



Structural challenges in English>Arabic simultaneous interpreting

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Abstract: This article reports on an empirical investigation into language-specific factors and strategies pertaining to syntactic asymmetry in English>Arabic simultaneous interpreting. It discusses the disparity between subject-verb-object (S-initial) and verb-subject-object (V-initial) structures when complicated by long and/or complex initial subjects in the source language (SL). These types of complex initial structures in the subject position significantly *delay* the verb that is *normally* needed to start sentences in Arabic. I hypothesise that professionals are more likely to follow SL structures to cope with complex initial subjects and avoid memory overload, information loss or failure. I propose that they do so using what I refer to as the strategy of *not waiting for the verb*, utilising Arabic word-order flexibility which offers nominal clause structures similar to the English S-initial structure. Three English speeches from real-life conference settings were analysed. The analysis focused on English sentences with complex initial subjects and their different renditions in multiple authentic Arabic simultaneous interpretations. The results of the analysis and fidelity assessment supported my hypothesis in relation to strategy and “language-pair specificity”, indicating a preference for “form-based processing”. The analysis also supported the difficulty of interpreting complex initial subjects. The strategy of *not waiting for the verb* was found to contribute to greater completeness and accuracy, albeit the latter to a lesser extent. It can be proposed as a complementary strategy to ‘waiting’, ‘lagging’, ‘restructuring’, ‘anticipation’, and so on. This approach could enhance (would-be) interpreters’ repertoire of potentially useful options, particularly when other approaches may lead to memory overload, omission or information failure.

Keywords: language-pair specificity; syntactic asymmetry; interpreting strategies; S-initial and V-initial structures; complex initial subjects, Arabic simultaneous interpreting

1. Introduction

Structural asymmetry has been widely debated in the literature on simultaneous interpreting (SI) and closely linked to the discussion of interpreting strategies. A great deal of literature has discussed difficulty in interpreting involving languages with left branching structures such as German, Chinese and Japanese. Scientists belonging to the “natural science” group (Moser-Mercer, 1994, p. 17), also known as the “bilateralists” (Setton, 1999, p. 53) attach considerable significance to language-pair syntactic asymmetries. The bilateralists adopt a “form-based” (Isham, 1994, p. 207) approach to the analysis of the interpreting process.

It is reasonable to argue that the distinction between ‘form’ and ‘meaning’ or ‘sense’ is only a theoretical one because it is obvious that understanding discourse, translating and interpreting depend, *inter alia*, on both. Form-based processing is understood here as structure-oriented processing in which the

interpreter follows source language (SL) structure in target language (TL) text production (Dam, 2001, p. 27). In other words, the focus here is on the interpreting product, which could somehow reveal some *features* of the interpreting process.

The bilateralists view the SI process essentially as a language-pair processing activity, arguing that SI between languages with similar syntactic structures such as English<>French is *easier* than languages with asymmetrical ones such as German>English. This position does not refute research findings on the interconnection between expert performance and semantic processing. With regard to “*factual knowledge*”, Moser-Mercer acknowledges that when “experts are uninformed about a subject matter they have a tendency to revert to more novice-like performance at times” (1997, p. 257). Similarly, there is no reason why professional interpreters should not be forced to abandon semantic processing and adopt a form-based strategy in response to adverse conditions (see also Gile, 2009, pp. 208-209). One example of such extreme conditions may very well be a combination of syntactic asymmetry and complexity in the subject initial position as hypothesised and shown in this article.

The bilateralists and other researchers argue that such extreme conditions require the use of specific strategies for coping with structural disparities and avoiding memory overload such as segmentation, lagging, restructuring and anticipation (e.g. Kade & Cartellieri, 1971; Kirchhoff, 1976/2002; Le Ny, 1978; Moser, 1978; Wilss, 1978; Flores d’Arcais, 1978; Gile, 2009). Other examples of compensatory strategies include the use of flexible structures or fillers (e.g. Kade & Cartellieri, 1971; Kirchhoff, 1976/2002).

Flores d’Arcais (1978, pp. 398-399) proposes coping strategies such as using similar syntactic structures and lexical items, utilising structural and lexical similarities between certain language pairs such as Spanish<>Italian or German<>Dutch. This is particularly relevant to this discussion, as I will draw upon this suggestion in Subsection 1.1 to develop an English>Arabic SI strategy, which relies on structural flexibility, since Arabic offers nominal sentence structures similar to the English subject-initial structure.

The “liberal arts” group (Moser-Mercer, 1994, p. 17), also known as the “universalists” (Setton, 1999, p. 53), comprise the Paris School researchers (e.g. Seleskovitch & Lederer, 1995), who espouse a view that minimises the role of structural disparities, advocating a “meaning-based” approach (Fabbro, Gran, & Gran, 1991). The universalists attach considerable importance to sense as opposed to linguistic meaning. Seleskovitch and Lederer, two proponents of this group, argue that sense, which is the “deverbalized” product of understanding original discourse, is independent of linguistic form, making interpretation and translation possible between any language combinations irrespective of structural or other linguistic disparities (1995, p. 229). This approach makes linguistic theories, contrastive linguistics and linguistic asymmetries irrelevant to interpreting and translation (e.g. Seleskovitch, 1977, pp. 28-29).

Therefore, Lederer (1978, pp. 330-331) emphatically rejects form-based processing, structural segmentation and syntactic anticipation – aside from the direct translation of transcodable items – in favour of meaning-based processing, “units of meaning” or “chunks of sense” and sense-based anticipation. Yet, Lederer refers to “anticipation based on language prediction” of collocative expressions as the other type of anticipation. Lederer indicates clearly that “[u]nits of meaning are not a grammatical segmentation of language into syntactic units” (1978, p. 330). This explains the way the Paris School’s proposed strategies differ from those proposed by the bilateralists, who regard syntactic units as the deciding factor in segmenting language.

The Paris School universalists also believe that complete mastery of the working languages, familiarity with the subject matter and comprehensive training in interpreting skills will be enough for an effective and automatic re-expression of sense in the TL (Seleskovitch, 1989, p. 65).

However, various facets of “language-pair specificity” (Setton, 1999, p. 55) have been reported through a large volume of empirical research comprising experimental, retrospective and corpus analytical studies and involving various language pairs. A number of experimental studies referred to syntactic-based segmentation (Goldman-Eisler, 1972), omissions and errors due to memory overload and ensuing excessive time lag (Al-Rubai’i, 2004) as well as frequent deployment of anticipation, reformulation and lagging (Bevilacqua, 2009) to cope with structural asymmetry. Moreover, the results of an experimental study by Setton and Motta (2007) did not support linguistic autonomy of the TL text from the SL text for restructuring in languages with similar structures as opposed to language-pairs with asymmetrical ones.

In studies using “think aloud protocols”, syntactic structures were found to cause more or less syntactic transformations, compression and frequency of repairs depending on language pairs (e.g., Bartłomiejczyk, 2006; Dailidėnaitė, 2009; Chang and Schallert, 2007; Shamy & De Pedro, 2017).

Corpus analytical research provided similar discussions of difficulties of interpreting between language pairs with asymmetrical structures as well as the tactics used to cope with such difficulties (Gile, 1992, 2011, pp. 13-15; Van Besien, 1999; Liontoulou, 2011; He, Boyd-Graber, & Daumé III, 2016; Wang & Gu, 2016).

The results of most of these empirical studies end up tipping the scales in the bilateralists’ favour despite evidence to the contrary (Fabbro, Gran, & Gran, 1991), inconclusive evidence (Isham, 1994) or qualified support for the universalist position (Setton, 1999, pp. 275, 282).

The present article addresses syntactic asymmetry in English>Arabic SI, as is manifested in the syntactic disparity between subject-verb-object (S-initial) and verb-subject-object (V-initial) structures. The article focuses on strategies for dealing with long and/or complex (henceforth complex) initial subjects in English, which further complicate the S-initial and V-initial structure asymmetry. The underlined parts in sentences (1) and (2) from the corpus analysed in the present article are examples of complex subjects:

- (1) Given our interdependence, any world order that elevates one nation or group of people over another will inevitably fail.
- (2) And so this historic and unprecedented gathering of leaders—unique in the history of nations—is a symbol to the world of our shared resolve and our mutual respect.

Table 1 presents further examples of complex initial subjects and their Arabic simultaneous interpretations.

For the purposes of the present article, a complex initial subject is any subject that is longer than a single and simple noun phrase. It may be a clause, a combination of clauses, a string of phrases or part of a sentence or clause containing multiple embeddings such as relative clauses or parenthetical information that will *delay the verb*.

However, because complex subjects presented a wide range of lengths and levels of complexity, I had to resort to quantification for a unified definition of complex initial subjects relying on psychological research into working

memory capacity. I used Miller's (1956, pp. 348-349) "span of immediate memory" for retaining and processing information, which comprises 7 ± 2 isolated or unrelated words based on the theoretical assumption that SI is a form-based processing activity. It is established that simultaneous interpreters segment sentences into manageable chunks or meaningful units of information. However, Miller (1956, p. 349) argues that the distinction between "bit" and "chunk" casts doubt on what forms a chunk of information. That is, chunks might be processed differently as a single unit or number of units by different people depending on their knowledge and familiarity with what constitutes meaningful units for them. I have adopted the average (seven words) as the minimum benchmark for determining complex initial subjects here. Subjects in SI texts might be composed of units of a meaningful chunk, yet chunks dealt with under SI conditions and a combination of syntactic asymmetry and complexity can impose a cognitive overload on the interpreter's working memory. Based on this argument, seven words is a reasonable minimum benchmark for the concept of complex initial subject.

Some complex initial subjects fell within the above category, but were ruled out because they were subjects of an object that-clause. An example of this case is the underlined complex subject in "[...] I do believe that a woman who is denied an education **is**¹ denied equality". In Arabic, the interpreter has no choice but to translate such clause with an S-initial structure preceded by the "verb-like particle" (Guillaume, 2007, p. 179) *إِنَّ/أَنَّ* (*inna/anna*), which means truly or surely and is replaceable with 'that'. This eliminates the problem and therefore the need for a strategy. However, the discussion investigates interpreter decisions in situations where syntax permits a choice between the V-initial and S-initial structures, but where the interpreter somehow chose or was forced to use the S-initial structure in response to the complex initial subject.

Complex initial subjects are mostly a feature of written texts. This is pertinent for simultaneous interpreters nowadays as they are often required to interpret written texts read by delegates (Setton & Motta, 2007, p. 210). Complex initial subjects can also be found in impromptu speech as evidenced by the corpus analysed in this article (see 2.2).

Moreover, complex initial subjects are one example of syntactic complexity, which is seen as an "extreme speech" condition (Meuleman & Van Besien, 2009) that could potentially cause memory overload (Gile, 2009, Ch. 8). More importantly, this adverse condition could exert a serious impact not only on less experienced interpreters, but also on *more experienced ones* (Liu, Schallert, & Carroll, 2004, pp. 34, 37; Gile, 2009, p. 191; Meuleman & Besien, 2009, pp. 26, 31). This is because complex initial subjects are difficult to process even in monolingual communication, and word-order disparities in bilingual communication will only further aggravate the situation, making them difficult to interpret into languages with an asymmetrical word order.

I am raising the topic of syntactic asymmetry and complexity in the subject initial position here because I hypothesised that the co-occurrence of these two features had a negative impact on trainee performance during interpreting training sessions which I conducted. I believe that this combination of syntactic

¹ Note that complex initial subjects are always underlined and **verbs or predicates in bold type**.

asymmetry and complexity of initial subjects was the cause of significant information loss and serious failure. The present article proposes an *English > Arabic language-pair-specific strategy*² for student interpreters to cope with the problem and improve their SI performance with a view to contributing to research which addresses the needs of interpreter trainers and trainees alike. Trying to find alternative strategies is also underpinned by the need to explore other viable strategies when waiting, lagging, anticipation or restructuring cannot be used, or may cause memory overload and/or omissions (cf. Kade & Cartellieri, 1971, p. 15; Wilss, 1978, p. 347; Gile, 2009, p. 201).

My argument rests on the belief that structural asymmetry does *not* impede SI, but language-pair-specific factors are a reality and can variably affect the interpreting process – and the same is true for other situational factors. Such factors may, for example, lead to cognitive overload, omission and even significant failure, especially if they coincide with other complicating issues such as high information density, syntactic complexity, higher-than-normal presentation rate, and so on (Kirchhoff, 1976/2002, p. 113; Setton, 1999, p. 275; Gile, 2011, p. 215). Even Seleskovitch and Lederer acknowledge the effect of linguistic disparities on the interpreting process as regards length of time lag, arguing that “lag is also affected by the language combination and the nature of the interpretation” (1995, p. 131).

1.1. The S-initial and V-initial structure dichotomy

The structural disparity between the S-initial structure in English and *normal* V-initial structure in Arabic does not in itself pose a severe problem for simultaneous interpreters. As indicated above, the problem arises in English>Arabic SI when the source sentence has a complex initial subject that *significantly delays the verb*, which should *normally* be the first item in the Arabic clause. Obeying this V-initial structure rule in SI into Arabic would impose a heavy cognitive overload and potentially information loss or failure. This is because interpreters would have to retain the complex initial subject in their working memory, *wait for the verb* to start the Arabic sentence, and later retrieve information from memory before proceeding to another segment. It should be obvious, especially in the light of the research findings reported above, that this memory overload or excessive lag will probably result in a significant loss of the complex initial subject, or of the segment that follows, or part thereof (see 4.2).

To avoid this, I anticipate that professional interpreters are more likely to use the exceptional S-initial structure – not the *normal* V-initial structure – and opt for the *similar and easier* structure, presumably to avoid the problems mentioned above. Following Flores d’Arcais’s (1978, pp. 398-399) recommendation for utilising *structural similarities* between certain language pairs, I propose the following hypothesis:

When faced with complex initial subjects in English>Arabic SI, interpreters are more likely to follow the English structure in their

² It is only natural that this also applies to other language-pairs with identical structures on both ends, and I refer to a ‘language-pair-specific strategy’ here only because this language-pair is the focus of attention in this article.

rendition than to wait for the verb and produce the V-initial structure which is the default word order in Arabic.

Waiting for or anticipating the verb in SI from German into other languages with asymmetrical syntactic structures is frequently reported in the literature (e.g. Oléron & Nanpon, 1965/2002, p. 48; Moser, 1978, p. 60). However, students training on English>Arabic SI may be advised and taught to deploy the strategy of *not waiting for the verb*. They *do not have to* start Arabic sentences with a verb all the time, at least when interpreting complex initial subjects and even though this may lead to stylistic or linguistic unacceptability or register incompatibility because a V-initial structure is expected. This violation of the rules of grammar and style is not only sanctioned due to the extreme conditions brought about by syntactic asymmetry and complexity, but is also seen as an act of *creativity* by some researchers (Gran, 1998; Riccardi, 1998).

I have termed the strategy *not waiting for the verb* as a form of juxtaposition with the strategy of *waiting* frequently reported in the literature. The name of the strategy is also based on the reasonable assumption that if the verb is delayed due to a complex initial subject in the SL, and if simultaneous interpreters start their Arabic sentences with the subject, then effectively they will *not be waiting for the verb*. Deploying the strategy of not waiting for the verb may be achieved by exploiting the *word order flexibility* Arabic allows, whereby sentences can be structured without the verb needing to be in initial position, thereby resembling English S-initial structures.

The possible structures available to the interpreter are any type of nominal clauses in which the verb is either used in a later position or not used at all. Arabic nominal clauses have two basic constituents. The first is the *muftada*, meaning “that which is begun with, inchoative” (Hoyt, 2008, p. 381) and which might be called “initial agent” (Hoyt, 2009, p. 653). The second constituent is the *khobar* or predicate, which means news as it provides information on the initial agent. There are four types of *khobar*, as exemplified below. In sentence (3), the *khobar* is an adjective while in (4) it is a verbal clause or a verbal predicate that contains a pronoun implied by the verb head and governed by the initial agent. In (5), the *khobar* is a noun phrase and in (6) it functions as an adverbial or prepositional phrase (Al Afghani, 2003, p. 229; Hoyt, 2008, p. 381):

<u>Lujain</u> (is) beautiful.	لجين جميلة. (3)
<u>The children</u> are playing in the park.	الأولاد يلعبون في الحديقة. (4)
<u>The lesson</u> explanation-its (is) simple.	الدرس شرحه بسيط. (5)
<u>The book</u> (is) on the table.	الكتاب على الطاولة. (6)

Items between two round brackets indicate implied information.

I have used the concept of S-initial structure, regardless whether the ‘S’ refers to a “grammatical subject or grammatical topic” (Hoyt, 2009, p. 653), for any structure in which the verb is not in initial position to distinguish it from the concept of V-initial structure. The pertinent point here is whether the verb is used in the *normal, default* initial position or *strategically delayed* by the interpreter to cope with syntactic asymmetry and complexity. In Arabic, this coping tactic may be deployed by using an Arabic sentence structure similar to

that of the English clause, irrespective of the syntactic analysis of the elements preceding the verb.

The V-initial structure is described as the “basic” and “unmarked” structure in Arabic (Fassi-Fehri, 1993, p. 19; Mohammad, 2000, p. 1). It is also referred to as the “default”, “normal” (Hoyt, 2009, p. 654; Dahlgren, 2009, p. 728) and “discourse neutral” word order (Mohammad, 2000, p. 1) in Standard Arabic (Fassi-Fehri, 1993, p. xi) which is the concern here. As a corollary, the S-initial structure is the *marked* structure in which the subject is moved to a preverbal position, generally for the purpose of *emphasising* the subject. This means that interpreters cannot afford to always start Arabic sentences with subjects. Even though doing so is not syntactically wrong, it cannot be tolerated from the stylistic, register and pragmatic viewpoints in every sentence or if used frequently. This is because the interpreter would sound as though he/she were a newscaster reading the headlines³ of a news bulletin or violate the register, which should be maintained in this genre (conference and political speeches). More seriously, the interpreter would constantly emphasise the subject when this is not always the case in the source speech, thereby potentially modifying the pragmatic value of the message.

For the (would-be) simultaneous interpreter, the *strategic* decision to opt for the exceptional (S-initial) and deviate from the *default* or *normal* (V-initial) structure in English>Arabic SI, would be the lesser of the two evils. The more serious evil being information loss or complete failure. In other words, such deviations from the usual would be viewed as a “deliberate act” (Korpala, 2012, p. 103) in response to an extreme condition rather than an error. SI represents an extreme type of communication, a situation that is cognitively complex and stressful enough to give the interpreter licence to *pragmatically* opt for the exception rather than the rule.

In the following section, I outline the objectives of my study and present the data and methodology before embarking on a presentation of the findings in Section 3, followed by a discussion of the results of the analysis in Section 4 and the implications for training in Section 5.

2. Corpus and method

2.1. Research objectives

The article presents the findings of a study which sought to address the issue of structural disparity between English S-initial and Arabic V-initial structures and syntactic complexity of English subjects in English>Arabic SI. The study analysed professional performance to determine the structure mostly preferred by the Arabic simultaneous conference interpreters in my sample when confronted with English complex subjects. In other words, the analysis is an endeavour to determine whether professionals will opt for the *unmarked* V-initial structure or *marked* S-initial structure.

I anticipated that the analysis would determine whether my hypothesis and strategy of *not waiting for the verb* were supported. I also expected the analysis to show whether complex initial subjects could be a source of difficulty for

³ News headlines and standfirsts must have an S-initial structure in Arabic.

English>Arabic SI. Finally, I hoped that the results might help assess the validity of language-pair specificity.

2.2. Corpus

The material analysed in the present study consists of authentic English>Arabic simultaneous interpreting renditions (SIRs) of three speeches delivered in real-life conference settings. The first is President Obama's speech to the Muslim World at Cairo University on 4 June 2009 (Speech I). The speech was addressed mainly to the Muslim world, but also to the American people and the world. President Obama spoke for 54' 13" and appeared to be improvising, although the speech he delivered was almost identical, word-for-word, to the transcript which was made available immediately prior to his delivery, which points to a prepared text. Delivery was manageable, averaging at approximately 111 words per minute (wpm) on average if the 42 rounds of applause are included. Nevertheless, there were bursts of speedy delivery at times. Therefore, a selection has been made of stretches of speech of three minutes' duration from the beginning (1' 12" – 2' 11"), middle (23' 55" – 24' 54") and end (47' 48" – 48' 47"), without rounds of applause. The presentation rates measured 108, 111 and 139 wpm, respectively, making an average of 119 wpm. This and the fact that on occasions interpreters kept talking during applause indicate that the interpreters clearly benefited from those rounds of applause when they occurred. The speech was characterised by a formal style, familiar topics and relatively short sentences. This was, however, offset by the highly refined and remarkably eloquent style typical of President Obama and occasional use of Qur'anic, biblical and other historical references.

The second speech is a press conference by the Joint Special Representative for Syria, Mr Lakhdar Brahimi, delivered on 31 January 2014 on the conclusion of the first round of intra-Syrian talks at the UN Geneva Office (Speech II). Mr Brahimi read a written statement, and a question-and-answer session followed. The present analysis concerns the English>Arabic SI of that written statement lasting 9' 32" (02' 05" – 11' 37"), since the question-and-answer session mostly concerned interpretation into the opposite direction, English, when Mr Brahimi answered questions in Arabic and French. On a few occasions, however, Mr Brahimi answered questions in English, and during one of them (15' 31" – 17' 15"), he used a sentence with a complex initial subject, which was transcribed, analysed and added to the corpus. This indicates that complex initial subjects can occur not only in written texts, but also in impromptu speech. Mr Brahimi was directly addressing journalists and reporters, but indirectly all parties concerned. Delivery was smooth due to a normal presentation rate, averaging 114 wpm. The style was formal as befitting the occasion and purpose of the event, and the statement discussed issues familiar to the audience.

The third material is President Donald Trump's speech to the Arab Islamic American Summit in Riyadh on 21 May 2017 (Speech III). The President was addressing the heads of state and delegates of the nations participating in the Summit, but also indirectly the Muslim world, the American people and the entire world. For 33' 35", President Trump delivered a prepared text, but he improvised on some occasions. Again, some instances of complex initial subjects occurred during improvised segments. Delivery was very smooth as the presentation rate was 108 wpm on average. The style was formal and typical

of speeches delivered at such top-level conferences. The topics discussed were familiar to the audience.

With regard to Speeches I and III, the Arabic SI recordings were downloaded from the internet. No information is available on the conditions under which the interpreters worked and whether they had copies of the texts in advance or even had the texts at all, nor on their expertise. This remains a shortcoming of the present analysis. Two points need to be made here. First, the interpreters were apparently working under real SI conditions as their performance indicated, i.e. working under psychological pressure. The features of their output such as pauses, hesitations, errors and instances of ungrammatical utterances, incomplete sentences, etc. were characteristic of interpreted rather than translated speech. Second, given the formal nature of the events, one should assume that the interpreters were professionals with the expertise required for interpreting on such highly formal occasions. All spoke with a native Arabic accent except for the Arabic interpreter for Russia Today (for Speech III) who spoke Arabic with an obvious foreign accent. As for Speech II, the UN interpreters are expected to be among the most rigorously vetted interpreters around the world, and the conditions under which they work should be ideal. I therefore assume that the interpreter had a copy of the statement in advance; all the more so because Mr Brahimi advised the journalists to ask the secretary for a copy if they had not already received one.

For Speech I, three different and complete Arabic SI versions have been used as broadcast on Al Jazeera, Al Arabia and Egyptian Channel One. For Speech II, only one version is available from the UN website. Seven Arabic SI versions were found for Speech III, as broadcast on Al Jazeera Mubasher, Al Saudia, Al Arabia, Russia Today Arabic, Al Hadath, Al Ghad and France 24 Arabic.⁴ Al Jazeera and Al Arabia's interpreters for Speech I were different from those who interpreted Speech III for the same two channels.

2.3. Selection of materials

The three speeches and their Arabic SIRs are available in the public domain. The corpus is believed to be a representative sample of authentic conference interpreting speeches delivered and simultaneously interpreted in real-life conference settings. Therefore, it provides for a "naturalistic and simple" (Gile, 2011, p. 201), as well as ecologically valid and "reasonable" (Setton, 2002, p. 29) analysis.

Moreover, the speeches cover almost 100 minutes (99' 4"), and – as explained above – an attempt was made to find as many Arabic SIRs as possible to allow for comparability of decisions by different interpreters. The speeches and their Arabic SIRs make a sizeable, hence sufficiently representative corpus. Furthermore, with its varied spatial and temporal settings, contexts, purposes and multiple Arabic SIRs by 11 different interpreters, the corpus should allow for broader comparability of interpreter decisions in coping with the problem under discussion. This can only add further validity to the results obtained.

Finally, even though every language pair presents its own challenges, some of the findings may be useful for interpreters and interpreter educators working with other language pairs. Insights gained from the analysis of professional

⁴ The official transcripts and video recordings of the speeches and their Arabic SIRs are available in the public domain from relevant official sources and YouTube.

performance can undoubtedly contribute to the training of student conference interpreters in this and other similar language pairs.

2.4. Data coding and analysis

The official English transcripts were checked against the actual speeches as heard in the video recordings, and verbatim records were created complete with repetitions, false starts, repairs, and so on, but without pauses and hesitations. These were scrutinised for determining sentences with complex initial subjects.

The Arabic SIRs of those sentences were then transcribed. The current analysis is only concerned with whether the interpreters started their Arabic sentences with the *normal* V-initial structure or the S-initial structures when interpreting the complex initial subjects. Therefore, only “fluent” (Setton, 2002, p. 35) transcripts of sentences with complex initial subjects and their SIRs were used, and no attempt was made to analyse synchronicity or represent the temporal and prosodic features of the corpus. This is in line with Setton’s (2002, p. 34) observation that research objectives will govern what should be shown in the transcript.

The data were transferred to an Excel sheet containing aligned segments of SL sentences with complex initial subjects and their various Arabic SIRs for analysis. First, the data were analysed for the frequency of occurrence of S-initial and V-initial structures in the Arabic SIRs of the SL sentences.

Second, a fidelity assessment was conducted to assess the use of S-initial and V-initial structures in the TL renditions regarding the two basic fidelity criteria of completeness and accuracy (Setton, 2015, p. 162). I used a scale of 1 – 3, with ‘1’ being ‘acceptable’, ‘2’ ‘partially acceptable’ and ‘3’ ‘unacceptable’. The fidelity assessment was carried out by the author and a second rater to reduce observer bias and ensure objectivity. The second rater functioned as an expert judge with more than 17 years of experience as a professional translator and translator educator. It was agreed that a TL rendition would be complete if it contained all the information of the SL sentences without missing parts, and accurate if the information provided was not wrong or distorted. The two raters held calibration sessions during which example sentences were scored by both raters to ensure consistency in scoring. Cohen’s Kappa was run to determine inter-rater reliability, rendering agreement measures of .850 (completeness) and .780 (accuracy) for Arabic SIRs with S-initial structure and .810 (completeness) and .856 (accuracy) for V-initial structure, with a mean of .824 for all measures. These measures indicate a very good level of inter-rater agreement.

3. Findings

The present corpus analysis identified 39 sentences with complex initial subjects: 22 in Speech I, 3 in Speech II and 14 in Speech III. As indicated earlier, there are three Arabic SI versions for Speech I, one for Speech II and seven for Speech III. This gives a total of 167 Arabic SIRs for the original 39 sentences with complex initial subjects. Due to limitations of space, Table 1 contains a sample of the most complex initial subjects in each of the three speeches and only one Arabic SIR. As anticipated, all these sentences were rendered with the S-initial structure. Figure 1 shows a breakdown of the structures used by the Arabic simultaneous interpreters in each of the three speeches. The column with

the heading 'Other' refers to the Arabic SIRs that did not fall in either of the two categories of S-initial or V-initial structure due to partially or completely missing translations (sometimes due to technical issues as evidenced by the interruptions and missing parts in the interpreters' output).

Table 1. Sample complex initial subjects and their Arabic SIRs

Speeches	No.	English SL sentences with their complex initial subjects are followed by an Arabic SI version and a word-for-word (Setton, 2002, p. 34) English back translation; <u>subjects are underlined</u> , and verbs/predicates are in bold type ; [x×x] means parts omitted by the interpreter; items between two round brackets () refer to implied items; and pronouns prefixed or suffixed to other words indicate inflection for person.
Speech I	(7)	<p><u>The attacks of September 11, 2001 and the continued efforts of these extremists to engage in violence against civilians</u> has led some in my country to view Islam as inevitably hostile not only to America and Western countries, but also to human rights.</p> <p>إن هجمات الحادي عشر من سبتمبر عام 2001 واستمرار جهود هؤلاء المتشددين في الانخراط في العنف ضد المدنيين جعل البعض في بلدي ينظر إلى الإسلام على أنه حتماً دين عدائي ليس فقط ضد الولايات المتحدة والدول الغربية ولكن أيضاً ضد حقوق الإنسان.</p> <p><u>Truly (the) attacks (of) the eleventh of September year 2001 and (the) continuation (of the) efforts (of) those the extremists in involving in violence against the civilians</u> it-made some in country-my view to Islam as it (is) inevitably (a) religion hostile not only against the States the United and the countries the Western and but also against (the) rights (of) man.</p>
Speech II	(8)	<p>At Montreux, <u>more than 40 countries, along with the United Nations itself and three regional organizations,</u> came together to insist that the unspeakable suffering of the population of Syria must cease.</p> <p>وفي مونتغو أكثر من أربعين بلد، بالإضافة إلى الأمم المتحدة نفسها وثلاثة من المنظمات الإقليمية اجتمعوا في مونتغو وذلك لكي يصرروا على أن المعاناة الفظيعة التي يعاني منها السوريون يجب أن تتوقف.</p> <p>And in Montreux <u>more than 40 country, in addition to the Nations the United itself and three from the organizations the regional</u> gathered-they in Montreux and that so that insist-they on that the suffering the horrible that suffer from it the Syrians must cease.</p>
Speech III	(9)	<p><u>The surge of migrants and refugees living and just living so poorly that they are forced to leave the Middle East</u> depletes the human capital needed to build stable societies and economies.</p> <p>ارتفاع عدد اللاجئين والمهاجرين الذين يعيشون بشكل فقير فقير بحيث يغادرون الشرق الأوسط هذا يستنزف الرأسمال الإنساني [x×x] من أجل بناء مجتمعات واقتصادات آمنة.</p> <p><u>Rise (of the) number (of) the refugees and the migrants who (are) living-they in (a) manner poor poor so that leave-they the East the Middle this</u> it-depletes the human the capital [x×x] for building societies and economies secure.</p>

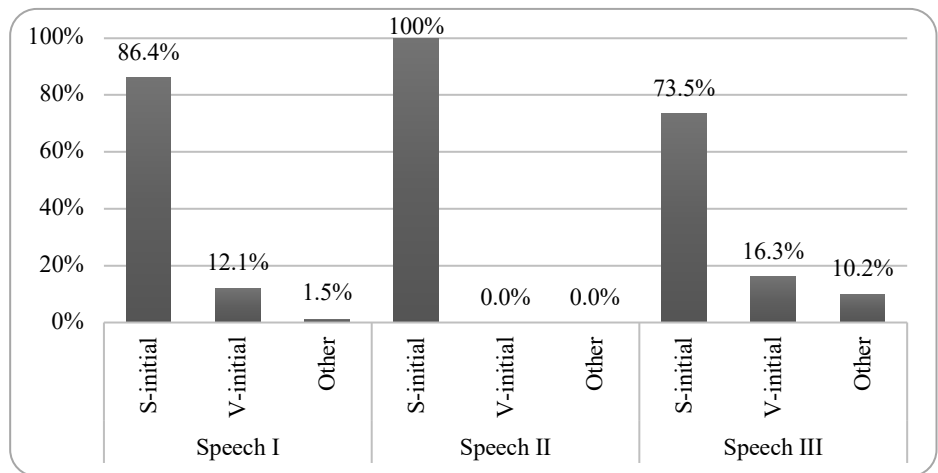


Figure 1. Structures used in the Arabic SIRs of the three speeches

Figure 2 summarises the results from a total of 167 Arabic SIRs of the sentences with complex initial subjects in the corpus.

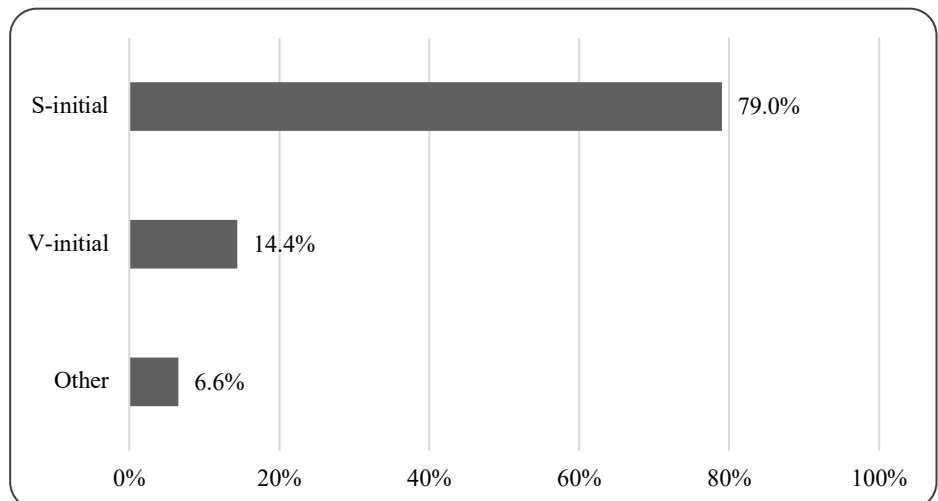


Figure 2. Summary of the structures used in the corpus

4. Discussion

4.1. *The S-initial structure and strategy of not waiting for the verb*

As Figure 1 clearly indicates, in the overwhelming majority of the cases, the S-initial structure was used by the interpreters to cope with complex initial subjects. This was the case regardless of whether the various speeches and their different interpretations were taken individually or collectively (see Figures 1 and 2). This further validates my results and conclusions. In Speech I, the S-initial structure was used in 100%, 81.8% and 77.3% of the cases in the three Arabic SIRs with an overall average of 86.4% and in Speech II, in all (100%) of the cases in the only Arabic SI version available. In Speech III, the S-initial

structure was used in 78.6%, 100%, 92.9%, 71.4%, 71.4%, 50.0% and 50.0% of the cases respectively in the seven Arabic SI versions with a mean of 73.5%. The overall average for all speeches was 79.0%.

Note that the two 50.0% results were still considered a majority as use of the V-initial structure in both cases amounted to only 35.7%.

It is remarkable that the S-initial structure was opted for in most cases although in theory other alternatives were available to the interpreters in some cases. For example, I could tenably argue that the context of (8) in Table 1 provides sufficient grounds for a potentially successful anticipation of the verb “gathered-they”. First, the sentence is part of the opening remarks being the second in the statement and sets the scene for what follows along with the previous sentence. Second, the mention of “Montreux” and the stakeholders who gathered there provides vital clues for correctly anticipating the verb. Third, I have reasonably assumed in Subsection 2.2 that the UN interpreter probably had a copy of the statement in advance. All this renders anticipation a viable option, yet the interpreter opted for the S-initial structure.

To assess the impact of using the S-initial and V-initial structures in the corpus, I conducted a fidelity assessment of the Arabic SIRs of the SL sentences with complex initial subjects against completeness and accuracy. Table 2 shows a breakdown of fidelity assessment scoring by the two raters. It indicates clearly that renditions using the S-initial structure command higher scores overall compared with those rendered with the V-initial structure regarding completeness and accuracy. However, the renditions in question scored higher for completeness than for accuracy.

Table 2. Mean score of fidelity assessment of all Arabic SIRs.

	Structure	S-initial: total 132	V-initial: total 24
<i>Fidelity criteria & values</i>			
<i>Completeness</i>	Acceptable	65 (49.2%)	6 (25.0%)
	Partially acceptable	48 (36.4%)	8.5 (35.4%)
	Unacceptable	19 (14.4%)	9.5 (39.6%)
<i>Accuracy</i>	Acceptable	35 (26.5%)	3.5 (14.6%)
	Partially acceptable	57.5 (43.6%)	7 (29.2%)
	Unacceptable	39.5 (29.9%)	13.5 (56.3%)

Since the length and complexity of the SL sentences and their complex initial subjects vary considerably, a deeper layer of analysis was conducted by filtering the sentences which were rendered with both V-initial and S-initial structures in various Arabic SIRs. That is, sentences which were translated solely with an S-initial structure were excluded. Since no sentences were translated with a V-initial structure only, this left 40 sentences with an S-initial

structure and 24 with a V-initial structure. This filtering was thought to provide a more accurate result about the deployment of the two structures, ensuring a proper comparison between different Arabic SIRs of the same sentence with the same level of complexity and length of the complex initial subject. Table 3 indicates more or less a similar trend to the one detected in the analysis of the whole corpus since the S-initial structure commanded higher scores overall than the V-initial structure, especially with regard to completeness.

The use of the S-initial structure contributed to more fidelity than the V-initial structure in respect of completeness and to a lesser extent accuracy. Moreover, the results indicated that complex initial subjects were a real cause of information loss in English>Arabic SI in this corpus, and this is the subject of discussion in the following subsection.

This result clearly supports the hypothesis that simultaneous interpreters are more likely to follow SL structure if TL syntax permits them to do so, especially when dealing with complex initial subjects. Obviously, this is because this presents them with the ease of following the speaker closely and relieving their memory from excessive cognitive overload and potential consequent information loss or failure due to lagging for too long until they hear the verb. Consequently, the suggested language-pair-specific strategy of *not waiting for the verb* is also strongly supported by the results.

Table 3. Mean score of fidelity assessment of SL sentences rendered with both S-initial and V-initial structures.

	Structure	S-initial: total 40	V-initial: total 24
Fidelity criteria & values			
Completeness	Acceptable	15.5 (38.8%)	6 (25.0%)
	Partially acceptable	16 (40.0%)	8.5 (35.4%)
	Unacceptable	8.5 (21.3%)	9.5 (39.6%)
Accuracy	Acceptable	7 (17.5%)	3.5 (14.6%)
	Partially acceptable	18 (45.0%)	7 (29.2%)
	Unacceptable	15 (37.5%)	13.5 (56.3%)

More importantly, the results indicated that the interpreters were in most cases largely engaged in *form-based* as opposed to *meaning-based* processing when interpreting the complex initial subjects in the corpus. I reiterate that form-based processing is used here to refer to structure-oriented processing where interpreters tend to follow the SL structure in TL text production (Dam, 2001, p. 27) even at the expense of linguistic unacceptability. This is further illustrated by the unusual – in fact incorrect – use of the subject before the verb in certain constructions on several occasions where the use of the verb before the subject was the *only correct* word order:

(10) [...] using the same Holy Koran that one of our Founding Fathers, Thomas Jefferson, kept in his personal library.
 [...] استخدم نسخة من نفس المصحف الذي توماس جيفرسون أحد أبائنا المؤسسين احتفظ بتلك النسخة من المصحف الشريف في مكتبته الشخصية.

[...] used-he copy from (the) same Qur'an, which Thomas Jefferson, one of fathers-our the founding, kept-he that the copy from the Qur'an the Holy in library-his personal.

(11) [...] as in the story of Isra when Moses, Jesus, and Mohammed, peace be upon them, joined in prayer.

[...] كما هي القصة مع الإسراء عندما عيسى وموسى ومحمد عليهم الصلاة والسلام جميعا صلوا سوية.
 [...] as it (is) the story with Al Isra when Jesus and Moses and Muhammad, (be) upon-them the prayer and the peace all prayed-they together.

The relative pronoun *الذي* (that/which) in (10) and the conjunction of time *عندما* (when) in (11) should have been followed by a verb, not a subject in Arabic. This is probably why in the other two Arabic SIRs of (11), the interpreters used a neutral or copular verb as a *general filler* after *عندما* (when) and compensated for the main verb “joined in prayer” later.

The results lend support to Isham’s (1994, pp. 207-208) conclusion that the need for the *form-based approach* as defined above increases in step with syntactic similarity between language pairs and vice versa. Interestingly enough, this view is shared by Lederer (1978, p. 331):

I shall have to resort to interpretation from German into French where evidence of sense expectation is easier to collect, *since the syntactic structures of German and French are wide apart and literal translation less frequent.* (italics added).

The results also support Setton and Motta’s (2007, p. 217) conclusion regarding the lack of support for linguistic autonomy in expert performance and the linguistic autonomy of the TL text from the SL text for restructuring. This is only natural because, whenever structural similarity exists between SL and TL, restructuring, lagging, anticipation, and so on may be needed less frequently.

Inevitably, the results also lend support to language-pair specificity as the structures discussed and the strategy proposed concern English>Arabic SI and other language pairs with similar or identical syntactic structures. For example, complex initial subjects are not expected to be a source of difficulty in English>French or languages with S-initial structure in the same way they so clearly did in English>Arabic SI as is demonstrated in the following subsection.

Moreover, it is the flexibility of word order in Arabic that provides the interpreter with structures similar to the English S-initial structure and therefore the possibility of deploying the strategy of *not waiting for the verb*. Obviously, this is not available to interpreters working into languages with a more rigid word order such as German as opposed to Dutch (Bevilacqua, 2009). This in turn confirms the bilateralists’ position with regard to the correlation between syntactic similarity or lack thereof in a certain language pair and level of ease or otherwise difficulty of interpreting in that particular language pair.

4.2. Complex initial subjects as a potential source of difficulty

The present analysis has demonstrated that where syntactic complexity was present in the subject initial position, instances of significant omissions and serious failure occurred in various parts of many sentences. This is true of (12) and (13). This is also true despite sometimes using the S-initial structure as indicated in the fidelity analysis in Subsection 4.1.

- (12) No description of the suffering and depravity can begin to capture its full measure.

وليس هناك كلمات لوصف ما يحدث [xxx] حاليا [xxx].

And **not be there** words to describe what (is) happening [xxx] currently [xxx].

- (13) Starving terrorists of their territory, of their funding, and the false allure of the craven ideology, will be the basis for easily defeating them.

يجب أن نحرم الإرهابيين من كل القدرات [xxx] الممنوحة لهم [xxx].

Must that we-deprive the terrorists from all the abilities [xxx] given-they to-them [xxx].

[xxx] indicates parts omitted by the interpreter.

The co-occurrence of information density and syntactic complexity in the subject position and syntactic asymmetry is at least one, if not *the* contributing factor to this serious failure. This assumption is justified by the absence of other potentially aggravating factors as evidenced by the normal SL presentation rate in all speeches, familiarity of topics and the presumed expertise of the professional interpreters.

Based on the above assumption, it is possible to conclude that complex initial subjects could constitute a source of difficulty in English>Arabic SI and potentially cause cognitive overload, information loss and even failure, especially when aggravated by syntactic asymmetry.

This difficulty might serve as one possible justification for preference for the *marked* S-initial structure by the Arabic interpreters over the *normal* V-initial structure. As discussed above, the difficulty also lends further support to language-pair specificity because interpreting into a TL which tolerates S-initial structures might be less challenging.

This conclusion appears to support research findings regarding the correlation between the coincidence of two or more extreme factors on the one hand and cognitive overload, omissions and serious failure on the other hand in SI (Kirchhoff 1976/2002, p. 113; Setton, 1999, p. 275; Al-Rubai'i, 2004, p. 260; Gile, 2011, p. 215). In this case, it is the coincidence of syntactic complexity and structural asymmetry that is the probable cause of difficulty, omissions and instances of failure.

5. Implications for training

Interpreting strategies should form an essential component of the interpreter-training curriculum whether they are language-pair specific or not. Incorporating such strategies in the curriculum is best achieved through theoretical presentation and practical application as recommended by various researchers (e.g. Wilss, 1978, pp. 350-351; Flores d'Arcais, 1978, p. 394; Gile, 2009, p. 191; Li, 2015). If well proven and effective, strategies can and should be *teachable* to would-be interpreters and *learnable* by them through extensive

exposure until the point of optimisation and possible automatization (Kirchhoff, 1976/2002, pp. 114, 119; Riccardi, 1996, p. 219).

My results indicate that the strategy of *not waiting for the verb* can be proposed as an alternative to the indispensable and widely researched and taught strategies of anticipation, restructuring, segmentation, lagging, and so on. This strategy represents a complementary approach that can be deployed in English>Arabic SI and other similar language pairs in which the TL is characterised by structural flexibility. Teaching this strategy might further enhance trainees' strategic competence, providing them with the flexibility of expression needed for successful SI performance. The strategy may be viewed as just another option that is readily available for the interpreter in a number of situations. For example, it can be employed when the application of other strategies may not be possible or successful due to working memory overload, other situational or linguistic constraints or any unforeseen reason, or if implementing other strategies might cause more problems than it solves.

Teaching the strategy might be achieved through theoretical presentation of the problems and solutions and a range of problem-solving (Riccardi, 1996, p. 221) activities for practical application. At a fairly advanced stage and after mastering dual tasks and information retention under cognitive pressure, students could be challenged further by being presented with speech segments characterised by multiple layers of syntactic complexity (Meuleman & Van Besien, 2009; Liu, Schallert, & Carroll, 2004), especially in the subject position. This would provide interpreter educators with the opportunity to train their students on how to cope effectively with complex initial subjects under various conditions.

Sight translation containing sentences with complex initial subjects is yet another effective exercise, all the more so because it is similar to SI-with-text where complex initial subjects are most likely to occur. The visual presence of the text might help the interpreter decide whether to wait for the verb if the subject length was manageable or start with the subject immediately if the subject was too complex and waiting was not possible. However, this exercise should come at a very advanced stage of SI training development. See also Setton and Dawrant (2016, Ch. 6) for extensive exercises on sight translation.

6. Concluding remarks

The present article has discussed the structural disparity between English S-initial and Arabic V-initial structures and the syntactic complexity of English subjects in English>Arabic SI. The analysis of a corpus of three authentic speeches and their Arabic SIRs by 11 different professional interpreters confirmed the proposed hypothesis concerning professional interpreters' preference for similar structures in the presence of TL Arabic flexibility. The results obtained also lend considerable support to the strategy of *not waiting for the verb* to cope with complex initial subjects.

The above conclusion indicates a preference for the *form-based* as opposed to the *meaning-based approach* to interpreting. Inevitably, the above discussion strongly supports the language-pair specificity hypothesis as the present results and conclusions concern English>Arabic SI and other pairs with identical structures. The current analysis has also verified the assumption that complex initial subjects could form a source of difficulty in English>Arabic SI and

similar language pairs, which is yet more evidence of the importance of language-pair specificity. The strategy of *not waiting for the verb* may be recommended as a complementary approach in addition to other essential strategies as it was found to contribute to greater fidelity in terms of completeness and, to a lesser extent, accuracy. Finally, further research involving larger corpora and other language pairs with structures similar to the English>Arabic language pair might add to the findings of the study presented here.

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