Posture Verbs and Aspect: A View from Vernacular Arabic

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Abstract

This paper discusses a construction found in contemporary Arabic vernaculars (but not in Modern Standard Arabic (henceforth MSA)) which constitutes an instance of a common grammaticalisation path in which a posture verb with a core lexical meaning of 'sitting' has grammaticalised into an ASPECTual marker. We bring together data from a range of dialects and provide substantial evidence of grammaticalisation, in which the active participle (ACT.PTCP) of the 'sit' verb has developed a range of ASPECTual senses. Here we concentrate on the PROGRESSIVE interpretation, which exists in all of the vernaculars. We argue that there is also evidence for a further grammaticalisation of the posture verb form into a copula. Our aim is to present a comprehensive cross-dialectal picture of the data and consider synchronic and diachronic aspects from an LFG perspective.

1   Introduction

This paper discusses a particular construction found in contemporary Arabic vernaculars (but not in Modern Standard Arabic) which constitutes an instance of a common grammaticalisation path (Bybee & Dahl (1989); Heine (1993); Lord (1993); Bybee et al. (1994); Kuteva (2001); Heine & Kuteva (2002)). The construction involves posture verbs, in particular the ACT.PTCP forms of verbs with a core lexical meaning of 'sitting/lying' (often extended to 'stay/remain') that have grammaticalised into ASPECTual markers. Since these forms also maintain their lexical usage, sometimes resulting in ambiguity, they exhibit a 'functional split' (Hopper & Traugott, 2003) or 'divergence' (Heine & Reh, 1984). In what follows we focus specifically on cases of posture ACT.PTCP forms which have grammaticalised into PROGRESSIVE auxiliaries, but note that in some dialects both the ACT.PTCP and the corresponding verb forms can take on a wider range of progressive, durative, habitual and continuative senses (Eksell, 1995), crosslinguistically typical of such lexical verbs (Kuteva, 1999).

The existence of these grammaticalised forms is noted and partially described in the literature on the Arabic vernaculars (Johnstone (1967); Cuvalay (1991); Aguadé (1996); Brustad (2000); Mion (2004); Persson (2013)). We provide fuller description and discussion of these grammaticalised forms. Additionally we argue that there is evidence for a further grammaticalisation of the posture verb form into a copula, which can be understood as an off-shoot of the posture verb > ASPECT grammaticalisation. This contradicts a recent claim in the literature on Arabic that this development is not attested in the core dialects (Akkuş, 2016). Because it

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exhibits this further process, we focus specifically on the ACT.PTCPs *gāʕid/qāʕid* and *ǧālis/yālis* (lex: 'sitting') rather than posture verbs such as *gām* 'stand up' which have also grammaticalised into aspectual auxiliaries, but whose copula status may not be as clear or not as geographically widespread. Our aims are to present the first comprehensive cross-dialectal picture of the data and to contribute to the LFG-oriented literature on grammaticalisation and change (see Vincent (2001) and Schwarze (2001) *inter alia*).

2   The grammaticalisation of a Progressive construction

The ACT.PTCP forms *gāʕid/qāʕid* > *gaʕad/qaʕad* and *ǧālis/yālis* > *ǧalas* both meaning 'sit; lie', give a PROGRESSIVE meaning when combined with a lexical verb in the imperfective form.[1] As shown in (1)-(2) the lexical meaning of 'sit' is still be associated with the ACT.PTCP which may lead to ambiguity out of context.[2]

(1) weħid   **qāʕid**   ye-kol
     one.SGM sit.ACT.PTCP.SGM 3SGM-eat.IMPV

     Lexical: 'Somebody is sitting and eating/sitting while eating.'
     Grammatical: 'Somebody is eating.'   Tunisian: Saddour (2009, 273)

(2) bas hāði   **gāʕid-ə**   t-mūt
     but DEM.SGF sit.ACT.PTCP-SGF 3SGF-die.IMPV

     Lexical: 'But this is sitting dying.'
     Grammatical: 'But this is dying.'   Emirati: Persson (2013, 15)

The grammaticalisation of this structure to express PROG may seem somewhat redundant as it has emerged and integrated into a system where imperfective morphological forms (vs. perfective ones) already give the three readings which imperfectives display crosslinguistically, i.e:

(3) (i) the progressive or *event-in-progress* reading;
     (ii) the habitual or *generic characterizing* reading;
     (iii) the *continuous* reading with lexically stative predicates   Deo (2015, 4)

The data in (4) are representative of the three interpretations associated with the imperfective form (examples from Qasīmi).[3]

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[1]This is not the only way to express a PROGRESSIVE aspect. The ACT.PTCP of the lexical verb itself can express a progressive, though not in all dialects (see Henkin (1992); Woidich (1995); Boneh (2010) Mughazy (2005); Procházka & Batan (2015)), and some dialects use of the prepositional marker *fi* before the transitive object (Mion (2004); Pallottino (2016); Börjars et al. (2016)).

[2]*Lexical* refers to the use of the ACT.PTCP form with a lexical meaning, while *grammatical* refers to the ASPECTual function of the ACT.PTCP.

[3]The finite morphological forms in Arabic are the imperfective and the perfective. It is well established that the imperfective also serves as a non-finite form (Benmamoun (1999); Hallman (2015)), at the syntactic level notably in embedded structures. The perfective form in Arabic provides interpretations associated with both past tense forms and perfect forms in English (Fassi Fehri, 2003).

(4) a. ʔana ʔa-dris   (al-ħin)
       I   1SG-study.IMPV DEF-time
       'I am studying now.'   *event-in-progress*

    b. ʔana ʔa-dris   (bil-ǧamiʕa)
       I   1SG-study.IMPV in.DEF-university
       'I study at university.'   *characterising*

    c. ʔana ʔa-ʕiš   fi london
       I   1SG-live.IMPV in London
       'I live in London.'   *continuous*

In her study of grammaticalisation paths in this domain, Deo (2015, 5) observes: 'In languages where both progressive and imperfective aspects are realised with distinct morphology, the event-in-progress reading is often blocked for the imperfective form'. While this is indeed the state of affairs in Maltese, it is not the case in other Arabic dialects.[4]

Our main focus here is on the synchronic specifics of the progressive construction and the grammaticalised status of the posture verb form as an auxiliary in that construction, together with its subsequent grammaticalisation into a copula. We believe that the structure combining the *sit* ACT.PTCP and the imperfective of the lexical verb grammaticalised out of a construction which involved the lexical verb functioning as the PRED of a circumstantial adjunct clause to the (intransitive) posture verb itself. This adjunct eventually got reanalysed into a clausal argument of *gāʕid/ǧālis* (in LFG terms, we would take this to be an XCOMP) out of which the grammaticalisation of the progressive construction developed, in line with plenty of instances of this trajectory of change crosslinguistically (Heine (1993); Lord (1993); Aikhenvald (2006); Dixon (2006); Versteegh (2009)). In what follows we will consider what evidence supports the sort of grammaticalisation path which is summarised in (5).

(5) *gāʕid/ǧālis* + Circumstantial ADJ clause > *gāʕid/ǧālis* + XCOMP >
    PROG + lexical main verb

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[4]We consider Maltese as an Arabic dialect on the basis of a number of grammatical (i.e. morphology and syntax) considerations. The grammar of Maltese, however, is somewhat more advanced on the grammaticalisation cline, as displayed in Camilleri et al. (2014) for instance, and one repercussion of this is that the imperfective in Maltese has completely lost the ability to express PROGRESSIVE. This is recent – in the early 20th century it seems that Maltese displayed a behaviour similar to the one we observe synchronically in the other Arabic vernaculars. Sutcliffe (1936, 70) appears to have captured a shift in interpretation taking place in Maltese at the time when he was writing his grammar. When discussing the PAST TENSE auxiliary *kien* + imperfective combination he claims that: 'The form *kien joqtol* in addition to 'he used to kill' can also mean 'he was killing', but continuous action is more clearly and emphatically expressed by the addition of *qiegħed* ('sit.ACT.PTCP') as in *kien qiegħed joqtol*'. The only instance where an *event-in-progress* reading is associated with an imperfective form in the matrix clause is in the context of pronominal negation, as opposed to circumfixal negation (see Spagnol (2009)). PROGRESSIVE readings are however (still) associated with the imperfective form in non-matrix contexts (Camilleri, 2016).

3 Evidence for Grammaticalisation

Evidence for desemanticisation comes from the fact that in some dialects, the semantics of the ACT.PTCP form of this root has widened from *spatially located* to something that is *temporally located*, that is, from 'sit' > 'stay/remain'.

In Maltese the ACT.PTCP form has completely lost the lexical meaning of 'sitting' as a main verb, while other forms such as the imperfective *joqgħod* in (6) retain theire lexical meaning (as 'sit'). In fact, the only place where a 'sitting' meaning is associated with the ACT.PTCP is in the highly fixed structure shown in (7), where it is the nominal use of the (invariant, non-inflecting SGF) ACT.PTCP in the PP ('with the sitting') and *not* the verbal ACT.PTCP form in the sentence which provides the sense of sitting. More generally, the ACT.PTCP *qiegħed* (and its inflectional variants) has come to mean 'stagnant; not working', which can be seen as part of the semantic spatial bleaching of the meaning of 'sitting'.

(6) Il-ħin   kollu   j-qum   u
    DEF-time.SGM all.SGM 3M-stand.up.IMPV.SG CONJ

    j-o-qgħod.
    3M-FRM.VWL-sit.IMPV.SG

    'He's all the time getting up and sitting down.'

(7) It-tfal   qegħd-in   bil-qiegħd-a
    DEF-children sit.ACT.PTCP-PL with.DEF-sit.ACT.PTCP-SGF

    'The children are sitting down.'

A second piece of evidence comes from the combination of the ACT.PTCP with lexical verbs that involve incompatible physical disposition with the original (lexical) meaning of the 'sit' ACT.PTCP. Data bearing on this point is found across a wide range of dialects.

(8) gāʕd-a   t-nit
    sit.ACT.PTCP-SGF 3SGF-jump.IMPV

    'She is jumping.'   Kuwaiti: Duha Alaskar (PC)

(9) ɣālis   yi-bni   ʕmāra
    sit.ACT.PTCP.SGM 3SGM-build.IMPV building

    'He is building a building.'   Emirati: Jarad (2015,102)

(10) ǧālis   yi-sbaħ
     sit.ACT.PTCP.SGM 3SGM-swim.IMPV

     'He is swimming.'   Hijazi: Al Zahrani (2015, 58)

(11) al-weled gāʕed   tōl al-waget y-nōt
     DEF-boy sit.ACT.PTCP.SGM long DEF-time 3SGM-jump.IMPV

     'The boy is jumping all the time.'   Libyan: Enas Sigurti (PC)

(12) monǧiyya qāʕd-a   to-ḥrok   fil-kuzina
     M   sit.ACT.PTCP-SGF 3SGF-bustle.IMPV in.DEF-kitchen
     'Monjiyya is bustling around in the kitchen.'   Sfaxi: Cohen (1984, 279)

Third, just as the physical meaning of the posture is lost (evidenced above) the requirement for an animate SUBJ is lost. This loss of SUBJ selectional restrictions is expected for an element which has become an auxiliary. Kuteva (1999, 207) takes the ability to have the meaning of 'sit' verbs extended to express the spatial position of inanimate physical objects to be the prerequisite for the trigger of auxiliation.

(13) il-bass   gāʕid   y-ōṣal   is-sāʕa xams min
     DEF-bus.SGM sit.ACT.PTCP.SGM 3SGM-arrive.IMPV DEF-hour five   from
     isnīn
     year.PL
     'The bus has been arriving at five o'clock for years.'
     Kuwaiti: Al-Najjar (1991)

(14) il-giṭar   ǰālis   y-wagif
     DEF-train.SGM sit.ACT.PTCP.SGM 3SGM-stop.IMPV
     'The train is stopping/The train is slowing down to stop.'
     Hassāwi: Al-Abdullah (2016, 84)

(15) al-malābes   gāʕad-a   ta-nšif
     DEF-clothes sit.ACT.PTCP-SGF 3SGF-dry.IMPV
     'The clothes are drying.'   Libyan: Sigutri (PC)

(16) Qiegħd-a   t-a-għmel   ħafna sħana
     sit.ACT.PTCP-SGF 3F-FRM.VWL-do.IMPV.SG a.lot   heat.SGF
     Lit: 'It is doing a lot of heat.'
     'It is being very hot (at the moment).'   Maltese

Despite this array of data from across the area, Jarad (2015, 93) states (for Emirati Arabic) that inanimates cannot be SUBJs. However his examples do not involve the combination of the 'sit' verb ACT.PTCP with a lexical verb but rather (potentially) relate to further grammaticalisation as a locative copula.[5]

(17) a. *fi   ktab yālis/minsidiḥ   ʕaṭ-ṭāwli
        EXIST book sit.ACT.PTCP.SGM/lying-SGF on.DEF-table
        Intended: 'There's a book (sitting/lying) on the table.'

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[5]We will discuss this type of data further below, as it is in contrast with what we find in other dialects, and this in turn sheds more light on the further developments of the PROGRESSIVE auxiliary.

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b. *l-lamba   yāls-a/minsidḥ-a   ʕaṭ-ṭāwli
DEF-lamp.SGF sit.ACT.PTCP-SGF/lying-SGF on.DEF-table
Intended: 'The lamp is (sitting/lying) on the table.'

Fourth, it is often the case that as a lexical word changes into a grammatical word, it also undergoes phonological weakening and morphological erosion, sometimes developing into a clitic and later into an affix (and further, into null) (Hopper & Traugott (2003, 7); Harris & Campbell (1995, 337); Fischer (2007, 182). One way in which morphology is eroded is through the loss of paradigmatic contrasts/inflection. Synchronically, the use of agreeing forms of the grammaticalised ACT.PTCP is optional in Kuwaiti and the SGM form is an optional default, initiating a loss of paradigmatic contrasts.

(18) huma **gāʕid**   / gāʕd-in   y-ḥaqqaq-ūn
     they   sit.ACT.PTCP.SGM / sit.ACT.PTCP-PL 3-achieve.IMPV-PL
     ḥadaf-hum   muʔaḥḥar
     goal-3PL.GEN lately
     'They are achieving their goal lately.'   Kuwaiti: Alaskar (PC)

There are a number of cases in which the morphological form of the ACT.PTCP has eroded, e.g. the retention of the last syllable in the case of *da* > from *gāʕda*, and the first syllable (along with shortening) in the case of *gaʕ* > from *gāʕad* (we gloss these simply as PROG).

(19) **da**-tu-mṭur   ihwāha has-sana
     PROG-3SGF-rain.IMPV a.lot   DEM.SGF.DEM-year.SGF
     'It is raining a lot this year.'   Iraqi (Baghdadi): Cohen (1984, 288)

(20) maryam **gaʕ**   ta-ktib   maktūb
     Maryam PROG 3SGF-write.IMPV letter
     'Maryam is writing a letter.'   Kuwaiti: Al-Najjar (1991)

(21) It-tifla   **qed**   t-i-kteb
     DEF-girl PROG 3F-FRM.VWL-write.IMPV.SG
     'The girl is writing.'   Maltese: Camilleri (2016, 73)

(22) a. winti   ʔiš **qat**-t-qūl?
        CONJ.you what PROG-2SG-say.IMPV
        'And you, what were you saying?'

     b. ūwa **qā**   i-fədlək
        he   PROG 3SGM-joke.IMPV
        'He is joking.'   Tunisian: Cohen (1984, 280)

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The interaction with negation provides an insight into small differences between the status of the grammaticalised 'sit' ACT.PTCP in different vernaculars. Negation of non-finite predicates such as ACT.PTCPs, nominal and adjectival predicates differs in its realisation from negation of finite verbs. In some varieties, we observe **persistence** of the form of negation appropriate to non-finite predicates, despite the participle's apparent synchronic and morphological reanalysis into an auxiliary. This is illustrated by the use of the so-called pronominal NEG marking (which is the form used for non-finite predicates) in (24) and (25), in parallel with the negation of *gāʕid* as a *lexical* ACT.PTCP, shown in (23).

(23) **mū** gāʕid, gāyim
     NEG sit.ACT.PTCP.SGM stand.ACT.PTCP.SGM

     'He is not sitting, but standing.'   Kuwaiti: Alaskar (PC)

(24) al-ḥarēm **mū/mūš / ma-hum** gāʕd-in/ǧāls-in iy-sulf-ūn ʕan
     DEF-women NEG   / NEG-3PL sit.ACT.PTCP-PL 3-talk.IMPV-PL about
     al-ʕirs   al-ḥin
     DEF-wedding DEF-time

     'The women are not talking about the wedding now.'
     Hassāwi Al-Abdullah (2016, 61-62)

(25) Pawlu **mhux** qiegħed/qed i-kellim-hom
     Paul NEG   sit.ACT.PTCP.SGM/PROG 3M-talk.IMPV.SG-3PL.ACC

     'Paul is not talking to them.'   Standard Maltese

In other varieties, however, syntactic reanalysis along with morphological erosion results in the auxiliary undergoing negation in the manner of finite verbs, as shown in (26) and (27), where negation is through the *ma ...(-š)* strategy, as opposed to the pronominal strategy seen in (23)-(25).

(26) Ɂiskut **ma**-da-š-šūf iǧ-ǧāhil
     be.quiet.IMP.2SG NEG-PROG-2SG-see.IMPV DEF-child
     nāyim
     sleep.ACT.PTCP.SGM

     'Quiet! Aren't you seeing that the child is sleeping!'
     Baghdadi: Cohen (1984, 288)

(27) **M'qid-x** n-għid-l-ik hekk biex
     NEG.PROG-NEG 1-say.IMPV.SG-DAT-2SG like.this in.order.to
     n-beżżgħ-ek
     1-frighten.CAUSE.IMPV.SG-2SG.ACC

     'I am not telling you this to frighten you.'
     Dialectal Maltese: Camilleri (2016, 79)

3.1 Further Degrees of Grammaticalisation

In recent work Deo (2015, 20) discusses the Imperfective Cycle and in particular the final stage in which a previously established niche PROG marker can develop into a more general marker of imperfectivity, thus bringing the cycle full circle, as illustrated in (28), where X and Y denote forms.

(28) (I) *X*IMPV - The initial state with just a general IMPV marker, in principle ambiguous in its interpretation

    (II) (*Y*PROG), *X*IMPV   emergent (optional)-PROG

    (III) *Y*PROG, *X*IMPV   categorical-PROG

    (IV) *Y*IMPV   generalized-PROG

Our working hypothesis is that essentially all the Arabic vernaculars have reached or are moving towards stage III of this cycle. The other stages have been shown through the use of the imperfective form with the appropriate interpretations shown in §2, e.g. (4). At the end of the cycle we have a state of affairs where the syntactic construction is generalised and has taken over (aspectual) functions otherwise fulfilled by the morphological imperfective.[6] According to the cycle, in time 'progressive marking realizes a more specific meaning than the imperfective and gradually generalizes over time' Deo (2015, 8). This gradual generalization from the more specific meaning is an *extension* effect in which the construction or structure continues developing its grammaticalised meaning further. Several examples from the literature suggest to us that this process is underway in at least some varieties of Arabic.

First, we see that in at least some dialects the PROG marker (i.e. the ACT.PTCP of the 'sit' verb) is felicitous with stative lexical verbs and gets a *continuous* type interpretation in this context (as would a simple imperfective form). This appears to be possible in Hassāwi and Kuwaiti but not in (the more conservative) Emirati.

(29) gāʕid   yi-šbah   ubū-h
     sit.ACT.PTCP.SGM 3SGM-resemble.IMPV father-3SGM.GEN

     'He resembles his father.'   Kuwaiti: Alaskar (PC)

(30) hū gāʕid/ǰālis   ya-ḥbba-hā
     he sit.ACT.PTCP.SGM 3SGM-love.IMPV-3SGF.ACC

     'He loves her.'   Hassāwi: Al-Abdullah, (2016, 85)

Further evidence for the extension of this grammatical construction may perhaps also be seen in Al-Abdullah (2016, 38)'s observation that in Hassāwi the PROG marker *gāʕid/ǧālis* co-occurs with (some) achievement lexical verbs which

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[6]We cannot discuss tests for stativity in Arabic here but see Hallman (2016) on the presence of an epistemic reading as opposed to a deontic reading when such verbs are placed under modals which could in principle allow for both interpretations, e.g. *lāzim* 'must' .

(normally) describe a punctual event with a result state. In some cases, the interpretation is habitual, or *characterising* as in (31). However in others, as shown by the free translation in (32) (reflecting the discussion in Al-Abdullah (2016)), the interpretation appears to be processual.

(31) il-ħilal   gāʕid/ǧālis   ya-fūz   bil-kass   kil   sanah
     DEF-hilal sit.ACT.PTCP.SGM 3SGM-win.IMPV with.DEF-cup every year
     (illa   has-sanah)
     except DEM.SGF.DEF-year.SGF
     'Il-Hilal wins the cup every year (except this year).' = (habitually wins)
     Hassāwi: Al-Abdullah (2016, 38)

(32) hū gāʕid/ǧālis   yu-ṣal   l-il-qima
     he sit.ACT.PTCP.SGM 3SGM-arrive.IMPV to-DEF-top
     'He is on his way to the top.'

The construction also occurs with punctual, change of state (achievement) verbs in Kuwaiti (Al-Najjar (1991), Alaskar (PC)).[7]

(33) il-bass   gāʕid   y-ōṣal   is-sāʕa   xams min
     DEF-bus sit.ACT.PTCP.SGM 3SGM-arrive.IMPV DEF-hour five from
     isnın
     year.PL
     'The bus has been arriving at five o'clock for years.'   Al-Najjar, 1991

(34) huma gāʕid   / gāʕd-in   y-ħaqqaq-ūn
     they   sit.ACT.PTCP.SGM / sit.ACT.PTCP-PL 3-achieve.IMPV-PL
     ħadaf-hum   muʔaħħar
     goal-3PL.GEN lately
     'They are achieving their goal lately.'   Alaskar (PC)

It is quite straightforward to demonstrate extension as the 'endpoint' of the Imperfective Cycle in Maltese. In this vernacular, only a small handful of ACT.PTCP forms still exist in the paradigm of *lexical/content* verbs. Where they exist, these morphological forms always express progressive aspect in Maltese (Borg, 1988): E.g. *miexi* 'walk.ACT.PTCP and *nieżel* descend.ACT.PTCP mean 'walking' and 'going down' respectively. In contrast, the *syntactic* construction built of the PROGRESSIVE auxiliary *qed/qiegħed* 'sit.ACT.PTCP' + (imperfective) lexical verb is quite widespread. This construction involving the auxiliary *qed/qiegħed* + lexical imperfective can occur with those (few) verbs which themselves have ACT.PTCP forms in their verbal paradigm, giving rise to pairs such as (35).

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[7]In examples such as (34) we seem to have a particular type of *characterising* habitual, namely one which has taken root relatively recently. This 'restricted habit' reading is also found in Maltese. We see it as an instance of the sort of 'more specific' interpretation which Deo discusses.

(35) a. Miex-ja
walk.ACT.PTCP-SGF
'She is walking (now)/(generally).'   PROG

b. Qiegħd-a   ∼ qed   t-i-mxi
sit.ACT.PTCP-SGF ∼ PROG 3F-FRM.VWL-walk.IMPV.SG
(dal-aħħar)
DEM.SGM.DEF-late.ELAT
'She walks (lately) (≠ now).'   RESTRICTED HABIT

In (35a) it is precisely the choice of morphological form of the lexical verb,
(the ACT.PTCP) that gives rise to the PROG interpretation (use of the imperfective
would give a purely *characterising* reading 'she walks'). On the other hand, the
(periphrastic) PROGRESSIVE construction with *this particular* lexical verb in (35b)
does not in fact give rise to a reading denoting that the eventuality is in progress (a
progressive). Rather, what we get is a HABITUAL which is in some way restricted,
and hence the name RESTRICTED HABIT provided. It is restricted in the sense that
it is not understood to have always been the case. This reading, which we argue is
more 'specific' than the interpretation otherwise yielded by the imperfective, to use
Deo's (2015) terminology, is we believe, compatible with the temporality which
the PROGRESSIVE auxiliary itself denotes. (See Fabri (1995), Spagnol (2009) and
especially Camilleri (2016, pp. 80-81) for discussion how these morphological
vs. syntactic constructions give rise to complementarily distributed readings). For
verbs such as *lagħab* 'play' which no longer have an ACT.PTCP form **liegħeb* in
the *verbal* paradigm, we have only the periphrastic PROGRESSIVE construction.
This gives rise to both PROGRESSIVE and restricted HABIT readings.

The final piece of evidence we present in favour of the grammaticalisation of a
posture verb into a PROGRESSIVE-expressing auxiliary comes from the seemingly
additional grammaticalisation that has been undergone by *gāʕid* 'sit.ACT.PTCP',
where it functions as a copula in the context of stage-level predication where
the pronominal copula is not allowed. The grammaticalisation literature (Kuteva,
1999) discusses the relationship between the development of a PROG auxiliary and
that of a stage-level copula, and this issue has also recently received some attention
for Arabic in Akkuş (2016), which (erroneously, in our view) takes it to be non-
existent in the core (non-peripheral) dialects. We will not discuss this in any detail,
but observe that the grammaticalisation of a copula is at various stages across the
different core Arabic dialects, even when geographically quite close. Thus in Emi-
rati, examples such as (17) above are ungrammatical but counterparts such as (36)
are grammatical in Kuwaiti though restricted to temporary locations, themselves a
subset of stage-level predication types. A wider range of stage-level copula func-
tions for *gāʕid* appears to be attested in Libyan.

(36) a. is-sħūn   gāʕid   gaddām-ik
DEF-plate.SGM sit.ACT.PTCP.SGM in.front-2SG.GEN

'The plate is in front of you.'

b. il-akil   gāʕid   bil-shūn
   DEF-food.SGM sit.ACT.PTCP.SGM in.DEF-plate

   'The food is on the plate.'

c. kahu il-akil   gāʕid
   there DEF-food.SGM sit.ACT.PTCP.SGM

   'There is the food.'

d. il-ktāb   gāʕid   fug iṭ-ṭāwla
   DEF-book sit.ACT.PTCP.SGM on   DEF-table

   'The book is on the table.'   Kuwaiti: Duha Alaskar (PC)

(37) a. gāʕd-in   f-əl-ħoš   əl-yōm?
        sit.ACT.PTCP-PL in-DEF-house DEF-day

        'Are you in the house today?'   Libyan: Pereira (2008, 408)

b. gāʕəd   šekl-a   zēy əz-zebb
   sit.ACT.PTCP.SGM form.SGM-3SGM.GEN like DEF-dick

   'Its appearance is (at the time being) shitty.' Libyan: Pereira (2008, 417)

Once again, Maltese shows a further level of grammaticalisation because the *qiegħed* copula can turn up in a wider set of circumstances, with the choice between this copula and the pronominal copula having some interpretive significance.

(38) a. Kemm hu   ħelu/tajjeb!
        how   COP.3SGM sweet.SGM/good.SGM

        'How sweet/good it/he is!'

b. Kemm qed/qiegħed ħelu/tajjeb!
   how   QED   sweet.SGM/good.SGM

   'How sweet/good it/he is (in this current state, e.g. in a photo; in a current acting role).'   Maltese

Only the pronominal copula in (38a) gives a permanent or individual-level reading while *qed/qiegħed* can only be used in stage-level contexts where equational or identificational interpretations can never arise (Borg 1988, 299). This split parallels copula distinctions between the use of *ser* and *estar* in Spanish, where *qed/qiegħed* parallels the contingent state *estar* 'be'.

From the above data concerning the distribution of the PROGRESSIVE auxiliary and its grammaticalisation as a copula, one could in principle hypothesise one of the two alternative trajectories which Kuteva (1999) posits: (i) lexical posture verb > stage-level copula > PROG auxiliary as in the case of Spanish *estar* and (ii) a

cycle that gradually involves a change from a lexical posture verb to an ASPECT-realizing auxiliary via the loss of human/animate SUBJ requirements along with added cohesion between the posture verb and the verbal complement (for the Bulgarian posture verb pseudo-coordinate construction). We will not consider these alternatives further here, although we take the view that the latter trajectory might be the most correct characterisation for the data we have discussed, with the emergence of an (additional) copula across the Arabic vernaculars being a natural process, once a feature-type auxiliary combines with a wider range of predicate types, including non-verbal predicates.

4   Towards an LFG analysis

To summarise, the data above illustrate that across the range of (core) contemporary Arabic vernaculars, the ACT.PTCP of the 'sit' posture verb has grammaticalised at least into a PROG marker, with some evidence of development into a more generalised imperfective marker. In several dialects we also see the development of a stage-level copula from the same form (which we hypothesise is a further stage of grammaticalisation). Stative posture verbs, which are by definition inherently unbounded, first undergo spatial extension, allowing inanimate SUBJs (incapable of the physical posture). Once grammaticalisation and desemanticisation proceeds further, what is left (of 'sit') is the eventuality's unboundedness which in turn gives rise to the ASPECTual interpretation as a PROG marker (and inexhorably generalises further).

Synchronically, we might consider two alternative analyses for the aspectual use of 'sit.ACT.PTCP' (which we have called PROG above, but which we have noted has broadened in at least some dialects to serve as a general imperfective marker) — as an auxiliary or as forming a complex predicate in which the posture verb has the status of a light verb. Within the LFG context, the term complex predicate broadly refers to cases where multiple predicational elements jointly determine a monoclausal f-structure. Most canonical are instances of argument merger, where each predicate makes some independent contribution (of arguments) to a merged a-structure (which then maps to a single f-structure), as shown for the Urdu permissive in (39) - (40) (Butt, 1996). [8]

(39) yassIn=nE   nAdyA=kO gHar   banA-n-E   dI-yA
     Yassin=ERG Nadya=DAT house.NOM make-INF-OBL give-PERF.MSG

     'Yassin let Nadya make a house.'   Urdu: Butt & King (2006,239)

(40) a-structure: give< ag go$_i$ make < ag$_i$ th >>
     f-structure: PRED = 'give-make< SUBJ, OBJ$_\theta$, OBJ>'
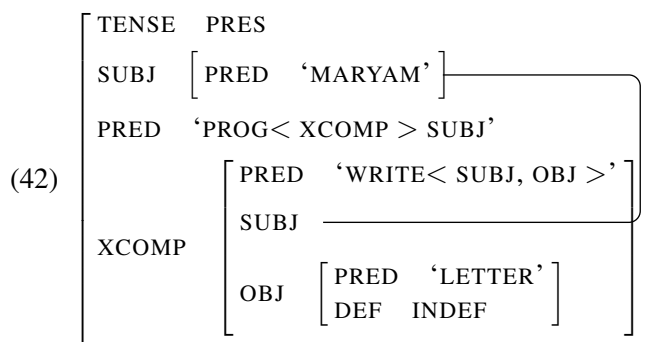
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[8]The approach to complex predicate formation using restriction offers the slight different PRED value: PRED = 'GIVE < SUBJ, 'MAKE < OBJ$_{go}$, OBJ >' >' (Butt & King 2006, 240-242). Nothing hinges on this difference here.

In cases of aspectual V V complex predicates, by contrast, the 'aspectual' light verb is argued to contribute only to event modification at the sub-event structure, and hence there is no argument fusion (Butt, 1996; Butt & Geuder, 2003). However while it is claimed (Butt & Lahiri, 2013) that the lexical (main) and its aspectual light verb counterpart may be derived from the same lexical entry, such sources are somewhat elusive concerning the concrete details about the f-description associated with the aspectual light verb (or the clausal PRED value itself). Nonetheless, we can conclude on other grounds that the grammaticalised 'sit.ACT.PTCP' we are concerned with is not a light verb.

Studies of light verbs (Butt & Lahiri, 2002; Butt & Geuder, 2003; Butt & Lahiri, 2013) identify a number of distinguishing properties (see also Seiss (2009)). If these observations are correct, light verbs maintain some vestiges of lexical meaning (so may be subtly restricted in their combinatorial possibilities); are form-identical to the corresponding lexical verb; and are paradigmatically regular both in their form and distribution. As we have shown at some length in the preceding sections, these properties do not accuractely characterise the grammaticalised use of the 'sit' ACT.PTCP. Furthermore, if Butt & Lahiri (2002) and Butt & Lahiri (2013) are correct that light verbs constitute a 'dead end' on the grammaticalisation cline, and cannot grammaticalise further, then the very fact that the PROG marker has also grammaticalised into a copula form in some vernaculars additionally militates against a light verb/complex predicate analysis. We therefore rule out a complex predicate analysis, leaving us with an auxiliary analysis.

The synchronic analysis of an example such as (41) as a grammaticalised auxiliary form could in principle involve raising in an AUX-PRED approach, as in (42), or a fully functional AUX-FEAT approach as in (43) (Falk, 2008). Note that the eroded form *gaʕ* **cannot** express the lexical predicate 'sit' here, although of course the verb *taktib* 'she writes' is in principle compatible with the lexical meaning of the posture ACT.PTCP. Consequently, the utterance in (41) is not ambiguous, and only a PROGRESSIVE reading is available.

(41) maryam gaʕ ta-ktib maktūb
      Maryam PROG 3SGF-write.IMPV letter

      'Maryam is writing a letter.'   Kuwaiti: Al-Najjar (1991)

$$
(42)\quad
\begin{bmatrix}
\text{TENSE} & \text{PRES} \\
\text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{`MARYAM'} \end{bmatrix} \\
\text{PRED} & \text{`PROG}\langle \text{XCOMP} \rangle \text{SUBJ'} \\
\text{XCOMP} & \begin{bmatrix} \text{PRED} & \text{`WRITE}\langle \text{SUBJ, OBJ} \rangle\text{'} \\ \text{SUBJ} & \\ \text{OBJ} & \begin{bmatrix} \text{PRED} & \text{`LETTER'} \\ \text{DEF} & \text{INDEF} \end{bmatrix} \end{bmatrix}
\end{bmatrix}
$$

$$(43) \quad \begin{bmatrix} \text{TENSE} & \text{PRES} \\ \text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{`MARYAM'} \end{bmatrix} \\ \text{ASP} & \text{PROG} \\ \text{PRED} & \text{`WRITE}< \text{SUBJ, OBJ} >\text{'} \\ \text{OBJ} & \begin{bmatrix} \text{PRED} & \text{`LETTER'} \\ \text{DEF} & \text{INDEF} \end{bmatrix} \end{bmatrix}$$

Finding grounds to choose between these two alternative analyses is quite tricky, as Falk (2008) observes in his discussion of English auxiliaries. For English, Falk (2008) points to some evidence of a distributional type involving co-occurence requirements of specific lexical items which weigh in favour of the AUX-FEAT analysis for *do* and *have* - for example, the English auxiliary form *use to* occurs only in the context of past tense, but this can be expressed periphrastically (*did he use to...*) or synthetically (*he used to...*). Under an AUX-PRED analysis the TENSE would not be in the same clause, and so the dependency would at best be clumsy to state.[9] A further consideration is whether or not the features are compositionally distributed across the periphrasis: for English, Falk shows that (unlike the past participle) the progressive participle is associated with its own aspectual feature (leading to a XCOMP analysis).

Our current understanding of the tense/aspect verbal periphrasis system of the Arabic vernaculars is not well enough advanced to allow us to make a absolutely firm choice between these closely related AUX-FEAT and the AUX-PRED analyses. However we favour the AUX-FEAT approach shown in (43) for several reasons. [10] First, it is more attractive on the grounds of simplicity, in the absence of independent evidence in *favour* of the AUX-PRED analysis. Second, and crucially, it is not clear what the PRED's function name would be on the AUX-PRED analysis, for it evidently cannot be 'sit'. We have represented this as PROG in (42). Given that there is no vestige of the lexical meaning of 'sit' in this example or in with the aspectual uses of the 'sit.ACT.PTCP' in general, it would not be appropriate to use the function name SIT alongside this 'raising type' argument structure given (recall that *gaʕ* is not even part of the paradigm of the lexical verb). In the absence of evidence for (42), given these considerations, we opt for (43).

We now briefly consider a possible diachronic trajectory in which the PROG auxiliary element has grammaticalised from the lexical use of the 'sit' predicate, and what stages it might have passed through in the course of developing towards an aspectual auxiliary, and in some varieties, beyond, into a stage-level copula. Observe that if Butt & Lahiri (2002), Butt & Geuder (2003) and Butt & Lahiri (2013) are correct, the previous stages of grammaticalisation *also* cannot involve a light verb/complex predicate. There is a substantial literature on the path through degrees of increasing integration into fully grammaticalised aspectual constructions
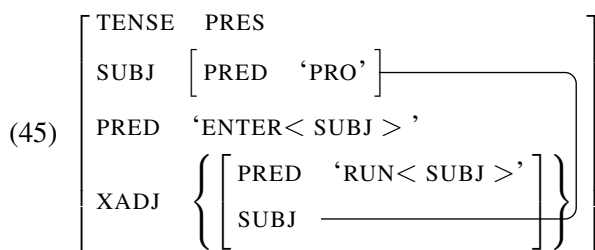
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[9]Similar arguments are made concerning the dependencies between *have* and *got* in the *have got* dialects of English, and between *had* and *better* in *had better*.

[10]Börjars et al. (2016) treat the Arabic auxiliary *kāna* 'be' as a raising verb.

(Lord (1993); Heine (1993); Dixon (2006, 343); Aikhenvald (2006, 30-31)), and some of it makes reference to serialisation, although this notion is far from being understood in a uniform manner across sources. A possibility is that it has instead grammaticalised in various stages from a circumstantial adjunct construction (these are very common structures in Arabic, in which the verb in the adjunct clause is often an imperfective form), through what Kuteva (1999, 193) refers to as 'sedimentation' in which repeated usage might have led to progressive grammaticalisation. At the stage following 'sedimentation' itself this could be somewhat akin to the sort of "chaining" (as opposed to integrated) serial verb construction discussed in Hellan & Beermann (2002), which are monoclausal, involving a PRED along with (multiple) clausal XADJs which with SUBJ sharing with the matrix PRED. In Oriya, the event denoted by the XADJ precedes that denoted by the main PRED in some event sequencing. However in Arabic circumstantials, the event denoted within the circumstantial ADJ is concurrent to the event denoted by the main predicate (whatever the main predicate is). Examples such as (44) (with one of the few remaining *verbal* ACT.PTCPs in Maltese as the main predicate, followed by a imperfective form in the circumstancial adjunct which illustrates an adverbial circumstantial could be seen as a precursory structure. (45) provides the structure for (44a). Out of this type of structure, the XADJ developed into a clausal argument (XCOMP), resulting in a raising type structure, and due to further cohesion between the posture verb and the predicate in the complement clause, coupled with additional bleaching and grammaticalisation of the posture verb as an auxiliary, it further loses any PRED feature associated with it, such that the original embedded clause predicate is reanalysed as the matrix lexical predicate.

(44) a. Dieħl-a   t-i-ġri
       enter.ACT.PTCP-SGF 3F-FRM.VWL-run.IMPV.SG

       'She is entering (while running/while she runs).'

   b. Miexi   j-għaġġel
       walk.ACT.PTCP.SGM 3M-hurry.IMPV.SG

       He is walking (while he hurries) i.e. walking quickly/hurriedly.'

(45)
$$\begin{bmatrix} \text{TENSE} & \text{PRES} \\ \text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{'PRO'} \end{bmatrix} \\ \text{PRED} & \text{'ENTER} < \text{SUBJ} > \text{'} \\ \text{XADJ} & \left\{ \begin{bmatrix} \text{PRED} & \text{'RUN} < \text{SUBJ} > \text{'} \\ \text{SUBJ} & \underline{\hspace{2cm}} \end{bmatrix} \right\} \end{bmatrix}$$

A possible trajectory from a structure of this sort would involve essentially three interrelated developments: (i) a tightening of the bond between the two verbal f-structures, so that the circumstantial adjunct becomes a clausal complement of
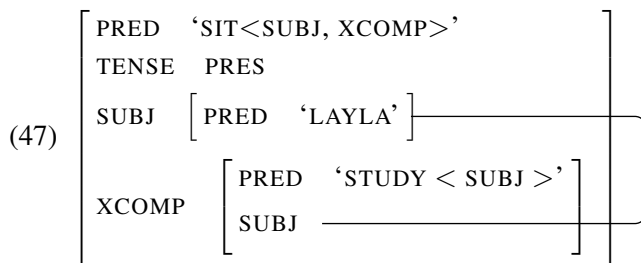
the lexical posture verb (ii) semantic widening of the sense of the posture verb (to eventual loss of lexemic meaning) and (iii) loosening of the selectional restrictions exerted by the posture verb over the subject. We further speculate that (at least) some synchronic *lexical* uses of the 'sit' verb may correspond to an intermediate stage in which the 'sit' verb takes a clausal complement and still places selectional restrictions on its subject. On the basis of this trajectory, we suggest that the lexical version of (46), i.e. the translation shown in boldface, corresponds to the f-structure in (47).

(46) layla gāʕd-a   ta-dris
     Layla sit.ACT.PTCP-SGF 3SGF-study.IMPV
     Layla is sitting studying.
     'Layla is studying.'   Kuwaiti: Alaskar (PC)

(47)
$$
\begin{bmatrix}
\text{PRED} & \text{'SIT} \langle \text{SUBJ, XCOMP} \rangle \text{'} \\
\text{TENSE} & \text{PRES} \\
\text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{'LAYLA'} \end{bmatrix} \\
\text{XCOMP} & \begin{bmatrix} \text{PRED} & \text{'STUDY} \langle \text{SUBJ} \rangle \text{'} \\ \text{SUBJ} & \end{bmatrix}
\end{bmatrix}
$$

Discussing this trajectory takes us too far afield: although we do see considerable common ground here, in terms of grammaticalisation patterns, with other constructions in the grammatical systems of vernacular Arabic, we leave this for future work. Some remarks are in order however, supporting the view that the verbs are more closely integrated in this structure than in a circumstantial adjunct. First note that NEG can only be expressed once, and this is obligatorily in the 'sit.ACT.PTCP' clause, irrespective of whether the reading is 'lexical' (as in (48) or fully grammatical (shown in (49) and (50)), while with circumstantial adjuncts, either or both of the main clause or adjunct clause can be independently marked for negation (and similarly for 'regular' COMP arguments). The behaviour of both the 'lexical' and the fully grammatical use of the 'sit' ACT.PTCP parallel what we find with auxiliated constructions in general, with NEG typically expressed in relation to the topmost verbal element (see (51) for example). The reading associated with 'semi'-lexical examples such as (46) and (49) can perhaps best be characterised as that of a 'complex' event, while the fully grammaticalised reading of (46) involves a single (temporally complex) event.

(48) layla mū gāʕid/gāʕd-a   t-akil
     Layla NEG sit.ACT.PTCP.SGM/SGF 3SGF-eat.IMPV

     'Layla is not sitting and eating (....but playing, e.g.).' Kuwaiti: Alaskar (PC)

(49) layla mū gāʕid/gāʕd-a   t-akil   hal-ayyām
     Layla NEG sit.ACT.PTCP.SGM/SGF 3SGF-eat.IMPV these-days

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‘Layla is not eating these days.’   Kuwaiti: Alaskar (PC)

(50) al-ḥarēm   mū/mūš/mā-hum   gāʕd-in/ǰāls-in
     DEF-women NEG/NEG/NEG-3PL sit.ACT.PTCP.PL/sit.ACT.PTCP.PL
     iy-sulf-un   ʕan al-ʕirs   al-ḥin
     3-talk.IMPV-3PL about DEF-wedding now
     ‘The women are not talking about the wedding now.’
     Hassawi: Al-Abdullah (2016, 61)

(51) aḥmed mā   kān   gāʕid/ǰālis
     Ahmed NEG be.PFV.3SGM sit.ACT.PTCP.SGM/sit.ACT.PTCP.SGM
     iy-šuf   al-mbarā   llama itiṣal-t   ʕli-h
     3SGM-watch.IMPV DET-match when call.PFV-1SG on-3SGM.GEN
     ‘Ahmed was not watching the match when I called on him.’
     Hassawi: Al-Abdullah (2016, 62)

5   Conclusion

Although a significant amount of detailed descriptive work still remains to be done, we have shown that the grammaticalisation of a posture verb with a core lexical meaning of ‘sitting’ into an aspectual marker is found across the range of contemporary Arabic vernaculars. We have also shown that the associated range of interpretations in some dialects indicates diffusion beyond the central progressive meaning into a wider imperfective. Synchronically, we have argued that this construction should be treated as involving auxiliation rather than complex predicate formation. We have also argued that the evidence for a further grammaticalisation of the posture verb form into a copula is notably more widespread than acknowledged. In the course of our discussion, we have offered some speculations concerning the likely diachronic path to the synchronic situation in the Arabic vernaculars.

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