

## The Syntax of Answers to Positive Polar Questions in Jordanian Arabic

Osama Omari, Hadeel Mohammad, Aziz Jaber, and Mujdey Abudaljuh\*

Date of Submission: March 12, 2020

Date of Acceptance: July. 9, 2020

<https://doi.org/10.51405/18.2.10>

### Abstract

Responses to a polar question have recently received much attention in the syntactic literature (e.g., Yaisomanag, 2012 on Thi; Wu, 2016 on Taiwanese, Servidio et al., 2018 on Italian; among others). However, the syntax of yes-no questions in Arabic has been undermined in the literature. The present study provides a syntactic analysis of answers to positive/neutral polar questions in Jordanian Arabic. Jordanian Arabic is particularly relevant here because its system allows for a variety of answer expressions. For example, an answer to a polar question could be in the form of a particle (a: 'yes' and la? 'no') or a finite verb echoing the verb of the question. Following Holmberg (2016), we demonstrate that these expressions are full sentences derived by ellipses. We assume that a yes-no question has an unvalued, free polarity variable [ $\pm$ Pol] that needs to be assigned a value. Deriving the answer would provide a value for this variable. This involves copying the TP of the question and merging an answer particle or an abstract polarity feature (affirmative or negative) in spec-Foc to value the unvalued feature of Pol; then the TP of the answer gets deleted at the PF component under identity with the TP of the question.

**Keywords:** Polarity questions, Answers, Ellipsis, Jordanian Arabic.

### 1. Introduction

As Holmberg (2016) puts it, there are alternative answers to yes-no questions (polar questions). In English, for instance, a yes-no question like 'Does John like this book?' can be answered by an answer particle (yes or no), by a particle followed by a complete sentence ('Yes, he likes this book'), or by a partial sentence (e.g., 'Yes, he does'). In JA, yes-no questions can be answered by a variety of answer expressions. An affirmative or negative answer to a question such as (1) could be in the form of a particle optionally followed by a sentence (A1) or a verb (verb-echo answer) (A2)<sup>1</sup>.

---

© Copyright 2019 by The Society of Arab Universities Faculties of Arts, All rights reserved

\* Department of English Language & Literature, Yarmouk University, Irbid, Jordan.

<sup>1</sup> Unlike Standard Arabic, yes-no questions in JA are not marked by a question particle. They are marked by intonation.

1. ɪdʒa            Sami?  
came.3sg.M Sami  
'Did Sami come?'

A1: a: (ɪdʒa Sami).            /laʔ (ma ɪdʒa Sami).  
Yes (came.3sg.M Sami) / No (not came.3sg.M Sami)  
'Yes (Sami came).'        / 'No (Sami didn't come).'

A2: ɪdʒa.            /ma ɪdʒa.  
came.3sg.M /not came.3sg.M  
'Yes.'            / 'No.'

It is worth mentioning here that there are other ways of responding to yes-no questions in JA, such as using modal adverbs like *momken* (a:/ laʔ) 'maybe (yes/not)'. Our study, however, focuses only on two types of answers: answer particles and verb-echo answers.

While a few studies have investigated the syntax of answer expressions in languages such as Swedish (Holmberg, 2013), Finnish, (Holmberg, 2001), Thai (Yaisomenang, 2012), and Taiwanese (Wu, 2016), the syntax of these expressions in JA has not been investigated. Therefore, this study aims to fill in this gap in the literature. Following Holmberg (2016), we show that these answers are full sentential expressions derived by ellipsis.

The data for this study consist of examples that are verified by the judgment of the authors, who are native speakers of JA. The examples are verified further with the judgment of 4 other native speakers of the investigated dialect.

## 2. Background of the Study

This study builds on the recent developments of the theory of ellipsis within the minimalist framework (Kramer & Rawlins 2009; Holmberg, 2013, 2016). We also follow Rizzi's (1997) assumptions that the C-domain contains multiple head projections. However, since the grounds of the theory of ellipsis are basically semantic, we will briefly review these ideas, focusing on Hamblin's (1958, 1976) semantic analysis of yes-no questions.

According to Hamblin (1958, 1976), a yes-no question provides a set of mutually exclusive possible answers. When a yes-no question denotes a set of statements (propositions), these propositions are counted as possible answers whether they are true or false. A positive yes-no question is believed to carry a proposition (p), and it needs to identify whether this proposition (p) or its negation (-p) is true, as illustrated in (2).

2. Does John drink coffee? (p)

A1: John drinks coffee (p)

A2: John does not drink coffee (-p)

A yes-no question like (2), when being neutral (i.e. does not predict the addressee's choice of the true proposition), asks the addressee to identify which of the following propositions is true: John drinks coffee (p) or John does not drink coffee (-p). Thus, from a semantic perspective, the possible answers to a yes-no question are propositions.

On the other hand, different hypotheses have been proposed to account for the syntactic structure of these answers. Krifka (2013) analysed answer particles like *yes* and *no* as propositional anaphors that function as clause substitutes. They substitute for a whole clause referred to in the question. On the other hand, other studies have proposed that answers to yes-no questions are complete clauses derived by ellipsis (Kramer and Rawlins, 2009; Yaisomanang, 2012; Holmberg, 2013, 2016). Two versions of this hypothesis have been proposed in the literature. The first builds on a combination of pro-drop and VP-ellipsis to account for the derivation of answers to yes-no questions (Holmberg, 2001). However, this proposal has been criticised on the grounds that some languages, like Finnish and Welsh, have partial subject pro-drop (Holmberg, 2016). Therefore, Holmberg (2016) introduced what he called the "big ellipsis" model which allows for the ellipsis of a constituent big enough to contain the subject. According to Holmberg, the "big ellipsis" analysis suits languages that have some restrictions on pro-drop such as the restrictions on dropping the subject if it is indefinite. JA seems to have such restrictions. As shown in (3), when the subject of the question in JA is indefinite, the answer cannot be in the form of an echo-verb (3, A1). It can be in the form of an answer particle (3, A2) or a complete clause (3, A3).

3. ḥada adʒa ʕa-l-beit?  
 someone came.3sg.M to-the-house?  
 'Did someone come to the house?'

A1: \*adʒa.  
 came.3sg.M  
 'Yes.'

A2: a:  
 'Yes.'

A3: a: adʒa ḥada.  
 yes came.3sg.M someone  
 'Yes'

Roberts (2010) points out that subject pro-drop in languages with subject agreement works by the process of T copying all the  $\phi$ -feature values of the subject pronoun. Consequently, this subject can be deleted because it becomes a

copy of features in T, and the features in T are spelled out as agreement inflection on the finite verb. However, in the case of indefinite subject pronouns, Holmberg (2010) suggests that T cannot copy all the features of the indefinite subject pronoun because the indefinite quantifier feature does not have a counterpart in T. Even if T copies the person and number of the subject, it cannot copy gender. Since the indefinite subject pronoun will not be copied by T, it cannot be deleted. Since JA is a pro-drop language that shows some restrictions on pro-drop in answers to yes-no questions, the big-ellipsis analysis will be followed throughout this paper. Therefore, we will assume that the subject in verb-echo answers will be deleted along with the TP whenever its features are copied by T; the verb, in this case, will move to Pol to provide the abstract polarity feature with phonological content to be interpreted at the PF.

Holmberg (2016) proposes that every finite sentence should have a polarity phrase (PolP) endowed with a polarity feature within the TP domain. In declarative sentences, this feature is valued. It carries a positive polarity feature [+Pol] in affirmative declarative sentences, whereas it carries a negative feature [-Pol] in negative declarative sentences. However, in interrogative sentences, the polarity feature is unvalued; therefore, it needs to be assigned a value. Deriving the yes-no question would trigger a movement operation whereby the variable moves to the C-domain to assign a sentential scope to the disjunction encoded by the polarity variable. This disjunction provides two options: one is positive and the other is negative. This movement can be overt or covert. In languages like English, this movement is realized by an overt T to C movement. Moreover, in direct yes-no questions, there is an illocutionary force feature Q-force, which c-commands the polarity variable and the TP. Due to this feature, this variable needs to be assigned a certain value: [+Pol] (when the answer is yes) and [-Pol] (when the answer is no). Thus, the derivation of the question ‘Does Mary want tea?’ would be as follows:

$$4. [_{CP} \text{Q-force} [_{CP} [\pm\text{Pol}] \text{C} [_{TP} \text{Mary} [\mp\text{Pol}] \text{want tea}]]]$$

The role of the answer, at the level of derivation, is to assign a value to this variable. Assigning a value means copying the TP of the question and merging the focused polarity particle (yes [+Pol] or no [-Pol]) in the CP-domain, particularly in spec-Foc. After the focused particle assigns a value to the polarity variable, the TP is deleted in the PF component as it is identical to the TP of the question, and only the focused particle is pronounced. Alternatively, in some languages, the polarity variable can be assigned a value by an abstract polarity feature, but in this case, the abstract feature is provided with phonological content by the verb in order for it to be pronounced. Therefore, V moves to Pol and then to Foc, and thus the answer will be spelled out in the form of a verb.

### 3. Data Analysis

#### 3.1 Answer Particles *a*: ‘yes’ or *laʔ* ‘no’

As discussed in section (1), a common way of answering a yes-no question in JA is by the answer particles *a*: ‘yes’ or *laʔ* ‘no’, as shown in (5):

5. *idʒa*                      *Samiʔ*

came.3sg.M *Sami*

‘Did *Sami* come?’

A: *a*: (*idʒa* *Sami*)                      / *laʔ* (*ma idʒa*).

Yes (came.3sg.M *Sami*) / No (not came.3sg.M)

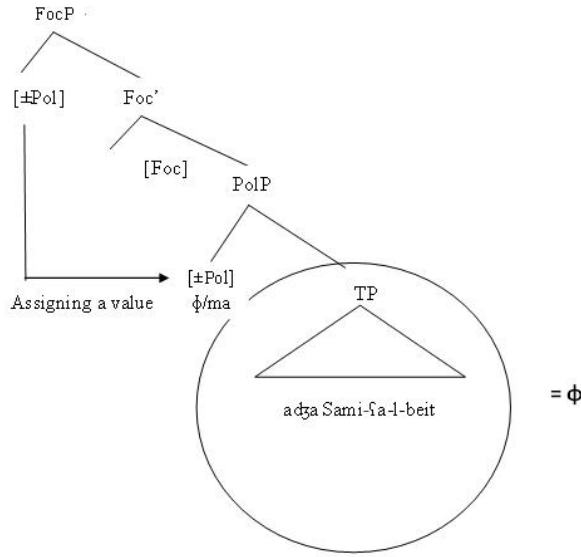
Since the question in (5) is neutral, having no expectations about what the answer could be, there are two possible answers (semantically two propositions) that are provided by the question: one is affirmative and the other is negative. Following Holmberg (2016), we assume that the question in (5) has a PolP which represents a free variable that needs to be assigned a certain value (positive [+Pol] or negative [-Pol]). The PolP is merged in the TP but then moves to the c-domain to assign a sentential scope to the disjunction. That is, the question denotes two propositions: *idʒa Sami* ‘*Sami* came’ or *ma idʒa Sami* ‘*Sami* did not come’. A Q-force feature is added. In this sense, it means: ‘Tell me which of the propositions *p* or  $\neg p$ , the denotations of PolP, is true’ (Holmberg 2016).

The head Pol is merged with an unvalued polarity feature. This unvalued feature, therefore, needs to be valued (Chomsky, 2001). Assigning a value requires a syntactic operation that copies the TP of the question including the PolP and merges an answer particle (either yes or no) in the focus position in the CP. This particle necessarily has one of the valued polarity features, [+Pol] or [-Pol]. In the case of affirmative answers like (5A), the particle *a*: ‘yes’ carrying the positive polarity feature [+Pol] is merged in spec-Foc; a ForceP with a declarative feature is also added to interpret the answer as declarative with a truth value. Consequently, the answer provides a value for the variable in the question indicating which of the propositions (*p* or  $\neg p$ ) denoted by the question the addressee states as true. In this case, the addressee states that *p* is true by answering with *a*: ‘yes’. The PolP with the TP can be deleted at PF since they are identical to those of the question. If the PolP is deleted, one of its features has to be spelled out. Therefore, the value [+Pol] which is encoded by the affirmative answer particle is spelled out as *a*: ‘yes’.

The derivation of negative answers, with the particle *laʔ* ‘no’, will go under the same process. The answer particle *laʔ* ‘no’ carrying a negative polarity feature [-Pol] is merged in spec-Foc; therefore, it assigns a negative value to the unvalued polarity variable. However, in this case, the negation marker *ma* ‘not’

would be the spelled-out form of [-Pol]. The derivation of answer particles is illustrated in (6).

6.



### 3.2 Verb-Echo Answers

According to Holmberg (2016), rich agreement morphology has significant clues to the ellipsis account of verb-echo answers. In other words, an answer consisting of a single verb marked for tense and subject agreement indicates that this answer is a sentence. As discussed in section (3.1), we assumed that the particles *a*: ‘yes’ or *laʔ* ‘no’ are externally merged in spec-Foc to assign a value to the Pol variable copied in the answer, but verb-echo answers such as (7) below do not have an answer particle.

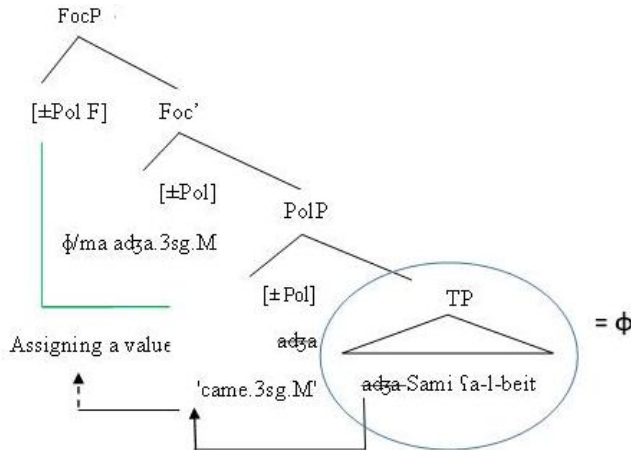
7. *ɪdʒa*            *Sami ʃa-l-beit?*  
     *came.3sg.M Sami to-the-house?*  
 A: *ɪdʒa.*            / *ma ɪdʒa.*  
     *came.3sg.M / not came.3sg.M*  
     ‘Yes.’            / ‘No.’

We assume, following Holmberg (2016), that this task in verb-echo answers is performed by a valued, abstract feature. Accordingly, in affirmative answers (7A), a positive polarity feature [+Pol] is externally merged in spec-Foc. However, this feature, being abstract, has no phonological content and thus comes with an empty phonological matrix. Therefore, according to Holmberg, this feature needs to copy the phonological matrix of the next head down the tree which has a phonological content. In this case, the head which provides a

phonological matrix to the empty feature [+Pol] would be the verb moving to Pol. This way the focused head is provided with the features needed to be spelled out at PF, and the Pol variable will be valued by the abstract feature. Since Arabic licenses the movement of the verb or the subject to positions higher than T in cases of focalization or topicalization (Aoun et al, 2010), we assume that the verb in verb-echo answers, being focused, raises to Foc via Pol. The verb, carrying the positive polarity feature [+Pol], will then be spelled out as an affirmative answer. We assume that the subject moves to spec-TP, but it gets deleted along with the TP in the PF since its features are copied by T (unless it is indefinite).

The derivation of negative verb-echo answers (7A) will go under the same process. However, the negative polarity feature merged in Foc does have a phonological matrix because in JA the negative polarity value is spelled out as *ma* 'not'. When the verb moves to Pol, it carries the negative polarity feature and moves to Foc to be spelled out as *ma adʒa* 'no'. The derivation of an affirmative/negative verb-echo answer is illustrated in (8) below.

8.



#### 4. Conclusions

Building on the theory of ellipsis (Holmberg, 2013, 2016), we conclude that anser particles and verb-echo answers reflect similar underlying syntax. We assume that yes-no questions include a Pol variable that needs to be assigned a value (affirmative or negative). Deriving the answer will provide a value to this variable. This involves copying the TP of the question and merging an answer particle, which necessarily has a valued polarity feature, in the spec-Foc position. After Pol being valued by the particle, the feature is realized in the form of an answer particle, and the TP is deleted in the PF component.

Alternatively, Pol can be valued by an abstract valued polarity feature merged in spec-Foc. In this case, V moves to Pol to provide a phonological matrix to the FocP, then V raises to Foc, carrying the valued feature of Pol, which eventually derives a verb-echo answer.

## الجواب على أسئلة الإيجاب أو النفي في اللهجة الأردنية: دراسة نحوية

أسامة العمري، هديل محمد، عزيز جابر، مجدي أبو دلبوح، قسم اللغة الإنجليزية، جامعة اليرموك، إربد، الأردن

### ملخص

لقد أصبحت تراكيب الأجوبة على أسئلة الإيجاب أو النفي محط انتباه النحويين في الآونة الأخيرة. ومن الأمثلة على الدراسات الحديثة في هذا الموضوع دراسة ياسوماناج (2012) بالتايلاندية، ووا (2016) بالتايلاندية، وسيرفيديو وآخرون (2018) بالإيطالية. ولكن يبدو أن نحو هذه التراكيب لم يلق الاهتمام الكافي من قبل الباحثين في اللغة العربية. تتناول هذه الدراسة نحو تراكيب الأجوبة على أسئلة الإيجاب أو النفي في اللهجة الأردنية التي يسمح نظامها النحوي بالإجابة عن مثل هذه الأسئلة بطرق متعددة. فعلى سبيل المثال، يمكن الإجابة عن أسئلة الإيجاب أو النفي باستخدام لفظ "آه" أو "أ" أو من خلال تكرار الفعل الذي استخدمه السائل في السؤال نفسه. وبناء على نظرية الحذف التي قدمها هولمبرج (2016)، نبين في هذه الدراسة أن ألفاظ أجوبة أسئلة الإيجاب أو النفي في اللهجة الأردنية هي جمل تامة تم حذف بعضها. ونفترض أن سؤال الإيجاب أو النفي يحوي متغيراً قطبياً مفتوحاً ( $\pm$ Pol) يحتاج إلى قيمة تحدده. هذه القيمة قد تكون موجبة (+Pol) أو سالبة (-Pol). ونفترض أن عملية اشتقاق الجواب هي المسؤولة عن تحديد قيمة هذا المتغير، بالاعتماد على نوع الإجابة مثبتة كانت أو منفية، حيث تتضمن عملية اشتقاق ألفاظ الإجابة نسخ المركب الزمني للسؤال (TP) ومن ثم دمج أحد حروف الجوب "آه" أو "أ" في مخصص المركب المركز (Foc-spec)، ثم يتم حذف الجزء المتبقي من المركب الزمني لأنه مماثل للمركب الزمني الموجود في السؤال.

الكلمات المفتاحية: الجمل الاستفهامية، الجواب المقدر، نظرية الحذف، اللهجة الأردنية.



## References

- Aoun, J., Benmamoun, E., & Choueiri, L. *Arabic Syntax*, Cambridge University Press, Cambridge, 2010.
- Chomsky, N. “Derivation by Phase”, in Hale K: A Life in Language, Kenstowicz M (ed.), MIT Press, Cambridge MA:, 2001, 1- 52.
- Hamblin, C. L., “Questions”, *Australasian Journal of Philosophy* 36, 1958, 159-68.
- Hamblin, C. L. “Questions in Montague English”, In *Montague Grammar*. Academic Press, 1976, 247-259.
- Holmberg, A., “The Syntax of Yes and No in Finnish”, *Studia Linguistica*, 55. No 2, 2001, 141- 175. <https://doi.org/10.1111/1467-9582.00077>
- Holmberg, A. “Answers to yes-no questions: a comparative study”. Handout of talk presented at Newcastle University, 13 October 2010.
- Holmberg, A. “The Syntax of Answers to Polar Questions in English and Swedish”. *Lingua*, 128, 2013, 31-50. <https://doi.org/10.1016/j.lingua.2012.10.018>
- Holmberg, A. *The Syntax of Yes and No*, Oxford University Press, Oxford, 2016.
- Kramer, R., & Rawlins, K. “Polarity Particles: An Ellipsis Account”, In *Proceedings of NELS* (Vol. 39), 2009.
- Krifka, M. “Response Particles as Propositional Anaphors”, *Semantics and Linguistic Theory*, 23, 2013, 1-18. <https://doi.org/10.3765/salt.v23i0.2676>
- Merchant, J. “Fragments and Ellipsis”, *Linguistics and Philosophy*, 27. No 6, 2005, 661-738. <https://doi.org/10.1007/s10988-005-7378-3>
- Rizzi, L. “The Fine Structure of the Left Periphery”, In *Elements of grammar*, Springer, Dordrecht, 1997, 281-337..
- Roberts, I. G. *Agreement and Head Movement: Clitics, Incorporation, and Defective Goals* (Vol. 59), MIT Press, Massachusetts, 2010.
- Servidio, E., Bocci, G., & Bianchi, V. “(Dis) agreement, Polarity, and Focus: Answering Negative Polar Questions in Italian”, *Glossa: A Journal of General Linguistics*, 3. No 1, 2018, 1–28. <http://doi.org/10.5334/gjgl.360>
- Wu, M. J., *The Syntax of Polar Questions and their Answers in Taiwanese*, Doctoral dissertation, Newcastle University, 2016.
- Yaisomanang, S., *The Syntax of Yes-No Questions and Answers in Thai*, Doctoral dissertation, Newcastle University, 2012.