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Habituality Markers in Jordanian Arabic

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Abstract

Objectives: This study investigates the grammatical encoding of habituality within Jordanian Arabic. This linguistic phenomenon is expressed through specific markers for different tenses in the dialect.

Methods: Our research employs a qualitative, theory-driven methodology rooted in truth-conditional semantics instead of a corpus-based approach. We base our findings on constructed utterances that are placed within specific contexts.

Results: In the present tense, habituality is expressed using the copular verb *bi-ku:n* 'Pres-be'. The copula occurs within nominal sentences, serving as a marker that indicates the habitual nature of the action. The obligatory presence of the copula exclusively enforces a habitual interpretation. Conversely, the obligatory absence of the copula allows for two interpretations: episodic and habitual. Event plurality in the past tense, however, is constructed using the past auxiliary *ka:n* 'used to'. These constructions are known as periphrastic forms or retrospective habituals (Boneh and Doron, 2008).

Conclusions: The periphrastic forms in Jordanian Arabic behave similarly to the perfective aspect, yet they are interpreted imperfectively. These periphrastic habituals are formed using both stage-level and individual-level predicates. However, the periphrastic forms incorporating stage-level predicates without an adverbial adjunct are ambiguous between a habitual and a non-habitual reading. The context serves to differentiate between the two readings.

Keywords: Habitual sentences, periphrastic forms, retrospective habitual, nominal constructions, Jordanian Arabic.

علامات تقعيد جمل العادة في اللهجة العربية الأردنية

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ملخّص

الأهداف: تعالج هذه الدراسة أنحاء جمل العادة في اللهجة العربية الأردنية؛ حيث يجري تقعيد هذه الظاهرة الدلالية نحويًا باستخدام علامات محددة للأزمان المختلفة للجملة في اللهجة.

المنهجية: تعتمد هذه الدراسة منهجًا نوعيًا يعتمد على النظرية بدلاً من الاعتماد على النهج القائم على جمع البيانات الضخمة. تشمل بيانات البحث أقوالاً تمثل سياقات محددة.

النتائج: أظهرت النتائج أنه في حالة الزمن المضارع، يُعبّر عن العادة باستخدام الفعل الناقص "بيكون"؛ حيث يأتي هذا الفعل ضمن الجمل الاسمية ويكون علامة تشير إلى طبيعة الحدث الاعتيادي، فيبرز المعنى الاعتيادي للجملة تفسيرًا منفردًا. أما في حالة الظهور الإلزامي للفعل الناقص، فيظهر المعنى الاعتيادي للجملة تفسيرًا منفردًا. وعلى العكس من ذلك، يظهر الغياب الإجباري للفعل الناقص تفسيرين: عرضي ومعتاد. أما تعددية الأحداث في الماضي فيعبر عنها باستخدام الفعل الماضي الناقص "كان"؛ حيث تُعرَف هذه العبارات باسم الصيغ المحيطية أو جمل العادة الاسترجاعية (Boneh and Doron, 2008).

الخلاصة: خلصت الدراسة أن الصيغ المحيطية في اللهجة الأردنية تبنى بشكل مشابه للفعل التام، إلا أنها تُفسَّر تفسير الفعل غير التام؛ يجري حيث يتم بناء هذه الصيغ باستخدام المسند العارض، أو المسند الدائم المتعلق بالفرد. ومع ذلك، تكون العبارات المحيطية التي تحتوي على المسند العارض دون ملحق ظرفي غامضة بين تفسير العادة وتفسير العرض؛ حيث يساعد السياق على التمييز بين التفسيرين.

الكلمات الدالة: جمل العادة، صيغ محيطية، جمل عادة استرجاعية، بناء اسمي، اللهجة الأردنية.

1. Introduction

Habitual sentences play a crucial role in expressing recurring actions or routines in daily life. The habitual constructions in many languages have either overt or covert markers. Hebrew, for instance, uses two forms to express habituality. The first is the unmarked form which is used with both habitual and episodic constructions (i.e., bare habituals). The other is the periphrastic form. It is constructed by combining the root *hyy* "to be" with the main participial verb form of the sentence (Boneh and Doren, 2008). In Polish, the periphrastic forms are expressed by the auxiliary verb *zvykl* in the perfective aspect followed by an imperfective verb (Boneh and Doren, 2010). In English, a habit in retrospect is expressed using either the auxiliary verbs "used to" or "would" (Tagliamonte and Lawrence, 2000). In Modern Standard Arabic (MSA), Jaber (2014) shows that habitual sentences are marked by the presence of the copular verb *yakuun* in the present tense.

This study investigates habituality encoding tools in Jordanian Arabic (JA). This phenomenon is grammaticalized using two markers per tense of the sentence. In the present tense, habituality is expressed using the copular verb *bi-ku:n* 'Pres-be'. The copula occurs with nominal constructions as a marker indicating the action's habitual nature. In contrast, the event plurality is constructed using the past auxiliary *ka:n* 'used to' in the past tense. To the best of our knowledge, no formal study has been undertaken to investigate the grammatical marking of habitual constructions in JA.

This study is divided into four sections. "In addition to this introduction, Section 2 presents both the data source and the theoretical framework. Section 3 investigates the nominal sentences with the copular verb *bi-ku:n*. It includes three sub-sections: nominal constructions with obligatory overt copula, nominal constructions with obligatory covert copula, and nominal constructions with optionally null copula. Section 4 delves into habitual constructions in the past tense, which are expressed using the past auxiliary *ka:n*. This section is further divided into three sub-sections based on predicate levels: periphrastic forms and S-level predicates, periphrastic forms and I-level predicates, and periphrastic forms and kind generics. Following this, Section Five presents the conclusion.

2. Methodology

The present study employs a qualitative, theory-driven methodology instead of relying on a corpus-based approach. The research data comprises constructed utterances situated within specific contexts, all of which were validated by the authors themselves. The authors are native speakers of two varieties of JA, specifically rural and urban. Moreover, the felicity and appropriateness of these utterances within their corresponding contexts were evaluated by four linguists, all of whom are native speakers of JA (two urban and two rural).

The primary objective of this study is to investigate multiple aspects concerning the grammatical marking, meanings, and functions of habitual sentences in JA. To accomplish this, the research adopts a theoretical framework rooted in truth-conditional semantics. This framework provides the basis for deciphering the meanings of habitual sentences within the dialect.

3. Nominal Constructions in JA

An intriguing compilation of works on Arabic nominal sentences has been accomplished by numerous Arab and Western grammarians. Among these, one of the earliest and most comprehensive studies of Arabic grammar was conducted by Sibawayh in his remarkable work known as *al-Kitab* 'the Book' (Sibawayh, 1977). He defines nominal sentences based on their syntactic formation. Such constructions include only a subject and a predicate. Since then, the term 'nominal' has become controversial. Some argue that nominal sentences are constructions that lack verbal predicates (Cantarino, 1974). Meanwhile, others claim that nominal constructions are those that feature a noun in a subject-initial position (Alotaibi, 2018). This study focuses on SVO structures only. This choice is motivated by the fact that only constructions starting with a DP can incorporate the copula either before or after the DP.

However, the copular verb *bi-ku:n*, which is analogous to the verb ' be' in English, is used with nominal sentences in JA as an indicator of habituality (Jaber, 2014). In present-tense nominal sentences, the copula *bi-ku:n* presents three possible situations: obligatory overt copula, obligatory covert copula, and optionally null copula, as illustrated in the following sub-sections.

3.1 The Semantics of the Nominal Sentence with Obligatorily Covert Copula in JA

In JA, present tense nominal sentences display a syntactic asymmetry based on the presence of the copula *bi-ku:n*. Nominal sentences with obligatorily null copula are ambiguous between a habitual and an episodic interpretation. The context differentiates between the two. However, due to grammatical reasons, the presence of the copula leads to awkward sentences. Consider (1) and (2)[1]:

(1) a. ʕali: b-irkab   l-ba:sˤ   l-al-madraseh
     Ali   3.ride   the-bus   to-the-school
    (Ali takes/is taking the bus to school)
  b. ʔajman   bo:kil   basˤal   maʕ   l-mansaf
     Ayman   3.eat   onions   with   the-mansaf
    (Ayman eats/is eating onions with Mansaf)
  c. xa:lid   b-imʃi   bi-l-le:l
     Khalid   3.walk   at-the-night
    (Khalid walks/is walking at night)

(2) a. *ʕali: bi-ku:n   j-irkab   l-ba:sˤ   l-al-madraseh[2]
     Ali   Pres-be   3.go   the-bus   to-the-school
    (Ali takes/is taking the bus to school)
  b. *ʔajman   bi-ku:n   j-o:kil   basˤal   maʕ   l-mansaf
     Ayman   Pres-be   3.eat   onion   with   the-mansaf
    (Ayman eats/is eating onions with Mansaf)
  c. ?xa:lid   bi-ku:n   j-imʃi   bi-l-le:l
     Khalid   Pres-be   3.walk   at-the-night
    (Khalid walks at night)

The only distinction between the grammatical sentences in (1) and their ungrammatical counterparts in (2) is the presence of copula *bi-jku:n*. The absence of the copula in (1) raises two interpretations: episodic and habitual. The sentence in (1a) shows that there is either a recurrent event of Ali going to school in the morning by bus or an episodic event of Ali taking the bus to school at a particular time and place. The former is habitual, but the latter is episodic. Likewise, (1b) can either report multiple situations of eating onions with Mansaf performed by Ayman or a specific event of Ayman eating onions with Mansaf at a specific time. Equally, the sentence in (1c) provides two alternative readings. In one reading, the sentence expresses a regular situation of Khalid walking at night. The other reading is episodic; it expresses a unique existential event salient in the context domain of Khalid walking at night. The context differentiates between the two readings. Instead of quantifying over a set of existentially calculated events, habituals quantify over a set of intentional situations. Hence, the individuals in (1) are not existentially calculated (Krifka et al. 1995).

However, their counterparts in (2) without expressed copulas are considered highly unusual and unnatural when interpreted habitually. They might be acceptable only in episodic, aspectual readings. That is, the copula must be absent in the deictic present tense (Alotaibi, 2018). It's important to note that (2.c) is considered acceptable only in a habitual reading; the episodic reading makes it unacceptable. Benmamoun (2000) argues that deictic contexts involving generics refer to sentences that incorporate SL predicates. These predicates describe situations that are consistently true in the past, and present, and are anticipated to remain true in the future. Because the sentences in (2) contain SL predicates in the deictic present tense, the copula must be absent. To bolster this argument, the previously mentioned sentences in (2) hold true in

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[1] **1, 2, 3** stand for 1st/2nd /3rd person, respectively, **m** & **f** stand for masculine and feminine, **sg.** stands for singular, and **pl** stands for plural, **PERF** & **IMP** stand for perfective and imperfective, respectively.

[2] This sentence can have an episodic, imperfective aspect, and non-habitual interpretation; as an answer to "What is Aii doing right now?"

past contexts, as demonstrated in (3)

(3) a. ʕali: ka:n   j-irkab   l-ba:sˤ   la-l-madraseh
       Ali   3.used to   3.ride   the-bus   to-the-school
      (Ali used to take the bus to school)

   b. ʔajman   ka:n   jo:kil   basˤal   maʕ   l-mansaf
      Ayman   3.used to   3.eat   onions   with   the-mansaf
      (Ayman used to eat onions with Mansaf)

   c. xa:lid   ka:n   j-imʃi   bi-l-le:l
      Khalid   3.used to   3.walk   at-the-night
      (Khalid used to walk at night)

The sentence in (3) receives past interpretations, the copula must be overt to give the habitual reading. They describe recurrent events in the past. The referent Ali in (a) was involved in multiple events of going to school by bus. Similarly, (b) describes a sum of eating onions with Mansaf events performed by Ayman. Likewise, (c) refers to a plurality of walking at night situations in which the referent Khalid was involved.

3.2 The Semantics of Nominal Sentences with Optionally Null Copula in JA

In JA, certain nominal sentences can occur either with or without the copular verb *bi-ku:n*. When the copula is overt, only a habitual generic reading emerges[3]. On the other hand, the covert copula gives rise to two possible interpretations: episodic and habitual. Various factors can distinguish between these interpretations, including the predicate level, the definiteness of the subject, and other pragmatic features. This is demonstrated in (4) and (5), where the proposition can appear with or without the copula *bi-ku:n*:

(4) a. ʕali: bi-ku:n   jilʕab   fatˤbo:l   esˤ- sˤubuh
       Ali   Pres-be   3.play   football   the-morning
      (Ali plays football in the morning)

   b. l-ikla:b   bi-tku;n   tʕawwi: bi-l-le:l
      the-dogs   Pres-be   3.pl-bark   at-the-night
      (Dogs bark at night)

   c. xa:lid   bi-ku:n   j-urkuðˤ   baʕd   eðˤ-ðˤuhur
      Khalid   Pres-be   3.runs   after   the-noon
      (Khalid runs in the afternoon)

(5) a. ʕali: bi-lʕab   fatˤbo:l   esˤ- sˤubuh
       Ali   3.play   football   the-morning
      (Ali plays football in the morning)

   b. l-ikla:b   bi-tʕawwi: bi-l-le:l
      the-dogs.pl   3.pl-bark   at-the-night
      (The dogs bark at night)

   c. xa:lid   bi-rkuðˤ   baʕd   eðˤ-ðˤuhur
      Khalid   3.runs   after   the-noon
      (Khalid runs in the afternoon)

The copula in the previously mentioned sentences can be either covert or overt. The overt copula in (4) primarily lends

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[3] It's worth noting that the insertion of aspectual adverbials like *hassa* 'now' cancels the habitual interpretation and instead promotes an episodic one.

itself to habitual interpretations as the more salient reading. In all the sentences presented in (4), quantification takes place across varying situations due to the inclusion of quantificational adverbials associated with time or place. These adverbials function as situation providers (Jaber, 2014). In contrast, sentences with a covert copula are open to both habitual and episodic interpretations. For instance, (5a) could either refer to varying instances of Ali playing football in the morning or report a spatiotemporal aspect of Ali playing football in the morning. Similarly, (5b) could indicate recurring instances of dogs barking at night or denote a specific occurrence of certain dogs barking at a particular time and place. Likewise, (5c) can denote a series of running events performed by Khalid or refer to a specific running event at a particular time, in which the individual Khalid is involved. Apart from proper names, the NPs are semantically indefinite, as quantification is over variable situations. The predicates employed in (5) are all SL predicates, such as *bi-tˤawwi* 'bark', *bi-lˤab* 'play; and *bi-rkuðˤ* 'run'. As a result, these SL predicates, coupled with spatiotemporal adverbials, enable habitual readings and prevent episodic interpretations. To substantiate this, substituting SL predicates with IL predicates results in semantically unacceptable sentences, as demonstrated in (6):

(6) a. *ʕali: (bi-ku:n) tˤawi:l esˤ- sˤubuh
       Ali (Pres-be) tall   the-morning
     (*Ali is tall in the morning)

   b. *l-ikla:b   (bi-tku:n) gasˤi:reh bi-l-le:l
       The-dogs.pl (Pres-be) short   at-the-night
     (*The dogs are short at night)

   c. *xalid   (bi-jku:n) bi-ʕrif ʔingli:zi baʕd   eðˤ-ðˤuhur
       Khalid (Pres-be) 3.know   English   after the-noon
     (*Khalid knows English in the afternoon)

In (6), the resulting sentences are considered infelicitous in both JA and English due to the incompatibility of IL predicates with adverbials associated with time or place. In (6a), the attribute of being tall is incongruent with the temporal adverbial *esˤ-sˤubuh* 'in the morning'. Similarly, the characteristic of being short in (6b) renders a semantically unacceptable sentence when combined with the adverbial phrase *bi-l-le:l* 'at night'. Likewise, the property of knowing English in (6c) is permanent, thus rendering it incompatible with temporal adverbials like *baʕd eðˤ-ðˤuhur* 'in the afternoon'.

3.3 The Semantics of the Nominal Sentence with Essentially Overt Copula in JA

Specific nominal sentences in JA necessitate the phonological pronunciation of the present copular *bi-ku:n*. These sentences incorporate spatiotemporal adverbials, acting as restrictors within a tripartite structure. The presence of the present copula prompts a habitual interpretation. Conversely, the omission of the present copula results in sentences that are considered infelicitous. Consider (7):

(7) a. ʔabi:r b-itku:n na:jm-eh gabil eðˤ-ðˤuhur
       Abeer Pres-be asleep-f before the-noon
     (Abeer goes to sleep before noon)

   a'. *ʔabi:r   na:jm-eh   gabil   eðˤ-ðˤuhur
       Abeer   3.sleep-f before the-noon
     (Abeer is asleep before noon)

   b. etˤ-tˤifel biku:n ðˤaʕi:f fi: ʃ-ʃhu:r   el-ʔu:la
      the-baby Pres-be weak   in the-months the-first
     (The baby is weak during their first months)

   b'.*etˤ-tˤifel ðˤaʕi:f fi: ʃ-ʃhu:r   el-ʔu:la
       the-baby   weak   in months   the-first

(The baby is weak during their first months)
c. el-kahraba: b-itku:n   ga:tˤʔah   el-ʔarbiʔa
   the-electricity   Pres-be   cut off   the-Wednesday
(The electricity gets cut off on Wednesdays)
c'. el-kahraba: ga:tˤʔah   el-ʔarbiʔa
    The-electricity   cut off   the-Wednesday
(The electricity gets cut off on Wednesdays)

The inclusion of the copula *bi-ku:n* in (7. a-c) conveys habitual interpretations, whereas their corresponding minimal pairs without the copula in (7. a'-c') sound odd or express episodic propositions. All the propositions in (7. a-c) quantify over variable situations. For instance, in (a), quantification pertains to a cumulative set of instances of sleeping before noon. Similarly, (b) describes recurring instances of the baby's weakness during the first months. In the case of (c), the sentence portrays a repetitive event of electricity being cut off on Wednesdays. The habitual reading is established by the presence of the habitual marker *bi-ku:n*, exhibiting a pattern akin to verbless sentences in MSA (Jaber, 2014). The sole distinction between these habitual sentences and the ones discussed earlier lies in the mandatory use of the copula in this context.

The sentences in (7. a'-c') featuring a null copula are grammatically acceptable but lack interpretability. These propositions resist episodic interpretations due to incompatible time-related adverbials with temporary SL predicates. The present tense in copular sentences signifies static situations (Farhi, 1993). Consequently, these situations must be valid across the entire interval, implying the property's presence for each sub-interval (Partee 1984, Herweg 1991, Smith 1997 among others).

For example, (7. a') describes an episodic state of affairs about Abeer sleeping before noon, implying the speaker observed Abeer's entire sleep period. This renders it semantically odd and infelicitous, as judgments can't be based on slices of situations. Similarly, (7. b') with the reference adverbial *fi: ʃ-ʃhu:r el-ʔu:la* 'in the first months' clashes with the SL predicate *ðˤaʕi:f* 'weak'. It necessitates that the baby remains weak throughout the whole interval, without any moments of strength. As a result, (7. b') would only be true if the baby is weak in all the initial months.

On the other hand, (7. c') is acceptable, detailing an episodic situation about electricity being cut off on Wednesdays. However, this episodic interpretation requires the removal of both the present copula and the adverbial adjunct. "In summary, when an incompatible adverbial adjunct accompanies SL predicates in JA, the copula *bi-ku:n* must be overt for clarity.

4. Past Habituals

The plurality of events in JA can be expressed using the past auxiliary *ka:n*. It assimilates with lexical verbs concerning inflection and agreement marking. The auxiliary *ka:n* has a functional meaning rather than a lexical one since it primarily functions as a tense marker (Yasin & Hussein, 2021).

The past auxiliary *ka:n* can have both perfective and imperfective aspects as its verbal complement. However, it's essential to note that only the past auxiliary with an imperfective verbal complement can denote habitual or continuous events (Yasin & Hussein, 2021). When *ka:n* is followed by an imperfective verb, it is used either to express a past habit, similar to 'used to' in English, or to denote a progressive aspect. Several factors can distinguish between these two aspects, such as the context.

Habitual constructions with the past auxiliary *ka:n* describe recurrent events over an extended period of time. These constructions are known as periphrastic forms or retrospective habituals (Boneh and Doron, 2008). Similar to English and Hebrew, periphrastic forms in JA are expressed only in the past tense (cf. Glinert 1989 for Hebrew, Quirk et al. 1985, Tagliamonte & Lawrence 2000 for English) and can be followed by both stage-level (SL) and individual-level (IL) predicates.

4.1 Periphrastic Forms and S-level Predicates

Expressing past habits with SL predicates is an intriguing aspect of the linguistic tools in JA for conveying habitual actions and events from the past.

(8) a. zama:n   ʔajman   da:jman   ka:n   jsa:fer ʕala masˤer
     in the past Ayman   always   3.used to 3.travel to Egypt
    (In the past, Ayman always used to travel to Egypt)
b. fi: es-sabʕi:na:t, en-na:s   ka:n-at   tiʕmal el-ʔaʕra:s   bi-l-be:t
  In the-seventies, the-people 3.used to-pl 3.hold the- weddings   at-the-house
(In the seventies, people used to hold wedding parties at home)

The sentences in (8) express past habits through the use of the past auxiliary *ka:n*. In (a), for instance, it indicates that Ayman regularly engaged in actual events of traveling to Egypt in the past. Similarly, (b) describes recurring episodes of having weddings at home throughout the entire seventies period (i.e., the seventies encompassed the habit of having weddings at home). It's worth noting that periphrastic forms with duration adverbials measure the time frame for each episode rather than the habit as a whole (Boneh and Doron, 2008).

Both sentences depict a past habit that concluded before the speech time. Consequently, they represent actual events and form a sequence of events realized in the actual world (Boneh and Doron, 2008). The predicates used as a verbal complement for the past auxiliary possess an imperfective aspect. They are temporary stage-level (SL) predicates that function as individual-level (IL) predicates. The propositions in (8) are constrained by time-related adverbials, making them akin to quantificational habituals in the sense that they exhibit a tripartite structure. Hence, they are analyzed as quantificational habituals.

To support the argument that past habits expressed using the past auxiliary *ka:n* cease before the present moment, it's worth noting that such constructions are incompatible with adverbials that describe events extending to the present moment, such as 'min + time' 'since/from'. Consider (9):

(9) a. * min   s-saneh   el-ma:ðˤjeh, ʔajman   ka:n   jsa:fer   ʕala   masˤer
     Since   the-year   the-last,   Ayman   3.used to   3.travel   to   Egypt
    (Since last year, Ayman has been traveling to Egypt)
b. *min   es-sabʕi:na:t, en-na:s   ka:nt   tiʕmal el-ʔaʕra:s   bi-l-beit
  Since   the-seventies, the-people 3.used to   3.hold   the-weddings   at-the-house
  (Since the seventies, people used to have weddings at home)

The adverbial phrases used with the sentences in (9) describe intervals that include the present moment. The past auxiliary *ka:n* in JA denotes a past habit that no longer holds at the present moment. Consequently, these spatiotemporal adverbials render the sentences infelicitous with periphrastic forms. For instance, the temporal adverbial *min s-saneh el-ma:ðˤjih* 'since last year' in (a) implies that Ayman used to travel to Egypt and continues to do so now. Similarly, the adverbial phrase *min es-sabʕi:na:t*('Since the seventies' in (b) suggests that people are still having weddings at home up to the present moment.

In contrast, durative and iterative adverbials scope under the generic operator of periphrastic habitual. Instead of measuring the time span of the entire habit, they gauge the temporal extent of each episode.

While the past tense in JA is expressed with a perfective aspect, the periphrastic forms discussed above take on an imperfective interpretation. Specifically, habituals assimilate the perfective aspect because they are compatible with durational adverbials, allowing them to measure the duration of an episode. Moreover, periphrastic habituals behave like perfectives in the sense that they denote multiple events that concluded before the speech time (Comrie 1976 and Smith

1991). However, these sentences are considered imperfective because the reference time is encompassed within the habit, as demonstrated in (8b) above. Furthermore, the habit expressed in retrospect overlaps with the timespan of when-clauses, as seen in (10):

(10) lamma   wisˤili-t   el- ʔurdun, ʔajman   ka:n   y-ʃtaɣil   bi-l-li:l   kul   jo:m
     when   arrived.1   the-Jordan, Ayman   3.used to   3.work   at -the-night   every day
    (When I arrived in Jordan, Ayman used to work night shifts every day)

If an event is embedded within when-clauses, it can be interpreted either perfectively or imperfectively. The former indicates that the event follows the timespan denoted in the main clause, while the latter refers to multiple events surrounding (i.e., overlapping with) the temporal interval of the when-clause. In (10), the habit in retrospect is embedded within the when-clause, indicating that the recurrent events of working at night overlap with the time of my arrival in Jordan. Therefore, periphrastic habituals in JA are obligatorily interpreted as imperfective. These results align with the analysis presented by Boneh and Doron (2013).

The asymmetry between the perfective nature and the imperfective interpretation of retrospective habituals suggests the presence of an additional interval responsible for extending the event until the present moment, running parallel to the perfect form (Boneh and Doron, 2010; 2013). This interval is known in linguistic literature as 'perspective time' (Kamp and Reyle, 1993).

Both the perfective and periphrastic forms in JA include an event and two temporal intervals: the retrospective aspect and the imperfective aspect. These forms are constructed using the past auxiliary *ka:n*. Fehri (1993) supports this claim by noting that Arabic also features complex tenses, including the reference time, the speech time, and the perspective time, which is distinct from the speech time.

To support the existence of perspective time, Binnick (2005) presents a test. He argues that the perspective interval can be modified by the adverb 'now.' Kamp and Reyle (1993) contend that the presence of the adverb 'now' in a clause indicates that the state holds at the perspective time. However, since retrospective habituals require that the speech time precedes the perspective time, the adverb 'now' is deemed unacceptable. In JA, the periphrastic form with the past auxiliary *ka:n* is incompatible with the adverbial phrase *hassa* 'now'. Consider (11)

(11) * ʔajman   hassa   ka:n   y-sa:fer   ʕala   masˤer
     Ayman   now   used to   3.travel   to   Egypt
    (*Ayman now used to travel to Egypt)

The sentence in (11) is semantically and grammatically unacceptable in JA, as well as in English because the past auxiliary *ka:n* is incompatible with the adverbial phrase *hassa* 'now'. In contrast to Modern Hebrew, periphrastic forms with quantificational adverbials in JA are analyzed using the Gen operator. On the other hand, periphrastic habituals with no restriction are analyzed under the Hab operator, as proposed by Boneh and Doron (2008; 2010; 2013)

The periphrastic forms incorporating stage-level (SL) predicates without an adverbial adjunct can be ambiguous between a habitual and an episodic reading. More precisely, the past auxiliary *ka:n* is capable of conveying both a past progressive and a past habitual sense. The former expresses a spatiotemporal property of an individual or group of individuals, thus denoting an episodic reading. The latter describes a habitual reading by referring to multiple occurrences in the past. This duality is illustrated in (12):

(12) a. en-na:s   ka:n-at   tiʕmal   el-ʔaʕra:s   bi-l-beit
     the-people   3.used to-pl   3.hold   the-weddings   at-the-house
    (People used to have weddings at home/people were having weddings at home)

b. ʔajman   ka:n   y-o:kil   tuffa:ħah

  Ayman   used to/be-Past 3.eat   apple

(Ayman used to eat an apple/ Ayman was eating an apple)

The sentences in (12) exhibit ambiguity between two readings: habitual and episodic. For instance, (a) can convey either an accidental occurrence of people having weddings at home in the past or recurrent events of having weddings at home. Similarly, (b) could be interpreted as Ayman eating an apple at a specific time and place or Ayman being engaged in a regular event of eating an apple. However, context plays a crucial role in distinguishing between these interpretations.

The periphrastic reading is confined to events that occurred solely in the past, as it is exclusively expressed in the past tense. Notably, the number feature of bare singulars in object arguments introduces a scopal ambiguity when used with periphrastic forms. In (b), the bare NP can either have a wide scope, referring to the same apple in each situation, or a narrow scope, indicating a different apple in variable situations. This ambiguity also extends to bare plurals in JA.

As a result, habituals quantify over simple situations, and each simple situation is constrained to a distinct object (Krifka et al., 1995). This principle is also applicable to periphrastic forms. For example, in a simple situation constrained by context, Ayman eats an apple, ensuring that each simple situation corresponds to a distinct apple. Like bare habituals, periphrastic forms without an adverbial adjunct are analyzed as having a binary structure. Since periphrastic forms are realized in the actual world, they are exclusively analyzed under the Habitual operator (Hab)

4.2 Periphrastic Forms and I-level Predicates

Periphrastic forms and I-level predicates provide nuanced tools for expressing habituality in JA. This is exemplified in (13) below.

(13) a. fi: es-sabʕi:na:t, el-mʕalm-a:t   ka:n-in   y-ʕri-fu: ʔingli:zi w   faransi:

        in the-seventies, the-teacher-f.pl 3.used to-f.pl 3.know-pl   English and French

          (In the seventies, the (female) teachers used to know English and French)

b. l-iwla:d   ka:n-u   y-ħib-u   ylʕab-u   ko:rah   kul   jo:m

  the-boys   3.used to-pl 3.love-pl   3.play-pl football   every day

 (The boys used to love to play football every day)

The sentences in (13) express habits in retrospect. The predicates used, such as *y-ʕrif*('know' and *y-ħib* 'love', undergo a type-shifting process, transitioning from individual-level predicates to stage-level predicates. This shift occurs at the level of background assumptions, not in the lexical meaning of the predicates. As a result, there is no grammatical difference between the two predicates. Instead, the contrast arises from what is compatible with the context or our encyclopedic knowledge about the world (Chierchia, 1995).

Rather than quantifying over a set of existentially calculated events, habituals quantify over a set of intentional situations. Consequently, the individuals mentioned in (13) are not existentially calculated (Krifka et al., 1995). Therefore, *el-mʕalma:t* 'the female teachers' in (a) and *l-iwla:d* 'the boys' in (b)) do not refer to a specific, delimited group of individuals. Both constructions include a restrictor, such as *fi: es-sabʕi:na:t* 'in the seventies' and *kul jo;m* 'every day'. Hence, they are quantificational periphrastic habituals.

In (a), the teachers were involved in regular events of 'knowing' English and French during the entire period of the seventies. Similarly, (b) refers to multiple events of loving to play football every day in the past. The retrospective habits described in (a) and (b) cease before the speech time. Both include a perspective time that is distinct from the reference time, as they are incompatible with the adverb *hassa* 'now'.

However, periphrastic forms can also be constructed without a restrictor, allowing them to express variable situations at the VP level. The habitual operator is responsible for introducing event plurality. It's important to note that the progressive

reading with retrospective habituals that incorporate I-level predicates is deemed unacceptable because IL predicates typically express permanent, unchangeable properties. Consequently, the interpretation of habituals is context-dependent and relies on encyclopedic knowledge. This is evident in (14):

(14) a. el-mʕalm-a:t   ka:n-in   y-ʕrif-u: ʔingli:zi w   faransi:
         the-teachers-f.pl   3.used to-f.pl 3.know-pl English   and French
         (The (female) teachers used to know English and French)
   b. l-iwla:d   ka:n-u   y-ħib-u   ylʕab-u   ko:rah
      the-boys   3.used to-pl 3.love-pl   3.play-pl   football
    (The boys always used to love to play football)

The sentences in (14) convey a habitual reading without an explicit restrictor. The event plurality arises from the use of imperfective verbs such as *y-ʕrif* 'know' and *y-ħib* 'love'. The habitual readings expressed in these sentences are limited to events that occurred in the past but have ceased before the speech time. In other words, the denoted habits do not extend to the present moment.

For instance, the utterance in (a) denotes multiple occurrences of teachers knowing English and French, activities initiated by the teachers in the past. Similarly, (b) indicates that the boys were engaged in various instances of loving to play football over an extended period of time. Both habitual readings must be realized in the actual world.

4.3 Periphrastic Forms and K-level Predicates

Periphrastic habituals with the past auxiliary *ka:n* in JA cannot be formed using kind generics. Specifically, kind generics are unsuitable for expressing habits in retrospect because they typically denote permanent properties associated with a kind or a genus. This limitation arises because periphrastic habituals refer to variable situations that conclude before the speech time. Therefore, a permanent property cannot be terminated before the present moment. This is exemplified in (15):

(15) a.* el- ʔalma:n   ka:n-u   bixtaraʕ-u   d-dinamu
        The-Germans-Pl   3.used to-pl   3.invent-pl.IMP   the -dynamo
        (*The Germans used to invent the dynamo)
    b. * ed-dajna:sˤwra:t   ka:na-t   b-tenqareðˤ
         the-dinosaurs-pl   3.used to-pl   3.extinct.IMP
       (The dinosaurs used to be extinct)

The sentences in (15) are both grammatically and semantically infelicitous. K-level predicates are inherently incompatible with the periphrastic auxiliary *ka:n* because they denote essential properties applicable to kinds that cannot be terminated before the speech time. In (a), the property of inventing the dynamo is permanent and unchangeable, making it unsuitable for termination at speech time. Similarly, the property of extinction attributed to the kind 'dinosaur' in (b) is incongruous with the use of the auxiliary *ka:n*.

5. Conclusion

This study explores habitual markers in JA and highlights two main markers: the copular verb *bjku:n* 'Pres-be' and the past auxiliary *ka:n* 'used to'.

The copular verb *bjku:n* functions similarly to the verb 'to be' in English and is used in nominal sentences in JA to indicate habituality. Nominal constructions with obligatory covert copula involve SL predicates and can be interpreted in two ways: habitual and episodic. In contrast, nominal constructions with optionally null copula allow for a generic interpretation. The presence of an overt copula tends to promote a habitual interpretation as the more salient reading. Moreover, nominal constructions with essentially overt copulas exclusively promote a habitual interpretation when an

adverbial adjunct is incompatible with SL predicates in JA.

The second habitual marker is the past auxiliary *ka:n*. Periphrastic forms that incorporate S-level predicates express past habits over an extended period using *ka:n*. These forms describe habits that terminated before the speech time. Although periphrastic forms in JA behave like the perfective aspect, they are interpreted imperfectively. However, when periphrastic forms incorporate SL predicates without an adverbial adjunct, they become ambiguous, allowing for both habitual and non-habitual readings, with the context differentiating between them. These forms can also be constructed with IL predicates (Boneh and Doron, 2013). Kind generics, however, incorporating KL predicates, are unable to convey habits in retrospect.

An interesting implication of habitual sentences in the pedagogy of Arabic learning is worth mentioning. Habitual sentences in Jordanian Arabic carry substantial pedagogical significance for language learners. These sentences, which convey repeated or habitual actions, offer valuable insights into the language's structure and nuances. The integration of habitual sentence patterns into language instruction can enhance students' grasp of Arabic grammar, verb conjugation, and the concept of ongoing actions. Furthermore, these sentences provide a glimpse into the cultural and social dimensions of Jordanian Arabic, facilitating stronger connections between learners and native speakers and a deeper comprehension of the language's contextual use. Consequently, the inclusion of habitual sentences in Arabic language curricula stands to greatly enhance the learning experience, promoting a richer understanding of Jordanian Arabic and its cultural implications.

Appendix

Vowels in Jordanian Arabic

	Short			Long	
	Front	Back		Front	Back
Close	/i/	/u/		/i:/	/u:/
Mid		/ʊ/		/e:/	/o:/
	/e/				
Open	/a/			/a:/	
Diphthongs		/aw/, /aj/			

Consonants in Jordanian Arabic		**Labial**	**Dental**	**Denti-alveolar** plain	**Denti-alveolar** emphatic	**Post-alv./ Palatal**	**Velar**	**Uvular**	**Pharyngeal**	**Glottal**
Nasal		m		n						
Stop/	voiceless			t	tˤ		k			ʔ
Affricate	voiced	b		d	dˤ	dʒ	(g)			
Fricative	voiceless	f	θ	s	sˤ	ʃ		x	ħ	h
	voiced	(v)	ð	z	ðˤ			ɣ	ʕ	
Approximant				l		j	w			
Trill				r						

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