

On the Parataxis of Arabic Split Questions

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Abstract

In this paper I present an analysis of split questions in Modern Standard Arabic. I argue that this construction is best analysed as a biclausal articulation, where two clauses are mediated by a special relation of coordination dubbed 'Specifying Coordination'. Contrary to the previous literature on split questions, I maintain on empirical and conceptual grounds that split questions are best derived in a movement-free fashion by treating them as a constellation of two well-motivated operations in the grammar: ellipsis and coordination. If on track, the merit of this proposal is to derive peripheral phenomena, such as split questions, from core principles of the grammar.

Keywords: Modern Standard Arabic, ellipsis, split questions, coordination.

1 Introduction

This article focuses on an underexplored structure of Modern Standard Arabic (henceforth Arabic), namely Split Questions (SQs).¹ An Arabic SQ as in (1) is characterized by there being a tag (boldfaced), which is both preceded by and related to a *wh*-word occurring in a *wh*-part (underlined).

- (1) ma:ða: ijtara: khalid-un, **kita:b-n/** kita:b-un
what bought.3SG Khalid-NOM book-ACC/ *book-NOM?
'What did Khalid buy, a book?'

Not only NPs can partake in SQs as in (1), since this articulation can apply to multiple syntactic categories, as illustrated in (2).

- (2) a. kajfa (pro) ka:na, ðakjj-an?
how (he) was, intelligent-ACC?
'How was he, intelligent?' [AdjP]

¹Though this is not the case from a crosslinguistic perspective where SQs are thoroughly examined. For relevant references, see [Arregi \(2007\)](#); [Botteri \(2015\)](#); [Wei \(2020\)](#); [Fernández Soriano \(2021\)](#). To my knowledge, the sole antecedent mention of SQs in the generative literature on Arabic is brought out, in passing though, by [Alzayid \(2022: p.216\)](#); nonetheless they are left to future research.

- b. ajan ixtabʔa Zayd-un, xalaf-a almszid-i
 where hided.3SG Zaid-NOM, behind-ACC the-mosque-GEN
 'Where did Zaid hide, behind the mosque?' [PP]
- c. kajfa saarat ʔl-umur-u, bi-s3:raʕt-n
 how went.3SG the-things-NOM, with-quickly-GEN?
 'How did it go, so quick?' [AdvP]

The examples in (1) and (2) raise an important question concerning the derivational journey of the tag: how is the tag related to the *wh*-word in the *wh*-part? One possibility is to propose that Arabic SQs are analyzed as a monoclausal configuration, where the *wh*-phrase and the tag are generated in the same clause on a par with the analysis put forward by [Camacho \(2002\)](#). By contrast, [Arregi \(2010\)](#) presents a convincing case against the monoclausal approach to SQs by arguing at length that an SQ articulation is best analyzed as a biclausal structure.

I show in §2 that the biclausal analysis meshes well with the peculiarity of Arabic SQs in that this analysis can nicely account for the perplexing nature of Arabic SQs: the fact that this construction simultaneously displays the properties of movement and base-generation. I further show that although illuminating, [Arregi's](#) biclausal analysis of SQs leaves unaccounted for what is the kind of relation underlying two clauses in a biclausal analysis. To this end, I propose a minor modification to [Arregi's](#) account, whereby the two clauses are maintained to be mediated by a relation of 'Specifying Coordination' ([De Vries 2009](#)). Moreover, the persisting claim made by [Arregi](#) is that the tag question, behaving as a fragment in the sense of [Merchant \(2004\)](#), undergoes focus fronting. Attractive as it may seem, this movement lacks for the motivation. Alternatively, I argue in §3 that Arabic SQs need no special operations such as focus fronting and that this construction is better understood to be an interplay of two operations in the grammar: ellipsis and coordination; see [Ott and Struckmeier \(2018\)](#) and references therein as a precursor of this account in the context of elliptical structures. §4 is the conclusion.

2 Arabic Split Questions: Clausal Juxtaposition

In the realm of the monoclausal approach to SQs, there is a possible binary option which suggests itself. On the one hand, it could be argued that the tag is related to the *wh*-word via a movement chain: the tag is initially generated in the thematic domain and then undergoes movement to a position in the skeleton of the clause. On the other hand, it could be argued as well that there is no a derivational link between the tag and the *wh*-word, and hence both elements are externally merged where they appear in the clause. Both options, however, are not without shortcomings since Arabic SQs exhibit mixed properties. More specifically, consider again the example in (1), where the tag surfaces in a morphological case and a θ -role which are determined internal to the *wh*-part. Thus, in (1), the tag and the *wh*-word are case-assigned accusative, and marked thematically as a theme, giving rise to the conclusion that Arabic SQs

are derived by movement, under the assumption that connectivity effects entail there being a movement chain which has been activated (Anagnostopoulou 1997).^{2 3}

On the other hand, an Arabic SQ as in (1) shows base-generation properties as well in that the *wh*-word is related to a full argument instead of a trace, which is unexpected in a run-of-the-mill filler-gap configuration (Adger and Ramchand 2005). Further, the fact that the tag as in (1) typically forms an intonational phrase on its own, which is rendered orthographically by means of a comma, cannot follow from a movement analysis. This is attributed to the claim that SQs are mapped onto an independent Intonational Phrase (IP), and hence the prosodic continuity of the tag with the rest of the host clause is cut off; see Frascarelli (2000) for a similar observation argued to hold for dislocation structures. In addition to this, Arabic SQs do not give rise to Weak Crossover effects (WCO); a bonafide feature of constructions generated by a construal rule (Postal 1971; Richards 2014).⁴

- (3) mæn₁ ʔmmu-hu₁ intaqadat t₁ lajlat-a ams-in, Khalid₁
 whom mother-his criticise.3SGF night-ACC yesterday-ACC, Khalid
 'Whom did his mother criticise yesterday night, Khalid?'⁵

Evidently, the main challenge for these approaches to SQs is the ambivalent status of the tag, which seems to appear within and outside the *wh*-part.⁶ Building on Ott (2015), Fernández-

²One way to nullify a movement dependency is to argue that the tags can be case-assigned from a base-generated position in parallel to the proposals made in Bošković (2007) and Villa-García (2015), but see Boeckx (2008) and Preminger (2011) for a dissenting view.

³One possible way to go about connectivity effects is to claim, à la Ott's (2011) analysis of split topics, that the *wh*-phrase and the tag were both base-generated in the same position, and thus both received the same θ -role and morphological case, before independently moving away from each other. In this case, the *wh*-phrase and the tag do not share a movement chain. This account, though, would give rise to the "danger of too many variables", as termed by Salzmann (2017: p.216) in a different context, since this operation would eventually involve two concomitant movement operations whose rationale is not warranted. Furthermore, it is unclear for me at this juncture how this analysis would capture the discursive nature of the tags in MSA SQs which is argued to be a strategy to mark contrastive focus in MSA; see below for further discussion.

⁴One test to diagnose an \bar{A} -dependency is to examine the presence of Weak Crossover effects (WCO). The original observation is that WCO is a configuration where an operator undergoes movement while binding two related elements: a trace left by a movement operation and a possessive pronoun, as illustrated in (i).

- (i) *who_i does her_i sister like t_i ?

In this example, the *wh*-word undergoes movement to the C-area leaving behind a trace and simultaneously crossing (hence the name 'crossover') the subject pronoun 'her'. The ungrammaticality of this construction is due to the inability of 'her' to receive a bound reading because it does not c-command the trace.

⁵Note, though, that this is achieved by a reading, although marked, but it is still possible under a discursive context which should be promoted to realize this possibility. Here's a conversational scenario:

Khalid made a mistake which got his mother angry and critical. To ease this tension, he cracked a joke in the form of a question as in (3) in the main text.

Under this reading (i.e. Khalid's mother criticized Khalid), Arabic cancels a WCO effect although there is a constituent (i.e. the *wh*-phrase) that is moved across a related constituent (i.e. the subject pro-form). Thanks for an anonymous reviewer for bringing this issue to my attention.

⁶Surveying the empirical landscape, it can be concluded that this behaviour is more or less reminiscent of the derivational paradox attested for constructions such as Left Dislocation and Right Dislocation which are thought to exhibit the same mixed properties. As succinctly summed by Vat (1997: 67): "(t)he challenge which the

Sánchez (2017, 2020) and Alzayid (2022), which are similar in spirit to the analysis proposed in Arregi (2010), I argue that Arabic SQs can be elegantly treated as a biclausal configuration. According to this analysis, the tag appears in a separate root clause from the one hosting the *wh*-word. Further, the clause containing the tag is reduced by deletion at PF, which targets the whole clause *modulo* the tag.^{7 8} By way of illustration, consider the example in (4) featuring the elliptical representation of (1).

(4) [CP1 *what_i* bought Khalid *t_i*] [CP2 ~~Khalid bought~~ a book]

With this in mind, it is time to cut the Gordian knot and see how the biclausal analysis can neatly explain the perplexing behaviour of Arabic SQs. As outlined earlier, the tag along with the *wh*-word share the same morphological case as well as the θ -role. This state of affairs, however, ceases to be surprising under the biclausal analysis: the similar θ -role is expected since the tag and the *wh*-word are generated in two different, but semantically parallel clauses as a licensing precondition for ellipsis. Therefore, the tag and the *wh*-word receive the θ -role in their respective clauses as the example in (5) illustrates (repeated from (1)): they are marked thematically by the same predicate *iftra* 'bought', each in its own clause. The same logic can be extended to explain the invariant morphological case exhibited by the tag and the *wh*-word in Arabic SQs: both are case-assigned by the same predicate.^{9 10}

(5) a. CP1 [ACC/theme *iftra: ma:ða:*] ... CP2 [ACC/theme *iftra: kita:ban*]
 b. CP1 [ACC/theme *bought what*] ... CP2 [ACC/theme *bought a book*]

Recall that Arabic SQs do not exhibit WCO effects. Although the literature on this re-
 construction of Left Dislocation (henceforth LD) [and Right Dislocation] presents to linguistic theory stems from the fact that it is difficult to determine whether it is purely base-generated or whether a movement rule-of some kind is involved.”

⁷Incidentally, this analysis has been the impetus for a plethora of proposals which maintain, with varying degrees of implementation, that an ellipsis-based analysis can account for a crosslinguistic family of dislocation structures, which are argued to have internal-clause properties, but at the same time they tend to favour an externally generated analysis. These structures include Clitic Left Dislocation (Ott 2015; Fernández-Sánchez 2020; Alzayid 2022), Clitic Right Dislocation (Ott and De Vries 2014; Fernández-Sánchez 2020; Alzayid 2022) and Contrastive Left Dislocation (Ott 2014).

⁸Nonetheless, there is a rival approach, contrary to the one argued for in the main text, maintaining that clausal ellipsis only involves non-sentential constituents (Stainton 2005; Progovac 2006); but see Merchant (2004) for a strong case against proposals along these lines. See also Algryani (2017) and Alzayid (2022) for a defense of the idea that a PF-reduced approach fares well with clausal ellipsis in Arabic.

⁹The question of ellipsis identity is still a matter of debate, and whether the elliptical clause must be syntactically or semantically identical to the antecedent clause (Van Craenenbroeck and Temmerman 2019). For the purposes of this article, I assume in line with Merchant (2001) that the relation underlying the two clauses in an SQ articulation is one of a semantic relation, which can be recast in mutual entailment terms: CP1 must entail CP2 as illustrated in (a) for the example in (6) (\Leftrightarrow denotes mutual entailment).

(i) CP1 [ACC/theme *iftra: ma:ða:*] \Leftrightarrow CP2 [ACC/theme *iftra: kita:ban*] A typical Arabic SQ

¹⁰It should be noted that ellipsis is not obligatory, but it is applied optionally to override a pragmatic oddity and discursive redundancy which are bound to arise if the non-elliptical form is pronounced.

calcitrant phenomenon is replete with a wealth of proposals (Safir 2017), what matters for our current purposes is that the absence of such an effect is typically taken to be amenable to a construal analysis. But this is not a tenable solution, as shown earlier, given the fact that Arabic SQs cannot be based on the territory of either movement or base-generation. Typically, WCO would ensue in case the tag crosses a coindexed pronoun. This crossover, however, is not a possibility under the biclausal analysis for independent reasons: since the tag is generated in different root clause undergoing ellipsis, then it is not expected that the tag would crossover a coindexed pronoun to begin with. This squarely explains the independent status of the tag: since the tag is independently generated in a different clause from the *wh*-part, it is not expected again that the tag would partake in the semantic and prosodic composition of the *wh*-part.

What is left unexplained under the analysis of Arregi (2010) is how two clauses are syntactically related in a biclausal configuration. One possible way to relate two clauses in an SQ configuration is to assume a parenthesis relation: the tag is parenthetical to the host clause, in that it is "linearly represented in a given string of utterance (a host sentence), but seem[s] structurally independent at the same time" (Dehé and Kavalova 2007: p.1). The question which has generated much controversy in the literature concerns how to derive parentheticals relative to the host clause; see Griffiths and de Vries (2019) and references therein. Under one view, parentheticals are syntactically integrated into the host clause (Haegeman 1991). Under a dissenting view, parentheticals are not part of the host clause (Ackema and Neeleman 2004). However, this dichotomous view does not fit nicely with SQs in Arabic, since tags in this language simultaneously display the properties of movement and base-generation as we saw from the foregoing discussion, and hence another syntactic relation is called for. For the purposes of this article, I assume that the relation which works well as a mediator between two clauses in Arabic SQs is a coordination relation dubbed "Specifying Coordination" harking back to Kraak and Klooster (1971), which is revived recently by De Vries (2006, 2009).

To spell out how this relational mechanism works, a bit digression is in order. As is well-known, coordination is a syntactic articulation where two or more units are related to one another by means of an overt particle with special semantics. Different kinds of coordination have been identified in the literature depending mainly on the particle involved: additive (and), adversative (or) and disjunctive (but) as illustrated in the examples below.

- (6) a. Zaid will teach chemistry and physics.
- b. Zaid will teach chemistry or physics.
- c. Zaid will not teach chemistry but physics.

The common denominator of coordination constructions illustrated in (6) is that they employ a particle with special semantics in a relation of *syndetic* coordination (i.e. a coordination configuration with an overt particle). This is not the only strategy to form coordination in natural languages, however, since these languages are known to make use of coordination structures

without having to employ an overt particle in a relation of *asyndetic* coordination (i.e. a coordination configuration without an overt particle). This is exemplified in (7), where coordination does not involve an overt particle.

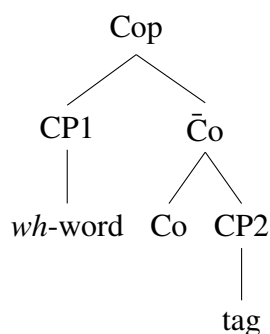
(7) Zaid invited all his friends, all classmates.

A thread running through the literature is the claim the traditional classification of coordination structures as in (6) is not rigorous enough to accommodate structures which are thought to involve asyndetic coordination with special semantics. An appositional configuration is a prime example to this effect.

(8) Have you met Zaid, your friend?

The example in (8) features an appositive construction composed of two elements: the appositive element (*my friend*) and the anchor (*Zaid*). According to De Vries (2006, 2009), appositives as in (8) cannot be semantically fit into the traditional classification as in (6). Building on an earlier work by Koster (2000), De Vries convincingly argue that the example in (8) involves a different coordination relation called 'Specifying Coordination'. As per this relation, the function of the appositive element is to identify, explicate and specify the anchor. As it stands, this coordination relation is taken to be a type of (i) asymmetric coordination, where the second coordinate explicates the first coordinate, and a type of (ii) asyndetic coordination where two coordinates are related to one another without there being an overt particle. Following this line of argumentation, I assume that the relation between CP1 and CP2 in Arabic SQs is mediated by a relationship of "Specifying Coordination". According to this syntactic relation, the role of the second conjunct is to 'specify' an answer for the first conjunct among many alternative answers. Stated in the realm of Arabic SQs, the tag is argued to specify or explicate the *wh*-word. The implementation of this type of coordination is translated by recourse to an X-bar scheme: the coordinator is a functional head projecting a Coordination Phrase (Cop), where CP1 and CP2 in Arabic SQs stand in a specifier-complement configuration. This is illustrated in (9) for an SQ articulation.

(9)



This specificational property of tags in Arabic SQs is triggered by a broad information-structural notion; *viz.*, cotransitivity. More specifically, I assume that tags in Arabic SQs are interpreted as (identificational) contrastive focus in the sense of Kiss (1998: 245) according to which tags in Arabic SQs "represent a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; it is identified as the exhaustive subset of this set for which the predicate phrase actually holds". One crucial aspect of contrastive foci is to provoke an alternative set in the sense of Roothian alternatives (Rooth 1992), which is in turn regulated in terms of delimitation by an exhaustive identification.

An important desideratum as far as the current analysis is concerned is the assumption that the contrastive interpretation of tags in Arabic is regulated by what is so-called 'Question Under Discussion' (QUD) (Roberts 2012; Büring 2003; Ott 2017). According to QUD, discourse is constructed in the form of a question and an answer. More precisely, the main goal for any conversation in rational discourse is an attempt to answer what is dubbed by Roberts (2012) 'the Big Question' (i.e. *what is the way things are*). For the sake of answering the Big Question (which is typically implicit, and can be explicitly phrased for current purposes in the form of a *what-happened* question), the interlocutors in a given conversational setting resort to strategies of inquiry typically rooted in "sequences of setup moves and questions ..". Two types of questions are thought to play a role in accommodating the Big Question: super-questions and subquestions; both of which are regulated by an entailment relation in that posing a superquestion would entail a subquestion. To be concrete, let us take an example to see an illustrative rendition of QUDs when applied to SQs in Arabic.

- (10) a. What happened? =The Big Question
 b. *ḏa:habə Khalid-un ?la l-maktabt-i*
 went.3SG Khalid-NOM to the-bookstore-GEN
 'Khalid went to the bookstore.'
 c. *ma:ḏa iʃtra Khalid-un min l-maktabt-i*
 what bought.3SG Khalid-NOM from the-bookstore-GEN?
 'What did Khalid buy from the bookstore?' =superquestion
 d. *iʃtra Khalid-un min l-maktabt-i kita:b-an?!*
 bought.3SG Khalid-NOM from the-bookstore-GEN book-ACC
 'Khalid bought a book from the bookstore?!' =subquestion

The response to the big question in (10b) features an "event-reporting" sentence, which is typically interpreted asthetic and all-focus (Vallduví 1990; Lambrecht 1994). As per the QUD scheme, there is already a stack containing an ordered set of unanswered questions (Roberts 2012) with an entailment relation involved, a state of affairs which amounts to a superquestion of the kind enumerated in (10c). Recast this in the context of SQs in Arabic, superquestions are flagged by the *wh*-part, and hence all instances of Arabic SQs are interpreted by postulating that the *wh*-part raises an implicit superquestion which must be addressed. This implicit superquestion in turn is resolved in (10d) by uttering a subquestion characterized by an asser-

tion, which is typically accompanied by a disbelief intonation (Arregi 2010). See among others Pierrehumbert and Hirschberg (1990); Armstrong and Prieto (2015) on how attitude and belief states of speakers can be encoded intonationally.¹¹ Given the fact the subquestion in (10d) is equivalent to the the superquestion in (10c) *modulo* the fragment matching the denotation of the *wh*-phrase, an ellipsis process is applied so as to avoid discourse redundancy¹², giving rise ultimately to fragmentary answers attested for tags partaking in Arabic SQs.

- (11) ʔftra ~~Khalid-un~~ ~~min l-maktabt-i~~ ~~kita:b-an?!~~
bought.3SG Khalid-NOM from the-bookstore-GEN book-ACC
'Khalid bought a book from the bookstore?!'

Note, crucially, that superquestions of the kind exemplified in (10c) could generate a set of contrastive subquestions corresponding to the *wh*-phrase. Though, only one element will be singled out as per the mechanism of identificational (contrastive) focus.

- (12) a. ʔftra Khalid-un min l-maktabt-i ~~kita:b-an?~~
bought.3SG Khalid-NOM from the-bookstore-GEN book-ACC
'Khalid bought a book from the bookstore?!'
- b. ʔftra Khalid-un min l-maktabt-i qalam-an?
bought.3SG Khalid-NOM from the-bookstore-GEN pen-ACC
'Khalid bought a pen from the bookstore?!'
- c. ʔftra Khalid-un min l-maktabt-i daffṭar-an?
bought.3SG Khalid-NOM from the-bookstore-GEN notebook-ACC
'Khalid bought a notebook from the bookstore?!'

That Arabic SQs are an instance of identificational focus, supplemented by an exhaustive iden-

¹¹One may wonder why is the elliptic clause a declarative phrase, rather than a polar question as in (i) below?

- (i) [what did Khalid buy] [~~Did Khalid buy~~ a book]

In particular, it could be argued that the above representation fits far better with our intuitions of what meaning is conveyed by SQs: first the speaker asks a *wh*-question and then one of the subquestions entailed by the *wh*-question. This is therefore an explicit expression of Roberts's (2012) QUD 'strategy of inquiry'. The above representation also explains why the tag is intoned as a question rather than as an assertion. Interesting as it may, this analysis comes at the cost of blurring the picture with the respect to the propositional nature of the tag in a SQ articulation. As far as MSA is concerned, the speaker does make an *assertion* in this context, not merely poses a question, which can be explicitly paraphrased as 'Khalid did buy a book, really!' with an exclamation mark being operative. This is strongly reinforced by the fact that the intonation of the tag in Arabic SQs is typically flagged by a disbelief prosody. Of course this does not exclude the possibility that the elliptic clause can be interpreted as a polar question, but this possibility is not corroborated by the intuitions of my informants. Due to space constraints, careful discussion of this issue is beyond the scope of this article, and hence I am obliged to leave it to future research.

¹²This can be explained by recourse to Levinson's (2000) the Informativeness Principle (The I-Principle) as illustrated in (i).

- (i) The *I-principle*
Say as little as necessary, that is, produce the minimal linguistic information sufficient to achieve your communicational ends.

tification, is much clearer when considering those questions with predicates which happen to hold of others as the example illustrated in (13b).

- (13) a. ma:ða iftra Khalid-un min l-maktabt-i
 what bought.3SG Khalid-NOM from the-bookstore-GEN?
 'What did Khalid buy from the book store?'
 b. #KITA:B-AN, QALAM-AN
 book-ACC, pen-ACC

In particular, the infelicity of (13b) is attributed to the claim that the predicate in this instance does hold of others. As it stands, this runs counter to the property of contrastive focus according to which there is a need to identify a subset, meaning that the predicate in (13b) hold of others, amounting to an infelicitous string.

Central to QUDs in the context of SQs is the question of felicity: what are the conditions underlying a felicitous question-answer congruence? For purposes of the current article, I assume that there are two conditions at play (i) the question (i.e. the superquestion) must be syntactically well-formed and (ii) the answer, contained within the subquestion and flagged by the tag, must be a fragment which is subject to an exhaustive identification. If one of these conditions are not met, a felicity violation would ensue. As it will transpire in the next section, these conditions will prove to be fruitful explanans when examining cases depicting a violation of island constraints.¹³

3 Split Questions in Arabic: To move or not

Note, finally, that an important tenet in Arregi's (2010) biclausal analysis is that ellipsis feeds movement. In other words, the tag must undergo movement before the ellipsis operation is applied to the whole clause as in (14), repeated from (1).

- (14) [CP₁ what_i bought Khalid_i] [CP₂ a book_i ~~Khalid bought t_i~~]

The original observation is that this movement is necessary so as to satisfy what is taken to be a standard assumption in current syntactic theorizing: syntactic operations operate on constituents (Merchant 2004). To circumvent non-constituent ellipsis, Merchant maintains that the derivation of ellipsis involves two processes: (i) the remnant (i.e. the element which escapes the domain of ellipsis) undergoes movement to the left periphery, and then (ii) the whole clause, where the remnant is generated, undergoes deletion; see Merchant (2004); Weir (2014) a.o. According to Merchant (2004: p.674), non-constituent ellipsis is barred under this analysis for principled reasons; particularly, under the assumption that ellipsis is triggered by the [E] feature occurring on a head, non-constituent ellipsis is not even a possibility since deletion under this

¹³To be sure, this is an overly simplified exposition of QUDs, but it suffices for the current purposes. For an elaborate and formal rendition of QUDs as far as SQs are concerned, see Arregi (2007); Botteri (2015).

analysis obligatorily targets a full-fledged constituent (i.e. the TP complement). This is known as the Move and Delete Approach (MADA). One trigger for the postulation of [E]-feature is the claim that there is a discrepancy in sluicing between interrogatives (15a) and relative clauses (15b): while sluicing is fine for interrogatives, it is ruled out in relative clauses.

- (15) a. Someone has talked to me, but I do not know who ~~talked to me~~.
 b. *Someone has talked to me, but I do not know the person who ~~talked to me~~.

To go about this discrepancy, Merchant (2001) stipulates that this is explained by recourse to a feature-based analysis: while ellipsis feature in interrogatives is specified for strong features [WH] and [Q], relatives are only specified for [WH] feature rendering them opaque to movement. As noted by many authors (Murphy 2016; Thoms 2010), this is an *ad hoc* analysis since it relies on the unwarranted claim that there are functional heads licensing elision by merely having an ellipsis feature.

A prime rationale behind a movement operation which is argued to hold for fragments is that it is triggered by a focus feature in the left periphery; see Weir (2014) and references therein. This is however an implausible solution since there are elements in Arabic which can behave as fragments, nonetheless they cannot undergo movement in a non-elliptical form as in (16), thereby amounting to the unexpected outcome that there is a dichotomy between elliptical forms and their parallel non-elliptical ones. As it stands, this discrepancy is mysterious and indeed runs counter to the claim of proponents of the MADA according to which "the postulated movement operations would have to bear the hallmarks of regular, non-elliptical \bar{A} -movement" (Van Craenenbroeck and Merchant 2013: p.721).¹⁴

¹⁴An anonymous reviewer cites the following example, as a manipulation of the example enumerated in (17) in the main text, showing that there are elements in Arabic which can behave as fragments, and simultaneously can be fronted in a non-elliptical sentence.

- (i) laa, [bal] asswad-an kan lawn fustan-ha
 No, [evidently] black.ACC was color dress-her
 'No, BLACK was the color of her dress'.

While I agree with the reviewer, my claim on the immobility of some elements in Arabic is not meant to be a blanket statement, but rather it is built around immobile elements in Arabic occurring as NP complements within the domain of transitivity as shown by the example in (iii), which is not unlike the example cited in (17) in the main text.

- (ii) a. hal kant tɔʃəʔziʃu Real Madrid?
 Q was support.SGF Read Madrid?
 Was she supporting Real Madrid?
 b. laa, [bal] Barcelona.
 No, [evidently] Barcelona.
- (iii) *Barcelona_i kant tɔʃəʔziʃu t_i
 '*Barcelona, was [she] supporting'

As indicted by the ungrammaticality of the example in (iii), fragments occurring as complements within the c-command domain of transitive verbs appear to be immobile. Interestingly, this observation seems robust in the

- (16) a. hall ka:nat talbʔsu fusta:n-an as^ʕfara-an
 Q was wear.3SGF cloth-ACC yellow-ACC?
 'Was she wearing yellow dress?'
 b. laa, [bal] ASSWAD-AN
 No, [evidently] black-ACC
- (17) *ASSWAD-AN_i ka:nat talbʔsu fusta:n-an i_i

Moreover, focus fronting is optional in Arabic, meaning that focused elements in this language can appear in clause-final, clause-internal and clause initial position rendering obligatory focus fronting unnecessary (Alzayid 2022: 147).¹⁵

- (18) CONTEXT: Did you give the winner a car?
- a. Laa. ʔaʕt^ʕajitu ʔl-faijz-a BAYT-AN
 No. gave.1SG the winner-ACC house-ACC
 'No. I gave the winner a house'
- b. Laa. ʔaʕt^ʕajitu-hu BAYT-AN, li ʔl-faijz-i
 No. gave.1SG-him house-ACC to the-winner-GEN
 'No I gave the winner a house'
- c. Laa. BAYT-AN ʔaʕt^ʕajitu ʔl-faijz-a
 No house-ACC gave.1SG the-winner-ACC
 'No. I gave the winner a house.'¹⁶

syntax of Arabic, suggesting that transitivity in Arabic has a blocking effect on movement chains. As it stands, this state of affairs is highly reminiscent of immobile elements cited in the literature which are notoriously known to defy movement, as is the case with the goal extraction ban in the English ditransitive construction (Sato et al. 2018), TP complements of an overt C attested in English as well (Abels 2003; Sailor and Thoms 2014), modal particles in German (Ott and Struckmeier 2016) and bare quantifiers as well as negative polarity items (Weir 2014; Valmala 2007). It remains an interesting question whether these immobile elements form a natural class from a typological perspective, an issue which is worth exploring in future research.

¹⁵Although Arregi (2010) notes that his analysis does not hinge on this detail, he nonetheless proposes that the tag, flagged by a focal import, undergoes movement to the left periphery in line with the cartographic approach to information structure. As it stands, the Arabic example in (18) casts doubts on the cross-linguistic validity of the cartography approach to information-structural notions according to which there is a one to one correspondence between interpretation and syntactic positions. Arabic is not a quirk though (see Bakir 2011; Alzayid 2022 for relevant discussion), since the incompatibility of the cartographic approach to information-structural notions has been noted from a cross-linguistic perspective. See, among others, Van Craenenbroeck (2009), Pereltsvaig (2004) and Neeleman et al. (2009).

¹⁶An anonymous reviewer notes that while focus in Arabic is an everywhere process, this nonetheless does not exclude the argument that under ellipsis fragment answer moves to clause initial before deletion. In fact, this argument is roughly reminiscent of Ouhalla (1994, 1997) according to which while contrastive focus undergoes movement to a dedicated focus projection in the C-area of the clause, this is not the case for focus denoting new information which remains in situ. However, this does seem on the right track. More specifically, I argue elsewhere (in preparation) that the apparent complexity and diversity of focus in this language is illusory, and epiphenomenal, emerging from the interaction of focus expressions and right dislocation—to wit, focalization in MSA occurs in situ, specifically in the rightmost position, with string-initial focus and string-internal focus being taken to be a reflex of an interfering right dislocation process targeting an IP-external position. Incidentally, and as an aside, the prohibition on the mobility of fragmentary answers in MSA, *qua* focused constituents, can be explained by recourse to the Criterial Freezing approach (Rizzi 2004). The original datum is that information-structural positions are traps, meaning that they block movement of elements filling them. Assuming that fragmentary answers in MSA are located in a low Spec-Focus (i.e. a Criterial Freezing position) in the wake of the cartographic desiderata grounded on the low IP area, a discourse-laden projection sandwiched between IP and vP (Belletti 2001, 2004),

On the analysis of [Arregi \(2010\)](#), movement is epitomized by two diagnostics: Preposition Stranding (PS) and islands sensitivity. Attending first to the PS generalization which is taken as symptomatic of movement of fragments ([Merchant 2001](#)), it has been argued that there is a correlation between the (non)availability of PS and a regular *wh*-movement. More specifically, English allows PS under regular *wh*-movement, meaning that this language allows PS under clausal ellipsis. German, by contrast, is not a PS language, and hence the preposition must be pied piped; see [Merchant \(2001\)](#) for a list of cross-linguistic examples. Several counterexamples to the PS generalization, however, have been noted in the literature with the Arabic varieties being the notable ones in the current context. For example, it has been noted that the PS generalization does not apply to Libyan Arabic ([Algryani 2012](#)), Emirati Arabic ([Leung 2014](#)) and Jordanian Arabic ([Albukhari 2016](#)).¹⁷ As far as Modern Standard Arabic is concerned, [Algryani \(2017\)](#) puts forward an argument which apparently seems to furnish a piece of evidence in favour of the PS generalization: MSA is a non-PS language, and hence PS is not allowed in fragments (19) and full sentences (20).¹⁸

they get frozen there, and thereby they cannot undergo movement. At any rate, a unified analysis of focus in Arabic seems promising, with the resulting outcome strongly lending support to [Samek-Lodovici's \(2006\)](#) model of a focus-less split CP, giving evidence that the rightmost analysis of focus ([Zubizarreta 1998; Samek-Lodovici 2006, 2015](#)) covers historically unrelated languages.

¹⁷In an attempt to rescue the PG generalization, [Albukhari](#) and [Algryani](#) flesh out an analysis by which the offending cases can be reanalyzed as cases of pseudosluicing where a regular *wh*-movement is not involved. This is untenable, however, since case-matching is characteristic of pseudosluicing, a property which is not found in Arabic dialects, rendering the reanalysis inapplicable. See [Alzayid \(2022\)](#) for relevant discussion

¹⁸An anonymous reviewer does not agree that that (19a) is unacceptable. According to the reviewer, there are 14 structures in Standard Arabic cited in [Hasan \(1978\)](#), where it is claimed that it is possible to elide the preposition while keeping the genitive case for the following NP. One of these structures is fragment answers for interrogative structures as illustrated below.

- (i) fi ayy bald qadit al.:ams?
in which country spent the.yesterday?
'In which country were you yesterday?
- a. alqahira
Cairo

While I agree with the reviewer that there are indeed cases where it is possible to elide the preposition while preserving the genitive case marking, my point is not meant to be a blanket statement about prepositionless fragments *in toto*, but rather it is restricted to *with*-prepositions in Arabic; namely, it seems that eccentric *with*-prepositions have a special semantics in that they are pied-piped along with a co-occurring fragment. Incidentally, this is augmented by the fact that *with*-prepositions in Arabic are not counted towards 14 structures cited by [Hasan \(1978\)](#) which are thought to license prepositionless fragments while keeping the genitive case marking, suggesting that there is something special about some prepositions in Arabic. Incidentally, it seems that Arabic is not peculiar to this effect. For example, *with*-prepositions in English are only deletable in some contexts; namely, only the preposition of the first remnant can be deleted as the examples illustrated below ([Dowty 1988](#)); see [Bruening \(2015\)](#) for further discussion.

- a. Mary caught a fish with a spear and a rabbit with a snare.
- b. *Mary caught a fish with a spear and a rabbit a snare.

In a same vein, French, a nonstranding language, displays an interesting pattern with respect to so-called 'orphan prepositions'. In particular, the preposition 'with' (*avec*) in this language can be left out in SQs (iia), suggesting that this absence is correlated to the fact that this preposition can be stranded (iib). See [Authier \(2016\)](#) and

- (19) maʕa man taḥaddaθat Hind-un?
with who talked.3SGF Hind-NOM
'With whom did Hind talk?'
- a. *Zayid-en
Zayid-GEN
- (20) *Zayid-en taḥaddaθat Hind-un maʕa
Zayid-GEN talked.3SGF Hind-NOM with
'Hind talked with Zayid'

As argued by [Alzayid \(2022\)](#), MSA is not a non-PS language in all contexts, pointing out that PS is blocked in non-elided clauses, but possible in fragmentary answers (cf. 21b) when they involve in explicit contrast contexts. Once this confound is controlled for, prepositionless fragments are possible in MSA, indicating that MSA is still anathema to the PS generalization.¹⁹

references therein for further discussion.

- (ii) a. avec qui a-t-il parlé, (avec) Marie?
with who has.he talked (with) Marie
'Who has he talked with, Marie?'
- b. Marie, il est parti avant de parlé avec
Marie he is left before of talk with
'Marie, he left before talking to her'
- ([Arregi 2010](#): p.572)

As it stands, the retention of prepositions in a given configuration (or the omission thereof) varies from a crosslinguistic perspective. Alas, due to time and space constraints, I postpone an elaborate investigation of facts till future work.

¹⁹An anonymous reviewer correctly notes that given that fragment answers are inherently contrastive structures. Why is (19a) unacceptable but (21b) is acceptable? While I agree with the reviewer that fragment answers are inherently contrastive, but I pursue here the hypothesis that there is a distinction between explicit and implicit contrast in that prepositionless fragments in Arabic are possible if they are contrasted with an explicit contrast set contained in the question domain as in (21). This distinction is based on the assumption that there is a dichotomy between focus and contrastive focus; namely both are argued to evoke alternatives *à la* [Rooth \(1992\)](#), but they differ on how these alternatives are realized: while the alternatives of focused items may remain implicit, this is not the case with the alternatives of a contrasted item in that they must be explicit ([Repp 2010](#)). I interpret the obligatory explicitness of the alternatives of contrastive focus as an anaphoric condition—to wit, clefts, the archetype of contrastive focus ([Kiss 1998](#)), are typically correlated to anaphoricity ([Delin 1992](#)); consequently and on a par with this correlation, I assume that an explicit contrast set invokes a high degree of anaphoricity which is taken as a prerequisite for fragments in Arabic to appear prepositionless; see [Ouhalla \(1999\)](#) on clefts and pseudo-clefts in Arabic. Another possible interpretation is also rooted in a non-syntactic condition in the sense of [Nykiel \(2013\)](#). According to this author, the preposition retention in sluicing is dependent on the informational make-up of correlates and remnants. By way of illustration consider the minimal pair in (i).

- (i) a. A Fox 29 reporter was attacked by a senator, but I can't remember (by) which (senator).
b. *A Fox 29 reporter was attacked by somebody, but I can't remember (by) which (senator).

The ungrammaticality of (b) is attributed to the assumption that the correlate (i.e. somebody) is not salient enough, and hence the remnant, *qua* a more elaborate anaphor, is licensed by a correlate with a less anaphoric nature, rendering the sentence in (b) ungrammatical. See [Almor \(1999\)](#)'s Informational Load Hypothesis, cited in [Nykiel \(ibid.\)](#). Recast this claim for current purposes, prepositionless fragments in an Arabic SQ context are licensed by an explicit contrastive correlate. This would, as a result, evoke a high degree of anaphoricity on the part of the interlocutors; if this condition is not met, the ungrammaticality would ensue as in (19a). In a same vein, P-stranding and the conditions regulating the retention or elision of prepositions can be explained by making a

- (21) a. maʕa man taħaddaθat Hind-un? maʕa Alij-an?
 With who talked-3SG Hind-NOM? with Ali-GEN
 ‘with whom did Hind talk’
- b. [bal] (maʕa) Khalid-en wa lajsa Alij-an
 [evidently] (with) Khalid-GEN and not Ali-ACC

Island constraints seem to be a straightforward matter as far as Arabic SQs are concerned: SQs straddled by islands give rise to an ungrammatical string as in (22) featuring the Complex NP Constraint (for convenience, the island domain is put in brackets in (23)).

- (22) *yʔajj-u mawḏʕu:ʕ-in samiʕta a-ssija:sij-a allaḏi: jataħaddaθu ʕan,
 which-NOM topic-GEN heard.3SG the-politician-ACC who talk.3SG about,
 ʕan l-batʕlah
 about the-unemployment?
 Intended ‘Which topic did you hear the politician talk about, unemployment?’

- (23) about the unemployment_i ~~about [which topic heard the politician who talk_i]~~

At first blush, this lends credence to the analysis of [Arregi \(2010\)](#) according to which island constraints would apply if the tag undergoes movement to escape the domain of ellipsis as depicted in (23). Nonetheless, I propose that a unified analysis of SQs in Arabic should be advocated in that locality constraints can be explained by invoking pragmatics, specifically by exploring how congruent QUDs are. In particular, the locality conditions attested for (22) can receive an alternative non-syntactic analysis by probing into the make-up of the implied questions involved in Arabic SQs, which are regulated by a QUD-based scheme as shown earlier. Therefore, the source of deviance in (22) is not attributed to the claim that the tag undergoes movement, but to the argument that QUDs are syntactically ill-formed to be accommodated by congruent answers.²⁰

reference to prosody. An interesting treatment to this effect is that of [Philippova \(2014\)](#). According to this author, P-omission is determined by the “prosodic weight” of the P: only those Ps which have an independent prosodic unit can be omitted freely. It remains to be seen though how P-stranding in its entirety behaves either in Arabic or across world languages, a topic which is indeed beyond the scope of this paper, and hence I am obliged to leave it to future work.

²⁰An anonymous reviewer correctly points out that if one assumes that an Arabic SQ is a movement-free structure followed by ellipsis, this directly presupposes that an Arabic SQ involves non-constituent ellipsis, in contradistinction to the widely-held claim that syntactic operations target constituents. Yet as many authors note, the notion of ‘non-constituent ellipsis’ is unwarranted, since this structure can be derived by successive application of constituent ellipsis ([Sailor and Thoms 2014](#): p. 361); see also [Griffiths \(2015](#): p. 47ff) and [Ackema and Szendrői \(2002\)](#). Another possible way to depart from these syntactic contortions is to simply make reference to the PF-branch of the grammar by adopting an old view harking back to [Chomsky and Lasnik \(1993](#): 546). The datum is that ellipsis is “determined within the PF-component”; see also [Tancredi \(1992\)](#). This view has been maintained by [Abe \(2015, 2016\)](#), [Fox \(1999\)](#), [Ott and Struckmeier \(2016, 2018\)](#) and [Fernández-Sánchez \(2017, 2020\)](#) among others. The original observation of this view is that ellipsis is a type of ‘radical deaccentuation’. In fact, this line of reasoning has non-trivial merits with respect to the in-situ analysis defended in this paper. First, the problematic issue of so called ‘non-constituent ellipsis’ will not arise, since ellipsis is relegated to phonology, which is thought to be orthogonal to syntactic constituency. Second, due to the assumption that ellipsis is a form of deaccentuation, exceptional movement of remnants is rendered obsolete since fragments of the kind illustrated in the main text can be derived without recourse to movement if the phonological view of ellipsis is maintained. For ease of exposition, ‘deaccentuation’ is marked by SMALL CAPS in (ii). See [Alzayid \(2022\)](#) for an earlier and

To appreciate this point, consider a reconstruction of the example in (22) depicted in (24).

- (24) a. *yʔajj-u mawðʕu:ʕ-in samiʕta a-ssija:sij-a allaði: jatahaddaθu
 which-NOM topic-GEN heard.3SG the-politician-ACC who talk.3SG
 ʕan, ʕan l-batʕlah
 about, about the-unemployment?
- b. *ma:ða: jatahaddaθu ʕan
 what talks about
 'what does he talk about?
- c. #ʕan l-batʕlah
 about the-unemployment.

The fragment in (24c) is infelicitous in this context given the fact that both the explicit superquestion in (24a) and the subquestion in (24b) are not syntactically well-formed in Arabic to begin with, rendering the tag semantically uncomputable, and pragmatically infelicitous.²¹ As it stands, what I suggest is that the tag does not move in Arabic, but it stays in situ, and the locality constraints can receive a principled account by provoking pragmatics and exploring how questions are formed in Arabic.²² This is indeed an elegant solution given the fact that the tags in Arabic behaving as fragments are not an easy pass for the tests typically garnered in favour of focus fronting as shown earlier, and hence the current analysis treating tags in Arabic SQs as unmoved ones capture a recurrent regularity underlying the behaviour of Arabic SQs, thereby obviating the need to look at Arabic SQs as a fragmented mosaic in terms of the derivation. For related (and precedent) analyses arguing that the locality conditions attested for clausal ellipsis can be explained by recourse to pragmatics, see [Griffiths and Lipták \(2014\)](#); [Griffiths \(2019\)](#); [Ott and Struckmeier \(2017\)](#); [Ott \(2017\)](#).²³

similar analysis for the behaviour of fragments partaking in Arabic dislocation, which are argued to be a result of an in-situ process of elision.

- (i) a. hal kaant talbʔsu fustan-an abyadd-an
 Q [was] wear.3SGF cloth-ACC white-ACC?
 'was she wearing white clothes?
- b. laa, [bal] asswad-an
 No, [evidently] black-ACC
- (ii) [KAANT TʔLBASU FUSTANAN] asswad-an

²¹Note though that the data are constructed in a resumption-free fashion. This is indeed a crucial variable to control for due to two reasons: (i) resumption is known to neutralize islandhood in Arabic ([Aoun et al. 2010](#); [Soltan 2007, 2011](#)) and (ii) the ultimate goal of the current paper is to examine the derivational history of SQs in Arabic without making reference to resumption, which is a confounding factor in this context. Though, it is worth exploring in future work how resumption interacts with SQs in Arabic.

²²It could be maintained as well that this is a corollary of the assumption that focus phrases are island-sensitive. See [Krifka \(2006\)](#) and [Reich \(2002\)](#) for relevant discussion.

²³Incidentally, the first mention of islands as a diagnostic for movement can be traced as far back as [Ross \(1967\)](#). Interestingly, [Chomsky \(1977: p.86\)](#) popularises this idea where movement is taken to be symptomatic of movement. He writes

When we find such a configuration [a dependency involving a gap, and obeying island constraints] in the data, [we can] explain it on the assumption that the configuration results from *wh*-movement.

4 Conclusion

In this article, I have shown that the bisentential analysis of SQs as motivated by [Arregi \(2010\)](#) can be applied to Arabic, but with introducing a crucial caveat which aims at cancelling a movement dependency argued by [Arregi](#) to underlie the derivation of SQs. Under this approach, an SQ is analysed as a biclausal configuration, where the clause containing the tag is reduced by ellipsis at PF, thereby eschewing the need to enrich the syntax of Arabic SQs with a two-pronged account, which proves to be a suspect from a minimalist perspective. This connects to a prime advantage for the analysis defended here by maintaining that the tags in Arabic SQs do not undergo an exceptional movement, *pace* [Arregi \(2010\)](#), and hence nullifying this operation which is argued to be construction-specific ([Boone 2014](#)). If this analysis is on the right track, this ultimately means that the grammar is relieved of a constructional remnant, thereby decomposing peripheral phenomena, such as SQs, into irreducibly core principles of the grammar. See [Chomsky \(1993\)](#) for a discussion on the dichotomy core vs. peripheral. See also [Ott \(2015\)](#) for a conclusion along these lines with respect to the optimal derivation of Clitic Left Dislocation (CLLD).

In other words, the conditions [presence of a gap, and island constraints] serve as a kind of “diagnostic” for *wh*-movement.

As rightly noted by [Boeckx \(2003\)](#), this has remained the orthodox view in the literature despite the fact that the very notion of islands has been subjected to a persistent debate on its practicality as a viable test for movement chains.

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