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The Universal Perfect in Syrian Arabic*

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Abstract

This paper describes a construction in contemporary Syrian Arabic that matches the semantic features of the 'universal perfect' in English. The construction is based on a stative predicate and a duration adverbial and says that the state has held for the specified duration. The primary identifying morphological characteristic of the construction is the fact that the subject is doubled by a dative pronoun. The dative pronoun may surface as an enclitic of the optional auxiliary $s\bar{a}r$ 'become'. The paper identifies the construction's morphosyntactic and semantic composition and addresses the question of whether $s\bar{a}r$ is a pleonastic auxiliary or makes a semantic contribution of its own. I claim that the universal perfect meaning is derived by a hidden operator that assigns dative case to the subject, and whose position is detectable by its interaction with negation. The doubling of the subject in Arabic by a dative pronoun represents a subtle similarity to English, which employs the auxiliary have in the perfect, since both the dative in Arabic and have in English signify possession in other contexts. Similarities in the components and composition of the universal perfect in Arabic and English support the notion that the universal perfect is a uniform element in a cross linguistic taxonomy of aspectual categories.

Keywords

perfect – universal – continuous – Arabic – aspect – dative

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1 Introduction

In this article, I analyze the structure and meaning of the Syrian Arabic¹ construction illustrated in (1). The construction distinguishes itself in three respects: 1) the subject must be doubled by a dative pronoun, 2) the main predicate must be stative, and 3) a durational adverb must be present. I claim the meaning of the construction corresponds to that of the English 'universal perfect', exemplified by the translation to (1) below.

(1) (muna) ila xamst iyyām bi-l-ħabis. (muna) 3FS.DAT five days in-the-jail 'Muna/she has been in jail for five days.'

In (1), $ila\ (her)$ is a third person feminine singular dative pronoun. The subject Muna may go unpronounced, since Arabic is a pro-drop language. However, the dative pronominal double is obligatory for the reading corresponding to the universal perfect translation in (1). The dative pronoun may not occur without the duration adverbial (2a) and the duration adverbial may not occur without the dative pronoun (2b). Without either, the sentence expresses the simple present (2c).²

- (2) a. * muna ila bi-l-ħabis. muna 3FS.DAT in-the-jail ('Muna/she has been in jail.')
 - b. * muna xamst iyyām bi-l-ħabis. muna five days in-the-jail ('Muna is in jail five days.')

¹ The construction is found throughout the Levant region and elsewhere, but may be subject to conditions in other dialects that are not found in the speech of the speakers from whom the facts reported here are ellicited.

² The simple present tense in English is compatible with a *for*-adverbial that has a modal character. A sentence like *Muna is in jail for five days* means she is expected to remain in jail for five days. Arabic employs the preposition *la*- in this usage, corresponding to *for*. But while *for* marks duration adverbials in the English perfect, *la*- does not occur in (1) or similar examples; the adverbial in this construction is bare.

⁽i) muna bi-l-ħabis la-xamst iyyām. muna in-the-jail for-five days 'Muna is in jail for five days.'

c. *muna bi-l-ħabis*. muna in-the-jail 'Muna is in jail.'

The forms of the dative pronoun and its clitic counterpart, which plays a role in section 4, are listed in (3).

Gloss	Free dat. pronoun	Bound dat. pronoun
1S	ili	-li
1P	ilna	-lna
2FS	ilik	-lik
2MS	ilak	-lak
2P	ilkun	-lkun
3FS	ila	-la
3MS	ilu	-lu
3P	ilun	-lun

I refer to the construction illustrated in (1) as the ilu construction, after its most striking morphological feature, the dative case on the subject pronoun. The following section sets the stage for the semantic analysis of the construction by discussing the types of perfect construction found in English. Section 3 then returns to Arabic and discusses semantic correspondences between the Arabic ilu construction and the English universal perfect. Section 4 discusses a variation on the ilu construction where the dative pronoun occurs as a clitic hosted by the auxiliary sar. Section 5 discusses what I claim are hidden morphological correspondences between the ilu construction and the English universal perfect.

2 Background on the Perfect Construction

The English perfect construction is marked by the auxiliary *have* together with the past participial form of the main verb. The literature on this construction identifies a broad division between the 'existential' (or 'experiential') perfect and the 'universal' (or 'continuous') perfect (McCawley 1971, McCoard 1978). The existential perfect asserts the past occurrence of an eventuality that the main predicate holds of, as (4a) illustrates (McCawley's example). The eventu-

ality may be asserted to have occurred more than once, as the adverbial *five times* does in (4a), but however many times it may have occurred, all occurrences are completed at the sentence's reference time (the utterance time by default). One must have actually finished the book in order to truthfully say *I have read Principia Mathematica*. A stative predicate is compatible with the existential interpretation of the perfect as well, as (4b) shows.

- (4) a. I have read *Principia Mathematica* (five times).
 - b. Max has lived in Paris (five times).

The completiveness of the underlying eventuality in the existential perfect stands in contrast to what the universal perfect asserts. The universal perfect construction in (5a) (with the duration adverbial for five years) asserts that Max still lives in Paris at the reference time. The universal perfect is built on a stative main predicate and asserts that the state described by the main predicate is ongoing, not completed (McCawley 1971, McCoard 1978, Mittwoch 1988). It is a defining feature of the universal perfect that the state that the main predicate describes holds at the reference time. This continuous, noncompletive interpretation of the perfect construction is contingent not only on the presence of a stative main predicate, but also on the presence of a duration adverbial, such as for five years in (5a) (Iatridou et al. 2001, Portner 2003, 2011). This requirement is not obvious at first glance, because stative predicates are also compatible with the existential perfect (cf. (4b)). Dropping the duration adverbial from the universal perfect therefore typically does not result in ungrammaticality. Rather, the the construction reverts to an existential interpretation, where the entailment that the state holds at the reference time disappears. If we drop the duration adverbial from (5a), we get (5b), which no longer asserts that Max still lives in Paris, in fact it implies he doesn't any more. Without the duration adverbial, a stative predicate in the perfect morphosyntactic form only admits the existential interpretation, where it asserts, in the case of (5b), that an eventuality of Max living in Paris occurred once (Portner's example).

- (5) a. Max has lived in Paris for five years.
 - b. Max has lived in Paris.

Iatridou et al. (2001) discuss some apparent counterexamples to the claim that the universal perfect requires a temporal adverbial, but demonstrate that the examples in question do not qualify as instances of the universal perfect. The sentence in (6) may be uttered as an answer to the question *I haven't seen Mary*

in a while; where is she?. In this context, (6) implies that Mary is sick at the utterance time. But as Iatridou et al. point out, this is only an implicature. The sentence in (6) may also be followed by the continuation I don't know how she is now, meaning that the claim that she is sick now is not part of the semantic content of (6), meaning it is not a universal perfect construction.

(6) She has been sick.

Similarly, Iatridou et al. point that that although progressive predicates are stative (McCawley 1971, Vlach 1981, Parsons 1990, Kamp and Reyle 1993, Condoravdi 2002, and others) and are accordingly compatible with the universal perfect, when they occur without a duration adverbial they fail to entail that the underlying event is in progress at the reference time. Hence, (7) may be followed up with *but I'm done now*.

(7) I have been cooking.

For these reasons and others, Iatridou et al. claim that the English universal perfect requires a stative predicate and a duration adverbial. Under these circumstances, the construction entails that the underlying state holds at the reference time, which is the defining semantic feature of the universal perfect.

3 The *Ilu* Construction as Universal Perfect

This section returns to Arabic and discusses the morphosyntactic and interpretational properties of the *ilu* construction in detail, including interpretational resemblances with the universal perfect. Section 3.1 discusses the obligatoriness of the duration adverbial in the *ilu* construction, section 3.2 the stativity restriction on the main predicate, section 3.3 the unusual case frame of the construction, and section 3.4 temporal construal. Section 3.5 presents an analysis of the construction's syntactic and semantic composition and section 3.6 reviews some predictions of the analysis for the scope of negation.

3.1 Temporal Modification

As (2a) demonstrates, the *ilu* construction must include a duration adverbial. This fact is easier to observe in Arabic than in English since the universal perfect in English, which also requires a duration adverbial, shares the same morphosyntactic form as the existential perfect, which does not require a duration adverbial. For this reason, the conclusion that the English universal perfect

requires the duration adverbial requires close attention to the interpretational defining characteristic of the universal perfect—that the underlying eventuality holds at the reference time. Unlike English, Arabic has a dedicated morphosyntactic format for the universal perfect—the dative subject pronoun. In this format, dropping the duration adverbial results in ungrammaticality. This fact in turn supports Iatridou et al.'s and Portner's claim that the duration adverbial is a critical component of the universal interpretation of the perfect morphosyntactic format in English.

3.2 Stativity

As in the English universal perfect, the main predicate in the ilu construction must be stative. In (1), repeated in (8a) below, the main predicate is a prepositional phrase. The other examples below illustrate nominal and adjectival main predicates. As above, the dative pronoun and the duration adverb are obligatory, and the construction entails that the state in question holds at the reference time (the utterance time in the present tense examples below).

- (8) a. *muna ila xamst iyyām bi-l-ħabis*.

 muna 3FS.DAT five days in-the-jail

 'Muna has been in jail for five days.' (→ she is still in jail)
 - b. muna ila xams sinīn ra?īsit n-nādi.
 muna 3FS.DAT five years president the-club
 'Muna has been president of the club for five years.' (→ she is still president)
 - c. muna ila xamst iyyām marḍān-e.
 muna 3FS.DAT five days sick-FS
 'Muna has been sick for five days.' (→ she is still sick)

The main predicate may be verbal, as long as it is stative. Consequently, the verbs Saraf (know) and habb (love) are grammatical in the construction. They appear in their imperfective form, which Benmamoun (1992, 1999, 2000), Shlonsky (1997), Aoun et al. (2010), Hallman (2015) and others argue is the default infinitival form of the Arabic verb. I gloss the b - prefix that occurs on imperfective verbs in some contexts evasively as 'B' here to sidestep the issue of its enigmatic distribution for the present purposes, on which see Cowell (2005), chapter 13 (roughly, it occurs with imperfective verbs in non-modal contexts).

(9) a. muna ila xams sinīn b-ta-ſrif marwān. muna 3FS.DAT five years B-3FS-know marwan 'Muna has known Marwan for five years.'

b. *muna ila* sinīn bi-t-ħibb umm kulsūm. muna 3FS.DAT years B-3FS-love umm kulthum 'Muna has loved Umm Kulthum for years.'

The main predicate in the ilu construction may not be an eventive verb, unless the verb is construed as progressive. The reason is that, as mentioned in section 2, progressive verbs are stative even when the underlying verb is eventive, and therefore meet the stativity requirement of the ilu construction when the underlying verb would not. An eventive verb like katab (write) may therefore occur with ilu when accompanied by the progressive morpheme Sam (10a). Some speakers of Syrian Arabic allow a progressive interpretation for the imperfective verb without Sam . For these speakers, (10b) is grammatical, but only because the imperfective verb there has a progressive interpretation on par with what Sam contributes in (10a).

- (10) a. *muna ila* sāsat-ēn sam b-ti-ktub r-risāle. muna 3FS.DAT hour-DUAL PROG B-3FS-write the-letter 'Muna has been writing the letter for two hours.'
 - b. % muna ila sāsat-ēn b-ti-ktub r-risāle. muna 3FS.DAT hour-DUAL B-3FS-write the-letter 'Muna has been writing the letter for two hours.'

3.3 Subject Case

The dative pronoun in the *ilu* construction expresses the canonical subject of the main predicate. Example (11) is ungrammatical because the masculine dative pronoun *ilu* does not match the gender of its full DP double or the agreement inflection on the main predicate there (feminine).

(11) * muna ilu xamst iyyām marḍān-e. muna 3MS.DAT five days sick-FS

The dative pronoun may be inanimate, as in (12a), or altogether non-referential, as in (12b), which illustrates the typical feminine pleonastic subject of weather predicates. These facts mean that the dative pronoun does not refer to a discourse participant such as a beneficiary or an attitude holder, two common

uses of non-argument datives in Arabic (Al-Zahre and Boneh 2010, Haddad 2013, 2014). The *ilu* construction does not affect the selectional dependency between subject and predicate; it merely requires the subject to bear dative case.

- (12) a. s-siyyāra ila xamst iyyām sāṭl-e. the-car 3FS.DAT five days broken-FS 'The car has been broken for five days.'
 - b. *ila* xamst iyyām mġayym-e. 3FS.DAT five days cloudy-FS 'It has been cloudy for five days.'

As mentioned previously, the dative pronoun, which is obligatory, may be 'doubled' by a full DP (e.g. *Muna* in (1)). The status of this DP is not obvious at first glance. One possibility is that the dative pronoun is the subject of the construction itself, and the full DP is a topic double of the clitic. Another possibility is that the full DP is the 'true' subject and the clitic is a non-canonical agreement inflection. I treat this issue in more detail in section 3.5, where I review evidence supporting the latter conclusion.

3.4 Temporal Construal

Like non-verbal predicates, the ilu construction has a present tense construal by default. The past and future are expressed with the help of the copular auxiliary. The perfective form $k\bar{a}n$ (was) in (13a) shifts the reference time of the ilu construction into the past, while rah $yik\bar{u}n$ (will be) in (13b) shifts it into the future. Placement of the ilu construction in a non-finite context such as the complement of the modal verbs $l\bar{a}zim$ (must) or mumkin (might) also requires support by the non-finite auxiliary $yik\bar{u}n$ (be) (13c). The auxiliary has the default masculine singular form.

- (13) a. muna kān ila xamst iyyām bi-l-ħabis lamma zir-t-a. muna was 3FS.DAT five days in-the-jail when visited-1s-her 'Muna had been in jail for five days when I visited her.'
 - b. $muna\ ra\hbar\ yi-k\bar{u}n\ ila\ xamst\ iyy\bar{a}m\ bi-l-\hbar abis\ lamma\ muna\ will\ 3MS-be\ 3FS.DAT\ five\ days\ in-the-jail\ when\ b-a-z\bar{u}r-a.$ B-1S-visit-her

'Muna will have been in jail for five days when I visit her.'

c. muna lāzim yi-kūn ila aqall ši xamst iyyām bi-l-ħabis. muna must 3MS-be 3FS.DAT least thing five days in-the-jail 'Muna must have been in jail for at least five days.'

The example in (13c) tells us one last thing about the aspectual composition of the construction. The construction as a whole is stative, above and beyond the fact that the main predicate within the construction must be stative. The stativity of the *ilu* construction is evident in the fact the construction triggers the epistemic reading of the modal verb *lāzim* (*must*) in (13c). Like English *must* (and other modals), *lāzim* has an epistemic reading in connection with stative verbs and an deontic reading in connection with eventive verbs (on English see Hoffmann 1966 and Condoravdi 2002, among others). The epistemic reading seen with stative yikūn bi-l-ħabis (be in jail) in (14a) asserts something about the speaker's epistemic state. It asserts that it is the speaker's best guess given the available evidence (e.g. that she never came home after the demonstration) that Muna is in jail. Example (14b), with the eventive predicate zār (visit), only has the deontic interpretation that asserts that Muna bears an obligation to visit the jail. The ilu construction in (13c) is like the stative case in (14a) in triggering an epistemic interpretation of the modal, which expresses the speaker's best guess about how long Muna has been in jail. This means the *ilu* construction as a whole is stative, just as the underlying predicate is.

- (14) a. *muna lāzim ti-kūn bi-l-ħabis*. muna must 3FS-be in-the-jail 'Muna must be in jail.'
 - b. *muna lāzim ti-zūr l-ħabis*. muna must 3FS-visit the-jail 'Muna must visit the jail.'

3.5 Composition

The meanings of some of the components of the *ilu* construction are clear. The stative predicate denotes a relation between an individual (x below) and a state (s below). The duration adverbial denotes a description of an interval (i below).

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(15) a. [[bi-l-habis / in jail]] = \lambda x \lambda s [in-jail(x, s)] b. [[xamst iyyām / (for) five days]] = \lambda i [five-days(i)]
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We cannot assume that the duration adverbial simply modifies the main predicate in the normal way an adverb would, because it is obligatory in the envi-

ronment of the dative pronoun. This means that the duration adverbial is an argument of some element that is itself central to the meaning of the construction and that is also responsible for the subject's dative case. This element is apparently covert in the *ilu* construction, since the meanings and functions of the few obligatory overt elements are 'accounted for'. I propose that this core component of the construction is the covert operator in (16). It attributes the duration signified by the temporal adverbial to the state signified by the stative predicate, deriving a time-point description. This time point functions as the 'reference time' in Reichenbach's (1947) sense, which tense manipulates.³ In this formula, P is a predicate of states and T a predicate of times. The variable tranges over moments, i over intervals (sets of moments), and s over states. The function τ maps an eventuality to its time span. The expression PAST, refers to the interval up to and including time t, that is, the 'past' of t. Given a state description $P(e.g. bi-l-\hbar abis (in jail))$, an interval description $T(e.g. xamst iyy \bar{a}m)$ ((for) five days)) and a reference time t, the formula in (16) says that P holds of a state s and t holds of an interval t, the reference time t is in the time span of s, and the interval i is the intersection of the time span of s with t's past. That is, it says the portion of the underlying state which has already transpired at the reference time has the duration *T*.

(16)
$$\llbracket U\text{-PERF} \rrbracket = \lambda P \lambda T \lambda t \exists s \exists i \left[P(s) \& T(i) \& t \in \tau(s) \& PAST_t \cap \tau(s) = i \right]$$

This definition is similar to the definition of the perfect construction in Pancheva (2003) shown in (17) (p. 284). Here, the perfect invokes a reference interval i, of which the eventuality time i is a final subinterval. 'PTS' stands for 'Perfect Time Span', similar to the 'extended now' of other theories (McCoard 1978, Dowty 1979).

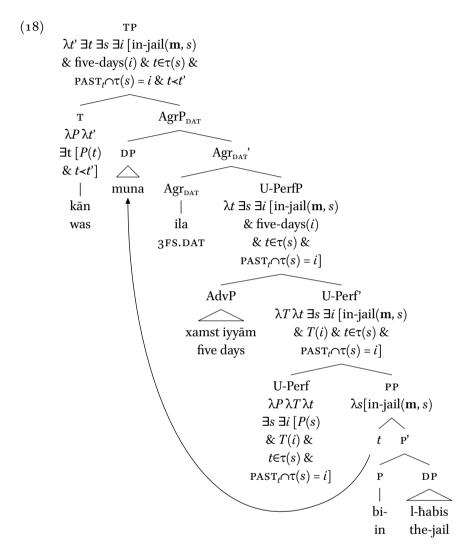
(17) **[PERFECT]** =
$$\lambda p \lambda i \exists i' [PTS(i', i) \& p(i)]$$
 PTS(i', i) iff i is a final subinterval of i'

The primary difference between the two definitions is that the definition in (16) for the *ilu* construction incorporates the obligatoriness of the duration adverbial in the definition of the universal perfect operator itself. In Pancheva's theory, the meaning in (17) is shared by both the universal and existential perfect. The difference between the universal and existential perfect in her approach lies not in the meaning of the perfect morphology, but in the aspec-

³ Katz (2003) claims that aspectual operators in general derive predicates of times.

tual character of the main predicate, which may be bounded or unbounded. The combination of (17) with a bounded predicate yields the existential perfect, with an unbounded predicate the universal perfect. Pancheva does not treat the issue of the obligatoriness of the duration adverbial in the universal perfect. Aside from this gap, her theory is a suitable approach to a language like English because it attributes a consistent meaning to the shared morphological component of the two types of perfect (have + participle). But as such, it is not obviously well-suited to a language like Syrian Arabic with a dedicated morphosyntactic format for the universal perfect, where there is no subtlety to the obligatoriness of the duration adverbial. Ideally, future research will show how these analyses are related to one another.

The operator in (16) is defined to combine with a main predicate and a duration adverbial in that order, as illustrated in the tree in (18) for the sentence in (1). The fact that dative is only possible in the context of the duration adverbial indicates that the the source of dative is connected to the source of the obligatoriness of the duration adverbial, which is U-PERF. I propose to capture this connection by positing an Agr projection that is part of the extended projection (in the sense of Grimshaw 2000) of U-PERF, that case-licenses the nominal phrase in its specifier. I claim that what I have called the dative pronoun is in fact the head of this Agr projection and that the DP with which it agrees is the 'true' external argument that raises from a theta-position within the main predicate to the specifier of the Agr head. On this view, the pronoun *ilu* and its morphological alternants (see the table in (3)) are morphologically free inflections. I defend this view in more detail below, I assume the external argument of the stative predicate is saturated within the predicate, according to the VP-internal subject hypothesis (Koopman and Sportiche 1991), and that the trace of subject movement to a case position is interpreted as a copy of the moved constituent (Chomsky 1993). The constant **m** represents the denotation of the name Muna. The case/inflectional structure AgrP is semantically vacuous. The past tense specification in the T node combines with a predicate of (reference) times and locates the reference time in the past with respect to a new time t', which by default is the utterance time 'now'. Present and future specifications are the obvious variations on the past. The DP in [spec,Agr_{DAT}] normally raises to a higher topic position but may in principle remain in the position it occupies in (18).



The tree in (18) explains a morphological alternation that some, though not all, speakers of Syrian Arabic admit. Instead of co-occurring with the dative pronoun/inflection *ila* in (1), the full DP *Muna* may itself bear dative case, expressed by the prefix *la*-, in which case the inflection does not occur.

(19) *la-muna xamst iyyām bi-l-ħabis.*DAT-muna five days in-the-jail 'Muna has been in jail for five days.'

For these speakers, what is expressed by the agreement inflection ila in (1) may be expressed by the case marker la- in (19). The notion that unmarked Muna is in the specifier of the inflectional head Agr_{DAT} in (18) makes (1) and (19) alternations in whether the dative property associated with Agr_{DAT} is expressed on the specifier or the head of Agr_{DAT} . The latter case, illustrated in (18), bears a striking resemblance to the analysis of clitic constructions postulated by Sportiche (1996). There, clitics are inflectional heads that agree with null pronouns in their specifier position. The tree in (18) makes the ilu construction a Sportichean clitic construction, albeit one in which the clitic head alternates with dative marking on its specifier.

3.6 Negation

The analysis sketched in section 3.5 makes a prediction about possible scope positions for negation in the ilu construction. The analysis offers two different insertion points for negation: at the level of the main predicate below U-PERF (20a), or above U-PERF at the level of TP or $AgrP_{DAT}$ (20b). The 'low' negation in (20a) is predicted to be interpreted as part of the description of the state that the ilu construction says holds for the interval the duration adverbial specifies. Indeed, (20a) asserts that a state of Muna not being sober has held for five days, meaning she has been drunk the whole time. The 'high' negation in (20b) is predicted to negate the assertion that Muna has been sober for five days, meaning that she has been sober for less than five days (if at all). As expected, only (20b) is compatible with a situation where she has been sober for three or four days, but not five. In Syrian Arabic, sentential negation is expressed by ma while predicate negation is expressed by mu (or by ma with an enclitic indexing the subject, not shown).⁴

- (20) a. muna ila xamst iyyām mu ṣaḥyān-e. muna ʒFS.DAT five days not sober-FS 'Muna hasn't been sober for five days.' (→ She's been drunk the whole five days.)
 - b. muna ma ila xamst iyyām ṣaḥyān-e.
 muna not 3FS.DAT five days sober-FS
 'Muna hasn't been sober for five days (yet).'
 (→ She's been sober for less than five days)

⁴ Both of these configurations have the same morphosyntactic expression in English, as the translations show. This suggests that negation is mobile at LF in English, and the scope distinction that is covert in English is overt in Arabic.

It is often remarked that negation has a stativizing effect on its aspectual environment (Mittwoch 1977, Verkuyl 1993, de Swart 1996). This is the case in the *ilu* construction, where a perfective verb may occur together with negation, as in (21). This means that $ma\ r\bar{a}\hbar it$ (she did not go) may function as a state description for the purposes of admissibility in the *ilu* construction.

(21) muna ila sini ma rāħ-it la-sūriyya. muna 3FS.DAT year not went-3FS to-syria 'Muna hasn't gone to Syria for a year.'

These negation facts confirm that the *ilu* construction contains an operator in addition to the stative predicate, that derives the description attributed to the U-PerfP node in (18). Negation may apply either to this description or to the underlying stative predicate, yielding truth conditionally different interpretations.

4 The Sarlu Construction

It is possible, and for many speakers preferable, to support the dative inflection in the ilu construction with the auxiliary verb $s\bar{a}r$ (become).⁵ In this case, the dative pronoun in the examples above surfaces as a dative enclitic of $s\bar{a}r$. The verb $s\bar{a}r$ itself is invariantly third person singular, as illustrated in (22), and does not display tense distinctions; it is invariantly perfective. See the table in (3) for the clitic forms of the dative inflection. The long vowel in $s\bar{a}r$ is shortened in the environment of the complex coda created by suffixation of the consonant-initial clitic pronoun.

(22) muna ṣar-la xamst iyyām bi-l-ħabis. muna became-3FS.DAT five days in-the-jail 'Muna has been in jail for five days.'

The dative inflection (ilu) may be replaced by $s\bar{a}r$ +dative clitic ($s\bar{a}rlu$) with no change in meaning in all of the examples described above, including those in (13) in which the ilu construction is subordinated to the tense-marked auxiliary

⁵ It is the impression of the native speakers consulted for this work that the *ilu* construction is typical of the Damascus region, while the *ṣarlu* construction is more prominent elsewhere.

 $k\bar{a}n/yik\bar{u}n$ (be), as shown below. Again, $s\bar{a}r$ is invariantly perfective; tense is expressed by the auxiliary.

(23) a. muna kān ṣar-la xamst iyyām bi-l-ħabis lamma muna was became-3FS.DAT five days in-the-jail when zir-t-a.
visited-1s-her
'Muna had been in jail for five days when I visited her.'

b. muna raħ yi-kūn ṣar-la xamst iyyām bi-l-ħabis muna will 3MS-be became-3FS.DAT five days in-the-jail lamma b-a-zūr-a.
when B-1S-visit-her
'Muna will have been in jail for five days when I visit her.'

c. muna lāzim yi-kūn ṣar-la aqall ši xamst iyyām muna must 3MS-be became-3FS.DAT least thing five days bi-l-ħabis.
in-the-jail

'Muna must have been in jail for at least five days.'

This interchangeability suggests that $s\bar{a}r$ functions here as a morphologically invariant, semantically vacuous host for the dative clitic, perhaps base generated in Agr_{DAT} together with the inflection. Below, I explore the plausibility of the alternative possibility that $s\bar{a}r$ has the same meaning in the sarlu construction as in its canonical use as an eventive verb meaning become.

In its canonical use meaning *become*, $s\bar{a}r$ combines with a nominative subject and a stative predicate, and asserts that such a state came into being.

- (24) a. *nuha ṣār-at* aħsan kātb-e bi-zamān-a. nuha became-3FS best writer-FS in-time-her 'Nuha became the best writer of her time.'
 - b. s-samā ṣār-at sūdā. the-sky became-3FS black 'The sky became black.'

As a 'regular' verb, $s\bar{a}r$ can be put in any tense, unlike in the $s\bar{a}rlu$ construction, where a copular auxiliary must bear the tense morphology.

- (25) a. s-samā sam bi-t-ṣīr sūdā. the-sky prog b-3Fs-become black 'The sky is becoming black.'
 - b. s-samā raħ t-ṣīr sūdā. the-sky will 3FS-become black 'The sky will become black.'

And as a regular verb, $s\bar{a}r$ is eventive. There is no epistemic reading for its infinitival form $yis\bar{v}r$ under the modal $l\bar{a}zim$ (must) in (26). Like its English translation, example (26) has only the very odd deontic reading that the sky is under the obligation to become black, as is characteristic of eventive verbs.

(26) s-samā lāzim ti-ṣīr sūdā. the-sky must 3FS-become black 'The sky must become black.'

It has been noted, however, that in Syrian Arabic (Cowell 2005) as in Standard Arabic (Fassi Fehri 1993, 2003, Bahloul 1994, Hallman 2015), a perfective verb may be subordinated to a copular auxiliary bearing tense morphology, resulting in shifting of the reference time in a way typical of the English perfect construction. The simple past interpretation of the perfective verb in (27a) interacts with the past tense point-adverbial *lamma waṣalt (when I arrived)* in the way typical of eventive verbs: the main clause event follows (and is perhaps caused by) the dependent clause event (Vlach 1981, Partee 1984, Kamp and Reyle 1993). The main predicate in (27b), however, where the perfective verb is supported by a past-tense auxiliary, interacts with the past tense point adverbial in the way typical of stative verbs: the main clause state holds during the dependent clause event. In this case, the state in question is Muna's having made coffee, that is, the post-state of a coffee making event. As a result, (27b) means that Muna had already made coffee when I arrived, like its English translation as a past perfect construction.

- (27) a. muna Saml-it qahwe lamma waṣal-t.
 muna made-3FS coffee when arrived-1S
 'Muna made coffee when I arrived.'
 - b. *muna kān-it Saml-it qahwe lamma waṣal-t.*muna was-3FS made-3FS coffee when arrived-1S
 'Muna had made coffee when I arrived.'

Reinforcing the fact that the perfective verb has a perfect reading in (27b), the construction triggers the epistemic reading of modals, just like the English perfect. Example (28) expresses the speaker's best guess about a salient state of affairs.

(28) muna lāzim ti-kūn Saml-it qahwe. muna must 3FS-be made-3FS coffee 'Muna must have made coffee.'

In light of this observation, and since, as mentioned above, the copula drops in present tense contexts in Arabic, a simple perfective sentence like (29) is predicted to be ambiguous between a simple past tense reading and a present perfect reading with a hidden auxiliary $yik\bar{u}n$ (be). The parentheses indicate that the auxiliary is optional (without it the simple past reading emerges) while the strikethrough indicates that it is not pronounced when it is present (where a present perfect reading emerges).

(29) muna (bi-t-kūn) Saml-it qahwe. muna (B-3FS-be) made-3MF coffee 'Muna (has) made coffee.'

As a result, the fact that the verb $s\bar{a}r$ itself is lexically eventive (it describes a transition and is compatible with the progressive (25a), as only eventive verbs are) does not lead to the expectation that its occurrence in the perfective form is necessarily eventive, since there is a stative interpretation of the perfective analogous to the English perfect. On this view, the sarlu construction always includes the auxiliary silvetarrow silvetarrow silvetarrow silvetarrow silvetarrow silvetarrow in the past and future tenses but in the present as well, though the auxiliary is covert in the latter case.

If the $\dot{s}arlu$ construction is a perfect construction analogous to the perfect reading of the perfective verbs above, then we do not expect this construction to be compatible with a past time point adverbial in (what is actually) the present tense, just like the corresponding English present perfect is incompatible with a past time point adverbial. Example (30a) bears this out. The contrast between (30a) and (27a) above indicates that $\dot{s}arlu$ with a dative subject is really $yik\bar{u}n$ $\dot{s}arlu$, where the copular auxiliary $yik\bar{u}n$ goes unpronounced. The perfect interpretation of $yik\bar{u}n$ $\dot{s}arlu$ is incompatible with the past tense point adverbial, as the English present perfect construction. As expected on the basis of the analogy to English, the same example is grammatical in the past tense, where the main clause tense matches that of the dependent clause (30b). By this rea-

soning, it is expected that $s\bar{a}r$ does not change the aspectual character of the ilu construction as a whole. The apparent vacuity of $s\bar{a}r$ in the sarlu construction is an epiphenomenon of the fact that we are really looking at the perfect (not perfective) $yik\bar{u}n$ $s\bar{a}r$.

- (30) a. * muna ṣar-la xamst iyyām bi-l-ħabis lamma muna became-3FS.DAT five days in-the-jail when zir-t-a.
 visited-1S-her
 (*'Muna has been in jail for five days when I visited her.')
 - b. muna kān-it ṣar-la xamst iyyām bi-l-ħabis lamma muna was-3FS became-3FS.DAT five days in-the-jail when zir-t-a.
 visited-1S-her
 'Muna had been in jail for five days when I visited her.'

One thing that (30a) shows, however, is that the aspectual ambiguity usually found for simple perfective verbs, schematized in (29) is not found in the sarlu construction. Even if it is true that (29) has a copula-supported present perfect reading, it is clear that it also has a simple past reading (without the covert copula). In this simple past reading, it is compatible with the past tense point adverbial lamma waşalt (when I arrived), as (27a) shows. But şarlu is not compatible with a point adverbial in the same context, as (30a) shows. So, if the stative, present perfect reading of sarlu is supported by a covert copular auxiliary, it is odd that sarlu cannot stand on its own without the auxiliary with its usual eventive meaning (become), and license the past time point adverbial in (30a) just as a garden variety perfective verb can do (cf. (27a)). The question here is: why can't the verb $s\bar{a}r$ have its usual eventive reading in the context of the ilu construction? If no explanation for the 'missing reading' of sarlu can be found (the simple past reading), then perhaps the analysis of $s\bar{a}r$ as a pleonastic host for the dative inflection is to be preferred.

Two final observations circumstantially support the view that $s\bar{a}r$ is contentful in the sarlu construction. First, as an eventive verb, $s\bar{a}r$ only combines with stative predicates, and describes a transition to that state. Since the ilu construction is stative, it satisfies the selectional restriction of $s\bar{a}r$ in its standard use, and we would expect the ilu construction to function as a possible complement of $s\bar{a}r$, as illustrated in (31), where the inflection in sar_{DAT} subsequently cliticizes to the governing head sar_{DAT} . On this view, (22)/(31) describes a

transition from it not being the case that Muna has been in jail for five days to a state in which it is the case that she has been in jail for five days, and the auxiliary-supported perfect interpretation of $s\bar{a}r$'s perfective morphology derives a description of the post-state of that transition. Once again, though, it is unclear why the (hidden) auxiliary $yik\bar{u}n$ (be) is obligatory here (which (30a) shows it is).

```
(31) \begin{bmatrix} TP & yi-k\bar{u}n \end{bmatrix} \begin{bmatrix} VP & s\bar{a}r \end{bmatrix} \begin{bmatrix} AgrP_{DAT} & muna & ila & xamst & iyy\bar{a}m \\ 3ms-is & became & muna & 3FS.DAT & five & days \\ bi-l-habis & ]]] in-the-jail 'Muna has been in jail for five days.'
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Second, it is not entirely true that $s\bar{a}r$ is morphologically invariant in the sarlu construction. The imperfective form may show up in future and conditional contexts. As mentioned in section 3.4, the ilu construction may be placed in the future tense by appending the string $ra\hbar yik\bar{u}n$ ($will\ be$). The same is true of the sarlu counterpart, as shown in (32a). Further, however, the string sarlu may be replaced by imperfective sarlu, as shown in (32b). There is no immediately apparent difference in meaning between the two forms.

```
(32) a. muna rah yi-kūn ṣar-la xamst iyyām bi-l-ħabis muna will 3MS-be became-3FS.DAT five days in-the-jail lamma b-a-zūr-a.

when B-1S-visit-her
'Muna will have been in jail for five days when I visit her.'
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b. muna raħ yi-ṣir-la xamst iyyām bi-l-ħabis lamma muna will 3MS-become-3FS.DAT five days in-the-jail when b-a-zūr-a.

B-1S-visit-her
'Muna will have been in jail for five days when I visit her.'
```

A similar alternation shows up in counterfactual conditional clauses, though here a subtle difference is meaning is reported. If Muna is arrested on Monday, her sister's wedding is on Wednesday, and one can only be released on bail after having been in jail for five days, then Muna cannot attend the wedding. In this case, we would say (33a) after the wedding and (33b) before the wedding. That is, (33a) presupposes that she had not been in jail for five days yet at the time of the wedding, and says what we could have done if she had been. Example

(33b) says the same thing about a future situation. It presupposes that she will not have been in jail for five days the day of the wedding, and says what we could have done if she would have been.⁶

- (33) a. law kān ṣar-la xamsit iyyām bi-l-ħabis yūm if was became-3FS.DAT five days in-the-jail day l-ʕaris, kān fī-na n-ṭāliʕ-a bi-kifāle. the-wedding, was able-1P 1P-release-her with-bail 'If she had been in jail for five days the day of the wedding, we could have gotten her out on bail.'
 - b. law kān b-yi-ṣir-la xamsit iyyām bi-l-ħabis yūm if was B-3MS-become-3FS.DAT five days in-the-jail day l-Ṣaris, kān fī-na n-ṭāliṢ-a bi-kifāle. the-wedding, was able-1P 1P-release-her with-bail 'If she had been in jail for five days the day of the wedding, we could have gotten her out on bail.'

The proper analysis of these alternations is intertwined with the analysis of these modal contexts in Arabic, an issue I do not pursue here. They show, however, that the context of the sarlu construction modulates the tense morphology on $s\bar{a}r$ itself, which militates against the view that $s\bar{a}r$ functions as an unanalyzable pleonastic host for the dative clitic in the sarlu construction, and suggests its morphological parts play a role in the semantic composition of the construction.

5 The Morphosyntax of Possession in the Expression of Perfect in Arabic and English

In this section, I briefly review evidence that the most striking morphosyntactic property of the *ilu* construction, namely the dative case of the subject, in fact represents a subtle resemblance to the English perfect construction. The English perfect is supported by the auxiliary *have*. The verb *have* of course also expresses possession in garden variety possessive constructions, where

⁶ I have the impression that the English translation to both sentences can be said in both of these situations. That is, the English is ambiguous between two readings that are morphosyntactically differentiated in Arabic.

its subject bears the possessor theta role. It is of some consequence, then, that dative case marks possessors in at least three contexts in Syrian Arabic, described below.

First, Syrian Arabic does not have a transitive possessive verb corresponding to *have*. Rather, possessors in (inalienable) possessive constructions bear dative case, as (34a) from Cowell (2005) and (34b) from Boneh and Sichel (2010) illustrate (See Freeze 1992 for similar constructions in other languages). Here, dative case morphologically expresses in Syrian Arabic at least part of what *have* expresses in English.

- (34) a. ?il-a Syūn ħilwe ktīr.

 DAT-her eyes pretty very
 'She has beautiful eyes.'
 - b. kān la-muna ?anf ṭawīl / tlāt ūlād. was DAT-mona nose long / three children 'Mona had a big nose / three kids.'

Second, possessor/recipients in double object constructions bear dative case in the context of most ditransitive verbs (accusative for others), as (35) illustrates for the verb ba\$at (send). This is significant in light of work claiming that possessor/recipients in double object constructions are arguments of a covert have, so that ba\$at/send abbreviates the structure cause to have by sending (Harley 1996, 2002, 2012).

(35) mona basat-it la-xālid l-ktāb. mona sent-3FS DAT-khalid the-book 'Mona sent Khalid the book.'

Third, the notion *to need* is expressed in Syrian Arabic by the modal participle $l\bar{a}zim$ (must) with a dative enclitic pronoun that obligatorily agrees with the subject (the needer), as illustrated in (36). The significance of this is that like double object constructions, English need has been argued to embed a

⁷ Alienable possession is expressed by the preposition *Sind*, as in (i), also from Boneh and Sichel (2010).

⁽i) kān Sind mona ktāb. was at mona book 'Mona had a book.'

covert *have*, so that *need* abbreviates the structure *need to have* (Larson et al. 1997, Schwarz 2006). Here again, a dative nominal shows up in Syrian Arabic where *have* occurs (covertly) in English. The fact that the dative clitic here may be doubled by an unmarked DP (Mona in (36)) is much like in the ilu construction.⁸

(36) muna lāzim-la j̃ākēt ždīd. muna must-DAT.3FS jacket new 'Muna needs a new jacket.'

These facts support my suggestion here that the peculiar case frame of the *ilu* construction in fact represents a subtle similarity between Syrian Arabic and English. While English makes use of the auxiliary *have* in the perfect construction, the *ilu* construction, which expresses the universal perfect, makes use of *have*'s counterpart in Arabic, namely dative case on the nominal corresponding to the subject of *have* in English.

6 Conclusion

The evidence offered above supports the claim that the <code>ilu/ṣarlu</code> construction has just the interpretational properties the English universal perfect does. Arabic has no auxiliary corresponding to the auxiliary <code>have</code> that marks the English perfect construction, but the auxiliary <code>have</code> manifests itself indirectly as dative case on the subject. I have analyzed the universal perfect interpretation of the construction as the semantic contribution of the null operator <code>U-PERF</code>, whose associated Agr head assigns dative case to the subject. This case is preferably expressed as an overt agreement head in Agr following the morphological paradigm in (3). This description adds to the typological repertoire of possible forms of the universal perfect construction cross linguistically.

⁸ Harves and Kayne (2012) claim that the verb *need* is derived from the possessive construction *have a need*, based on the incorporated noun *need*. If both Harves and Kayne and Larson et al. and others are correct, then *need* actually abbreviates *have a need to have*. If so, the question of which *have* the Arabic dative corresponds to in (36) is unclear and warrants further investigation. That it corresponds to at least **some** use of *have* supports the point advanced here, that dative in Syrian Arabic performs the syntactic function that *have* performs in English.

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