



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكرو فيلم

# بسم الله الرحمن الرحيم



**MONA MAGHRABY**



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التوثيق الإلكتروني والميكروفيلم



# شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



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**Impact of Working Memory Load on Performance and  
Strategy Selection in Simultaneous Interpreting  
A Case Study of Obama's Speech before the UN General  
Assembly (2015)  
& David Cameron's Speech before the House of Commons  
(2015)**

A Thesis Submitted in Partial Fulfillment of the Requirements of the  
Master of Arts in Interpreting Studies

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# **Impact of Working Memory Load on Performance and Strategy Selection in Simultaneous Interpreting**

## **A Case Study of Obama's Speech before the UN General Assembly (2015)**

## **& David Cameron's Speech before the House of Commons (2015)**

### **Abstract**

This study aims to explore interpreting studies from the cognitive psychology point of view. It focuses on investigating the underlying cognitive activity involved in the process of Simultaneous Interpreting (SI). To understand the cognitive workings inside the interpreter's brain, the importance of the Working Memory (WM) and the role it plays in attentional coordination are examined based on Baddeley and Hitch's WM model (2010). David Gerver's flow-chart model of simultaneous interpreting (1975) is presented to shed light on some aspects of the on-the-job performance of SI. Various problem triggers that constitute a load on the WM are investigated to show how overloading the memory due to these triggers leads to a number of errors and departures from the incoming message. The study also elaborates the various load-reduction strategies employed by interpreters to cope with WM load and circumvent the structural and lexical difficulties. Henri Barik's coding scheme (2002) that describes the various types of omissions, additions and errors of translation encountered in SI is used as a guideline for the analysis of the interpreter's departures from the original version. The Arabic interpretation of Obama's speech before the 70<sup>th</sup> session of the United Nations' General Assembly and David Cameron's speech before the House of Commons, both carried out by Al-Jazeera Channel interpreters, are examined. The study concludes that the WM plays a pivotal role in SI, but once saturated, performance declines and deviations occur. However, numerous load-reduction strategies can be employed upon the interpreter's discretion to ensure fluent communication.

**Keywords:** simultaneous interpreting, cognitive processing, working memory, flow-chart model, problem triggers, coding scheme, load-reduction strategies.

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## **List of Abbreviations**

|      |                                                      |
|------|------------------------------------------------------|
| A    | Additions                                            |
| AIIC | International Association of Conference Interpreters |
| E    | Errors                                               |
| EVS  | Ear-Voice Span                                       |
| L1   | Native Language                                      |
| L2   | Second Language                                      |
| LTM  | Long-Term Memory                                     |
| O    | Omissions                                            |
| S    | Speaker                                              |
| SI   | Simultaneous Interpreting                            |
| SL   | Source Language                                      |
| ST   | Source Text                                          |
| STM  | Short-Term Memory                                    |
| T    | Interpreter                                          |
| TL   | Target Language                                      |
| TT   | Target Text                                          |
| WM   | Working Memory                                       |

## **0. Introduction**

### **0.1 Statement of the Research Problem**

Interpreting is a special form of translation. It is a translational activity that is characterized by its simultaneity. “In principle, interpreting is performed “here and now” for the benefit of the people who want to engage in communication across barriers of language and culture” (Pöchhacker, 2004, p.10). The immediacy of the process of simultaneous interpreting makes the cognitive processing of information an essential ingredient of interpreting studies research. Thus, many of researchers in this field draw upon psychological theories in their quest for the human processing capacity and the role of WM in the process of interpreting.

### **0.2 Importance of the Study**

Simultaneous interpreting is a complex task that can only be appropriately performed by experienced well-trained professionals. It is highly significant to delve into the human mind to understand how the brain functions during such an intricate process, enabling the interpreter to decode the source language and encode the target language in tandem. The theories of prominent psychologists (Alan Baddeley 2010, David Gerver 1975, Henri Barik 2002, etc.) are discussed herein to disambiguate the mystery of the process, understand the factors that might affect it, analyze the resultant output, and define the strategies used by interpreters to cope with the difficulties that might arise.

### **0.3 Aim of the Study**

The study aims to unveil the concept of WM showing its main components pursuant to Baddeley and Hitch's model. Moreover, Gerver's flow-chart model is to be analyzed to clarify how the interpreter can process