosyntactic and phonological features of CA (McCarus 2006: 238). In fact, "Modern Standard Arabic is the direct continuation and modern version of Classical Arabic." (Fischer 2006: 404). Synchronic data from IA and diachronic data from CA are offered in support of the arguments made.

To locate the CA lexical ancestor of each one of IA degree adverbs, the following procedure is adopted. Using the consonantal root of each IA degree adverb, a careful examination of CA nouns, adjectives and verbs which are derived from the same root and which bear a similar communicative function to each of the IA degree adverbs is conducted using data from one of the most famous twenty-volume thirteenth century CA dictionaries, namely *Lisan Al-Arab [the Arabic Lexicon]* of Ibn Manẓūr (n.d.). The dictionary is available on the internet for free downloading. However, for the purpose of the present study, a manual rather than electronic search was conducted, as the electronic alphabet search function of the dictionary lacks page numbers.

5 Data analysis and results

This section discusses cases of the grammaticalization of IA degree adverbs and primarily covers aspects such as the CA lexical source, the mechanism of change, the outcomes of change, the contexts of use that triggered the change, and co-occurrence of the lexical function and the grammaticalized function in the same sentence.

5.1 *Noun > quantifier > degree adverb*

One of the IA degree adverbs is *shwayya* 'a little, few, some'. The following are some illustrative examples.

(6) ʔariid   ʔaziʕja-k   (**shwayya**)[1] (IA)
     want.1SG   bother.1SG-PRON.2SGM   a.little
     'I want to bother you [just] a little.'

(7) raaħ   ʔastiriiħ   (**shwayya**) (IA)
     FUT   rest.1SG   a.little
     'I will rest a little.'

We claim that the lexical source for the IA degree adverb is the CA noun *shuwayʔaat* 'small things', which is the diminutive form of the CA noun *ʔashyaaʔ* ' things' (Ibn Manẓūr n.d.: 2370).[2] The following are some illustrative examples of the CA lexical source.

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[1] Some of the following orthographic symbols in the Arabic data and their corresponding IPA symbols are given here. y = IPA /j/; j = IPA /dʒ/; dh = the IPA alveolar emphatic stop /dˤ/; ẓ = the IPA the labio-dental emphatic fricative/ðˤ/; tˤ = the IPA alveolar emphatic stop /tˤ/, sˤ = the IPA alveolar emphatic fricative /sˤ/, θ = IPA /θ/, th = IPA /ð/, gh = IPA /ɣ/, sh = IPA /ʃ/; ħ = IPA /ħ/.

[2] That the diminutive form of *ʔashyaaʔ* 'things' is *shuwayʔaat* 'small things' is mentioned by the medieval grammarian ʔal-Maazini in the context of an oral scientific debate that he had with his contemporary medieval grammarian ʔal-ʔaxfash. Another possible diminutive form mentioned in the same debate is *ʔushayyaaʔa* (Ibn

(8) huwa   ʔaħsan-u   min-ka   **shayʔ-an** (CA)
    PRON.3SGM better-NOM   PREP-PRON.2SGM thing-ACC
    'He is better than you [in] one thing.' (Ibn Manẓū n.d.: 2369)

(9) ʔa-laa   t-araa   ʔanna   **sh-shayʔ-a**   muthakkar-un (CA)
    Q-NEG   2-see.SGM COMP   DEF-thing-ACC   masculine-NOM
    'Don't you see that the thing [is] masculine?' (Ibn Manẓūr n.d.: 2369)

(10) wa-laa   y-ajuuz-u   ʔan   y-akuun-a (CA)
     CONJ-NEG 3-be.possible-INDIC   COMP 3-be.SGM-SUBJ
     shayʔ-an   haa-hunaa manṣˤuub-an
     thing-ACC   DEM-here accusative-ACC
     'And it is not possible for a thing right here in this position to be accusative.' (Ibn Manẓūr n.d.: 2369)

We believe that the mechanism responsible for this case of grammaticalization is reanalysis (Harris & Campbell 1995, Chapter 4). The IA form in the examples in (6) and (7) is clearly a constituent of a different nature from that of the CA in (8) through (10). To illustrate, the IA term in (6) and (7) serves a purely adverbial function. And while this is also the case for the CA term in (8), the examples in (9) and (10) clearly show that the CA term was also used as the syntactic subject of sentences. Specifically, the CA *shayʔ* 'thing' in (9) and (10) is the syntactic subject of the embedded adjectival predicates *muthakkar* 'masculine' and *manṣˤuub*. 'accusative' respectively.

Assuming that the syntactic position of a lexical item determines whether it will be grammaticalized or not (Jarrah et al. 2019), we believe that the trigger for this case of grammaticalization is found in contexts of use, where the CA term serves an adverbial function, as that found in (8) above.

Support for the claim that the CA noun has evolved into a degree adverb in IA is derived from the following facts. First, there is a semantic extension of the CA specific term 'a small thing' to the IA generic term 'a little', an outcome to be expected in cases of grammaticalization (see specifically Section 3 above).

Second, the syntactic properties of the IA term are different from those of the CA lexical source. For unlike the CA term which cannot be used to modify other nouns, the IA term is used to modify nouns, as can be found in (11) through (13) below.

(11) ʔakal   **shwayyat**   xubuz (IA)
     eat.PAST.3SGM   DET   bread
     'He ate a little bread.'

(12) shtara   **shwayyat**   laħam (IA)
     buy.PAST.3SGM   DET   meat
     'He bought a little meat.'

Manẓūr n.d.: 2370). The idea is basically this. If one where to consider *ʔashyaaʔa* 'things' as of the pattern *ʔafˤilaaʔa*, then the diminutive form *shuwayʔaat* 'small things' takes as its input the diminutive singular form *shuwayʔ* 'a small thing' rather than the plural non-diminutive form *ʔashyaaʔ* 'things'.

(13) tiħtaaj   **shwayyat**   sˤabir (IA)
       need.2SGM   DET   patience
       'You need a little patience.'

Second, unlike the CA noun which can be definite (see example 9 above), the IA term does not allow the definite prefix, as can be demonstrated by the contrasting pair in (14).

(14) a. raaħ   ʔastiriiħ   **shwayya** (IA)
         FUT   rest.1SG   a.little
         'I will rest a little.'

     b. * raaħ   ʔastiriiħ   **l-shwayya** (IA)
           FUT   rest.1SG   DEF-a.little
           'I will rest a little.'

Third, the CA lexical source, being a noun, can be pluralized. On the other hand, being a degree adverb or a quantifier means that the IA grammaticalized term cannot be pluralized. This is borne out by the facts, as exemplified by the contrast in (15) and (16).

(15)   kayfa t-usˤaghir-u   **ʔashyaaʔ-a** (CA)
        how   2-make.small.SGM-INDIC   thing.PL-ACC
        'What would you say is the diminutive form of the word 'things'?' (Ibn Manẓūr n.d.: 2370)

(16)   a. *ʔakal   **shwayyaat**   xubuz (IA)
            eat.PAST.3SM DET.PL   a.little.PL bread
            'He had a little bread.'
       b. * raaħ   ʔastiriiħ   **shwayyaat** (IA)
            FUT   rest.1SG   a.little.PL
            'I will rest a little.'

Syntactically, then, reanalysis in this case shows a change of category label (Harris & Campbell 1995).
        Phonologically, the IA grammaticalized degree adverb and indefinite quantifier are both weaker than the CA lexical source. Thus, while the CA term *shuwayʔaat* 'small things' is made up of three syllables /ʃʊ.weɪ.ʔaat/, the IA grammaticalized terms *shwayya/shwayyat* are made up of only two syllables /ʃweɪ.ja/ and /ʃweɪ.jat/ respectively.
        Clear evidence that the IA grammaticalized form is polyfunctional can be elicited in contexts where the term is a degree adverb as well as an indefinite quantifier in one and the same sentence, as can be seen in (17).

(17)   raaħ ʔaakul (**shwayyat**) xubuz ħatta ʔaqaawim (IA)
        FUT eat.1SG DET   bread SUB resist.1SG
        l-juuʕ   (**shwayya**)
        DEF-hunger   a.little
        'I will eat some bread so that I can fight hunger a little.'

It is interesting to note in this regard that despite being grammaticalized, the original meaning of the CA term can still be found in contexts of use, where it still has the category of nouns, witnesses the fact that it can be used on its own, can be modified by an indefinite article, and is followed by no other nouns, as shown by the example in (18).

(18) fad   **shwayya**   w   ʔaxaabr-ak (IA)
      INDEF   little   CONJ   call.1SG-PRON.2SGM
      'In a bit, I will call you.' (Lit. 'A little, and I call you.')

Cross-linguistic evidence that (partitive) modifiers grammaticalize into degree adverbs is reported in English (Traugott 2008) and Polish & Swedish (Herda 2018).

5.2 *Prepositional phrase > degree adverb*

Another IA degree adverb is *bshakil* 'very, to a large extent'. Some illustrative examples are offered in (19) through (21).

(19) samiir (**bshakil**) taʕbaan   (**bshakil**) (IA)
      Samir   very   tired.3SGM   very
      'Samir [is] very tired.'

(20) samiir (**bshakil**)   minziʕij   (**bshakil**) (IA)
      Samir   very   upset.3SGM   very
      'Samir [is] very upset.'

(21) tʔaθθar-t   (**bshakil**) b-il-tajruba   (**bshakil**) (IA)
      affect.PAST-1SG   very   PREP-DEF-experience   very
       'I was very affected by the experience.'

We propose that the IA degree adverb *bshakil* 'very' has as its lexical source the CA/SA prepositional phrase *bi-shakl* 'in a manner, in a way, in a form'. The examples in (22) and (23) illustrate contexts of use of the CA/SA prepositional phrase.

(22) rusim-at   l-lauħat-u   **bi-shakl-in** (CA/SA)
      draw.PASS-3SGF   DEF-painting-NOM   PREP-manner-GEN
      mumayyaz-in
      exceptional-GEN
      'The painting was drawn in an exceptional manner.'

(23) rusim-at   l-lauħat-u   **bi-shakl-in**   (CA/SA)
      draw.PASS-3SGF   DEF-painting-NOM   PREP-manner-GEN
      y-ajʕal-u   fahma-haa   mutaʕassir-an
      3-cause.SGM-INDC   understanding-PRON.3SGF   difficult-ACC
      'The painting was drawn in a manner which makes it hard to understand it.'

Reanalysis seems to be the mechanism where the CA/SA lexical ancestor is part of a clausal/prepositional adjunct structure [AdjunctP] is rebracketed as an adverb [AdvP Adv].

We suggest that the driving force for the development of the CA/SA prepositional adjunct into the IA degree adverb comes from examples where the CA/SA prepositional phrase *PP* of the prepositional adjunct is modified by an adjective, as in (24).

(24)   rusim-at   l-lauħat-u   **bi-shakl-in**   muθiir-in (CA/SA)
       draw.PASS-3SGF   DEF-painting-NOM   PREP-manner-GEN   interesting-GEN
       'The painting was drawn in an interesting manner.'

On the assumption that the syntactic position of a lexical item determines whether it will be grammaticalized or not (Jarrah et. al. 2019), we postulate that at some point in the development of IA, the *P + Noun* part of the prepositional adjunct was reanalyzed as an adverb modifying an adjectival predicate in contexts of use such as those in (24).

Support for this claim is derived from the following observations. First, the semantic shift from 'in a manner' to 'very' seems to be implausible at first sight. However, the shift might become plausible if one could imagine a time when speakers of Arabic were uttering expressions such as *bishaklin muθiirin* 'in an interesting manner or form' to a time when they started interpreting *bishakl* 'in a manner' as a degree adverb modifying the adjective *muθiir* 'interesting.'

Syntactically, the CA/SA adjunct seems to be a constituent of a different nature from the IA grammaticalized term. For example, while the IA term is used on its own to describe an adjectival predicate, this is not possible in CA/SA, as can be shown by the contrasting pair in (25).

(25)   a. samiir (**bshakil**)   taʕbaan   (**bshakil**) (IA)
          Samir very   tired.3SGM   very
          'Samir [is] very tired.'
       b. *samiir-un   taʕbaan-un   **bi-shakl-in** (CA/SA)
          Samir-NOM   tired.3SGM-NOM   PREP-manner-GEN
          'Samir [is] very tired.'

Another syntactic difference between the two constituents is related to the fact that unlike the IA term, which can precede or follow the adjectival predicate (see 25a), the CA/SA term lacks such flexibility in position, as shown by the contrast in (26).

(26)   a. rusim-at   l-lauħat-u   **bi-shakl-in**   muθiir-in (CA/SA)
          draw.PASS-3SGF   DEF-painting-NOM   PREP-manner-GEN   interesting-GEN
          'The painting was drawn in an interesting manner.'
       b. * rusim-at   l-lauħat-u   muθiir-in   **bi-shakl-in** (CA/SA)
          draw.PASS-3SGF   DEF-painting-NOM   interesting-GEN   PREP-manner-GEN
          'The painting was drawn in an interesting manner.'

A third syntactic difference between the CA/SA term and the IA term is that unlike the CA/SA term, which is obligatory, the IA term is optional, as can be seen in the two contrasting pairs in (27) and (28).

(27)   a. rusim-at   l-lauħat-u   **bi-shakl-in**   muθiir-in (CA/SA)
              draw.PASS-3SGF   DEF-painting-NOM PREP-manner-GEN   interesting-GEN

             'The painting was drawn in an interesting manner.'

        b. *rusim-at   l-lauħat-u   muθiir-in (CA/SA)
             draw.PASS-3SGF   DEF-painting-NOM   interesting-GEN
             'The painting was drawn in an interesting manner.'

(28)   a. samiir (**bshakil**)   taʕbaan   (**bshakil**) (IA)
          Samir very   tired.3SGM   very
          'Samir [is] very tired.'

        b. samiir taʕbaan (IA)
          Samir tired.3SGM
          'Samir [is] tired.'

At the phonological level, the IA degree adverb is weaker than its postulated CA/SA source term, as the vocalic part of the CA/SA preposition is lost in IA. Also, the CA/SA nominal part of the *PP* structure, namely *shakl*, which is a word made up of one super-heavy syllable (CVCC) is reduced to a light syllable followed by a heavy one (CV. CVC) (on superheavy syllables in Arabic, see Broselow 2017: 37).

        A clear indication of the polyfunctionality of the grammaticalized term comes from contexts of use where both the grammmaticalized function and CA/SA grammatical function may co-occur, as in (29).

(29)   ʔil-qaẓiya   [AdvP**bshakil**] sˤaʕba   [Prepositional Adjucnt**bshakil**   ma (IA)
        DEF-case   very   difficult   PREP-manner.3SGM   NEG
        ti-tsˤawwar-ii-h]
        2-imagine.PRES-SGF-PRON.3SGM
        'The case is very difficult in a way that you cannot imagine.'

5.3 *Universal quantifier > degree adverb*

Another IA degree adverb is *kullish* 'very, to a large extent'. The following are some illustrative examples.

(30)   samiir (**kullish**) taʕbaan   (**kullish**) (IA)
        Samir   very   tired.3SGM   very
        'Samir [is] very tied.'

(31)   samiir (**kullish**)   minziʕij   (**kullish)** (IA)
        Samir   very   upset.PASS.PCPL   very
        'Samir [is] very upset.'

(32)   (**kullish**)   tʕabi-t   (**kullish**) (IA)
        very   get.tired. PAST-1SG   very
        'I have gotten really tired.'

We claim that the IA degree adverb *kullish* is derived from the CA universal quantifier *kullu shajʔ* 'everything'. In terms of the mechanism of change, we propose that this change is the

result of a reanalysis of the CA universal quantifier *kullu shajʔ* 'everything'. In other words, the CA quantifier phrase [_{QP} [_Q *kullu*] + [_N *shajʔ*]] has been rebracketed as an adverb phrase [_{AdvP} [_{ADV} *kullish*]]. Evidence that reanalysis is implicated in this change comes from the fact that unlike the CA term, which can occupy the subject position of a verbless sentence, this is not possible with the IA grammaticalized term, as shown in (33).

(33)   a. **kull-u**   **shayʔ-in**   jaaʔiz-un (CA)
         every-NOM   thing-GEN   possible-NOM
         'Everything [is] possible.'
    b. *****kullish**   jaaʔiz (IA)
         every-NOM   possible
         'Everything [is] possible.' (The example is ungrammatical on the sentential reading)

Syntactically, then, reanalysis in this case shows a change of category label (Harris & Campbell 1995).

Another component of reanalysis relates to the change in cohesion (Harris & Campbell 1995), for unlike the CA term, which is made up of two fully independent morphemes, *kull shayʔ*, the IA grammaticalized term is one morpheme, *kullish*.

On the assumption that the syntactic position of a lexical item determines whether it will be grammaticalized or not (Jarrah et. al. 2019), we suggest that the driving force for the change comes from CA examples where the universal quantifier is the subject of an adjectival predicate, as in (33a) above. Of particular interest in this regard is the fact that sentences such as (33a) lack a verbal predicate, and no other free morpheme separates the quantifier from the adjectival predicate. We postulate that examples such as (33a) have, at some point, been reanalyzed as instances of an adjectival predicate being modified by a degree adverb. In other words, the sentence 'everything [is] possible' has been reanalyzed as 'very possible.'

A number of observations can be made to support this case of grammaticalization. First, there is an obvious semantic link between the CA universal quantifier *kullu shajʔ* 'everything' and the IA degree adverb *kullish* 'very' in that the meaning of the CA universal quantifier is to semantically pick out all the members of a given set, and the meaning of IA degree adverb is to assign an extreme degree to a given property or event. Second, the syntactic category of the CA expression, namely *quantifier + noun* has shifted to that of an adverb in IA. Third, there is a clear morphological loss (from a two-morpheme expression to a one-morpheme expression) in the shift from *kullu shajʔ* to *kullish*.

One of the clearest pieces of evidence of this case of grammaticalization can be found in cases of polyfunctionality where the original lexical meaning of the term and the grammaticalized function of the term are both found in one and the same sentence, as can be found in (34).

(34)   a. samir **kullish**   taʕbaan   min   **kulshi** (IA)
         Samir very   tired.3SGM PREP everything
         'Samir is very tired of everything.'
    b. samir taʕbaan   **kullish**   min   **kulshi** (IA)
         Samir tired.3SGM very   PREP everything
         'Samir is very tired of everything.'

A further typical feature of the grammaticalization of the CA universal quantifier into a degree adverb is that the metathesis found in the grammaticalized IA term (from CA *kull shayʔ* to *kull ʔaysh* and later to *kull-ish*) has not impacted the IA term when it is still a universal quantifier, as can be seen in the example in (34) above. In fact, this is a typical example of the principle of divergence that characterizes the process of grammaticalization. Specifically, Wischer (2006: 132) states that "when a lexical item splits into two uses, […] the lexical unit retains its full phonetic form, whereas the functionalized item undergoes phonetic reduction."

5.4 *Noun > degree adverb*

Another IA degree adverb is *ħeel* 'very; to a large extent', The following are some illustrative examples.

(35)   samiir (**ħeel**) taʕbaan   (**ħeel**) (IA)
         Samir   very   tired.3SGM very
         'Samir [is] very tired.'

(36)   samiir (**ħeel**) mashghuul (**ħeel**) (IA)
         Samir   very busy.3SGM   very
         'Samir [is] very busy.'

We claim that the CA noun *ħail* 'strength and ability' (Ibn Manẓūr n.d.: 1073) is the lexical source of the IA degree adverb *ħeel* 'very'. Some illustrative examples of the CA noun can be found in (37) through (39).

(37)   ʔallaahumma tha-**l-ħail**   l-shadiid (CA)
         Oh.lord   DEM-DEF-strength DEF-extraordinary
         'Oh Lord, the one [who is] with extraordinary strength!'(Ibn Manẓūr n.d.: 1073)

(38)   ʔinna-hu   la-shadiid-u   **l-ħail-i** (CA)
         COMP-PRON.3SGM   EMPH-extraordinary-NOM   DEF-strength-GEN
         'Verily, he is of extraordinary strength.' (Ibn Manẓūr n.d.: 1073)

(39)   maa la-hu!   laa   shadda   l-laah-u (CA)
         Q   PREP-PRON.3SGM NEG gather.PAST.3SGM   DEF-god-NOM
         ħail-a-h
         strength-ACC-PRON. 3SGM
         'What is [wrong] with him? May the Lord deprive him of the capacity to gather his strength!' (Ibn Manẓūr n.d.: 1073)

We propose that reanalysis is the mechanism of change responsible for this case of grammaticalization. On the assumption that the syntactic position of a lexical item determines whether it will be grammaticalized or not (Jarrah et. al. 2019), we suggest that the driving force for this case of evolution comes from examples such as (37) above, where the CA lexical source *l-hail* 'physical strength' is modified by an adjective in the noun phrase. It seems plausible to conjecture that the CA noun in the *N + Adj* order might at some point have been reanalyzed as an *Adv + predicative Adj*.

An interesting context of use of the IA degree adverb might provide some clues about the intermediate stages of the development of the term. To illustrate, consider the example in (40), where the IA degree adverb has the meaning of 'with physical force'.

(40)   ʔidfaʕ   **ħeel!** (IA)
        push.IMP.SGM   force
        'Push with force!'

We suggest that contexts of use such as that of (40) must have acted as an intermediate stage from the meaning of the CA source noun 'strength and ability' to that of 'very'. In other words, we claim that the path of change took the following stages: noun 'physical strength and ability' > degree adverb 'with physical force' > degree adverb 'very'. According to this path, the grammaticalized meaning 'very' does not take the source meaning of the CA noun 'physical strength and ability' as its precursor, but rather the intermediate meaning of the already grammaticalized adverb 'with physical force' as its precursor. This line of reasoning is compatible with what is now standardly assumed in the literature on grammaticalization, where already grammaticalized forms may develop further more general and abstract grammaticalized meanings (Bybee et.al. 1994; Hopper & Traugott 2003; Kuteva et al. 2019). In this regard, it is worth remembering the statement made in Bybee et al. (1994: 18) that "…patterns of multiple uses [of the grammaticalized form] in effect constitute fossil evidence and can thus serve as a diagnostic of earlier history." Applied to the present context, we claim that the semantic meaning of the IA grammaticalized adverb *ħeel* 'with force' is fossil evidence of the earlier history of the grammaticalized meaning 'very' of the same form.

Evidence in support of this case of grammaticalization comes from a number of observations. Semantically, there is a link between the source noun *ħail* 'physical force' 'and the grammaticalized adverb *ħeel* 'with force'. From a morphosyntactic perspective, the IA term has lost some of the features of the lexical source. For example, unlike the source term, which can be definite, the IA term cannot be definite, as is shown by the contrasts in (41) through (43).

(41)   ʔallaahumma **tha-l-hail**   l-shadiid (CA)
        Oh.lord   DEM-DEF-strength   DEF-extraordinary
        'Oh Lord, the one [who is] with extraordinary strength!' (Ibn Manẓūr n.d.: 1073)

(42)   a. samiir (**ħeel**) mashghuul   (**ħeel**) (IA)
           Samir   very busy.3SGM   very
           'Samir is very busy.'
        b. *samiir (**l-ħeel**)   mashghuul   (**l-ħeel**) (IA)
           Samir   DEF-very DEF-busy.3SGM DEF-very
           'Samir is very busy.'

(43)   a. ʔidfaʕ   **ħeel!** (IA)
           push.IMP.SGM   force
           'Push with force!'
        b. *ʔidfaʕ   **l-ħeel**! (IA)
           push.IMP.SGM   DEF-force
           'Push with the force!'

Another syntactic difference is that the IA, being an adverb, can modify an adjectival predicate, as in (42a) above, or a verb phrase, a property which is not available to the lexical source. This can be exemplified by (44).

(44) l-mauʐuuʕ   (**ħeel**) ʔaθθar   bi-yya   (**ħeel**) (IA)
       DEF-issue   very   affect.PAST.3SGM PREP-PRON.1SG   very
       'I was very affected by the issue.'

Syntactically, then, reanalysis in this case shows a change of category label (Harris & Campbell 1995).
       Interestingly, in contexts when the IA term is still a nominal category with the CA source meaning, adjectives do modify it, and the IA term can be definite, as shown in (45).

(45) maa ʐal   bi-yya   **l- ħeel**   **l-qadiim** (IA)
       NEG remain.PAST.3SGM   PREP-PRON.1SG   DEF-strength DEF-old
       'The old strength is not in me any more' (meaning: I am no longer as strong as before.'

Phonetically, the IA degree adverb *ħeel* /ħe:l/ is a weaker version of the CA lexical source *ħail* /ħeɪl/ in that the diphthong /eɪ/ in the source term, which is the result of one vowel gliding into another, is replaced with the long monophthong /e:/ in the grammaticalized form, a phonological change which is widely attested in all the CA words with /eɪ/ that are retained in IA (Mustafawi 2018: 16).
       That grammaticalization has indeed taken place is further confirmed by the polyfunctionality exhibited in contexts of use where both the lexical term (the noun) and the grammaticalized term (the degree adverb) co-occur, as is shown in (46).

(46) salma (**ħeel**) minziʕj-a (**ħeel**) liʔan   maa   ʐal   (IA)
       Salma very upset-3SGF very   because   NEG   remain.3SGM
       bii-ha   **ħeel**
       PREP-PRON. 3SG.F   strength
       'Salma is very upset, as she doesn't have any strength [left in her].'

5.5 *Noun > degree adverb*

Another IA degree adverb is *hwaaya* 'a lot, very, to a large extent'. The following are some illustrative examples.

(47) samiir (**hwaaya**)   taʕbaan   (**hwaaya**) (IA)
       Samir very   tired.3SGM   very
       'Samir [is] very tired.'

(48) il-baarħa   (**hwaaya**)   ntiʐart-ak   (**hwaaya**) (IA)
       DEF-yesterday   a.lot   wait-PRON.2SGM   a.lot
       'Yesterday, I was waiting for you for a long time.'

(49) il-massafa   been   il-Muusˤil   w   il-basˤra (IA)

DEF-distance between		DEF-Mosul	CONJ	DEF-Basrah
(hwaaya)	biʕiida	**(hwaaya)**		
very	far	very		

      'There is a very long distance between Mosul and Basrah.'

(50)   sˤaari-l-na   **hwaaya** ma   shaayf-ii-k (IA)
        become.PAST-PREP-1PL   a.lot   NEG see-PCPL-PL-PRON.2SGM
        'It has been a lot [of time] [for us] since we last saw you.'

We propose that the lexical source of the degree adverb *hwaaya* is the CA plural noun phrase *ʔahwaaʔi* 'my desires'.[3]

      In terms of the mechanism of change, we suggest that reanalysis is responsible for this change. Following arguments in the literature that the syntactic position of lexical items is crucial to whether they are grammaticalized or not (see Jarrah et. al., 2019), we suggest that it is examples such as those in (51) below that must have served as the driving force for the change in question.

(51)   …wa ʔinna   kaθiir-an   la-y-adhill-uu-na (CA)
        CONJ COMP   many-ACC EMPH-3-lead.astray-MPL-INDIC
        bi-**ʔahwaaʔ**-i-him   bi-ghajr-i   ʕilm-in
        PREP-desire.PL-GEN-PRON.3PLM   PREP-nothing-GEN knowledge-GEN
        '… And indeed do many lead [others] astray through their [own] inclinations without knowledge.' (Quran suurat l-anʕaam, the 119th verse of Chapter 6).

In (51), the CA plural noun *ʔahwaaʔ* 'desires' serves an adverbial function by virtue of the fact that it is part of a prepositional phrase modifying the sentence following the coordinating conjunction *wa* 'and'.

      There are a number of observations that can be made to support this case of grammaticalization. Semantically, there is a link between the CA source term *ʔahwaaʔi* 'my desires' and IA grammaticalized term *hwaaya* 'very; a lot'. We believe that the immediate ancestor of the IA term must have been derived from examples such as (51) above, where the term means a plurality of desires. Such plurality might have served as a catalyst for the change from a specific plurality to a generic plurality meaning 'a lot'. As for the intensifier meaning 'very' of the IA grammaticalized term, we suggest that this meaning must have been a later evolution out of the intermediate link, where the IA term acquired the meaning of generic plurality 'a lot'. To put it differently, we suggest that the paths of semantic change followed the trajectory *plurality of desires > a lot > very*.

      Morphosyntactically, there are a number of characteristics that make the IA term *hwaaya* unlike the CA term. First, the CA term can be pluralized (*hawaa* 'desire' vs. *ʔahwaaʔ* 'desires'), a property which the IA term lacks. Second, the CA term, being a noun, can distributionally be the complement of a prepositional phrase, as shown in (51) above; this is

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[3] In the literature on the history of the Arabic dialects, there seems to be uncertainty regarding the CA lexical ancestor of the IA degree adverb *hwaaya*. Thus, in map 467c offered in Behnstedt & Woidich (2021), we find the following statement about the IA adverb: "Die Etymologie ist unsicher [The etymology is uncertain]." However, the CA lexical ancestor we propose is one of the possible CA lexical ancestors given in that map. We thank the reviewer for bringing this reference to our attention.

not possible with the IA term, as the latter has lost its nominal category and acquired that of an adverb. Third, unlike the IA term, which cannot be prefixed with the definite article, the CA term can be prefixed with the definite article, as shown below.

(52)   …wa   nahaa   n-nafs-a   ʕan   **l-hawaa** (CA)
       CONJ prevent.3SGM   DEF-soul-ACC PREP   DEF-desire
        '…and prevented the soul from [unlawful] inclination,' (Quran suurat lnaaziʕaat; the 40th verse of Chapter 79)

Syntactically, then, reanalysis in this case shows a change of category label (Harris & Campbell 1995).

     Phonetically, we suggest that the grammaticalized form *hwaaya*, which is a bi-syllabic form /hwaa.ja/, is a reduced form of the CA plural noun *ʔahwaaʔi 'my desires'*, which is a tri-syllabic form /ʔah.waa.ʔi/. The gliding of the glottal stop /ʔ/ in the initial position of the last syllable of the CA term is commonly attested in the evolutionary path of CA into IA (cf. CA *laa.ʔɪq* 'appropriate' > IA *laa.jɪg*; CA *ra.ʔis* 'leader' > IA *ra.jɪs*; CA *maa.ʔɪl* 'tilted' > IA *maa.jɪl*, etc.).

     There is also evidence that the IA grammaticalized term is polyfunctional. Thus, in addition to its being an adverb, the term is also found in contexts of use, where it has the category of a quantifier modifying a noun. This is shown in (53) and (54).

(53)   ʕind-ii   (**hwaaya**)   mashaaghil   (**hwaaya**) (IA)
       have.PRON.1SG   a.lot   work.PL   a.lot
       'I have a lot of things [to do].'

(54)   ʔaku   (**hwaaya**)   kutub   (**hwaaya**)   b-il-ghurfa (IA)
       EXIST   a.lot   book.PL   a.lot   PREP-DEF-room
       'There [are] a lot of books in the room.'

6 Grammaticalization as economy

In analysing the different cases of the grammaticalization of degree adverbs in IA, the general pattern is for CA nouns to evolve into degree adverbs and to a lesser degree into indefinite quantifiers. The question that needs to be asked is why nouns evolve to become adverbs and quantifiers. Following van Gelderen (2004: 11-12), we believe that the pattern of change observed in this study can be accounted for using two Minimalist economy principles, and these are the Late Merge economy principle "Merge as late as possible" and the Head Preference economy principle "Be a head, rather than a phrase"

     In the Minimalist literature, the clausal structure comprises three layers, the outer layer (the Complementizer Phrase or CP), the inner layer (the Inflectional Phrase or IP), and the thematic layer (the Verb Phrase or VP) (van Gelderen 2004: 3). Nouns and lexical verbs are merged early in the structure of the clause, as the meaning of the lexical verb determines the thematic roles assigned to its argumental noun phrases. In the cases of grammaticalization reported on in this study, what is observed is that CA nouns, which are necessary for the argument structure of the lexical verb, evolve to become degree adverbs. What seems to have

taken place in the process of grammaticalization is for the IA grammaticalized degree adverbs to merge late rather than early in the structure of the clause, as they are no longer nouns.

In the case of the CA nouns also evolving to become indefinite quantifiers, this can be accounted for using the Minimalist economy Head Preference Principle "Be a head rather than a phrase". The CA lexical source terms are noun phrases that become in the process of grammaticalization determiners, or quantifiers which are heads of the Determiner Phrase or the Quantifier Phrase (for arguments that quantifiers in CA/SA head a Quantifier Phrase, see Benmamoun 1999).

7 Evidence from other modern Arabic vernaculars

This study shows that a number of IA degree adverbs have evolved out of CA nouns. Modern Arabic vernaculars share a number of linguistic properties. If the present analysis is correct, the prediction is that a similar process of grammaticalization must have taken place in these vernaculars. In fact, a cursory look at other Arabic vernaculars shows that this is probably the case. The following is a number of examples from various varieties of Arabic, where the degree adverb is clearly derived from CA nouns.

(55) ʔana   tˤafshaan **ziyaada** (Yemeni Arabic)
       PRON.1SG   frustrated excess
       'I am totally frustrated.'

(56) ʔana   b-ħibb-u(h)   **moot**   (Syrian Arabic; Gulf Arabic)
       PRON.1SG   ASP.love-PRON.3SGM   death
       'I love him to death.'

(57) ʔana   b-ħibb-u(h)   **halba**   (Libyan Arabic)
       PRON.1SG   ASP.love-PRON.3SGM   abundance
       'I give him love in abundance.'

(58) ʔana   garfaan   **ħadd-i** (Bahraini Arabic)
       PRON.1SG   frustrated   end-PRON.1SG
       'I am totally frustrated.'

Needless to say, these are mere cursory remarks awaiting a thorough analysis before any conclusions may be drawn.

8 Discussion

The present study attempted to chart out the evolution of some degree adverbs in IA by postulating that their lexical sources are nouns in CA, and that typical of what is expected in the process of grammaticalization, these degree adverbs have acquired more grammatical functions than those of their lexical ancestors. The study considered five cases of grammaticalization in IA, and claimed that CA nouns in particular, are implicated in all five cases. Nouns, for example, are the direct ancestors of three degree adverbs in IA. In another

case a CA prepositional phrase *bishakl* 'in a manner', which is made up of the preposition *bi* 'in' and a noun *shakl* 'manner, form', is the direct CA ancestor of the IA degree adverb *bshakil* 'very'. In yet another case, a CA noun phrase, which is made up of the universal quantifier *kull* 'every' and the noun *shayʔ* 'thing' is the direct ancestor of another IA degree adverb *kullish* 'very'.

The study aimed to answer three main questions. The first question was the lexical source of IA degree adverbs. The findings of the study show that the CA category of nouns is implicated in all the cases of grammaticalization considered in the study.

The second question of the study attempted to identify the specific contexts of use of the source lexical ancestors that triggered the process of grammaticalization. The results of the study suggest that two contexts of use probably served as the trigger for such grammaticalization; one such context turns out to be cases where the CA nouns were part of a construct state, a structure made up of N + N, or a context of use where the CA noun was the subject of a predicative adjective in non-verbal sentences.

The third research question of the study was an attempt to see if the cross-linguistic outcomes of grammaticalization reported in the literature on grammaticalization are also available in the cases of grammaticalization considered in this study. Here also, the results show that the cross-linguistic outcomes of grammaticalization, namely desemanticization (or semantic bleaching) or extension, syntactic category change (or decategorization), and phonological erosion are all attested in the cases considered.

Bearing the findings of this study in mind, we are now at a point where we believe that we can provide a unified account of two of the research questions raised in the present study, namely what the CA lexical ancestors of the IA degree adverbs are, and what contexts of use triggered the particular grammaticalization process investigated in this study. We believe that the account we present here also helps us answer another related finding of the study, namely the nature of the mechanism of change employed in the cases of grammaticalization considered.

We begin with the first research question of the study. The findings show that the category of CA nouns served in one form or another as the lexical ancestor of all the grammaticalized IA degree adverbs. This, we believe, drives us to raise the following question: why should CA nouns serve as the lexical ancestor? We think that the answer to this question lies in the idiosyncratic behavior of CA nouns. Specifically, CA is a language which has very few true adverbs (Badawi et al. 2004: 187), and hence, it is a language, where nouns can in many contexts of their use serve an adverbial function as long as they are accusative case-marked and indefinite. Consider, for instance, CA accusative-marked indefinite nouns which express the kind or the cause of the action.

(59)   ʔaxatha-hu   **ghasˁb-an** (CA)
       seize.PAST.3SGM-PRON.3SGM   force-ACC.INDEF
        'He seized him/it by force.' (Fischer 2002: 196)

(60)   y-askut-u   **jahl-an** (CA)
       3SGM-be silent-INDIC   ignorance-ACC.INDEF
        'He remained silent out of ignorance.' (Fischer 2002: 196)

Accusative case-marked nouns can also be used in CA as adverbials denoting the extent and direction, as can be shown in (61) and (62).

(61) saar-a   **farsax-aini** (CA)
      walk.PAST-3SGM   parsang-DUAL.ACC.INDEF
      'He travelled two parsangs.' (Fischer 2002: 196)

(62) tabaddad-uu   **sharq-an**   w   **gharb-an** (CA)
      scatter.PAST.3PLM   east-ACC   CONJ   west-ACC.INDEF
      'They scattered east and west.' (Fischer 2002: 196)

Accusative case-marked nouns are also recruited in CA as circumstantial adverbials, where they express a simultaneous condition, as can be shown by the examples in (63) and (64).

(63) tˤalaʕ-a   l-qamar-u   **badr-an** (CA)
      rise.PAST-3SGM   DEF-moon-NOM   full.moon-ACC. INDEF
      'The moon rose full [moon].' (Fischer 2002: 196)

(64) t-aʔt-uu-na   **ʔafwaaj-an** (CA)
      2-come-PL.M-INDIC   drove.PL-ACC. INDEF
      'You come in droves.' (Fischer 2002: 196)

Accusative case-marked nouns are further used in CA as adverbials of specificity, i.e., they specify the action denoted by the verb, as can be shown in (65) and (66).

(65) t-aziid-u   **ʕishq-an** (CA)
      2-increase.SGM-INDIC love-ACC. INDEF
      'You love more.' (Fischer 2002: 199)

(66) lan   t-ablugh-a   l-jibaal-a   **tˤuul-an** (CA)
      NEG.FUT   2-reach.SGM-SUBJ   DEF-mountain.PL-ACC tallness-ACC. INDEF
      'You will not reach the mountains in tallness.' (Fischer 2002: 199)

Given the diverse contexts of use in which CA nouns serve an adverbial function, we suspect that this is the reason behind repurposing CA nouns as degree adverbs in IA.

The mechanism that seems to have contributed to the change described here is reanalysis, where nouns have, over the course of their history, been reanalyzed and rebracketed as adverbs. A second major argument of the study has been the idea that it is the syntactic position of the source items in some of the contexts of their use that must have triggered the process of change. A third major argument is that the change observed is triggered by contexts of use where the CA lexical ancestor was either the first noun in construct state structures, a noun being modified by an adjective, or a subject of a predicative adjective. It is in these particular contexts of use where the lexical ancestor is linearly adjacent to either another noun or to an adjective. Such surface adjacency might, at some point, have been reanalyzed as either an indefinite quantifier modifying a noun, or as a degree adverb modifying a predicative adjective. Once CA nouns, in some of the contexts of their use, are rebracketed as adverbs modifying predicative adjectives, it is only natural that they start modifying verb phrases too, as this is what adverbs normally do.

The study has further shown that in the process of change from CA to IA, the linguistic properties of the IA degree adverbs exhibit outcomes that characterize the process of

grammaticalization such as semantic bleaching (or desemanticization) or extension, syntactic decategorization, and phonetic erosion.

Throughout this study, we have claimed that a number of degree adverbs have all evolved out of CA nouns. We would like to end this paper with an attempt at answering the following question. What does the claim that all cases of IA degree adverbs considered in the present study have CA nouns as their lexical ancestor mean for the history of IA as a modern variety of Arabic? We would like to answer this question by claiming that the results of the present study suggest that CA is the genealogical ancestor of IA (probably via the intermediate link of Middle Arabic). In other words, the findings of the present study seem to corroborate Rabin's (1955: 26) statement that "[…] the present-day colloquials, […] all are derived from Classical Arabic or from a *Vulgärarabisch* [vulgar tongue] closely related to it."

9 Conclusion

This study has been an attempt to investigate the grammaticalization of a subset of degree adverbs in IA, but it has by no means explored grammaticalization of all degree adverbs in the language. The major insight of the present study is the discovery that a subset of IA degree adverbs traces its origin back to CA, and if so, perhaps this is another piece of evidence that helps resolve the long-standing puzzle of identifying the evolutionary ancestor of the modern Arabic vernaculars. An extension of this work might examine all other degree adverbs in IA in order to confirm or disconfirm the generalization arrived at in the present study, namely that IA degree adverbs are derived from CA nouns. A further extension of this work might be an analysis of the grammaticalization of degree adverbs in neighboring Arabic vernaculars in order to verify or refute some of the predictions made in this study about the possible grammaticalization of degree adverbs in those neighboring vernaculars. The present study also speculates that the functional versatility of CA nouns might have made them the prefect target of grammaticalization into IA degree adverbs. If this speculation turns out to be correct, a future study might examine other types of adverbs in IA or neighboring modern Arabic vernaculars in order to determine whether or not CA nouns are also the target of the grammaticalization of those adverbs.

Abbreviations

1	First person
2	Second person
3	Third person
ACC	Accusative
ASP	Aspect
AUX	Auxiliary
COMP	Complementizer
CONJ	Conjunction
DEF	Definite
DEM	Demonstrative
DET	Determiner
EMPH	Emphatic particle

EXIST	Existential
FUT	Future
GEN	Genitive
IMP	Imperative
IND	Indicative
INDEF	Indefinite
M	Masculine
NEG	Negative
NOM	Nominative
PARTCP	Participle
PAST	Past
PCPL	Participle
PL	Plural
PREP	Preposition
PROG	Progressive
PRON	Pronoun
Q	Question word
SG	Singular
SUB	Subordinator
SUBJ	Subjunctive

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