Analysing departures in E/A simultaneous interpretation: A case study of ex-president Mubarak speeches (Jan-Feb 2011)

Yomn SharafElDin¹; Prof. Dr. Soheir Gamal Mahfouz²; Dr. Amal AbdelMaqsoud³

Abstract

Simultaneous interpretation (SI) is a complicated process that involves a variety of cognitive operations, posing a multitude of problems. As a result, deviations from the source, or "departures", are inevitable. Departures committed by interpreters represent an interesting area of study. Henri Barik (1975) has studied departures in SI and arrived at a categorization of omissions, additions, and substitutions. This paper uses contrastive analysis to examine the departures in the interpretation of the three final speeches by Expresident Hosni Mubarak to test the strength of Barik's model. For a more solid framework, the analysis draws from other models to expand Barik's model covering further categories and giving grounds and explanations to the departures detected. The results confirm Barik's categories, expand them through Daniel Gile's Effort Model and Mona Baker's discussion of equivalence and non-equivalence, conclude a set of linguistic and cognitive causes for such departures, and assess their effect on the output.

Keywords: Simultaneous interpretation; departures; effort model; omissions; additions; substitutions

¹ Teaching assistant - Department of English, Faculty of Al-Alsun, Ain Shams University

² Associate Professor of Linguistics, Translation and Simultaneous Interpretation - Department of English, Faculty of Al-Alsun, Ain Shams University

³ Lecturer in Translation and Simultaneous Interpreting Studies - Department of English, Faculty of Al-Alsun, Ain Shams University

تحليل الحيود في الترجمة الفورية من العربية إلى الإنجليزية: دراسة في خطب الرئيس السابق مبارك (يناير/فبراير ٢٠١١)

يمن شرف الدين ١؛ د. سهير محفوظ ٢؛ د. أمل محمد عبد المقصود "

ملخص البحث

تشتمل الترجمة الفورية على مجموعة معقدة و متباينة من العمليات الذهنية و تطرح الكثير من المشكلات. من ثم، ليس هناك مفر من "حيود" المترجم عن النص الأصلي. يمثل الحيود الذي يرتكبه المترجمون الفوريون مجالاً شيقًا في در اسات الترجمة الفورية. قدم هنري باريك (١٩٧٥) در اسة عن الحيود في الترجمة الفورية وعرض تصنيفًا له مكونًا من الحذف، والإضافة، والاستبدال. تستخدم هذه الورقة البحثية التحليل المقارن لبحث الحيود في ترجمة الخطب الثلاث الأخيرة للرئيس السابق حسني مبارك لاختبار قوة نموذج باريك. ولإضافة مزيد من القوة للبحث، يستند الإطار النظري إلى نماذج أخرى لإثراء نموذج باريك وتغطية تصنيفات إضافية وتقديم التفسيرات للحيود الوارد في التحليل. تؤكد النتائج على صحة تصنيفات باريك، وتضيف لها من خلال الاستعانة بنموذج دانبيل جيل عن الجهد في الترجمة الفورية ودراسة منى بيكر عن التعادل وعدمه في الترجمة، وتخلص إلى مجموعة من الأسباب اللغوية والذهنية التي تؤدي لذلك الحيود، وتقييم تأثير ها على مُخرجات الترجمة .

الكلمات المفتاحية: الترجمة الفورية، الحيود، نموذج الجهد، الحذف، الإضافة، الاستبدال

المعيدة بقسم اللغة الإنجليزية، كلية الألسن، جامعة عين شمس

أستاذ اللغويات والترجمة التحريرية والفورية المساعد بقسم اللغة الإنجليزية، كلية الألسن، جامعة عين شمس

⁷ مدرس الترجمة التحريرية والفورية بقسم اللغة الإنجليزية، كلية الألسن، جامعة عين شمس

1. Introduction:

Simultaneous interpretation (SI) has always been marked as a task of great strain, as it requires the integration of several mental and linguistic processes at the same time, hence demanding immense cognitive effort and posing a multitude of problems for the interpreter that are not commonly faced by ordinary listeners and speakers, or even by written translators. As a result, the deviations and "departures" committed by interpreters represent an interesting area of study, revealing the intricate nature of the process, highlighting its distinction from translation, and shedding light on the best practices for interpreters. This study primarily draws upon Henri Barik's analysis of errors in interpreting (Barik, 1975), yet, for deeper analysis and accounting for such departures, it relies as well on Daniel Gile's Effort Model of simultaneous interpretation, along with his list of common problem triggers and tactics in SI (Gile, 2009), and other theories and concepts in translation and interpreting studies, linguistics, and psycholinguistics.

2. Research objectives:

This study aims to shed more light on the nature of simultaneous interpretation, revealing its peculiarity, particularly in relation to Arabic-English translation, in a way that should help interpreters handle their task better. This will be done through analysing departures in the simultaneous interpretations of the three speeches delivered by the former Egyptian president Hosni Mubarak in the final days of his rule (January/February 2011).

While the study takes for its starting point Henri Barik's model, it is hypothesized that Barik's model, though ground-breaking and largely comprehensive, is not exhaustive. Accordingly, this analysis relies on other theories to expand and reinforce Barik's model.

Thus, this study aims to:

- 1. Examine the departures committed throughout SI, analysing their types in relation to Barik's model, and complementing it with additional categories;
- 2. Explore possible reasons for such departures; and
- 3. Asses the effect of each of these departures locally then the effect of departures globally.

In order to achieve these aims, the following theories have acted as basis for the study. Other theories and concepts are used throughout the analysis.

3. Theoretical Framework:

3.1 Barik's Error Analysis:

Barik's dissertation "study of simultaneous interpretation" presents a "pioneering experimental research" in SI (Pöchhacker & Shlesinger, 2002, p. 78). The main tenet upon

which the experiment has been set is that simultaneous interpreters often deviate from the source in three ways: omission, addition, and substitution. These are considered errors when greatly different from the source (Barik, 1975, p. 79).

Barik classifies omissions into four subcategories: O1 (skipping omissions), omission of a single word or phrase without much effect on the sentence; O2, omission because of a comprehension problem; O3, omission because of delay; and O4 (compounding omissions), or in other words summarizing (1975, pp. 80, 81). Additions in SI, according to Barik, are classified into four types: qualifier addition (adding an adjectival or adverbial word or phrase), elaboration addition (which is similar to the first type but involves a more elaborate addition), relationship addition (adding connectors and linking words or phrases), and closure addition (the interpreter inserting an addition to render his/her sentence meaningful, after a misinterpretation or an omission) (1975, pp. 81, 82).

Finally, Barik equates substitutions with errors, and classifies them into five types: two types involving a single lexical item, and three involving larger stretches of text. The former are: E1, "mild semantic errors" where the item is rendered inaccurately but with little damage to the meaning; E2, "gross semantic error", where it is rendered inaccurately leading to a grave change in meaning (Barik attempts to identify reasons for gross semantic errors and detects "error due to confusion with homonym or near-homonym", "error due to confusion of reference", and errors not resulting from confusion) (Barik, 1975, pp. 82, 83). On a larger scale, he recognizes E3, "mild phrasing change" where the expression is different but "the gist" of the source is retained, hence the rendition remains acceptable; E4, "substantial phrasing change" the change in meaning is more remarkable but not very grave; and E5, "gross phrasing change" where the variance is so great and hence "wrong". He attempts to account for the latter type saying some of them are straightforward errors, others are because of a problem of comprehension or long lag leading to the interpreter making up a sentence, and some are a result of misunderstanding (Barik, 1975, pp. 83-85).

By counting the number of instances of these departures and their length, Barik arrives at conclusions comparing different texts and the performance of interpreters of various levels of expertise. This, however, is irrelevant to the objective of this study, so it suffices to review the categorization, upon which the analysis in hand is based.

3.2 Gile's Effort Model:

Daniel Gile is considered "the most prolific writer" on conference interpreting (Pöchhacker & Shlesinger, 2002, p. 162). His major contribution was the Effort Model, a conceptual model that outlines the cognitive processes involved in interpreting (p. 162). Gile attributes the difficulty of interpreting to the fact that it involves a series of non-

automatic mental operations which require an amount of attention or "processing capacity". Once this supply becomes insufficient, the performance of the operation deteriorates (Gile, 2009, pp. 159, 160). He explains this through his Effort Model.

This model has a simple structure, grouping all the intricate cognitive processes of interpreting into three main efforts: the Listening and Analysis Effort (L): covering all processes pertaining to comprehension of the source text (ST); the Production Effort (P): covering all processes pertaining to production of target text (TT); the Memory Effort (M): required essentially during interpreting due to the time lag between the reception of the ST and the production of the TT (Gile, 1997, p. 164).

Presumably, at any point of the interpreting process, the three efforts are active but operating on three different segments. Accordingly, the total requirement of processing capacity (TR) is equal to the sum of processing capacity requirement (R) for each effort (Gile, 1997, p. 165). For interpreting to go on smoothly, the available processing capacity for each effort (A) must be equal to or greater than the R of the effort. But since A is finite, these conditions are not guaranteed (Gile, 1997, pp. 165, 166). R may exceed A, and the interpreter's performance begins to deteriorate. It is often caused by "problem triggers" in the ST that require more processing capacity than other segments such as names, numbers, speed, etc. or by great difference between the source language (SL) and the target language (TL) (Shuttleworth & Cowie, 1997, p. 49). Along these lines, Gile proposes the "Tightrope Hypothesis" that "most of the time, interpreters work close to saturation" whether wholly, considering TR against TA, or individually, considering the R of each effort against the processing capacity allocated for it. It is this hypothesis that explains why interpreting is "intrinsically" difficult (Gile, 2009, pp. 182, 183).

Studies that support the tightrope hypothesis have not proven it on global level, but rather on local one. In other words, interpreters are not in a continuous state of cognitive saturation, but it occurs throughout because of increasing cognitive load or mismanagement of processing resources causing local saturation. The notion of "imported cognitive load" is relevant here. The processing of a sentence often lingers as the second sentence starts, which thus imports a cognitive load (Gile, 2008), and the pattern of difficulty and simplicity of sentences determines the liability to saturation.

Due to the commonality of interpreting problems, professional interpreters seem to have developed a variety of tactics to cope with these problems and lessen R (Gile, 2009, pp. 201-211). Gile also deduced a number of laws that seem to govern interpreters' selection of these tactics (pp. 211-214). Of these, those that are relevant to the analysis are explained when necessary.

4. Methodology:

This study relies on TV interpretation of live speeches. The subjects of the study, hence, are professional Arab TV interpreters rendering simultaneously the live Arabic speeches into English. The corpus is comprised of the video recordings of Mubarak's three speeches from state television news (Channel 1); and the video recordings of the interpretation from renowned TV Channels. All of these were retrieved from YouTube, transcribed, and divided into parallel ST and TT segments, each of which has been divided into tags (numbered between triangular brackets), to facilitate the contrastive analysis. The informative content and the effects of the ST and the TT are analysed by employing an interpretive-psycholinguistic approach. Barik's model guides the analysis, and Gile's model and theory are used to account for the interpreter's behaviour whenever applicable. Other theories and concepts in translation and interpreting studies, linguistics, and psycholinguistics are also employed when the need arises.

5. The Analysis:

5.1 Omissions:

The omissions occurring in Mubarak's three speeches have been basically classified as an SI strategy according to Barik's categorization, in addition to classifying the types of items mostly omitted, and concluding with an assessment of the effect of those omissions on meaning.

5.1.1 Causes of omissions:

5.1.1.1 Skipping omissions:

Skipping omissions of single lexical items or phrases with little effect on the context, are relatively abundant (76 out of 92 omissions). These largely fall under Anthony Pym's description of low-risk omissions. According to Pym, "[o]missions that are low-risk for the aims of the discourse occur in a constant background mode" (2008, p. 83). At some cases, interpreters perform such omissions, without being consciously aware of their need for time or processing capacity, or even that the context will not be affected by these (2008, p. 83). Analysing the skipping omissions in these speeches, it shows that most of the omissions occur within coordinating conjunction phrases (omitting either the item preceding the coordinating conjunction (*alma'touf 'aleh*) or the item following it (*alma'touf*), especially when the conjunction is $\mathfrak{g}(wa=and)$), qualifiers (adjectives and adverbs), and genitive constructions (omitting either the head noun or the dependent).

The most common of these is the omission of noun(s) in a coordinating conjunction phrase (35 occurrences). The speeches are rich in phrases where the speaker copulates semi-synonymous or semantically related words together using "5", so the interpreter automatically omits one or more of such words, assuming that the remaining items will cover the intended thought. Examples of this appear in speech 1, in 10 <4>,

where "مداها و تداعياتها" is rendered into "repercussions"; in speech 2, 19 <1> where "مداها و تداعياتها" is translated into "judicial entities"; in speech 3, where 12 "الرقابية والقضائية translates "we with the people" (in fact the interpreter recurrently omits "مصر" to suffice with the mention of its people), and 31 <3> "أيام الانكسار والاحتلال" "days of occupation".

The second most common type of skipping omissions is the omission of qualifiers (21 occurrences). The interpreter often omits the modifier of a noun (anna 't) as in speech 1, 8 <2>, rendering "المساحات العريضة" into "spaces"; in speech 2, rendering 8 <3> "اللظرف" into "the critical time" (though its meaning is compensated by the progressive verb), and 13 <3> "عزيزة آمنة مستقرة" safe"; and in speech 3 rendering 30 <3> "حياته "into "the normal way of life". Adverbs (alaḥwal) are also often omitted as in speech 2, 9 <3> "اليومية الطبيعية "rendered as "I now speak today to the people of our country" (omitting "واحد الآن rendered as "are lying in the same trench" (though the omitted adverb is compensated by the progressive verb).

Thirdly, in 9 instances the interpreter has omitted either the head (almuḍaf ilayh) or the dependent (almuḍaf) in a genitive construction, but mostly the head. For example, in speech 2, 4 "أمن الوطن" is rendered omitting the head and maintaining the dependent "our homeland". In speech 3, 16 <3>, "خياية الطريق الصحيح" is rendered omitting "is rendered omitting" "on the right path", and in 24 <3> "ضوابط الإشراف" stating "the supervision". In such instances, the head of the construction represents a single aspect of the dependent noun, so the interpreter opts for the more general item.

Finally, though less common, it has been noted in several instances that when a structure uses a verb followed by an infinitive, the interpreter omits the verb and turns the infinitive into a verb. For example, in speech 2, 24 <4>, "نقمن تحقيق" is rendered into "to accomplish" (instead of ["to ensure the accomplishment of"]; in speech 3, 16 <1>, "الدعوة is translated into "called for"; and in 18 <2> and 18 <3> "الدعوة become "to examine" and "to ensure". While these verbs add focus to a particular dimension of the action, the interpreter chooses to focus on the (more general) action itself.

5.1.1.2 Delay omissions:

Delay omissions as strategy are less common, occurring 12 times, as a result of lagging behind the speaker (Barik, 1975, pp. 80, 81). Lagging behind can often result in memory decay (forgetting parts of the text) or deliberately skipping them to catch up with the next part. For example, in speech 1, 9 < 1 >, "نوالسلطات" is rendered as "as a judge and arbitrator". The interpreter's addition took up the time slot presumably allocated for وهي نتطلع إليهم كي ", and hence the adverbial phrase was omitted. In 15 < 2 >, " يصنعوا مستقبلها is rendered into "and Egypt looks at them to live up". The omitted clause

"كي يصنعوا مستقبلها" bears no difficulty in itself, yet "كي يصنعوا مستقبلها" does, since it offers several meaning possibilities (to see, to aspire, to expect, etc.). As the interpreter struggles with it, the rest of the sentence is dropped, and the interpreter moves on to the following part.

In speech 2, in 16 <4>, "في الطعون على الانتخابات التشريعية الأخيرة دون إبطاء" is wholly omitted, as the interpreter moves immediately to the following segment to avoid accumulating delay. The reason for the omission is obviously delay since there is no significant pause between the two segments uttered by the interpreter although the omitted part is relatively long. A similarly long stretch of text is omitted in 19 <2> "لمواصلة ملاحقة" <1> ومن قاموا بأعمال السلب والنهب where the interpreter is delayed by disfluency and need for explication and ends up omitting longer parts of the sentence "to prosecute b- corrupted corrupted officials and to investigate the recent events of looting". It can be argued here, however, that delay is not the only trigger for omission, but also the syntax (the problematic structure of "ما ... من") and the then new term of "انفلات أمني" which the interpreter may have deemed to be requiring more time and processing capacity than was available for him, and therefore opted for omission. This agrees with Gile's law of minimizing interference in information recovery, where the interpreter favours tactics that consume least amount of time and processing capacity so as not to hamper subsequent segments (Gile, 2009a, p. 212).

In speech 3, 18 <2> the interpreter is delayed rendering "تشريعية" "together with the necessary parallel necessary legislative amendments" and thus omits the first part of 18 <3> rendering "كما تلاقى حول تشكيل لجنة للمتابعة" as "also a steering committee". In segment 28, the speaker begins at a low pace which soon accelerates. The interpreter similarly begins slowly but fails to keep up with the increasing pace, which results in rendering "فيز داد ما ألحقته بنا وباقتصادنا من أضرار" into "our economy has suffered losses".

5.1.1.3 Compounding omissions:

Compounding omissions or regrouping, according to Barik, are not common strategies in simultaneous interpreting. The interpreter here selectively omits particular items and regroups the rest to form a coherent sentence (Barik, 1975, p. 81). The present analysis shows indeed that it is not common within the corpus of the study, occurring only twice: first in speech 1, 20 <2>, where the interpreter renders "ومكتسباته وأن يتصدوا لحماية وطنهم" into "and to stand up for the earnings of their country" (instead of ["to stand up for the protection of their country and its earnings"]); and second in speech 3, 19, where تشكيل كلتا اللجنتين من الشخصيات المصرية المشهود لها بالاستقلال والتجرد ومن فقهاء القانون الدستوري ورجال "is compounded into "the formation of these two committees to be comprised of independent and transparent jurist legal professional and professionals" omitting "القنون الدستوري" and "الشخصيات المصرية المشهود لها بـ" Using this type of omission can be

accounted for in terms of Gile's law "minimizing interference in information recovery". Its rarity can be explained by the fact that it requires a relatively long Ear-Voice Span (EVS), to be able to employ meaning-based interpreting and select which items to be omitted and how the rest will be regrouped.

5.1.1.4 Comprehension omissions:

Considering that the speeches are low in pace (average 70 words per minute), along with the professionality of the interpreters, attributing omission to problems of comprehension or reformulation is very unlikely, and, throughout the analysis, no instances of omission could be classified as comprehension omissions.

5.1.1.5 Other causes:

Some omissions, however, do not fall under Barik's four subcategories. In speech 1, 17 <4> and <5>, the interpreter renders " أو ما خلاك أبناء الشعب خلالة أبناء الشعب أبسرع مما يحتمله أبناء الشعب أبسرع مما يحتمله أبناء الشعب أبسرع مما يحتمله أبناء الشعب 'into "to be expedited and speeded up to lift the suffering of the people". Here the interpreter delivered a totally different meaning simply by omitting the negation. This can be attributed to what Gile terms "vulnerability of signal", that is, the negation was easily missed since it is delivered by the simple, two-letter, monosyllabic word \(\frac{1}{2}\). In addition, the speaker's logic is unusual (most leaders promote faster economic reforms), so it was beyond the interpreter's anticipation. The same problem is detected in speech 2, 15 <1>, where "\(\frac{1}{2}\) \(\frac{1}{2}\) is rendered into "article 76". Again, the omission is attributed rather to the vulnerable nature of numbers which often act as a common problem trigger for interpreters.

5.1.2 Effect of omissions:

In several instances, the word "أبناء" is omitted as in 10 < 1> "بناء شباب مصر", in 20 < 1> "أبناء الشعب" (wholly omitted), and in 33 < 2> "أبناء الشعب". The word is acceptable and common in Arabic meaning "the youth of Egypt" or "the Egyptians", yet it is not

commonly used similarly in English, hence its omission inevitably obliterates the sense of closeness and endearment.

5.2 Additions:

Additions are naturally less frequent in SI than omissions (37 instances compared to 92 omissions as previously noted). Additions however are more elusive than omissions. A variety of factors can understandably lead to omissions, but why an interpreter would add (and hence consume more time and processing capacity) requires delving more deeply in SI, cognitive, and linguistic theories.

5.2.1 Causes for additions:

The main problem with Barik's classification upon analysis is that it is not clear whether it is based on linguistic types (as in the first type "qualifier addition") or on the aim of the addition (as in the second type "elaboration addition"). Besides, while this classification covers most of the additions in the corpus of the study, it does not cover all of them. Therefore, the present analysis uses Barik's classification accompanied with a sub-classification into types and causes of addition, and more subcategories are included to cover the added items that do not fall under Barik's categories.

5.2.1.1 Qualifier additions:

An interpreter often adds a qualifier that is not stated in the original. For example, in speech 1, 12 <1>, "نحاذر" is rendered into "cautious and aware"; in 14 <4>, the interpreter renders "العمل المخلص الجاد" into "conscious, concerted, genuine effort", using three qualifiers instead of two. In speech 3, 2 <2>, "ويحلم بالمستقبل" is rendered as "dreaming of a bright future", so the interpreter adds the qualifier "bright" though it has no equivalent in the source speech. In 24 <1>, "ذات الأولوية" translates into "the top priority" though the speaker did not mention ["القصوى"] or ["ألقصوى"]. These instances of qualifier addition can be explained in terms of the presupposed meaning, which indicates how speakers of a language associate certain words together (Baker, 1992, p. 14). To illustrate, once the interpreter's mind recognizes "مستقبل" and "مستقبل, it automatically links these two words to the word ["مشرق"] and renders it into "bright". Similarly, "effort" is automatically linked to "concerted"; "a priority" is very often "a top priority" (see CALD and English Collocations Dictionary online). Thus, it can be argued that such additions were made because the mind could not separate the lexical item already found in the ST from another collocating item that is not found in the ST (the collocating item is automatically "activated").

The other instances of qualifier additions, however, cannot be explained similarly. In speech 3, 5 < 2>, "بكل الجدية والصدق" reformulates as "genuinely, honestly, and seriously" and in 18 < 2>, "التعديلات المطلوبة في الدستور وما تقتضيه من تعديلات تشريعية" is translated as "the constitutional ami- amendments required together with the necessary- parallel necessary

legislative amendments". The added items can be explained in terms of the law of "maximizing information recovery", which, according to Gile, indicates following tactics that favour covering the meaning fully over saving time and processing capacity (Gile, 2009a, pp. 211, 212). The interpreter is attempting to reformulate the meaning in all or the most expressive terms available. Such additions can thus be seen as part of the second category (elaboration additions) as well.

5.2.1.2 Elaboration addition:

This is probably the most common type of additions since it is capable of encompassing a variety of forms. A salient form is that of adding synonyms or near synonyms. As mentioned above under qualifiers, interpreters are sometimes driven by the law of maximizing information recovery to articulate more than one expressive equivalent of the source. For example, in speech 1, 9 <1>, the interpreter renders "کحکے" into "as a judge and arbitrator" in an attempt to get as close as possible to the meaning of the source. The same may be said of 11 <2> in speech 3, where "حمایة الدستور ومصالح الشعب" is reformulated into "protecting the constitution, safeguarding the interests of the people". In 36 <2>, the interpreter renders "أتباعًا لأحد" more vividly into "satellite state", which is not a direct equivalent but a very close one particularly in this context, then, again, to make sure the meaning is fully delivered, he follows it with an elaboration "satellite state followers to others".

In speech 3, 32 <4>, he does not use synonyms but semantically related items "مصر واستقرارها" "peace, stability, and independence and sovereignty of Egypt". This seems a rather unwarranted and long addition, and only one possible explanation can be given here: the interpreter realized that "peace" was not the accurate equivalent of the source item, yet failed to recall the accurate alternative. Instead, he gave other semantically related items in an attempt to recover the inaccuracy. In speech 1, 25 <3>, "امن الوطن "the interpreter adds a synonym as well "homeland's security and citizen's safety", yet this is not attributed to maximizing information recovery, but rather to dissimilarity in the Arabic and English genitive structure accompanied by a short EVS. The interpreter rendered "أمن الوطن" simultaneously into "homeland's security", then realized that "المواطنين" was added. In English, it should be ["homeland's and citizens' security"] but the head "security" was already articulated, so instead of self-correction he added another synonymous head "safety".

In other instances, the addition is an outright elaboration: the interpreter gives more details of the image depicted or generally elaborates the message. A variety of reasons can drive the interpreter to allocate time and processing capacity for this. One of these is problems of non-equivalence at word level. For example, in speech 3, 15 <3>, the word "حریص" is rendered into two "person keen" due to the problem of non-equivalence that Baker describes as "difference in form" (1992, p. 24). Arabic has a word for the

person characterized by keenness, while English does not, so the interpreter elaborates it into adjective and noun (paraphrase using a related word (Baker, 1992, p. 37)). In 31 <3>, "العبور والنصر والنصر

Some additions are necessitated by the surrounding structure, particularly collocation. In speech 1, segment 19, the interpreter elaborates "لزعزعة الاستقرار" saying "to shake the foundation of stability of Egypt". The addition of the word "foundation" is possibly driven by its collocation with the word "shake". In speech 2, 17 <1>, the interpreter renders "متابعة تنفيذ الحكومة الجديدة لتكليفاتها" in "متابعة" in "المتعددة الحكومة الجديدة التكليفاتها" into "supervise" ("I will continue to supervise the new government as it carries out its mi-mission"). In 17 <2>, the speaker adds a second dependent to the word "متابعة", but in the form of an infinitive "وأن يأتي", which should literally translate into ["and that its performance comes"]. This literal translation would not have collocated with "supervise" ("supervise that" yields no occurrences on Brigham Young University corpus), and "come" would not collocate with "performance", so the interpreter had to add "and to make sure that". In speech 3, 13 <4>, in "متابعة" but the interpreter renders it into "ensures", which collocates with "stability" but not with "demands", so the interpreter uses a noun that collocates and completes the meaning "the materialization of their demands".

Barik dismisses the explication of pronouns as a phenomenon unworthy of inclusion under additions (1975, p. 82). It may be argued here however that this is not true of Arabic-English SI. The system of pronouns in Arabic differs from that in English, particularly in that Arabic uses for plural inanimate nouns pronouns that are similar to pronouns used for single feminine animate nouns (Wright, 1898, pp. 197, 198). So when the interpreter faces a pronoun, s/he has one of three choices: either to remember exactly what this pronoun refers to and how s/he has rendered this referent, then use the corresponding pronoun in the TL pronouns system to match the TT item used; to translate the pronoun literally (i.e. using a feminine pronoun for a feminine pronoun, regardless of the actual referent in the source); or to explicate the pronoun, preferably recalling the actual referent or, alternatively, introducing any plausible, relevant referent. In the following examples, the interpreter has opted for the latter choice, avoiding mistaken pronominal choices and memory failures.

In speech 1, segment 3, "أمامها" becomes "to the people", though "ها" originally refers to "عهدي" In speech 2, 20 < 2>, the pronoun in "عهدي" refers to "عهدي" ("my

pledge") and is rendered into "those promises". In speech 3, segment 7, a potential error in the use of pronouns is avoided by rendering the pronouns in "الأعتراف بها وتصحيحها" which refer to "الأخطاء" ("mistakes") into full nouns "to admit to mistakes and rectify such mistakes". In 13 <3>, the interpreter renders "ولا يقوضها" into "without undermining the constitution". The pronoun in the source refers to "الشرعية الدستورية" which the interpreter has rightly rendered into "constitutional legitimacy", yet he rendered the pronoun into "the constitution", apparently forgetting the referent and replacing it with another one. Thus, the explication of pronouns hints to the complicated cognitive processes taking place in the interpreters' minds.

Some additions can be explained by employing mental modelling, in which the interpreter creates a relationship between stored information and the new input (cf. Pöchhacker F., 2015, p. 308). In speech 1, 4 <1>, the interpreter renders "البعض" in "محاولات البعض" into "some infiltrators". The interpreter adds the explicitation "infiltrators" although it does not appear anywhere in the segment or earlier in the speech. This may be viewed as a "mental model". At the time of 25 Jan revolution, the Egyptian media was continuously using the description of "infiltrators" or "مندسون for some protestors and even earlier for people in the opposition (see for example, Abu Amra, 2009). Thus, the interpreter used the term as an explicitation. In 18 <1>, "خلل رهنًا بالحفاظ is rendered into "will remain conditional on our efforts to maintain Egypt", although it could be easily translated into ["will remain conditional on maintaining Egypt"]. In speech 3, segment 37, the speaker reads "أساس وجودنا وجو هره من سبعة آلاف عام and the interpreter translates it into "the foundation of our presence and the essence of our civilization over seven thousands of years", although there is no mention of "civilization" in the source. Again, mental modelling can account for this, for the phrase ["٧٠٠٠ خضارة انسنة has become a cliché used to describe Egypt.

Some additions are more difficult to explain. In speech 3, both in segment 8 and in 10 < 1> the interpreter adds "my fellow countrymen" though the speaker does not say it, perhaps because the interpreter anticipates it since it has been repeated several times throughout the speeches. In speech 3, segment 12, the interpreter renders "وسوف أحافظ عليه" into "I will continue to keep this oath" instead of ["I will keep this oath"].

5.2.1.3 Relationship addition:

Throughout the study, a single example of relationship addition has been found, and a rather arguable one. In speech 2, 2 <2>, the speaker describes the demonstrations saying "... من استغلهم من سعى إلى " and carries on in 2 < 3>" سرعان ما استغلهم من سعى إلى " with a contradiction conjunction, with which he begins a new sentence "However, they were exploited by those who wanted to spread chaos". An opinion might suggest that this is a substitution; while another would argue that since the two relationships are not mutually exclusive (the interpreter could

have easily said ["However, they were soon exploited by ..."]), therefore this should be viewed as an omission and a separate addition.

5.2.1.4 Closure addition:

Speech 1 features one clear example of closure addition. As mentioned above, in segment 19, "نول ما حدث خلال هذه التظاهرات يتجاوز ما حدث من نهب وفوضى وحرائق لمخطط أبعد من "خلال هذه التظاهرات يتجاوز ما حدث من نهب وفوضى وحرائق لمخطط أبعد من", the interpreter omits the first part because of delay. He then follows with an addition to render the sentence meaningful and to be able to carry on with the rest of the segment "We will go above the arsons and looting which may indicate further plots". It is the addition of this relative clause that redirects the meaning to match the speaker's instead of carrying on with the initial misinterpretation.

5.2.2 Effect of additions:

By examining the effect of these additions, it is found that most of them have a neutral effect on the meaning, some even have a positive effect, and only a few have a negative one. For example, in speech 1, 4 < 1 >, the addition of the word "infiltrators" makes the meaning clearer. Additions driven by difference in culture or form as in speech 3, 31 < 3 > "of Sinai" and 32 < 3 > "dictated orders" are in fact required to give a complete meaning. The occasional negative effect of addition is basically attributed to the fact that additions consume time and processing capacity and often lead to a subsequent omission or incompletion of meaning, as in speech 1, 9 < 1 > (where "initially is omitted) and 15 < 2 > (where the sentence ends up incomplete and meaningless "looks at them to live up").

5.3 Substitutions:

Barik describes substitution solely as an equivalent of error and examines them inasmuch as they change the meaning (1975, p. 82). The present study however includes all semantic substitutions, so the categorization given below digresses from that of Barik's. The interpretations of the three speeches are rich in instances where the interpreter renders a lexical item in a way that is different from the literal one. The resulting output is not necessarily wrong, but it is probably not what a written translator would have used, hence called a "departure". These departures hereafter range from using a superordinate, using a semantically related item (or approximation), and errors.

5.3.1 Causes of substitutions:

5.3.1.1 Equivalence and problems of non-equivalence:

Using a superordinate or a more general item occurs 17 times throughout the three speeches. It is a common strategy reported by Mona Baker for written translation (1992, p. 26) and by Gile for interpreters (2009, p. 206). Occasionally, using a superordinate is driven by problems of non-equivalence. For example, in speech 1, segment 3, the speaker

uses the verb "تشدد" in "… عليماتي للحكومة تشدد على "the literal translation of which ["My instructions ... stress"] is not common (only two instances on GloWbe). Thus, to avoid an inappropriate collocation and wasting time and effort searching for a better one, she used a superordinate "was". In 15 <2>, "تطلع إليهم" similarly poses a problem of non-equivalence, because the verb is semantically complex. It involves "looking", "holding high expectations of", and "anticipation". The interpreter therefore resorts to the general verb "looks" in "looks at them". In speech 2, 13 <2>, the word "أمانته" is problematic because it is not lexicalized in the TL and bears religious and cultural connotations. The best option available for the interpreter was to use a more general item "responsibility".

Equivalence above word level is similarly a factor for using semantically related items. Baker, in her book, discusses the problem of "tension between accuracy and naturalness" (1992, p. 56). Sometimes a collocating TL item does not accurately render the SL item, so the translator has to choose between using the more common collocating item or the literal, accurate equivalent. In speech 1, segment 3, the interpreter renders into "to give a chance" which is not strictly the same but is a common "إتاحة الفرصة" collocation (The English Collocations Dictionary online, n.d.). In speech 2, 17 <2>, the speaker aims at a government's performance that is "معبرًا عن الشعب" [literally "reflecting the people"]. Usually the people are reflected through the parliament, political parties, etc. but not through actual performance. The interpreter instead reformulated it as "performs in a way that err- satisfies the nations' demands", opting for naturalness. In speech 3, 26 <1> "الحقوق والحريات" is rendered into "rights and obligations", because they come often together (a simple google search yields over 9 million results compared to less than 3.5 million for the literal "rights and freedoms"). Earlier, in 11 <4>, the speaker calls for elections characterized by "الحرية والنزاهة" (freedom and integrity) but the interpreter renders it as "transparency and integrity", though both "free" and "transparent" collocate with elections. In 39 <3>, describing Egypt as "هي الهدف والغاية" is rendered into "it is the means and the end". This shows that the interpreters in these instances at least have been following Gile's law of maximizing communication impact, which indicates cases when the interpreter favours tactics that serve other aims of the text besides the information, such as fluency, continuity, etc. (Gile, 2009, pp. 212, 213). In the examples in hand, though, not only do the interpreters prefer a collocating target item to an accurate one, they more readily articulate what they anticipate and expect by their knowledge of collocational restrictions, even if the source item is also collocating, because they are activated automatically or anticipated with the mention of the other item (for example, the way ["فسيلة" – literally "means"] has been activated upon hearing "فاية" (cf. Pöchhacker F., 2015, p. 120)), and hence do not consume much time or processing capacity.

Substitutions on the level of phrases is also common for the sake of achieving equivalence and idiomaticity. These may go under Barik's (1975) third and fourth subcategories of substitution, or under Schjoldager's (1996) categories of equivalent

substitutions, generalizing substitutions, overlapping substitutions, and substitutions proper (2002, p. 308). Equivalent substitutions appear to be associated with meaning-based interpreting, as the interpreter renders the same gist but in a different way. For example, in speech 1, 10 < 4>, the interpreter renders "قائمة" is rendered into the idiom "on the table". In speech 2, 9 < 2>, "قائمة" is rendered into the idiom "on the table". 10 < 1> "فالب سلطة أو جاه" poses a problem because of its structure and its idiomaticity, so the interpreter attempts to deliver the intended meaning but ends up with "interested in being a dictator". In speech 3, 15 < 2>, "أولاً بأول" is also an idiomatic expression that cannot be rendered literally so the interpreter goes for "step by step". 35 < 3>, "سترد كيد الكائدين وشماتة الشامتين" is quite cultural as the Egyptian society is known to fear and to fight envy and gloating. It also involves parallelism, so the interpreter resorts to equivalent substitution, saying "we will not allow others to gloat over us".

Equivalent substitutions are also common among phrases of opening, greeting and conclusion, such as "بسم الله الرحمن الرحيم" at the beginning of speech 1 rendered into "in the name of God almighty"; "in speech 2, 1 <2>, 7 <1>, and 21 <1>, is rendered into "dear" and "dearest"; and in speech 3, 1 <2>, "الإخوة المواطنون" becomes "my fellow countrymen". "السلام عليكم ورحمة الله وبركاته" at the end of the speeches is always rendered through generalizing substitution "peace be upon you".

5.3.1.2 Excessive load:

There is near consensus in the field of psycholinguistics that, within speech production, lexicalization or word retrieval takes place through two stages. In the first stage, the conceptual representation of words is linked to a corresponding "lemma", that is a lexical item that is "specified syntactically and semantically but not phonologically"; in the second stage, the lemma is linked to a corresponding "lexeme or phonological form selection" (Harley, 2014, p. 410). Lemmas and lexemes are widely depicted in the form of networks. According to the network approach in psycholinguistics, lexical items are organized in the mental lexicon in the form of a network of nodes (Caramazza, 1997, p. 181). So, on the semantic level, words are connected according to their hierarchical and other semantic relationships to form communities (see for example Beckage & Colunga, 2016, p. 5). According to Fay and Cutler, in the process of speech production, a word pushes its way through this hierarchically arranged semantic network until it ends at its phonological representation. Naturally, errors occur in this process. Word error may be the result of the selection of a wrong semantic branch [or lemma] in the semantic network, so the resulting word will be similar to the desired one in meaning but not in phonological structure (semantic paraphasia); or it may be because "the final pointer to the target phonological form slips, [so] a nearby item will be substituted", so the resulting word will be similar in phonological structure though not in meaning (phonological paraphasia) (Qtd in Harley & MacAndrew, 2001, p. 397).

While this provides a cognitive explanation of how the errors occur, the trigger for such errors in ordinary conditions (i.e. in the absence of disorders and injuries) remains to be explained. Possible candidates include overuse of processing capacity, or "mental energy" (see Bock, 1995, p. 201). Thus, saturation or excessive cognitive load can be responsible for the error. According to Gile, interpreters most of the time "work close to saturation" (Gile, 2009, pp. 182, 183), which makes them continuously liable to such errors, and, arguably, inaccuracies.

In speech 1, 4 <1> the interpreter renders "محاولات" as "impact" instead of "attempts", an example of word substitution in speech errors. Another instance appears in 9 <3> where "نفى إطار الشرعية" is rendered "within the paramits of law". The word "paramits" can be explained as a blending error (an error that occurs when there is more than one way of expressing a message and "these alternatives become merged into one utterance" (Harley, 1984, p. 202)). The source item "إطار" can both be rendered as "parameters" and "limits", and hence came the blend "paramits". Recalling Bock's assumption that overuse of "mental energy" (or processing capacity) plays a role in speech errors, then previous confusions (in the same tag "the- to the right of- to exercising the right of freedom of expression") have contributed to the error (i.e. the confusion used up processing capacity, and the blend came within a failure sequence). Another blending error appears immediately in the following segment in "إن خيطًا رفيعًا يفصل" "there is a fining line separating". The word "fine" is used as a verb only in the sense of (imposing a fine), while the sense of (thin) appears only in the adjective. Using it in the gerund form can be understood as a blend of "fine" and "separating" or "defining". General lack of sufficient processing capacity also accounts for other errors. These include rendering "اقتصادي into "economical" [instead of "economic"] in speech 1, 16 <1>; "التدابير والإجراءات" into "measurements" [instead of "measures"] in speech 2, 14 <2>; and "أضرار" into "damages" [instead of "damage" or "harm"] in speech 3, 28 <2>.

Within the abovementioned network approach in psycholinguistics, a model known as "the spreading activation model of semantic processing" has been proposed. In this model, when a concept is activated and starts pushing through the semantic network, it does not only activate the word that accurately corresponds to that concept, but also neighbouring words. So, for example if the word "bus" is activated, "car" will also be activated (Beckage & Colunga, 2016, pp. 11, 12). This, along with the argument about the limitation of processing capacity, explains other errors as in speech 1, 26 <2>, where "الراهنة" is rendered into "upcoming" [instead of "current" or "present"], and in speech 3, 38 <2>, where "فلاحينا و عمالنا و مثقنينا و عمالنا و مثقنينا و عمالنا و مثقنينا و

The same explanation can apply to the use of superordinates and semantically related items where no other linguistic trigger occurs. For example, in speech 1, 7 < 2>,

the interpreter renders "تتحول" into "changed" [instead of "transformed"], and "in 8 <2> into "the media" [instead of "the press"]. In speech 2, "قطع الطرقات" (segment 4) becomes "acts of thugs", and "أطالب" (19 <1>) "ask". In speech 3, 11 <3> "أطالب" is rendered as "the people" and "أطالب" (15 <1>) as "to take". Using semantically related items is even more proliferous, occurring no less than 72 times. Examples in speech 1 include 7 <3> "لاستقلال القضاء وأحكامه" rendered as "security", and 23 <2>, where "لاستقلال القضاء وأحكامه" is rendered as "rule of law". In speech 2, there is a clear example in 7 <2>, where "بتشكيل" is rendered into "imposing or bringing up". Here the interpreter clearly finds difficulty locating the accurate equivalent ["formulate"] and lands on activated neighbouring verbs. Other examples in the same speech include 14 <3> where "صلاحيات" becomes "rights", and 23 <2> where "أرضه" becomes "its honour". In speech 3, the interpreter renders 2 <2> where "أرضه" into "shaping", and 31 <1> "شرف العسكرية" into "the ethics of the military".

Excessive load also explains the use of what Schjoldager terms "generalizing substitutions", when the interpreter delivers a phrase in shorter or more general words, but here it acts more like a preventive tactic (to prevent saturation – law of minimizing interference in information recovery). In speech 1, 26 <1>, "التقدم باستقالتها" is rendered less specifically into "to step down"; in speech 2, 11 <3>, "وفق ما تراه المقبلة المقبلة (الانتخابات الرئاسية المقبلة rendered into "to allow a new election for the Egyptians to choose"; in speech 3, 23 <3> "وفق ما تراه من الدواعي والمبررات" is stated simply as "as required".

In several instances, the interpreter seems to use equivalent substitution to avoid complication of syntax, and hence avoid excessive load. This shows in speech 1, 14 < 2 >, where "لا رجعة فيه" is modulated into "attached". In speech 3, 5 < 1 > "لم أنفصل" is rendered into "that cannot be waived"; 10 < 2 > (1)" into "plain unequivocal words"; and 23 < 2 > "التي تنتهي إليها هذه اللجنة الدستورية" into "as per the recommendations of the constitutional committee".

Furthermore, the interpreter uses overlapping substitution twice. In this type, the interpreter renders the phrase "with a different viewpoint, so that target-text item conveys different information" (Schjoldager, 2002, p. 308). This shows in speech 2, 20 <2>, where the interpreter renders "عطائي لمصر وشعبها" into "my life in politics"; and in speech 3, 35 <1>, "تتجاوز أزمتها" is translated into "exit this exit". Substitution proper, where "target-text item bears little or no resemblance to relevant source text item" (Schjoldager, 2002, p. 308) appears in speech 3, 24 <2>, where the interpreter reformulates "للوطن into "to rise above all differences" but then adds a more literal rendition "and to put the interests of the nation above all."

5.3.1.3 Confusion:

It has been noted that, so far, this account of substitutions has not depended primarily upon Barik's categorization (1975), because his categorization of substitutions depended mainly on the scale of the substitution (substitution of a lexical item vs. substitution of a phrase) and effect of substitution (mild error vs. substantial change in meaning). Only in the subcategorization of the second and fifth types of substitution (gross semantic error, and gross phrasing change) does he refer to causes of substitutions. In Barik's study (1975), gross semantic errors (E2) were sometimes attributed to confusion (E2a), such as confusion between homonyms or near-sounding words (1975, p. 83). This accounts for several substitutions in the present study.

In speech 1, 8 <1>, "وقفات" in "وقفات" is rendered into "stances". The Arabic word "وقفة" can indeed mean "stance" (i.e. opinion) and "stand" (i.e. an act of opposition). In this context, it is used to mean the latter, but the interpreter wrongly assumes it is the former. In both speech 1 (25 <3>) and speech 3 (28 <1>), "مالت " and "مالت " are rendered into "tolerate" (though the former is then corrected into "allow"). This is because of the closeness between the Arabic "مالت " (allow) and "مالت " (tolerate). In speech 2, 16 <2>, the referent of the pronoun is confused because of memory decay and difference in pronominal systems in SL and TL, rendering "مالت الدستورية" (where "التحديلات الدستورية") into "it entails" (where "it" cannot be understood as referring to the plural "constitutional amendments" and hence the only grammatical referent would be "the parliament"), which does not correspond to the source. In 19 <2>, the interpreter mistakes "لتحقيق مع" and hence renders it as "to investigate" [instead of "to interrogate"].

5.3.1.4 Lapse in listening and analysis effort:

In Barik's fifth subcategory of substitutions, he reports that interpreters sometimes substitute a phrase in the source for a different one in the target because s/he has missed a part of the source or omitted it in the translation and had to make it up based on the remaining part (Barik, 1975, p. 85). This resonates with Gile's tactic of parallel reformulation and his law of self-protection (where the interpreter favours tactics that conceal the fact that s/he is facing a problem (Gile, 2009, pp. 213, 214)). In speech 1, 11 <1>, the interpreter misses the middle part of "أَلُو وَ الْمُورِّ اللهُ وَ اللهُ وَاللهُ وَ اللهُ وَاللهُ وَاللهُ

"rendered as "to shoulder new duties and to account for").

5.3.2 Effect of substitutions:

As the case has been with omissions and additions, substitution may and may not affect meaning of the text, compared to the literal translation. Quantitatively, substitutions resulting from confusion or speech errors are the ones that had the greatest negative effect. 10 confusion substitutions out of 16 had a negative effect on meaning (62.5%). Examples of these are, translating "محاولات" into "impact", "إطار" into "paramits", and "الأجراءات" into "measurements", which render a different or unclear meaning in the target. Such examples might be deemed to subsume Barik's "gross semantic errors" or E2, since they result from confusion or mistranslation, and more often than not they affect meaning negatively. None of them had a positive effect.

Substituting a lexical item with its superordinate is less drastic. Out of 17 instances, only 3 had a negative effect on meaning (17.6%). For example, rendering "i" into "looks at them" omits the idea of expectation; and rendering "باليهم" in speech 2, 7 <2>, into "engaged in" omits the idea of initiation, hence resulting in an inaccurate meaning.

Phrasal changes rank next in terms of negative effect on meaning and fluency (4 times out of 28; 14.2%). The phrase that the interpreter made up in speech 1, 17 <4> and <5> (after omitting the negation) is directly opposite in meaning to what the speaker said. In speech 2, 10 <1>, substituting "طالب سلطة أو جاه" results in an awkward translation "interested in being a dictator" because "interested" connotes something positive while "dictator" is negative, and the speaker is obviously not being ironic. Phrasal changes also contributed some positive effect to meaning and fluency (4 times out of 28; 14.2%). This shows in the rendition of the introductory "بلاخوة المواطنون" and "بسم الله الرحمن الرحيم" الرحيم عليكم ورحمة الله وبركاته" and "السلام عليكم ورحمة الله وبركاته" in 15 <2> into "step by step" in speech 3 is smoother and more idiomatic than a literal equivalent.

Using semantically related items, though most frequent (77 instances), has the least negative effect on meaning and fluency (10 times; 12.9%). The negative effect shows in disfluencies due to the interpreter's refinement as in speech 1, 10 <3> "النظام العام" "Egypt's righ- Egypt's interests", and 18 <2> "بنزاهة وشرف وأمانة" "in a fair and ju- and just way". It also shows in inaccuracies or clear differences in meaning as in rendering speech 3, 11 <3>, "المسؤولية" into "authority and power", and 26 <2> "إيقاف العمل بين ألمن "into "scrapping". Using a semantically related item also occasionally had a positive effect (twice; 2.6 %).

Rendering speech 2, 14 <1> "عبارات" into "words", and speech 3, 25 <1> "صحة و عضوية" into the legitimacy and validity" is more natural and idiomatic than their literal equivalent.

6. Conclusion:

The above analysis has relied initially on Henri Barik's model of departures occurring in SI (1975) and extended it using Gile's effort model and his list of problem triggers, tactics, and laws (2009), as well as other explanatory theories and concepts. The analysis thus covers departures in terms of omissions, additions, and substitutions.

It has been concluded that skipping omission represents the most common type of omissions. It occurs in coordinating conjunction phrases, qualifiers, genitive constructions, and phrases formed of a verb and an infinitive (where the verb is omitted and the infinitive turned into a verb), as the interpreter relies on the accompanying elements within the phrase to cover for the omitted meaning. Delay omissions are less frequent. Compounding omissions are rather rare since they require a long EVS and substantial resources management effort, yet they serve the law of minimizing interference in information recovery. Omissions due to problems in comprehension were not detected, while a few instances of omissions were attributed to vulnerability of segment and low anticipability (common problem triggers as listed by Gile, but missing in Barik's model). The effect of these omissions on meaning has been mostly neutral.

Additions naturally were less frequent than omissions. They have been categorized (based on Barik's model) into qualifier additions, elaboration additions, relationship additions, and closure additions. The analysis reveals that qualifier additions are mostly attributed either to the interpreter's sense of the presupposed meaning (collocations), or to his/her obedience to the law of maximizing information recovery. Elaboration additions are further categorized here into addition of synonyms or near-synonyms, addition of semantically related items, addition of direct elaborations, and explicitation of pronouns. These have been attributed to a variety of reasons including: the law of maximizing information recovery, syntactic dissimilarity (a problem trigger according to Gile), problems of non-equivalence at and above word level, cultural differences (problems listed by Baker), and sense of presupposed meaning. Other additions are explained cognitively by the notion of "mental modelling" where a pre-set image in the interpreter's mind presents itself in the output. While the explicitation of pronouns had been discarded by Barik as of little importance, the analysis here has shown its necessity. As for closure addition, it has been attributed here to the law of self-protection. The additions used in these speeches have mostly led to neutral or positive effect, with the exception of 4 instances where they led to the consumption of the interpreter's resources, hence hampering subsequent chunks.

The interpretations of the three speeches are rich in substitutions, though the substitutions covered here are not viewed solely as errors as Barik deems them. Analysing their causes (thus digressing from Barik's model) they are attributed to problems of nonequivalence and strategies to overcome them, excessive load, confusion, and lapses in the listening and analysis effort. With reference to Baker's discussion of equivalence and nonequivalence (1992), the analysis attributes several substitutions to problems of nonequivalence that have required the use of superordinates, which is also a tactic recommended by Gile (2009). Other instances have been attributed to the clash between accuracy and naturalness, where the interpreter substituted the literal equivalent by a more collocating choice. Finally, non-equivalence above word level has also accounted for substitutions at phrase level, or equivalent substitutions, to borrow Schjoldager's term. Excessive mental load has been responsible for many substitutions where equivalence poses no problem. Relying on the network theory of lexical retrieval in psycholinguistics, instances of phonetic and semantic speech errors are detected and explained. Within the same theory, the notion of activation (how summoning one semantic item activates neighbouring ones) explains other substitutions that are not errors but inaccuracies, such as using semantically related items or superordinates instead of the literal equivalent. Substitutions due to confusion between homonyms have also been found. Others have been attributed to lapses in listening and analysis effort which result in the interpreter making up a segment of his own, a tactic mentioned both by Barik and Gile (parallel reformulation). The effect of the substitutions has been mostly neutral. The negative effect occurred basically in substitutions that resulted from confusion or speech errors, less often in the use of superordinates, even less with equivalent substitutions, and least in the use of semantically related items. On the other hand, equivalent substitution and using semantically related items have resulted in positive effect in several instances.

Thus, this paper has attempted to expand on Barik's model (1975) to cover both causes and effects of departures and to give more details about their types. It is doubtless that further analysis with different texts would probably yield in more details, but this study could claim that it again asserts Gile's statement that SI is intrinsically difficult (1997). Hence, while additional practice would always be advised, it must be conceded that no matter how professional the interpreter may be or how easy the text is, departures are inevitable, and more often than otherwise they have a neutral effect on the interpretation.

References

Abu Amra, M. (2009, 10 26). القلة المندسة في مواجهة الوطني. Retrieved from Masress: http://www.masress.com/misrelgdida/6661

Baker, M. (1992). In other words. London and New York: Routledge.

- Barik, H. C. (1975). Simultaneous interpretation: Qualitative and linguistic data. In F. Pöchhacker, & M. Shlesinger, *The interpreting studies reader* (pp. 78-92). London and New York: Routledge.
- Beckage, N. M., & Colunga, E. (2016). Language networks as models of cognition: Understanding cognition through language. In A. Mehler, A. Lücking, S. Banisch, P. Blanchard, & B. Frank-Job (Eds.), *Towards a theoretical framework for analyzing complex linguistic networks* (pp. 3-28). Heidelberg: Springer. doi:10.1007/978-3-662-47238-5
- Bock, K. (1995). Sentence production: From mind to mouth. In J. L. Miller, & P. D. Eimas, *Handbook of perception and cognition* (Vols. 11: Speech, language, and communication, pp. 181-216). Orlando, Fl: Academic Press.
- Caramazza, A. (1997). How many levels of processing are there in lexical access? *Cognitive Neuropsychology*, 14(1), 177-208. Retrieved from http://www.wjh.harvard.edu/~caram/PDFs/1997_Caramazza.pdf
- English collocations dictionary online. (n.d.). Retrieved from English collocations dictionary online: http://ozdic.com/
- Gile, D. (1997). Conference interpreting as a cognitive management problem. In F. Pöchhacker, & M. Shlesinger (Eds), *Interpreting studies reader* (pp. 162-177). London and New York: Routledge.
- Gile, D. (2008). Local cognitive load. Retrieved May 23, 2013, from CIRIN: cirinandgile.com/2008%20Local%20Analysis%20Forum.doc
- Gile, D. (2009). *Basic concepts and models for interpreter and translator training*. Amesterdam/Philadelphia: John Benjamins Publishing Company.
- Harley, T. A. (1984). A critique of top-down independent levels models of speech production: Evidence from non-plan-internal speech errors. *Cognitive Science*, 8, 191-219.
- Harley, T. A. (2014). *The psychology of language: From data to theory* (4th ed.). London and New York: Psychology Press.
- Harley, T. A., & MacAndrew, S. B. (2001). Constraints upon word substitution speech errors. *Journal of Psycholinguistic Research*, 30(4), 395-418.
- Pöchhacker, F. (2015). Routledge encyclopedia of interpreting studies. London and New York: Routledge.
- Pöchhacker, F., & Shlesinger, M. (2002). *The interpreting studies reader*. London and New York: Routledge.
- Pym, A. (2008). On omission in simultaneous interpreting. Risk analysis of a hidden effort. In A. C.-A. G. Hansen, *Efforts and models in interpreting and translation research* (pp. 83-105). Amsterdam/Philadelphia: John Benjamins.
- Schjoldager, A. (2002). An exploratory study of translational norms in simultaneous interpreting. In F. Pöchhacker, *The interpreting studies reader* (pp. 300-311). London and New York: Routledge.
- Shuttleworth, M., & Cowie, M. (1997). *Dictionary of translation studies*. Manchester: St. Jerome Publishing.
- Walter, E. (Ed.). (2008). Cambridge advanced learner's dictionary. Cambridge University Press.
- Wright, W. (1898). A grammar of the Arabic language. Cambridge: Cambridge University Press.

Appendices:

- 1. Source speeches of Mubarak:
- a. The first speech, delivered on the 28th of January, 2011, retrieved from: http://www.youtube.com/watch?v=5Nbnc-QAUfU&list=PLC791FB02C289CD15
- b. The second speech, delivered on the 1st of February, 2011, retrieved from: https://www.youtube.com/watch?v=hieZso8dSeg
- c. The third speech, delivered on the 10^{th} of February, 2011, retrieved from: $\frac{\text{https://www.youtube.com/watch?v=XOiXKqPiPVw}}{\text{https://www.youtube.com/watch?v=XOiXKqPiPVw}}$
- 2. Interpreted speeches of Mubarak:
- a. The first speech, delivered on the 28th of January, 2011, retrieved from: https://www.youtube.com/watch?v=VCqI9JuOa44
- b. The second speech, delivered on the 1st of February, 2011, retrieved from: http://www.youtube.com/watch?v=vrLHwNre_qU