THE DEVELOPMENT OF THE UNIVERSAL PERFECT IN ARABIC

MARIS CAMILLERI

University of Essex

Arabic has a construction that expresses a universal perfect interpretation. It is here argued that this construction, which is widespread across the different vernaculars, can be analyzed as a possessive perfect construction, a structure thought to be rather rare beyond Indo-European languages spoken in Europe. I further argue that the grammaticalization path differs from that of well-known possessive perfect structures across European languages. I hypothesize that the structure which paved the way for the grammaticalization of a universal perfect construction across Arabic was a possessive structure, originally headed by a preposition, which eventually developed into a transitive verbal predicate taking an interval-denoting object as its possessum, and which subsequently grammaticalized into a construction expressing the universal perfect.*

Keywords: universal perfect, Arabic, possessive perfect, grammaticalization

1. INTRODUCTION. This article provides a cross-dialectal syntactic and diachronic characterization of a construction expressing a universal perfect in Arabic, described as such by Holes (1984:108), Watson (1993:80), Ingham (1994), and Hallman (2016) for Gulf, Şanṭāni, Najdi, and Syrian Arabic, respectively. The construction involves what at first approximation seems to be the prepositional predicate il or la ‘to’. The contrast between these two forms is subject to cross-dialectal variation, and both forms are sometimes encliticized to a host as l. This study considers data from (Tetouan) Moroccan, Algerian, (Tunis and Sfaxi) Tunisian, (Tripoli and Benghazi) Libyan, Maltese, (Khartoum) Sudanese, Egyptian, Negev Arabic, (rural) Palestinian, (Damascene and Aleppan) Syrian, (Baghdad and southern) Iraqi, Kuwaiti, Omani, and (Tabuk, Najdi, and Abha) Saudi varieties of Arabic. The data was first gathered from published descriptive accounts of these dialects, which are, however, largely not discussed in the context of the construction under investigation, and has been augmented with data collected by elicitation from speakers of the various dialects. Due to the paucity of written records on the development of the Arabic dialects, I rely heavily on the comparative method in reaching my diachronic conclusions.

The construction in question is illustrated in 1–4. It consists of a subject, the preposition la/il/l (which in turn bears a weak pronominal suffix in the genitive case paradigm), an interval description, and a stative predicate. It expresses the proposition that the subject has been in the state for the duration expressed by the time description. I ultimately analyze the weak pronoun as an inflection and describe some dialectal variation in this construction. Note that in 2, the preposition l is encliticized onto the auxiliary ṣār, which literally means ‘happen, become’.1

* I hereby acknowledge the Austrian Science Fund (FWF), grant number P27384-G23, which has made this research possible, and would like to thank Peter Hallman as the PI of the project at the University of Vienna, and Louisa Sadler, Doug Arnold, and the LFG/Arabic syntax research group at the University of Essex for a number of fruitful discussions and support, and the native-speaker informants who have provided me with the data.

I hypothesize that the emergence of the universal perfect construction in Arabic is the result of a grammaticalization, akin to what are in the literature referred to as possessive perfect constructions (Heine & Kuteva 2006), that is, perfect-expressing constructions that have been grammaticalized out of a possessive construction. In this case, though, the historical base is a preposition, in contrast to the well-known grammaticalization of constructions expressing tense and aspect from possessive verbs in Romance and Germanic languages (Meillet 1923, Trask 1979, Vincent 1982, Pinkster 1987, Bybee & Dahl 1989, Dahl 1996, Haspelmath 1998, Ramat 1998, Drinka 2003, 2013, 2017). Such a developmental trajectory has never before been attested in the context of Semitic.

I first discuss the universal perfect and the semantic interpretations associated with it in English and Arabic (§2). From the inferences made from the array of cross-dialectal data, I then posit a hypothesis for the grammaticalization of the universal perfect (§3), which I claim to be derived from a prepositional type of possessive construction, where the erstwhile preposition in the construction has grammaticalized into a transitive verbal form. I demonstrate that the universal perfect construction also involves a verbal form, which I argue should follow from the fact that its source already involved a P-turned-V. In §4 I provide what direct diachronic evidence is available supporting this hypothesis, which I then couple with comparative evidence. Finally I discuss the implications of the proposals and conclude (§5).

2. THE UNIVERSAL PERFECT. ‘Perfect’ is the name for the construction common in European languages whose core structure involves an auxiliary along with a participial form (Jespersen 1924, inter alia; see Portner 2011 for an overview). The interpretation associated with the perfect is considered to belong to the aspectual category that bears relevance to tense (Reichenbach 1947) and has been associated with a four-fold categorization of associated readings in, for example, Comrie 1976 and Brinton 1988, or with the broader semantic distinction between the existential (also called ‘experiential’) and universal (also called ‘continuous’) readings in, for example, McCawley 1971 and McCoad 1978. The universal perfect interpretation conveys the meaning that the endurance of a state persists until the reference time. This distinguishes the universal perfect from the existential perfect, which simply asserts that an episodic occurrence of an eventuality remains of current relevance at the reference time (McCawley 1971, 1981, McCoad 1978). In Germanic and Romance, it is crucially the presence or the absence of adjuncts such as for, since, or just within the same core syntactic structure that results in the different array of semantic readings (e.g. Dowty 1979). As observed in the contrast in 5, it is the presence of a PP adjunct headed by for that distin-
guishes the universal vs. existential reading in a construction that otherwise incorporates the same core structure, that is, the auxiliary have along with the participle lived.

(5) a. Mary has lived in London for five years.  
   (universal perfect)  
   (Portner 2011:1221)

   b. Mary has lived in London.  
   (existential perfect)

Michaelis (1998), Iatridou, Anagnostopoulou, and Izvorski (2001), Katz (2003), Portner (2003, 2011), and Hallman (2016) claim that the universal perfect reading is available only in the context of a stative predicate and a duration adverb, as illustrated in 5a.

2.1. Claims about the Arabic universal perfect in the literature. Turning our attention to the expression of the universal perfect in Arabic, Hallman (2016) identifies three essential parts within the construction in 6a, repeated from 1, which together contribute to the semantics associated with the universal perfect construction.

(i) The presence of il lit. ‘to’, which inflects and agrees with what appears to be the subject. The subject need not be overt, since Arabic is a pro-drop language.

(ii) A temporal/durational interval, such as ‘five days’. The obligatory presence of this temporal interval is illustrated through the ungrammaticality of 6c.

(iii) The presence of a state or stativized predicate, including progressive event predicates (Vlach 1981, Asher 1992, Iatridou et al. 2001, Portner 2011, Varrasi 2013) or negative-marked perfective predicates (Mittwoch 1977, de Swart 1996, Verkuyl 1996), which typically pattern as statives, as we get in 7. A bare perfective is otherwise ungrammatical in this context.

(6) Syrian (Hallman 2016:77)

   a. (muna) ?il-a xamst ?iyâyām bi-l-ħabis  
      (Muna) DAT-3SG.F five day.PL in-DEF-prison  
      ‘Muna/she has been in prison for five days.’

   b. *muna xamst ?iyâyām bi-l-ħabis  
      Muna five day.PL in-DEF-prison  
      intended: ‘Muna has been in prison for five days.’

   c. *muna ?il-a bi-l-ħabis  
      Muna DAT-3SG.F in-DEF-prison  
      intended: ‘Muna has been in prison for a(n unspecified) duration of time.’  
      (obligatory presence of il)

(7) muna ?il-a sini mā rāḥ-it la sūriyya  
    Muna DAT-3SG.F year NEG go.pfv-3SG.F to Syria  
    ‘Muna has not been to Syria for a year.’  
    (obligatory presence of the duration adverbial)

While the existential and universal perfect constructions are in English structurally distinguished through the presence of a durational adverb (5), this is not the case in Arabic. The universal perfect reading comes about through structures such as 6a, which cannot express the existential perfect. Some claim that perfective verb morphology that expresses the simple past is ambiguous with an existential perfect reading (Cowell 1964, Fassi Fehri 1993, 2003, Bahloul 2008, Hallman 2016), and the same has been said to be true of active participles (at least in some dialects), depending on their ak- tionsart (Ingham 1994, Mughazy 2004, Boneh 2010, Hallman 2017).

Hallman (2016) also discusses universal perfect constructions containing the element sār, as in 8, which is the same sār present in the Gulf data in 2. Sār is formally the pfv.3SG.M form of the eventive verb meaning ‘become’; in the absence of agreement,
3sg.m is the default form of the Arabic verb. Mitchell and Ḥasan (1994:89) argue that šār is a copula used as one of the ‘devices reflecting a progression of changing state’. But Hallman (2016) points out that it triggers an epistemic reading of the modal lāzim ‘must’ in 9, as only stative predicates do (Hoffmann 1966, Condoravdi 2002), meaning that šār does not have its usual change-of-state reading in these contexts. Hallman analyzes šār as a semantically vacuous and morphologically invariant morphophonological host for the phonologically weak, encliticization-prone il.²

(8) muna šār-l-a xamst ʔiyyām bi-l-ḥabis
Muna become.3sg.m-dat-3sg.f become.3sg.m-dat-3sg.f five day.pl in-def-prison
‘Muna has been in prison for five days.’ (Hallman 2016:89)

(9) muna lāzim yi-kūn šār-l-a ʔaqall šī
Muna must 3.m-be.ifv.sg become.3sg.m-dat-3sg.f become.3sg.m-dat-3sg.f least thing five day.pl in-def-prison
‘Muna must have been in prison for at least five days.’ (Hallman 2016:90)

Both versions of the universal perfect construction are put in the past tense by adding the perfective auxiliary kān in its (default) 3sg.m form (10).

(10) a. muna kān ill-a xamst ʔiyyām bi-l-ḥabis lamma zīr-t-a
Muna be.pfv.3sg.m dat-3sg.f become.3sg.m-dat-3sg.f five day.pl in-def-prison when
visit.pfv-1sg-3sg.f.acc
‘Muna had been in prison for five days when I visited her.’ (Hallman 2016:83)

b. muna kān šār-l-a xamst ʔiyyām
Muna become.3sg.m become.3sg.m-dat-3sg.f five day.pl bi-l-ḥabis lamma zīr-t-a
in-def-prison when visit.pfv-1sg-3sg.f.acc
‘Muna had been in prison for five days when I visited her.’ (Hallman 2016:90)

In Hallman’s account, il is analyzed as a dative pronoun, hence the glossing provided in the data in 6a through 10. Specifically, Hallman claims that il + infl is a dative pronoun subject, which can be doubled by an overt NP. It is particularly the fact that the dative pronoun can be the pleonastic 3sg.f subject selected by weather verbs (11) that leads Hallman to believe that the dative pronominal form functions as the subject of this construction. He concludes that the ‘ilu construction [i.e. the construction expressing the universal perfect] does not affect the selectional dependency between subject and predicate; it merely requires the subject to bear dative case’ (2016:83).

(11) ill-a xamst ʔiyyām myayym-e
dat-3sg.f five day.pl clouded-sg.f
‘It’s been cloudy for five days.’ (Hallman 2016:83)

Hallman posits a covert operator, which he calls [u-perf] (2016:85) and which takes the temporal/durational interval as its argument, along with an Agr projection that assigns dative case. The semantics of the universal perfect reading is associated with [u-perf]. However, I provide evidence in §3 that Illa + infl is not a dative case

² Šār is vacuous and morphologically invariant only in the universal perfect construction. Both as the verb meaning ‘become’ and in its grammaticalized inceptive/inchoative phasal auxiliary function (Mitchell & Ḥasan 1994, Maas 2009) it inflects fully with its subject.
marker, but rather a pseudo-verb grammaticalized out of an erstwhile preposition, even though *illa* does function as a case marker in certain other constructions in the Arabic varieties. In the presence of an overt structural subject, the `infl` on *illa* functions as an instance of agreement.

In what follows I highlight the variation across the different vernaculars in their expression of the universal perfect, and in §§3–4 I draw both synchronic and diachronic conclusions from this survey.

### 2.2. Variation in the universal perfect construction across dialects

The Arabic varieties display a number of points of variation in the universal perfect construction described by Hallman (2016) for Syrian. I list here the observed key points of variation, providing representative illustrations for each.

(i) A number of varieties, including Libyan, Maltese, (Khartoum) Sudanese, and Negev Arabic, for instance, do not allow the presence of the semantically vacuous morphophonological host *ṣār*. In such varieties, *lē ila il + infl* always stands on its own as a fully fledged (i.e. non-phonologically deficient or encliticized) prosodic word.³

\[(12)\]
\[
\begin{align*}
\text{a. } & \quad \text{lē-ya } \dot{\text{ʔūsbūʕ mā-}} \text{-sˇrəb-t } \text{ṣāhi} \\
& \quad \text{to-1SG.GEN week } \text{NEG-drink.PFV-1SG tea} \\
& \quad \text{‘I haven’t drunk any tea for a week.’} \quad \text{(Libyan; Pereira 2008:320)} \\
\text{b. } & \quad \text{kān ma sˇa li-h sˇahaṛ} \\
& \quad \text{be.PFV.3SG.M go.PFV.3SG.M to-3SG.M.GEN month} \\
& \quad \text{‘He may have been going on for a month.’} \quad \text{(Negev Arabic; Henkin 2010:238)} \\
\text{c. } & \quad \text{ʔanā lē-y yōm-ēn mu-lāḥẓ-ak} \\
& \quad \text{I to-1SG.GEN day-DU ACT.PTCP-NOTICE.SG.M-2SG.M.ACC} \\
& \quad \text{ma-hmūm} \\
& \quad \text{PASS.PTCP-WORRY.SG.M} \\
& \quad \text{‘I’ve been noticing you are worried for two days.’} \quad \text{((Khartoum) Sudanese; Bergman 2002:160)}
\end{align*}
\]

(ii) Saudi dialects allow *ṣār*, but also optionally make use of the active participle form *ṣāyir* for the same placeholder function (13).

\[(13)\]
\[
\begin{align*}
\text{(ṣāyir-)l-i sana } & \text{ʔa-t-manna } \text{ʔa-rūḥ} \\
& \quad \text{(become.ACT.PTCP.SG.M-)to-1SG year 1SG-REFL-hope.IPFV 1SG-go.IPFV} \\
& \quad \text{is-saʕudiyya} \\
& \quad \text{DEF-Saudi} \\
& \quad \text{‘I’ve been hoping to go to Saudi for a year now.’} \quad \text{(Tabuk Saudi)}
\end{align*}
\]

(iii) In Baghdadi Iraqi, apart from the presence of *li* along with the optional presence of *ṣār*, it is additionally possible to drop the *l + infl* part of the structure, leaving only *ṣār* (14).

\[(14)\]
\[
\begin{align*}
\text{ṣār} & \quad \sim \text{ṣār-la-ha} \\
& \quad \sim \text{ʔal-ha} \\
& \quad \text{become.PFV.3SG.M } \sim \text{become.PFV.3SG.M-have-3SG.F.GEN } \sim \text{have-3SG.F.GEN} \\
& \quad \text{snēn wa-hiya wāʔq-a b-e wa hassa} \\
& \quad \text{year.PL CONJ-she trust.ACT.PTCP-SG.F in-3SG.M.GEN CONJ now}
\end{align*}
\]

³ For now I gloss the forms *lē ila* as ‘to’. This is not to say that the function of these inflected forms (and that of others), as used in this construction, is that of an inflected preposition, even if these forms are used in this way elsewhere in the system, and even if I later argue that these forms are themselves developments/grammaticalizations out of prepositional forms. In this way, I intend to leave the description of the facts void of any analytical content for now.
ˈʃɑːɾf-at-a ˈkɑːdab
know.PFV-3SG.F-3SG.M.ACC lie.PFV.3SG.M
‘She had trusted him for many years when she now found out that he had been lying.’

(Baghdadi Iraqi)

(iv) The Maltese variety presents us with an idiosyncratic behavior whereby the temporal/durational interval need not be present in the universal perfect construction, as can be observed in an example like 15. However, this is merely a syntactic fact; it is clear that an underlying and understood existential quantifier of time belongs as an inherent part of the universal perfect construction’s reading.

(15) Il-hom mejt-in
to-3PL.GEN dead-PL
‘They have been dead for some (unspecified) time.’

(Maltese; Camilleri 2016:163)

(v) Algerian and Tunisian varieties make use of the preposition ʕand/sind ‘at’ instead of la/il ‘to’.4

(16) ʕind-na ʃākā wahna ne-hk-u fi ṭalifūn
at-1PL.GEN hour conj.1PL.NOM 1-talk.PFV-PL PROG telephone
‘We have been talking on the phone for an hour.’

(Tunis Tunisian)

(vi) Lastly, in some dialects, the function of ʃār is fulfilled by a different lexical item—for example, in Egyptian it is fulfilled by the default perfective 3SG.M form of the verb baʔa, which also means ‘become’ (illustrated in 17), and this is obligatory in Egyptian. In Omani, by contrast, as illustrated in 18, the (synchronously) meaningless ʕād optionally functions as a host to the encliticized lu + infl.

(17) ʕala ma ʔil-ʔisʕāf waṣal-it, kān ʔir-rāgil
for comp def-ambulance.SG.F arrive.PFV-3SG.F be.PFV.3SG.M def-man
māt baʔā-l-uh saʕt-ēn
die.PFV.3SG.M become.PFV.3SG.M-to-3SG.M.GEN hour-DU
‘By the time the ambulance arrived, the man had been dead for two hours.’

(Egyptian; Mughazy 2015:128)

(18) samīr (ʕād-)lu-h ʔalāʔ ʃāk-āt yi-ʃab
Samir (ʕa¯d-)to-3SG.M.GEN three hour-PL.F 3.M-play.PFV.SG
bi-t-tilfūn
on-def-telephone
‘Samir has/had been playing [video games] for three hours on his phone.’

(Omani)

2.3. Summary. The most significant of the points of variation listed above are the Algerian and Tunisian facts. That the preposition ʕand ‘at’ is used in Algerian and Tunisian where other dialects use la casts doubts on Hallman’s (2016) analysis of la as a dative inflection within the universal perfect. If a structurally parallel analysis of the universal perfect in the Arabic dialects is to be identified, then a common denominator between la/il and ʕand/sind should be found. Yet ʕand/sind does not function as a dative case in any of the Arabic varieties. It does, however, have in common with la/il that it marks possession across the different varieties, in fact more generally than la does. Fol-

4 In Sfaxi Tunisian, the situation varies. While ʕand + infl is available in the rest of the Tunisian dialects, Sfaxi stands out from the others in being the only one that predominantly makes use of li + infl, with the optional use of ʃār preceding li. Zammit (2014) argues that Maltese and Sfaxi Tunisian are genetically close to one another.
following this lead, I discuss connections between possessive structures and the perfect construction in the following section, their significance for the Arabic data, and what Arabic can contribute to what is known about this connection typologically.

3. The grammaticalization of the universal perfect in Arabic. In this section I claim that the Arabic universal perfect grammaticalized from a possessive construction. For this reason, the universal perfect construction in Arabic can be considered an instance of what in the typological literature is referred to as the ‘possessive perfect’ (Heine & Kuteva 2006), albeit one that displays a distinct grammaticalization path from that postulated for the perfect in European languages. It is their function as possessive predicates that underlies the use of la’il andʕand/ʕind in the universal perfect and that presents itself as these predicates’ common denominator.


This literature maintains that the grammaticalization of a possessive perfect is typologically rare beyond Indo-European, and among Indo-European languages is largely restricted to languages spoken in Europe. As a result, this grammaticalization has emerged as a defining characteristic of Europe as a linguistic area (Dahl 1996, Haspelmath 1998, Ramat 1998). Most of the research has been on Romance and Germanic, which are languages with a ‘have’ possessive predicate in their lexicon, that is, languages that build their possessive construction on the basis of a transitive Action schema, noted ‘X takes Y’ > ‘X has, owns Y’ (i.e. the phrase ‘X takes Y’ develops the meaning ‘X has Y’) in the typology of possessive constructions in Heine 1997, 1998. The diachronic development thus involves a possessive construction that is ‘conceptually derived from a propositional structure involving an agent, a patient, and some action or activity’ (Heine 1997:47), or as Givón (1984:103) puts it, ‘a “have” verb arises out of the semantic bleaching of active possession verbs such as “get”, “grab”, “seize”, “take”, “obtain” etc., whereby the sense of “acting to take possession” has been bleached, leaving behind only its implied result of “having possession”’. While Heine and Kuteva (2006:43–46) and Heine and Nomachi (2010:14–16) identify a three-stage process for the grammaticalization of a possessive construction to a perfect, the trajectory proposed remains Indo-European-oriented. Essentially, stage 0 is the possessive stage. Stage I then involves the onset of the loss of the possessive interpretation, and the passive participial form that characterizes such perfect constructions comes to function as a modifier of the theme object—the erstwhile possessor. Gradually, the main predicate ‘have’ and the participle that is in an adjunct/modifier position to the object are re-analyzed as an auxiliary and a main verb, respectively (Heine 1997:192). In stage II, the possessive interpretation is lost entirely and the erstwhile possessor comes to be viewed
as the external argument of the verb underlying the participle. At this stage, an intransitive participle also becomes available in the construction, such that the original possessum no longer figures in the structure. In the case of transitive participles, the original agreement with the theme/possessum begins to be lost. Bybee and Dahl (1989:70) take this to be the result of the syntactic reanalysis of the participle. Stage III then involves the end point of the grammaticalization, at least as observed from the synchronic behavior of perfect constructions typologically. In this stage, one finds no restrictions on the type of verbal predicate involved or the nature of the subject.

Below I claim that Arabic has undergone a change from a possessive construction to a perfect construction, specifically a universal perfect construction that has reached a fully grammaticalized stage. However, the initial stage in Arabic did not involve a transitive verb meaning ‘have’, but a possessive construction that started out specifically as a Goal schema: ‘Y exists to/for X’ > ‘X has, owns Y’, involving the preposition la/li ‘to, for’, which then gradually grammaticalized into a verbal element, expressing possession, with the resultant structure then paving the way for the eventual perfect-expressing development that followed.

### 3.2. Possession in Arabic

In general, clausal possession across the dialects of Arabic comes about through the use of prepositions-turned-verbal predicates (Comrie 1989, 1991, Naïm 2007, Stassen 2009), which are also referred to as pseudo-verbs in the literature on Arabic (Vanhove 1993, Ingham 1994, 2007, Brustad 2000, Comrie 2007, Peterson 2009, and Vanhove et al. 2009). These broadly consist of a number of forms, such as prepositions, nouns, or quantifiers, that have taken on a verb-like function. They inflect very much in the same way that nouns or prepositions do. The change into a pseudo-verb in Arabic, described below for la and ḥand, can be viewed as an initial step toward further grammaticalization into other functions.

The major possessive strategies make use of the erstwhile prepositions la/liil ‘to’ (which has also grammaticalized as a more general dative case marker in the dialectal system) and ḥand ‘at’. The original prepositions mas ‘with’, bī ‘with; in’, and fī ‘in’ have also grammaticalized as possessive predicates, but the latter two are mainly used as minor strategies.5 The examples in 19 illustrate representative data involving la and ḥand in their possessive use in some Arabic vernaculars. These exemplify the Goal schema (i.e. where ‘Y exists to/for X’ comes to mean ‘X has, owns Y’) and the Location schema (‘Y is at X’s place’ > ‘X has, owns Y’), respectively, in Heine’s (1997, 1998) typology. Given that these prepositions have been reanalyzed as verbs through grammaticalization, which I support empirically below, I gloss them as ‘have’ in the rest of the examples, rather than ‘to’ or ‘at’.6

(19) a. huwa la-ḥ ʔaθar ẓal-ey
    he have-3SG.M.GEN influence on-1SG.GEN
    ‘He has influence on me.’ (Kuwaiti)

b. kān la-mona tlat ʔulād
    be.PFV.3SG.M have-Mona three children
    ‘Mona had three children.’ (Palestinian; Boneh & Sichel 2010:4)

---

5 An illustration of the use of fī ‘in’ as a possessive predicate is the following. It is, however, restricted to a number of inalienable contexts, particularly ones involving bodily/psychological conditions.

(i) fī-ya ~ fī-nī ǧūʕ /nūm
    in-1SG.GEN ~ in-1SG.ACC hunger.vn/sleep.vn
    ‘I am hungry/sleepy.’ (Southwestern Saudi Arabian)

6 I gloss the inflection on ‘have’ as ‘GEN’ to stay true to the morphology. Prepositions in Arabic inflect with a genitive-marked bound pronominal form. This morphological inflection is maintained even when a shift from a P (or N) to a pseudo-verb takes place. Refer further to the discussion in §3.3.
c. ʕaṭī-ha ʔil-kin min ʔilli ʕind-isˇ
   give.IMP.2SG-3SG.F.ACC DEF-gum from COMP have-2SG.F.GEN
   ‘Give her a gum from that which you have.’ (Abha Saudi; Al-Azraqi 1998:73)

d. ʕind-i kteb
   have-1SG.GEN book
   ‘I have a book.’
   (Tunisian)

A cross-dialectal overview (Naïm 2007:674–75) of the variation in the choice of possessive predicate illustrates that which predicate is employed depends on the nature of the possession relation and/or constraints on the theme. There may at times be free variation, overlap, or strict complementarity between the predicates available in a given system or across dialects. In Egyptian, for example, la ‘is found in inalienable contexts, and with an inanimate possessor’, as opposed to la in Levantine and Yemenite dialects, where ‘it is only found in set expressions and for abstract possession’ (Naïm 2007:674). Similarly, Boneh and Sichel (2010) claim that la only ever expresses inalienable possession in Palestinian, with ʕind, by contrast, able to express both inalienable and alienable possessive relations. An illustration of this split in the choice of predicate employed is illustrated in 20 from Palestinian.

(20) a. ʕand-ha/ʔil-ha/maʕ-ha tlat ʔulād
   have-3SG.F.GEN three children
   lit. ‘at-her/to-her/with-her three children’
   ‘She has three children (and she is their mother).’
   (inalienable possession)

b. ʕand-i/maʕ-i/*ʔil-i tlat ʔiʔlām
   have-1SG.GEN three pen.pl
   lit. ‘at-me/with-me/*to-me three pens’
   ‘I have three pens.’
   (alienable possession)

In Heine’s (1997, 1998) account, possessive constructions such as those in 19 are analyzed as intransitive structures, since they are not derived out of an Action schema, and in these constructions the theme functions as the subject, while the oblique-marked possessor functions as the object of the prepositional predicate. Accounts of the state of affairs across the vernacular Arabic varieties, as opposed to Standard Arabic, however, demonstrate shifts toward a ‘have’-type transitive possessive construction, even if the predicates employed were formerly prepositions (Comrie 1991, 2007, Vanhove 1993, Stassen 2009, and Camilleri 2016). I show below that although possession in Classical/Standard Arabic is based on a prepositional predicate, the possessive constructions of the type in 19 across the vernaculars can no longer be understood synchronically as involving prepositional predicates. Rather, the preposition has been reanalyzed as a verb, hence the use of the gloss ‘have’. More specifically, possessive constructions across the Arabic vernaculars are constructions headed by transitive verbs (Comrie 1989:210, Naïm 2007:675). Below I review two points cited in the literature supporting this conclusion, namely: agreement, and the realization of negation. To these I add a third, related to accusative case marking.7 I claim that the change from preposition to verb in the possessive structure took place before the structure further developed into a universal perfect construction.

7 It should here be added that most of the tests below are applicable to other pseudo-verbs present across the Arabic system, and not just to those that are grammaticalized from prepositions or function as possessive predicates. Moreover, other tests can be applied, which I have, however, excluded for reasons of space. These include: reflexive pronouns in theme position bound by the possessor, the morphosyntactic behavior of the pronominal doubling of the possessor, and the canonical behaviors that arise in the context of raising and control structures. See Camilleri 2016:132–53 for more detail.
Auxiliary agreement. The data in 21 demonstrates the use of both prepositions, *la* and *ʕind*, in the realm of possession in Quranic Arabic of the seventh century ce, itself probably reflecting a yet earlier form of the language. The constructions below are interpreted in the *present tense*, and the theme internal to the possessive structure clearly functions as a subject, as is indicated through the nominative marking.

(21) a. *wa-ʔin tu-ʔmin-ū wa-ta-ttaq-ū fa-la-kum* and-if 2-believe.ipfv-pl and-2-worship.ipfv-pl then-to-2.pl.m.gen *ʔaʒr-un ʕað īm-un* reward.sg.m-nom.indf splendid.sg.m-nom.indf ‘If you believe and worship, then you will have a splendid reward.’

b. *ʔinnamā ʔamwāl-u-kum wa-ʔawlād-u-kum* rather possession.pl-nom-2.pl.m.gen and-children-nom-2.pl.m.gen *fitnat-un wa-llāh-u ʕinda-hu* test-nom.indf and-Allah-nom at-3.sg.m.* ʔaʒr-un ʕað īm-un* reward.sg.m-nom.indf splendid.sg.m-nom.indf ‘Rather, your possessions and your children are a test, and Allah has a splendid reward [for you].’

Here, the theme receives nominative case, indicating that it is functioning as the subject. The forms *la* and *ʕind* are therefore not functioning as verbs, since we would expect the theme to bear accusative case if they were. Further, such constructions are shifted into the past tense with the auxiliary *kāna* ‘be’, which agrees with the theme, as expected for a subject (22). This differs from the situation in the vernaculars, where a parallel configuration is ungrammatical (23) and one finds a default 3sg.m form of the auxiliary instead. I take this to indicate a change in the possessive predicate’s category, with an associated subsequent change in the mapping between the thematic arguments in the possessive construction and their syntactic grammatical function.

(22) *kān-at l-ī ʕammat-un hakīmat-un* be.pfv-3sg.f to-1sg.gen aunt-nom.indf wise.sg.f-nom.indf ‘I had a wise paternal aunt.’ (Classical Arabic; Shboul 1983:33)

(23) a. *kān/*kān-it ʕand-i siyyāra* be.pfv.3sg.m/be.pfv-3sg.f have-1sg.gen car.sg.f ‘I had a car.’ (Syrian)

b. *kān/*kān-u la-əš-ʃajara ʕruʔ ktar* be.pfv.3sg.m/be.pfv.3-pl have-def-tree branch.pl many ‘The tree had many branches.’ (Palestinian; Boneh & Sichel 2010:4)

In other varieties, such as Maltese (24), one observes that it is possible to have both a default form, that is, a 3sg.m form on the auxiliary verb, and agreement with the possessor, suggesting that the possessor must be functioning as the subject. It is a likely hypothesis that the onset of this change may be attributed to, or suggestive of, prominent internal possessor behaviors. Such a hypothesis has been also postulated for the onset of the grammaticalization of at least one other structure that is specifically present across Arabic vernaculars, as discussed in Camilleri & Sadler 2019.

---

8 Example 21a appears in Sura 3, verse 179, and a similar example in verse 172. Example 21b appears in Sura 64, verse 15, and similar examples appear in Sura 8, verse 28, and Sura 9, verse 22.
Kon-t/kien ġa ghand-i ghaxar snin meta ... be.PFV-1SG/be.PFV.3SG.M already have-1.SG GEN ten year.PL when ‘I already had ten years when ... ’ (i.e. “was 10 years old”)

(Maltese; Camilleri 2016:132)

In addition to optional agreement with the possessor, Tunisian dialects, for example, preserve the Classical Arabic pattern of agreement with the possessum as a third option.

(25) kān ~ kān-it, ~ kun-tj ūand-ī djājāj be.PFV.3SG.M ~ be.PFV-3SG.F ~ be.PFV-1SG have-1.SG GEN chicken.SG.F

‘I had a chicken.’

(Tunis Tunisian; Comrie 1991:24)

Although the lack of agreement on auxiliaries in some dialects leads Comrie (1991) to conclude that the clausal possessive construction is subjectless, I suggest that the lack of agreement could instead be related to the fact that agreement/inflection on the possessive predicate la-il or ūand/ūind is itself noncanonical.9 The agreement on la-il or ūand/ūind is derived from the bound pronominal forms that affix to prepositional and nominal hosts, rather than the subject inflectional paradigm of finite verbs. It is precisely the nonnominative marking of the possessor that precludes agreement on the auxiliary. For this reason, then, a default form of the auxiliary is used instead. What is clear, and where my claim is in agreement with Comrie (1991), is that most of the dialects seem to be in an in-between stage in which the theme has lost its subject properties and is moving toward functioning as a canonical object, as it already has in Maltese and Tunisian, for example, except that the latter also preserves the Classical Arabic pattern as a third agreement option.

NEG BEHAVIOR. Evidence related to the morphosyntax of negation in the data below illustrates that there are differences in the expression of negation when comparing the prepositional locative use of la-il/ūand and their possessive use, where they function as verbs, at least in the vernaculars.10 The expression of negation across the various Arabic varieties differs depending on whether the predicate is verbal or nonverbal. Broadly, while (finite) verbs are negated with mā (...-š), nonverbal predicates, participial forms, and nonfinite uses of the imperfective verb are negated through the use of mū(s). Internal to the possessive construction, NEG realization is not the one found on prepositions (i.e. not the form mū(s) and variants). Rather, possessive predicates in the Arabic vernaculars display the NEG expression that is otherwise associated with verbal predicates (i.e. mā (...-š)). The pairs of data in 26–28 are meant to highlight the distinction in the NEG expression on ūand/la-il, depending on whether these are functioning as locative prepositional predicates or as verbal possessive predicates.

9 As suggested by an anonymous referee, it is not uncommon, crosslinguistically, to find that subjects expressing the thematic roles of experiencer and other roles lower than that, such as possessor, are expressed through noncanonical morphological means, including dative or genitive case (Aikhenvald et al. 2001, Bhaskararao & Subbarao 2004). Furthermore, it may be worth noting here Trask’s (1979:398) statement, mentioning that for those languages that lack a ‘have’ predicate, a ‘re-interpretation of such a possessor as an agent would automatically bring about ergative case-marking’ because of the original prepositional or other oblique marking on the possessor. Trask thus understands shifts parallel to the ones we are considering here for Arabic to be indicative of a structure passing through an ergative-marking phase as the possessor is reanalyzed as an agent, but where the agent is marked (via locative, genitive, or dative marking) while the patient remains unmarked.

10 For completeness, it is worth mentioning that this NEG test works for other sorts of pseudo-verbs, including other types of possessive predicates, such as maʕ lit. ‘with’ and fi lit. ‘in’, for instance.
(26) Syrian (Comrie 2007:739)
a. mā ʕand-i waʔt
   NEG have-1SG GEN time
   ‘I don’t have time.’  (NEG of POSS)
b. mū ʕand-i
   NEG at-1SG GEN
   ‘It’s not at my place.’  (NEG of LOC)

(27) Maltese (Comrie 1991:18)
a. M’għand-i-x ktiеб
   NEG have-1SG GEN-NEG book
   ‘I don’t have a book.’  (NEG of POSS)
b. Mhux għand-i, l-ktieb
   NEG.3SG.M at-1SG. GEN DEF-book
   ‘The book is not at my place.’  (NEG of LOC)

(28) Palestinian
a. ma-l-he-s ʔuxt
   NEG-have-3SG. GEN-NEG sister
   ‘He doesn’t have a sister.’  (NEG of POSS; Hoyt 2006:53)
b. haʔīk ʔis-sayyāra mīš ~ mū ʔil-na
   DEM.SG.F DEF-car.SG.F NEG ~ NEG to/for-1PL.GEN
   ‘That car is not for us (is not ours).’  (NEG of LOC)

Even in Classical Arabic one finds ʕind and la occasionally negated by mā, just as a verb would be, when this predicate participates in a possessive construction. Example 29 is one such illustration.

(29) mā ʕind-i ʔaʕazzu min-ka
   NEG have-1SG. GEN thing-ACC. INDF dear.ELAT from-2SG.GEN
   ‘I have nothing dearer than you.’  (Thousand and one nights)

This contrasts with how negation is expressed with locative predicates in Classical Arabic, which are negated by the negative copula laysa ‘not be’. Although the locative interpretation of ʕind happens to not occur with negation in the Quran, the locative preposition fī ‘in’ does, as illustrated in 30.11

(30) ya-qūl-ūna bi-ʔafwāh-i-him mā laysa fī
   3-say.IPFV-M.PL with-mouth.PL-GEN-3PL.GEN what NEG in
   qulūb-i-him
   heart.PL-GEN-3PL.GEN
   ‘They say with their mouths what is not in their hearts.’

Theme as object. The third piece of evidence for a (transitive) verbal status of possessive il/ʕind in the Arabic dialects, and against an intransitive prepositional analysis, comes from the availability of free object pronouns such as iyyāha in possessive constructions, as in 31. This differs from the pronominal form employed to express a subject, as shown in the locative construction in 32. The pronoun expressing the theme in the possessive construction is the same form otherwise used to express the theme argument in a ditransitive construction, for example, one headed by a canonical verbal predicate, as illustrated in 33.

---
11 Example 30 appears in Sura 3, verse 167.
(31) ʕind-na ʔiyyāha
have-1PL.gen acc.sg.F
‘We have it (f).’ (possessive construction; Palestinian)

(32) hiyye ʕind-na
she at-1PL.gen
‘She is at our place.’ (locative construction; Palestinian)

(33) ṭaʕam-it-u ʔiyyāha
feed.pfv-1sg-3sg.m.acc acc.sg.f
‘I fed him it (f) (e.g. maqlōba ‘traditional dish’).’ (ditransitive construction; Palestinian)

Further, a theme with high definiteness in the possessive construction may be differentially marked in dialects with differential object marking, such as Maltese (Comrie 1982, Borg & Comrie 1984, Sadler & Camilleri 2013). This is what we observe with the theme Marija in 34.

(34) Pawlu għand-u *(lil) Marija/lilha (miegh-u)
Paul have-3sg.m.gen *(acc) Mary/3sg.f.acc (with-3sg.m.gen)
‘Paul has Mary (with him).’ (possessive construction; Maltese)

This parallels the differential marking of objects of canonical verbal predicates, as illustrated in 35.

(35) Raj-t lil Marija/lilha id-darba l-oħr-a
see.pfv-1sg.acc Mary/3sg.f.acc def.once.sg.f def-another.sg.f
‘I saw Mary the other time.’ (transitive construction; Maltese)

With this overview, we have seen that the il and ʕind predicates, which clearly started out as prepositions (and which synchronically still display this ‘split function’, to use Hopper and Traugott’s (2003) terminology, since they function as prepositions elsewhere in the system), have syntactically developed into verbal possessive predicates, resulting in the formation of a possessive construction that syntactically parallels a ‘have’-type one.

3.3. The verbal nature of il in the universal perfect construction. Here I demonstrate that, internal to the universal perfect construction, il/ʕind display verbal properties, just as their precursors in the possessive construction do. I show that the argument from auxiliary agreement and the realization of negation apply to il/ʕind in their use in the universal perfect. Testing for objecthood internal to the universal perfect is not a possibility, since within this construction we have a temporal theme argument that neither can be substituted by a pronominal form nor is high enough on the definiteness hierarchy to be able to be differentially marked. However, I here add two idiosyncratic properties of the Maltese universal perfect construction, which I take to be additional important pieces of evidence in support of the verbal nature of il in the universal perfect.

Auxiliary agreement. If we consider what happens in the presence of kān ‘be’ when the universal perfect structures are changed into the past tense, we essentially observe the same behaviors as in the context of possessive constructions. Once again, this can only suggest that it is not a prepositional la/il that we have in this construction.

The data in 36 for Syrian (repeated from 10a above) illustrates the obligatory presence of a default 3sg.m form of the verb, implying that there is no agreement relation with the erstwhile possessum, which I claim below is the temporal interval.
‘Muna had been in prison for five days when I visited her.’ (Hallman 2016:83)

In Maltese, by contrast, in parallel with the observations related to the possessive construction in §3.2, it is possible to have both the default 3sg.m form of the auxiliary and a form that agrees with the construction’s subject, in this case a 3sg.f pro, which diachronically functioned as the possessor and which in the possessive construction functions as a subject.

‘She hadn’t bought it for a long time.’ (Maltese; Camilleri 2016:172)

I take this overall behavior to indicate that just as a remapping of the thematic arguments and the syntactic grammatical functions had already taken place in the possessive construction once the possessive predicate changed its category from P to V, this very remapping was transferred onto/inherited by the universal perfect construction as a direct consequence of its grammaticalization out of a possessive structure.

The realization of neg. Parallel to the use of the verbal negative strategy (i.e. with mā (...-sˇ)) with the possessive predicate within the possessive construction because it had grammaticalized into a verbal item, the universal perfect constructions also make use of this same neg exponent. As illustrated in 38, it is the verbal negation strategy expressed through mā (...-sˇ) that negates the predicates il/ʕind, as opposed to the use of mū/misˇ illustrated in 26–28 in §3.2, when these predicates are used in their prepositional function. I take this data to further enhance the claim that just as the possessive predicates are no longer prepositions in the vernaculars, il/ʕind within the universal perfect cannot be synchronically analyzed as goal/locative Ps (or a pronominal dative subject in the case of il/lá, for that matter).

‘Muna hasn’t been sober for five days (yet).’ (Syrian; Hallman 2016:88)

‘I haven’t been living in London for five years.’ ((Rural) Palestinian)

‘It has not been that long since they started coming.’ (Tunis Tunisian)

Genitive-to-accusative changes. Maltese presents another fact supporting the claim that il functions as a verb in the universal perfect within the modern dialects. In this variety, the 1sg inflection on il may be either -i or -ni. The former occurs otherwise in genitive contexts, that is, as a possessive suffix on prepositions (39a) or nouns (39b). The latter occurs otherwise in accusative contexts, principally as a bound object pro-
noun on verbs (40). The fact that -ni may appear on il in the universal perfect construction in Maltese, as illustrated in 41, indicates that il is clearly functioning as a verb in this particular dialect.\textsuperscript{12} As argued in Comrie 1982, 2007, this genitive ~ accusative alternation or genitive > accusative change takes place frequently in Arabic, when forms that are not originally verbal start functioning as, and grammaticalizing into, verbs in the system. These forms thus essentially make use of morphological means in order to establish, or further consolidate, their categorical change.\textsuperscript{13}

\begin{enumerate}
\item[(39)] a. Bagħat ittra il-
\hspace{1cm} send.PFV.3SG.M letter to-1SG.GEN 'He sent a letter to me.' (Camilleri 2011:145)
\item b. Mor-t hemm ma' hut-
\hspace{1cm} go.PFV-1SG there with sibling.PL-1SG.GEN 'I went there with my siblings.'
\end{enumerate}

\begin{enumerate}
\item[(40)] Ġe-w i-kellm-u-ni
\hspace{1cm} come.PFV.3-PL 3-talk.IPVF-PL-1SG.ACC 'They came to talk to me.'
\end{enumerate}

\begin{enumerate}
\item[(41)] a. Il-i ~ il-ni fit im-mur hemm, issa
\hspace{1cm} have-1SG.GEN ~ have-1SG.ACC little/few 1-go.IPVF.SG there now 'I have been going there for a bit, now.'
\item b. M'il-i-x ~ m'il-ni-x ħafna li
\hspace{1cm} NEG.have-1SG.GEN-NEG ~ NEG.have-1SG.ACC-NEG a.lot COMP mor-t
\hspace{1cm} go.PFV-1SG 'It hasn’t been a long time since I went.' (Camilleri 2016:128)
\end{enumerate}

**IMPLIED INHERENT ARGUMENT.** The second idiosyncratic characteristic is the fact that the temporal/durational interval need not be present in Maltese, yet it nevertheless functions as an inherent part of the universal perfect construction’s reading. A time frame, albeit unspecified, is nonetheless always implied in the structure, as illustrated in 42. One could argue that this is reminiscent of what we observe in other instances where the inherent arguments of predicates may be dropped but are understood in context, as with ‘eat’, which necessarily implies ‘eat something’. On an assumption that arguably only verbs introduce implied arguments, this then suggests that il has its own argument

\textsuperscript{12} The evidence provided is necessarily restricted to reference to the 1SG form, since across Arabic, this is the only cell in the morphological paradigm of incorporated accusative and genitive pronominal forms where syncretism is not present.

\textsuperscript{13} This conclusion is unidirectional. Wherever -ni occurs, we are looking at a verb, and the occurrence of ilni in Maltese makes it clear that grammaticalization has gone all the way. One also finds that a similar genitive > accusative change has taken place in the expression of the possessive construction using the P-turned-V bi ‘with’, for instance, as in Bini l-guħ lit. ‘with-1SG.ACC the hunger’, expressing ‘I am hungry’. The form bija ‘with-1SG.GEN’ would have been used in the context of a prepositional function of bi. Parallel data enhancing this point, for which I thank an anonymous referee, can be illustrated from Syrian and Lebanese, for instance, where the form fiyyāt lit. ‘in-1SG.GEN’ expresses the prepositional function of fi, whereas in the grammaticalization of this preposition as a modal-expressing verbal predicate, the form finī lit. ‘in-1SG.ACC’ is used, as in finī hārūḥ bukra laj-gym? ‘May/can I go tomorrow to the gym?!’. Refer also to the data from Southwestern Saudi Arabian in n. 5, which involves the use of the possessive predicate function of fi. These behaviors do not, however, bear on the many cases where only -i occurs, even if we are still dealing with a verb in such instances. A case in point is the verbal predicate bidd + INFL across the Arabic dialects, which uses incorporated genitive forms and which literally means ‘wish + poss’, but expresses the predicate ‘wish, want’. This thus implies that the form X + GEN can itself function as a verb, prior to any changes involving genitive > accusative. For instance, Sand is not able to express such a change from genitive > accusative, due to phonological prohibitions on the formation of *Sandni.
structure in the universal perfect construction in Maltese, and that an understood existential quantifier of time, which need not be present in the syntactic structure itself, is an obligatory part of the construction’s meaning. This thus indicates that it must be part of the argument structure of il. As the analogy to ‘eat’ implies, this property is verb-like.

(42) a. Il-ni ~ il-i n-a-f-ha, lil have-1SG.GEN ~ have-1SG.GEN 1-FRM.VWL-KNOW.IPFW.3SG.F.ACC ACC Marija!
   ‘It’s been a long time that I have known Mary!’

b. Kien-u il-hom j-i-stenne-w, sa ma be.PFV.3-PL have-3PL.GEN 3-EPENT.VWL-WAIT.IPFW-PL until COMP fl-ahhar mess-hom!
in.DEF-END touch.PFV.3SG.M-3PL.ACC ‘They had been waiting for quite some time and finally it was their turn!’ (Maltese)

3.4. Summary. We have seen that il and Sindic in both their possessive and universal perfect uses function as verbs in the modern dialects, with a noncanonical agreement inflection related historically to the genitive (and in Maltese also the accusative) bound pronominal paradigm. Insofar as the universal perfect use of la/il and Sind/Sind developed from the possessive use, the inheritance of the verbhood property in the universal perfect implies that the possessive use of these same items had already developed into a verb before the universal perfect use arose. The grammaticalization of a possessive perfect in Arabic can thus be understood as a result of a network of multiple grammaticalization chains, that is, polygrammaticalization (Craig 1991, Hopper & Traugott 2003), where an erstwhile preposition first grammaticalized into a verbal predicate within a possessive construction, then later developed into an auxiliary as part of the universal perfect construction.14 In the following section I look in more detail at the diachronic development of the universal perfect.

4. Diachrony vs. synchrony: possessive-to-perfect drift in Arabic. The previous section sought to establish that we are dealing with the grammaticalization of a prepositional predicate into a verbal predicate and then further into an auxiliary that expresses a universal perfect. I now turn to consider in detail a specific hypothesis about this trajectory. I ground this hypothesis in what we know from grammaticalization theory from a broader typological perspective. In doing so, I tackle issues that arise from a number of observed synchronic and diachronic mismatches involving the different predicates available to express possession and the different auxiliaries available internal to the universal perfect construction.

I start by positing the hypothesis that the universal perfect construction in Arabic arose out of a structure that had two components: an interval-denoting NP functioning as a possessum within a possessive construction, and a circumstantial clause, that is, a clause expressing a circumstance that occurs concurrently with what is expressed in the matrix (see Isaksson et al. 2009 for more details). All of the Arabic dialects discussed here allow such a possessive structure, which I here represent with data from Saudi, Palestinian, and Tunisian in 43.

14 See Camilleri & Sadler 2018 for more detail as to how such networks of grammaticalization and change can in turn be formalized within a syntactic theory of grammar.
I claim that the circumstantial clause’s predicate is that which later grammaticalized into what now functions as the stative predicate within the universal perfect construction. The Kuwaiti data in 44, which can be replicated in other dialects, represents how I claim the circumstantial clause progressed into becoming an integral part of the universal perfect construction. This I support through an observation of the inflection on the predicate *fādy* ‘free’, which correlates with whether it is interpreted as a modifier of the possessum or as a secondary predicate of the main predicate. In 44a, *fādy* ‘free’ functions as a modifier of *saʕtayn* ‘two hours’, meaning that she has two hours and these hours are free, while in 44b, *fādy* agrees with the subject of the sentence and gives roughly the same meaning, that she has two hours during which she is free. Example 44c is superficially identical to 44b but represents the universal perfect structure, with its corresponding interpretation, and here it is impossible to replace *la* with *ʕind*, as opposed to the possessive structures in 44a–b where *la* can be so replaced. My claim is that in all of the dialects under consideration here, sentences like 44b functioned as the basis of an eventual reanalysis as 44c, giving rise to the universal perfect construction.

(44) Kuwaiti

a. *la-ha* saʕt-ayn fādy-īn
   have-3SG.F GEN hour-DU free-PL.
   ‘She has two free hours.’
   (possession)

b. *la-ha* saʕt-ayn fādy-ah,
   have-3SG.F GEN hour-DU free-SG.F
   ‘She has two hours, (in which she is) free.’
   (possession)

c. *la-ha* saʕt-ayn fādy-ah,
   have-3SG.F GEN hour-DU free-SG.F
   ‘She’s been free for two hours.’
   (universal perfect)

The data in 43–44 presents a certain conundrum for the historical claim I am making. The predicate *ʕind* is commonly used to express possession in the modern dialects, yet in the universal perfect, the preposition *la* occurs almost exclusively (only Tunisian and Algerian make use of *ʕind* in the universal perfect). If it is true that the universal perfect is a possessive perfect construction, and hence grammaticalized out of a possessive structure, the development must have occurred at a time when *la* was the major strategy for expressing possession and *ʕind* was as yet an uncommon, or a more specific, one. This is what I claim in what follows.

Classical Arabic displays a number of prepositions used in possessive constructions (Shboul 1983, Procházka 2007:701), yet only *la* has developed a universal perfect use. The reason is probably related to the fact that the rest of the possessive predicates in Classical Arabic—that is, *maʕ* lit. ‘with’, *ʕinda* lit. ‘at’, *ʕala* lit. ‘on’, and *ladā* lit. ‘to’—
are exclusive to ‘humans having something’ (Shboul 1983:43); ُلا/ِلا is not. On the hypothesis that the Arabic universal perfect is a possessive perfect construction, evidently it was the more generalized possessive predicate that was more liable to further grammaticalization.

Comparative evidence suggests that the universal perfect construction was a relatively early development in the modern Arabic dialects. The relevant varieties for illustrating this are Syrian, Iraqi, and Maltese. While one finds ُلا/ِلا used in the universal perfect in these three vernaculars (45), they synchronically do not make use of this predicate in the ‘I have X to Y’ possessive construction, where X is a temporal interval and Y the clause hosting the stative predicate (see e.g. Erwin 1963 for Iraqi), as in 46. Rather, only ُهَن/ِهن is possible there.

(45) Universal perfect
   a. مُنَّا ُهَن-ا لَامَسْتِ شُنَّن رَاْفِشِت ُن-نَّاِدِ
      Muna have-3SG.F.GEN five year.PL president.SG.F def-club
      ‘Muna has been president of the club for five years (and still is).’
      (Syrian; Hallman 2016:81)
   b. ُذَانِي ل-ي شَا نِ في بَارِيْس
      I have-1SG.GEN year in Paris
      ‘I’ve been in Paris for a year.’
      (Iraqi)
   c. دِانِ مِل-ي يِتِ ُلي-ي ُجُقَتَار
      DEM.SG.M def-tap.SG.M a.little have-3SG.M.GEN 3.M-drIPFVSG
      ‘This tap has been dripping for only a short time.’
      (Maltese; Borg & Azzopardi-Alexander 1997:229)

vs.

(46) Possessive construction
   a. ُهَن-ا لُق-ا سَاْفَات-يْيَن ُلا-ت-تَكْتُب ُءال-ْيِمْتِيْهَان
      have-2SG.GEN hour-DU to-2SG-write.IPFV def-test
      ‘You have two hours to write the test.’
      (Syrian)
   b. ُهَن-ا ل-ي ُكْشِيْر ُلِي-يْنَِيْعُ ُءال-مَاْرُيْش
      have-2SG.GEN month to-finish.VN.SG.M DEM.SG.M def-project
      ‘You have a month to finish this project.’
      (Iraqi)
   c. غَنَّاهُ-ي ل-ي ُهَمَا شُنِن ُهَاوْن
      have-1SG.PL five year.PL here
      ‘I have five years (to live/to stay/to work) here.’
      (Maltese)

While the data in 46 shows that the garden-variety possessive construction in these Arabic vernaculars accepts a durational/temporal interval as a possessum, possession is expressed with a different predicate from that which occurs in the universal perfect construction (45). While 47 (and counterparts in a number of other dialects) is ungrammatical in Modern Maltese, the claim made above and further considered here—that the universal perfect derives from a garden-variety possessive construction involving the predicate ُلا/ِلا—entails that 47 was once grammatical. There is independent evidence that this is so.

(47) *مَرَي ُلا-ي/ِها ُكْيِب/ِسْيَغْت-يْيَن ُهَاوْن
      Mary have-3SG.F.GEN book/hour-DU here
      intended: ‘Mary has a book.’/‘Mary has two hours here.’
      (Maltese)

A closer look at possessive constructions in Maltese reveals that Maltese actually retains the original possessive predicate ُلا in the form of a phonologically eroded encliticized form. Unlike the relatively free variation (with semantic conditioning) one finds
in a number of Arabic varieties, determining the choice between the possessive predicates ʕind and la, in Maltese these are in a syntactically conditioned allomorphic relation with one another. The conditioning factor is argued to be tense by Comrie (1982, 1989) and Borg and Azzopardi-Alexander (1997), inter alia. According to these authors, għand + INFL occurs in the present tense (48a), kell + INFL in the past tense (48b), and its imperfective counterpart ikoll + INFL in modal or nonfinite contexts. kell and ikoll are, of course, none other than a fusion of the perfective and imperfective copulas kien and ikun, respectively, along with the possessive l + INFL. However, other evidence indicates that the conditioning factor is not tense directly, but the adjacency of the perfective or imperfective forms of the auxiliary kien ‘be’ and the possessive predicate. Note that għand is still available in the past tense (Camilleri 2016:132), but only if it is not linearly adjacent to the auxiliary ‘be’, as in 48c (refer also to 24). This (morpho)syntactically conditioned distribution is captured in 48.

(48) Maltese

a. Għand-hom tliet sigh-at ċans
   have-3PL GEN three hour-PL chance
   ‘They have three hours time.’ (present tense)

vs.

b. Kel-l-hom tliet sigh-at ċans
   be.PFV.3SG.M-have-3PL GEN three hour-PL chance
   ‘They had three hours time.’

c. Kien forsi għand-hom tliet sigh-at ċans
   be.PFV.3SG.M perhaps have-3PL GEN three hour-PL chance
   ‘They perhaps had three hours time.’ (past tense)

The fused auxiliary kell + INFL can be analyzed as an instance of ‘univerbation’: the ‘process whereby what are in origin groups of separate words gradually fuse into one’ (Vincent 1997:102–3). It consists of the perfective 3SG.M form of the auxiliary kien ‘be’ and the encliticized possessive predicate l. A parallel fusion between the auxiliary kān ‘be’ and the encliticized possessive predicate l is available in other dialects, including Syrian (49), though at least in this variety only optionally so.

(49) ʔumm kulsum kel-l-a (< kān ʔil-a)
   Umm Kulthum be.PFV.3SG.M-have-3SG.F.GEN (< be.PFV.3SG.M have-3SG.F.GEN)
   şawt hilu
   voice.SG.M beautiful.SG.M
   ‘(Singer’s Name) had a beautiful voice.’ (Damascene Syrian)

Fusion of il with the auxiliary kān/yikān can also occur optionally in the universal perfect construction in Syrian (50).15

(50) a. kal-l-u šahr mu-sāfir
   be.PFV.3SG.M-have-3SG.M GEN month ACT.PTCP-travel.SG.M
   ‘He had been traveling for a month.’

b. lāzim yi-kul-l-u šahr mu-sāfir
   must 3.M-be.IPVF.SG-have-3SG.M GEN month ACT.PTCP-travel.SG.M
   ‘He must have been traveling for a month.’ (Damascene Syrian)

In Maltese, possessive il fuses with the auxiliary kien obligatorily, as was shown in 48b. Nonfusion results in ungrammaticality, as demonstrated in 51.

15 Parallel fusion internal to the universal perfect construction is obligatory in Tetouani.
The universal perfect *il*, by contrast, displays the exact opposite behavior. It is impossible for universal perfect *il* to encliticize onto the auxiliary, as illustrated in (52).

(52) **Kien-et il-ha** /*kien- et *kel-l-ha snin

be.PFV.3SG.F have-3SG.F.GEN/*be.PFV.3SG.F have-3SG.F.GEN year.PL

twal t-għix hemm

long.PL 3.F-live.IPFV.SG there

‘She had been living there for three years.’ (universal perfect past tense)

The fact that the universal perfect use of *il* has a different distribution from the possessive use in Maltese indicates that the universal perfect use was an innovation that preceded the establishment of the allomorphic relation between *la* and *għand*. After this allomorph relation was established, there was no longer a specific possessive predicate *la*, but rather a predicate that surfaced as either *għand* or an encliticized *l*, depending on the adjacency of *kien* (where, for instance, *kien* + *l* fuses to *kell*). If the universal perfect had arisen from the possessive construction after this allomorphy developed, then we would expect the universal perfect *il* to alternate with *għand* under the same conditions that the possessive *l* does. That this is not so means that there was a point in the past when *il*/*la* was used to express possession independently of *għand*, and this same *il*/*la* developed a universal perfect use.

Consider now the evidence above from the perspective of grammaticalization clines documented in the grammaticalization literature (Heine 1993, 1997, Bybee et al. 1994, Heine & Kuteva 2002, 2005, 2006, and Hopper & Traugott 2003). I bring together here the diachronic-comparative account, sketched above, with what we know from typology. Taken together, as Comrie (1989) suggests from a broader typological perspective, these enable us to reconstruct earlier, undocumented stages of these developments internal to the Arabic varieties. Consider the following well-established tendencies.

(i) Lexical morphemes > grammatical morphemes

(ii) Full (lexical) V form > auxiliary > verbal clitic > verbal affix

(iii) Perfect/resultative/tense/mood are all grammatical features that have been crosslinguistically found to be able to grammaticalize out of different possession schemas.

On the basis of the guiding principle that ‘conceptual grammaticalization precedes erosion’ (Heine 1993:109), grammaticalization takes place first, and only then does the process of phonetic erosion kick off. This fact is also compatible with the grammaticalization cline à la Hopper and Traugott (2003), listed as (ii) above, where the process of cliticization of items on a grammaticalization path takes place only following these same items’ prior establishment as grammatical items in their non-phonologically deficient form. Given this, since *il* in the universal perfect is not eroded in Maltese (i.e. not encliticized onto the auxiliary), we can infer that the possessive predicate *la/lil* preceding it was itself not eroded. I hypothesize that it must have only been after the grammaticalization of the universal perfect construction as a possessive perfect structure that the erosion, and the eventual encliticization, of the possessive *la/lil* took place. Furthermore, it appears that these developments predated the widespread increased use of *śind* as a possessive predicate across the vernaculars and the eventual diminishment of the
distribution of *il*, since nothing could have otherwise inhibited *ʕind* from grammaticalizing into a perfect-expressing auxiliary, had it already been functioning in a more generalized fashion as a possessive predicate across the vernaculars. Further, as mentioned above, the split of *il* into a marker of possession and of the universal perfect in Maltese must have taken place before the former fell into complementary distribution with *ghand*. That is, both *ghand* and *il* were in free variation as expressions of possession, at which point *il* developed a universal perfect reading. Sometime after this, the universal perfect use of *il* was recognized as a (grammatical) item distinct from possessive *il*, with the latter eventually becoming an allomorph of *ghand* that cliticized obligatorily onto the adjacent auxiliary.

The situation observed in the above set of vernaculars, where we have a limited or total loss of *la/il* as a possessive predicate but its maintenance in the universal perfect, contrasts with the state of affairs in Tunisian and Algerian, where *ʕand/ʕind* is used in the universal perfect construction. I claim below that a possessive construction such as 47 must have existed not only in those varieties that synchronically do not employ *la/il* as a possessive predicate, but also in those where *la/il* is additionally not synchronically part of the universal perfect construction. In other words, while *la/il* appears to have predated *ʕand/ʕind* both as a possessive predicate and as a perfect auxiliary within the vernaculars, *ʕand/ʕind* in varieties such as Tunisian must have supplanted both the possessive and perfect-expressing functions of *la/il* at a later date.

Synchronic variation among the Tunisian dialects supports the claim that Tunisian *ʕand* supplanted both the possessive and universal perfect use of *la* after these had already differentiated. While the Tunis variety of Tunisian has been shown throughout our discussion to use *ʕind* in both possessive and universal perfect constructions, in the dialect of Sfax, which retains older features and hence is deemed more conservative (Gibson 2013), one finds that while (alienable/inalienable) possession is expressed through the use of *ʕand/ʕind*, the universal perfect requires the use of *li*, which can optionally also attach onto *sār*, as in 53.

(53) (sār-)li-ya ʕam tawa la-hna
(become.PFV.3SG.M-have-1SG.GEN year now ALL-here)
‘I’ve been a year here, now.’ (Sfaxi Tunisian)

It appears, then, that the use of *li* in the conservative Sfaxi variety predates the use of *ʕind* in other Tunisian dialects. The same can be said for the Algerian facts. While contemporary Algerian parallels Standard Tunisian in making use of *ʕand/ʕind* as a means of expressing the universal perfect, the use of *la* within the construction in 54 was documented for a tribe in Sāida, Algeria, in 1908.

(54) lēy-ya zmān mā ʃef-tā-ha-ʃ
(have-1SG.GEN time NEG see.PFV-1SG-3SG.F.ACC-NEG)
‘I have not seen her for a long time.’

(ūlâd bṛāḥîm Algerian Arabic; Marçais 1908:169)

I take both of these independent pieces of evidence to indicate that the use of *ʕand/ʕind* in the universal perfect in the standard varieties of Tunisian and Algerian dialects is a case of leveling: that is, a replacement of *li/la* in the universal perfect by *ʕand/ʕind* in analogy to the replacement of possessive *il/la* by *ʕand/ʕind*, which is widespread in the modern dialects.

Note that some of the cross-dialectal variation witnessed in §2.2 indicates that the erosion of *l+INFL* is gradually moving toward its logical endpoint in some dialects, especially as we observe the obligatory presence of a vacuous morphophonological ver-
bal host as required by individual dialects. Specifically, Baghdadi Iraqi, but not urban southern Iraqi, synchronically allows for the optional dropping of the predicate *ill*/*la* altogether, as illustrated in 55, repeated from 14.

(55) ṣār ~ ṣār-la-ha ~ ʔəl-ha
become.PFV.3SG.M ~ become.PFV.3SG.M-have-3SG.F.GEN ~ have-3SG.F.GEN
sīn wa-hiya wātq-a b-e wa hassa
year.PL CONJ-she trust.ACT.PTCP-SG.F in-3SG.M.GEN CONJ NOW
ṣarf-at-a kaðab
know.PFV-3SG.F-3SG.M.ACC lie.PFV.3SG.M
‘She had trusted him for many years when she now found out that he had been lying.’ (Baghdadi Iraqi)

The situation as it is developing in Baghdadi Iraqi can be viewed as one potential endpoint in the grammaticalization process of the universal perfect construction in Arabic, whereby what started off as a semantically vacuous optional morphophonological placeholder—ṣār—to the encliticized *l* predicate can now be present on its own in this construction. This erosion seems currently to have stopped short of targeting the imper- fective and active participle forms of ṣār, which are still required to cooccur with *l* + INFL, as illustrated in 56. This could be taken to imply that the nonperfective forms of the vacuous morphophonological placeholder are themselves more recent developments than the perfective verbal form and may thus need more time to solidify as part of the paradigm before they can eventually replace *ill*, which is itself the locus of the universal perfect construction.

(56) ṣāyir/y-sīr *(la-na) sana
become.ACT.PTCP.SG.M/3.M-become.IPVF.SG *(have-1PL.GEN) year
sākn-īn hni
live.ACT.PTCP-PL here
‘We’ve been living here for a year.’ (Baghdadi Iraqi)

A further parallel between grammaticalized derivatives of the possessive construction in European languages and Maltese (and other Arabic vernaculars more broadly; see Camilleri 2019 for more details) is that in both cases the underlying possessive construction has also given rise to a modal construction meaning ‘have, should, must’, as illustrated in 57. Such a trajectory of change is well attested in a number of languages (see e.g. Fleischman 1982, Bybee et al. 1994:183, Haspelmath 1998:275, and Heine & Kuteva 2002, inter alia, for illustrations of such a grammaticalization crosslinguistically). Maltese, however, offers particularly clear evidence that the modal construction developed directly from the possessive construction, not from its perfect derivative. When we look closely at the paradigm of items that synchronically function as the modal auxiliary in such structures in Maltese (Vanhove 1993, 2010 and Vanhove et al. 2009), we observe that the forms employed are not *il*, but rather *ghand*, *kell* + INFL, and *jkol* + INFL, used in their respective contexts. That is, in the MODAL function, the same allomorphy that is found in synchronic possessive constructions is observed.

(57) Maltese
a. T-mur fejn ghand-ek t-mur
2-go.IPVF.SG where have-2SG.GEN 2-go.IPVF.SG
‘You go where you have to go.’ (deontic function; Vanhove et al. 2009:332)

b. Ghand-hom i-kun-u hemm ghas-sebgha
have-3PL.GEN 3-be.IPVF-PL there for.DEF-SEVEN
‘They should be there at around seven.’ (epistemic function; Vanhove et al. 2009:333)
c. Kel-l-ek t-a-hseb qabel be.PFV.3SG.M-have-2SG.GEN 2-FRM.VWL-think.IPV.FSG before
“You should have thought about that before.’
(deontic function; Vanhove et al. 2009:332)

d. Saa erbat ijiem, hamsa, i-kol-l-ha until four day.PL five 3.M-be.IPV.SG-have-3SG.F.GEN
t-i-nxef 3.F-FRM.VWL-dry.IPV.SG
‘Until four, five days, it would have to dry.’
(epistemic function; Vanhove et al. 2009:333)

Maltese therefore provides us with evidence that the Arabic possessive construction is the source of split grammaticalization in the vernaculars, giving rise to a perfect construction and a modal construction, but at different times, so that changes to the form of the predicate in the possessive construction that took place after the development of the universal perfect are reflected in the form of the predicate in the modal construction, but not of the universal perfect construction. The synchronically obsolete possessive construction that made use of the predicate la/il gave rise to the grammaticalization of a possessive perfect, specifically a universal perfect construction, while the synchronically attested possessive construction, which involves the allomorphic predicates ghand and encliticized l, has given rise to the grammaticalization of a modal construction. The development hypothesized for Maltese is represented in 58.16

5. CONCLUSION. In this study, I have provided a synchronic (morpho)syntactic account of the universal perfect construction across the Arabic vernaculars. I have additionally posited a hypothesis that characterizes the grammaticalization of the universal perfect construction in Arabic as being a final stage in the development of a possessive perfect construction from a Goal schema of possession (which was overridden by the Location schema in the case of Tunisian/Algerian). I claim it is derived from a possessive construction that involved a durational/temporal interval as the theme/possessum. I have additionally provided a number of synchronic observations that imply a particular diachronic path. This argument exploits the fact that Maltese appears to sit high on the grammaticalization end, in comparison to the other varieties, and shows how the possessive construction at different phases in the history of Maltese has been the source of two distinct splits. The possessive perfect discussed here was shown to be a rather old development, which took place prior to the spread across the vernaculars of the use of fiind as the main possessive predicate to the exclusion of il. A modal auxiliary emerges from the same sources across the different Arabic varieties, as argued in Camilleri 2019, but specifically for Maltese, I have here shown that these grammaticalizations must have emerged from the later possessive construction in Maltese that involves l and fiand.

16 The dat marker then developed from P: il/la LOC/GOAL.
in an allomorphic relation, once \( l \) encliticized onto the auxiliary \( kien \) ‘be’. These developments largely parallel the developments of ‘have’ as a perfect and modal auxiliary in European languages, except that the original source for the Arabic ‘possessive perfect’ was a preposition, rather than a transitive verb. More broadly, insights remain to be gained from a wider consideration of what goes on in languages beyond Arabic, such as (neo-)Aramaic and Modern South Arabian languages, checking and testing the robustness of the possessive construction as a structural basis for the grammaticalization of temporal, aspectual, and modal categories and their values. Camilleri 2019 sets the ground for a preliminary discussion and hypothesis on the matter.

The claim that a universal perfect has grammaticalized out of a possessive construction in Arabic has two ramifications beyond Semitic. First, it presents a new counterexample to the conventional wisdom that possessive perfects are rare outside of the European languages (Haskelmath 1998). They are attested throughout the Arabic dialects, and therefore are at least a degree less rare than previously thought. Second, it presents a diachronic ‘continuation’ of a phenomenon discussed by Heine and Nomachi (2010:20). A handful of European languages, including Breton, Irish, and North Russian dialects, have a perfect construction based on a possessive construction with a prepositional predicate. These languages have been said to preserve the intransitive syntax of the diachronically underlying possessive construction, including the oblique marking of the possessor and the nominative marking of the possessee. The Arabic data provides us with a prepositional source for verbal possession and the subsequent perfect construction, which is a development that is to my knowledge undocumented in the European languages. While proposals in the typological literature such as that in Comrie 1991 and Stassen 2009 suggest that this is the result of the development of a topicalized locative structure, it may well be the case that, alternatively, the trajectory involved a thematic-role shift that resulted in the possessor argument being reinterpreted as an agent, a shift that could have come about due to behaviors associated with the presence of a prominent internal possessor—a behavior that has been observed elsewhere in the Arabic system, precisely at the onset of further grammaticalization (Camilleri & Sadler 2019). The consequence of this shift (à la the hypothesis in Trask 1979) is a phase of ergative alignment where the agent possessor is obliquely genitive-marked, while the theme, unmarked, is what triggers agreement on the verb. Classical Arabic displays a prepositional possessive construction that developed into a verbal possessive construction, but one that has an oblique subject which does not trigger verb agreement, essentially showing the ergative alignment that Trask (1979) discusses. As also illustrated in §3.2 in the discussion of auxiliary agreement in possessive constructions, Tunis Tunisian displays one such agreement possibility, where the nominative possessum can optionally trigger agreement. This is also true of the Meeknes Moroccan dialect, as illustrated in Comrie 1991. As the system across the different vernaculars strove to better fit the possessive structure within the more prototypical nominative-accusative alignment, the unmarked theme was reconstructed as accusative-marked. This is the situation in the Levantine dialects. Once the accusative-marking on the theme anchored the possessive construction within a more generalized nominative-accusative alignment, Maltese and Western systems such as those of Tunisian and Moroccan started additionally displaying optional agreement with the possessor subject, yielding a fully transitive structure, a development that is, again, not (to my knowledge) attested in European languages. Additional research must be done to test the robustness of these developments both internal to the Semitic family and in the Afroasiatic phylum more broadly, as well as in other languages for which transitions via an ergative stage in their development have been attested.
REFERENCES


