



Macro-cognitive and Micro-cognitive Efficacy of Translating Theatrical Texts into English

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Abstract

The current paper highlights the need for a unified approach that considers both micro - and macro-cognition in cognitive research. It suggests that integrating these perspectives can lead to a more complete interpretation of theatrical texts. The current work hypothesizes that the model of the translation process folds into two constructs of cognitive Efficacy (CE); the first is the macrocognitive interface, and the second is the microcognitive interface to pull away conceptual and operational analysis of the translator's performance of transfer ST and ground the mind into TT. The methodological consequences and practical part are applied to the theatrical texts to follow this model of the translation process and how it affects the scope of cognitive translation studies (CTS) by (Martín and de León, 2021). The study concluded that macro-cognitive research deals with the overall performance and ecology of task execution within the cognitive system of the translator. While it focuses on invariant processes, the use of binary linguistic levels is often employed in micro - cognitive research. The emphasis on internal validity and the ability to draw causal inferences is mentioned, as well as the convenience and utility of using large samples in analyzing complex relationships between variables of cognitive modeling, mental architecture, and knowledge sharing.

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الخلاصة

تسلط الورقة الحالية الضوء على الحاجة إلى نهج موحد يأخذ في الاعتبار الإدراك الجزئي والكلّي في البحث المعرفي. يقترح أن دمج هذه وجهات النظر يمكن أن يؤدي إلى تفسير أكثر اكتمالاً للنصوص المسرحية. يفترض العمل الحالي أن نموذج عملية الترجمة ينطوي على بنيتين للفعالية المعرفية؛ الأول هو الواجهة المعرفية الكبيرة، والثاني هو الواجهة المعرفية الدقيقة لسحب التحليل المفاهيمي والتشغيلي لأداء المترجم لنقل ST وتثبيت العقل في TT. يتم تطبيق العواقب المنهجية والجزء العملي على النصوص المسرحية لاتباع هذا النموذج من عملية الترجمة وكيف يؤثر على نطاق دراسات الترجمة المعرفية (مارتن ودي ليون، ٢٠٢١). وخلصت الدراسة إلى أن البحث المعرفي الكلّي يتعامل مع الأداء العام والبيئة لتنفيذ المهام داخل النظام المعرفي للمترجم. بينما يركز على العمليات الثابتة، غالباً ما يستخدم استخدام المستويات اللغوية الثنائية في الأبحاث المعرفية الدقيقة. تم ذكر التركيز على الصلاحية الداخلية والقدرة على استخلاص الاستنتاجات السببية، بالإضافة إلى راحة وفائدة استخدام عينات كبيرة في تحليل العلاقات المعقدة بين متغيرات النمذجة المعرفية والبنية العقلية ومشاركة المعرفة.

1. Introduction:

Breaking down the translation process has made a significant stride over the last twenty years. During that time, translation process research (TPR) such as performance analysis protocols have been supplemented by exciting new models of data analysis (Jakobsen and Alves, 2021:2). Translation process research (TPR) has also been reexamining notions, such as translation analysis in light of empirical findings. Increasingly, relevant models and concepts from the cognitive perspective, such as bilingual transfer and text comprehension are included in the understanding of translation task processes (what one has to know to translate) (Jakobsen, 2017: 32; Shreve and Lacruz, 2017: 127).

To be of real utility in helping us understand the translation process as a cognitive task, Martin and de Leon (2021: 57) propose a model that deals with two research issues. First, the model must describe the micro - cognitive development of the different translation - relevant resources of texts that are

activated and used when performing a translation task in ST and TT. Second, the model must describe the translation task from a macrocognitive perspective as a task that must be interfaced with the knowledge to explain how and when contextual resources are activated in the text. In other words, applied, created, and modified models during the cognitive processing of the translation task (see Nelson, 2018: 8).

The nature and interface of the translation task between micro - and macro-cognitive points have been the efficacy¹ of the strand in translation process research (TPR) (Tirkkonen-Condit & Jääskeläinen, 2000: 37; see also Schwieter and Ferreira, 2017: 145). In addition, the translation process research (TPR) is a model that conforms to the models of cognitive aspects of bilingualism (see also Muñoz-Martin, 2010: 174). According to the activities performed during the translation task, such as SL readership and TL writing, environment and audience have to be analyzed within the models of cognitive disciplines (Carl, 2009: 225; see also Jakobson, 2017: 22).

2. Cognitive Processes in Translation:

The distinct characteristic of the translation process is the center of interest in the efficacy of mental operations performed by the translator as inseparably linked to mental re-expression in TT. Tymoczko (2012:84) proposes a neurosciences of translation process research that emphasize precisely the importance of exploring the connections between the micro-level of cognitive

¹) In translation, the term "efficacy of mental processes" refers to the effectiveness or efficiency with which our cognitive processes function in producing intended results. It has to do with how effectively mental processes like perception, attention, memory, reasoning, problem-solving, decision-making, and information processing carry out their intended purposes.

processing, and the macro-level of texts, cultures, and ideologies. The concept of translation processes² focuses primarily on the intellectual operations of the inference-making process in SL and semantic constructions in TL (Risku, 2017:302). Hence, Jääskeläinen (2010: 214) views mental processes of translation by describing the efficacy of mental operations, much of this research is strongly process-oriented, inspired by pragmatics (see Schwieter and Ferreira, 2017:144).

Macro-cognition and micro-cognition models remain a subject under scrutiny, as there may not be a better way of collecting data about a translator's mind than by having information about language and contexts. Translation performance analysis considers contextual factors, lexical choices, and comprehension phase for suitable TL performance (see also Qi, 1998: 428; House, 2000: 150; House, 2015: 111). The translation process is model-driven in CTS with recent developments driven by theories of mind, translator comprehension, and inference-making in TL. The epistemological issue is whether we perceive reality pre-linguistically and then construct it through SL and TL, or if we construct it through SL and TL (House, 2000:151; Schwieter and Ferreira, 2017:143; Patricia Rodríguez-Inés, 2017: 274).

3. Translation Process Research (TPR):

In the late 1980s, there was just an epistemic perspective on the translation process, such as the phase identification process, lexical units of context, text conceptualization process, memory recall, retrieving process, and the combination of macro - cognitive and micro - cognitive efficacy, which would

² **Translation Process Research (TPR) is an empirical approach of investigating CTS.**

become objects of experimental work in the ensuing stages of research³ (Halverson, 2017: 201; Martín and de León, 2021: 57). This model (see footnote n.2) portrays translation process research (TPR) as a special type of cognitive-processing system⁴. The translation process research entails analyzing the complex processes of elements and different kinds of translation processes depending on the performance of the translator, the purpose of the translation process analysis, the method chosen, and the kind of translation (Alves and Albir, 2010: 29).

4. Macro - cognitive and Micro - cognitive Efficacy:

Cognitive efficacy of translation (TPR) involves macro-cognition and micro-cognition, which are complementary approaches focusing on action, environmental interaction, and linguistic, creative, and translator's construal capabilities using experimental, quantitative methodologies. The interface between macro and micro efficacy in cognition and translation deals with the possibilities of combinations of the text, i.e., during the translation process, the translator deals with these variables to build up cognitive constructs to achieve understanding in TT. Creative authorships focus on environmental aspects, involving translators in physical environments, and surpassing traditional research methods (Nelson, 2018: 23; Risku and Rogl, 2021:486).

³) Some models such as Königs (1987:182) presents the dual notion of ad hoc (automatic) microcognitive and rest dynamic (macrocognitive) blocks; Wilss (1988:133) builds on input from cognitive processes; Bell (1991:14) draws on cognitive science, and text linguistics; Gutt (1991:?) uses relevance theory in translation process, relevance-theoretic approach and puts both to the empirical test, Kiraly (1995:22) presents a psycholinguistic and behavioral model.

⁴) The period ranging from the 1990s to the late 2020s has provided a conceptual framework for the development of translation process research.

4.1 Macro - cognition

The configuration in which the technique is run is known as the macro context. The term macro-cognition is based on Cacciabue and Hollnagel (1995: 56) to refer to the study of macro-cognitive efficacy in translation as complex processes such as comprehension phase of the environment, recognition of context, and detection in natural settings while performing tasks. Macrocognitive efficacy is realized through the analysis of the translator's degree of realizing the settings of the TT text (i.e., the contextual factors that may affect the interpretation of the text). Take the following instances of theatrical text:

SL	<p>أنت تعلم تماماً أن كلمات الحق ليست جميلة... وأن الكلمات الجميلة ليست حقيقية. فماذا تكتب؟ وكيف؟ ولمن؟؟ (سحبات كمان نزقة. يخاطب المرأة بعتاب). ألم تكن هذه وسوستك لي؟ (الرمضاني، ٢٠٠٨: ١٥)</p>	
TL	Macro	Sounds of the violin. whereas he addresses reproachfully the woman.
	Micro	Let them pay the price of their recklessness because they deserve what happened and will happen to them. Why true words are usually unaccepted? Why fake deceitful words are appreciated? What do you write and for whom? Aren't these your anxious thoughts to me? (Al-Khashab, 2021: 26).

Translation performance is regulated by the cognitive interface, focusing on ecological factors and mechanistic aspects of the textual environment. This interface regulates the textual environment's regularities and units. Macro-cognition studies information processing as natural human experience units, focusing on regularities rather than hypothetical mechanisms (Martín and de León, 2017: 53).

4.2 Micro - cognition

The linguistic environment of a text, including its grammatical, phonological, lexical, syntactic, etc. Microcognition is the efficacy of invariant processes often in the form of binary linguistic, semantic and pragmatic structures of the formal language such as linguistic structures, metaphorical use, rhetorical questions, schematic conditioning, and so on (see Cacciabue and Hollnagel, 1995: 56; Klein *et al.*, 2000:173), as in the following example:

SL	وها هي ذي أمامي مطموسة حرفاً حرفاً ولا أستطيع أن أقرأ منها كلمة واحدة، هل هو كتاب في الحكمة؟ ترى ما نفع الحكمة لرجل ينتظر الموت في جوف حوت؟! ولماذا تأتي الحكمة دائماً بعد أن يكون أو انها قد فات؟ (يتوسط الخشبة رافعاً ذراعيه وباسطاً كفيه) (الرمضاني، ٢٠٠٨: ١٤).	
	Macro	He raises his open-handed arms in the middle of the stage
TL	Micro	They are now so much effaced that I can't read any of them . Is it a book of wisdom? What is then the use of wisdom ? What is the use of wisdom for a man like me waiting for his death inside a whale? Why does wisdom come so late?

Micro - cognitive evaluation of the translation process focuses on the complex processes tackled by semantic and pragmatic inputs between ST and TT (Klein *et al.*, 2000:173; West *et al.*, 2013: 107). Micro - cognition studies the TL that is relative to the mind of the translator, and the interpretation of complex systems in TT (see Cacciabue and Hollnagel, 1995: 55; Schraagen *et al.*, 2008: 4; Klein *et al.*, 2000:173; Smieszek and Rußwinkel, 2013: 214).

4.3 Model Adopted of Cognitive Efficacy (CE):

Macro- and micro-efficacy in CTS are not always considered tangible frameworks. Thus, Klein *et al.* (2000:174) and Staszewski (2008: 317) claimed

that macro- and micro-efficacy can be complementary interfaces of analysis to the translation process (see also Alves and Albir, 2010: 28; Nelson, 2018). According to Martín and de León (2021: 57), the following traits are essential features for breaking down macro and micro cognitive efficacy and bridging the gap between macro and micro related to three different concepts:

1. **Cognitive modeling:** This line is initiated by Cacciabue and Hollnagel (1995:57) focusing on the overall complex human–mental representations. Here, the strategy to interface macro cognition and micro-cognition efficacy to downscaling figurative tropes, as in:

SL	<p>حينما شعرت باليأس من نينوى. ومن أهلها الذين <u>صموا آذانهم</u> عن سماع كلماتي، <u>جلبت الطين</u> و<u>جهزت الألواح وبريت أقلام القصب</u>. قررت أن أدون كل ما جرى على الألواح لعل أحداً ما من ذرية أهل نينوى يقرأ يوماً ما فيعرف ما جرى... لعل أحداً ما في مكان ما يتعلم الدرس ... أو ينقل كلماتي إلى أناس آخرين (الرمضاني، ٢٠٠٨: ١٥)</p>	
	Macro	Strikes on drums while he addresses the man
TL	Micro	As soon as I left despair in Nineveh and its people <u>who did not listen</u> to my words, <u>I molded and collected the tablets and sharpened cane pencils</u> . I decided to document all the events on tablets so that the people of Nineveh may, one day, read them to transfer my words to other people.

This translation is done by interfacing microcognitive functions of figurative language (i.e., metonymic expressions) into the macrocognitive.

2. **Mental Architecture:** The second takes on macro-cognition that is based on the "macro architecture hypothesis" proposed by Newell (1990:63) to build a complete network that could integrate all macro-micro tasks in all knowledge and context domains (see also West *et al.*, 2013: 26). Accordingly, translator's competence can be described at different levels, each of which relies on macro-level architectures and micro-level

architectures, which, in turn, are built on the expertise and knowledge factors.

<p>SL</p>	<p>(صوت موجة عاتية يصاحبها نور جانبي ما يلبث أن يختفي، الممثل يقاوم ويتدحرج، ينهض ويسقط متثاقلاً وهو يخاطب الحوت). أيها الحوت.. أيها القوي الغامض، أمض بعيداً.. غص عميقاً.. أبتعد بي عنهم.. أبتعد أكثر وأكثر، أما أنا فقد أن لي أن أنام، وأتمنى أن تكون نومتي نومة طويلة أبدية لا تتخللها الأحلام. (يتمدد على الخشبة لكن جسده يصدم بشيء. يتخصص ما حوله ثم ينهض واقفاً فإذا به يمسك بجمجمة، يتأملها وهو يقول) أنا في جوف الحوت، والحوت في جوف البحر، ظلمات فوق ظلمات لكنني رغم هذا كله لا أستطيع أن أبقى لوحدي... أيها الحوت ما الذي يحتويه جوفك أيضاً؟ (ينظر ثانياً إلى الجمجمة... أيتها الجمجمة، يا شريكتي في هذه الرحلة التي لا أعرف كيف ستنتهي... أيتها الجمجمة، أهذا مألنا جميعاً؟ ما قيمة حياتنا اذن؟ وهل يدفعنا مصيرنا المحتوم إلى استعجاله؟ هنا ... هنا كانت العينان.... (الرمضاني، ٢٠٠٨: ٩)</p>
<p>Macro</p>	<p>Sounds of violent waves gradually disappear, whereas the actor rolls down... rises, and falls again. He resists and stands slowly up to address the whale...</p>
<p>Micro</p>	<p>O' strange animal, go away! Sink deeper. Take me away with you, go farther and farther... I should have my long everlasting sleep without dreams.</p>
<p>Macro</p>	<p>Lying on a board, his body strikes something. After groping around him, he stands up to see that he touches a skull. He stares at it:</p>
<p>Micro</p>	<p>I am inside a whale. The whale is inside a sea. Darkness over darkness. O' whale, I cannot live alone. O' whale, what other things are there inside you?</p>
<p>Macro</p>	<p>Again looks at the skull</p>
<p>Micro</p>	<p>O' skull my partner in this unknown voyage, is this our destiny? What is then the use of life? Does our decisive dentine lead us to this end? Here there were two eyes.</p>

In this case, the gap between macro-cognition and micro-cognition is overcome by upscaling from microcognitive architectures to model linguistic functions, such as the use of expressive identity, metaphoric expert, symbolic and interpretive resemblance, and performance multiagent environments (see also West & Nagy, 2007:186).

3. **Shared knowledge:** The understanding of macro-cognition stems from the shared knowledge between the text producer, translator, and audience. Here, macro-cognition refers to the cognitive construct of a group of people collaborating in complex socio-cultural contexts (see Fiore *et al.*, 2010:203). Studies of cognition coincide with distributed and extended approaches to the translation process (Clark, 2001:76).

SL	<p>المكان: تجاوبف مبهمة بلون أزرق داكن وبمستويات متعددة تتخللها أعمدة صفراء كأنها أضلاع عملاق ضخم (جوف حوت بعين سريلالية).</p> <p>الموسيقى: صوت أمواج تتلاطم. أحياناً صوت نوارس، وأحياناً تختفي هذه الأصوات لنسمع بدلاً منها صوت نبضات قلب عملاق... وآلات موسيقية ومؤثرات أخرى.</p> <p>تتسلط بقعة ضوء على يسار الخشبة. رجل في وسط العمر ينهض بهدوء وتثاقل، لحيته رمادية كثة... ويرتدي ملابس بيضاء مهلهلة وهو حافي القدين ... يسير إلى وسط الخشبة... يواجه الجمهور متسائلاً بمرارة...</p> <p>من أوكل لي مهمة اصلاح العالم؟ من؟ من؟ أي عبء وأية مهمة مستحيلة! ولماذا؟ لما ذا أنا بالذات؟ (الرمضاني، ٢٠٠٨: ٣)</p>	
TL	Macro	Place: inside a whale, some dark blue holes of different sizes are seen.
	Macro	Music: sounds of violent sea waves are frequently mixed with sounds of seagulls, which sometimes disappear to hear the pulses of the huge animal instead. Other effective music tools are also involved.

Macro	A spotlight is directed to the left side of the stage. A middle-aged man, barefooted with a grey beard stands up quietly, in his white dress, he moves to the middle of the stage facing the audience, he speaks bitterly
Micro	Who charged me with reforming the world...who? It is a heavy task, or it is an impossible deed, why me in particular?

Cognitive processes occur within and between individuals, enabling cooperation, knowledge transformation, and shared understanding of text, fostering effective cooperation and knowledge transfer.

4.4 Data Analysis of the Cognitive Efficacy:

Efficacy is an interface that interacts with the way of text comprehension during the translation process. This model has been proposed by Martín and de León (2021: 57) in terms of CTS, micro-, and macro-cognition are usually described as epistemologically and methodologically - based parameters to analyze the translation process research. This model is applied to the translation of theatrical texts to analyze the translator's performance tasks according to macro and micro-cognitive efficacies.

4.5 Data Collection and Nature of Theatrical Texts:

Theatrical text is a written piece that is meant to be presented on stage. It includes a variety of dramatic works, such as dialogue, stage directions, and structure and format, character descriptions, setting and time, emotional and artistic expression. Theater text and cognitive organization are specially tailored to encourage dramatic narrative and audience participation. Monologues, soliloquies, and other dramatic devices that improve the theatrical experience are frequently used in micro-cognitive efficacy. While macro-cognitive efficacy takes on the part of the performance to build characters, movements, and stage

reactions, explore issues, and character exchanges, and elicit efficacy and reactions from the performers. The translation of theatrical texts engages audiences, evokes emotions, and conveys messages, making them a vital component of efficacy. The data deal with the analysis of translating macro-and micro - cognitive efficacy to interface the translation process of theatrical works by:

SL	الرمضاني، ناهض (٢٠٠٨). مونودراما جوف الحوت . مطبوعات نينوى / العراق
TL	Al-Khashab, M. (2021). Inside the Whale: Translated from Arabic . In Al-Ramadhani, N., Al-Khashab, M. And Maree, B. (eds.). <i>Against War and Oppression</i> . Moment: Baghdad

The play, specifically, represents a new group of playwrights who have witnessed the hard circumstances of war and agonies in Mosul City. The purpose of focusing on such type of genre is to throw light on the translation process of theatric work.

5. Data Analysis:

Data of the paper involved (10) texts collected randomly from the above-mentioned play and tabulated according to the macro and micro cognitive efficacy of the interface model. This is associated with the pattern of (TPR), the analysis of the texts will focus on the efficacy of macro-and micro cognition of (TT), so, the performance of the translator will be broken down according to the tabulated formula of the following:

Text No. 1

SL (p. 8)	صوت موجة هائلة.. ينزلق ويتدحرج وكأن الموجة قد ضربته وهو يصارعها. ينهض رافعاً رأسه إلى أعلى ويلتفت حوله قائلاً: انا في جوف الحوت. والحوت في جوف البحر.. أيّ عزلة أشد من هذه؟! أيها الحوت.. أيها الحوت.. يامن لا يمكن للنور أن يجعلك أكثر وضوحاً. ويامن لا يمكن للظلمة أن تجعلك أشد عتمة. أيها القوي.. أيها الغامض. سر في طريقك.. غُص كما تشاء. أبعد وأعمق. اذهب أبعد وأعمق. أما أنا.. أما أنا فلم أعد أبالي بشيء.	
TL (p.8)	Macro	Sound of a huge wave. The actor slips away and rolls as if he was hit. He slips down from right to left raising his head, and then he turns around
	Micro	I am inside the whale. The whale inside a sea. What a terrible situation is this! O, whale! Light cannot make you clearer, and darkness cannot make you dimmer. O, strong obscure animal! Go farther on your way and sink deeper as you wish. I no longer care for what happens.

1. Macro-Level Cognitive Efficacy:

- a. Narrative Flow:** The narrative flow of the text is successfully maintained by the macro-level translation. The translation of the actor's response and the description of the sound of a massive wave ensure that the reader can easily follow the flow of events.
- b. Emotional Impact and Tone:** The translation maintains the original text's tone and emotional effect. The translation preserves the original text's atmosphere of wonder and introspection by using words like "O, whale! You cannot become more distinct in the light, and vice versa. This keeps the original's meditative and thoughtful atmosphere.

2. Micro-Level Cognitive Efficacy:

- a. Lexical Choices and Precise Phrasing:** To accurately portray the desired meaning, the translator makes careful vocabulary decisions. For instance, "أنا في جوف الحوت" is translated as "I am inside the whale," accurately conveying the precise meaning.
- b. Maintaining Meaning and Intent:** The original phrases' intent and meaning are successfully maintained by the translator. The meaning of "

"أيها القوي.. أيها الغامض" (O, powerful... O, obscure) is captured by the translator's use of phrases like "strong obscure animal".

- a. **Parallel Structure and Rhythm:** The parallel rhythm and structure of the original text are preserved by the translator, as in "اذهب أبعد وأعمق", "Go farther on your way and sink deeper as you wish". This makes sure that the original's rhythm and rhetorical aspects are translated accurately.

The translation accurately captures the emotional depth, reflective tone, and thematic relevance of the SL while addressing both macro and micro cognitive effectiveness.

Case No. 2

<p>SL (10)</p>	<p>يقف الممثل منتصباً وسط المسرح، يرفع السيف أمام وجهه ثم يقبل قبضته مؤدياً التحية العسكرية التقليدية بالسيف وهو يصيح بصوت جهور "سلام خذ". يبقى ثابتاً قليلاً ثم يخفض السيف برشاقة وهو يتحدث بسرعة وطيش.</p> <p>في نينوى.. في مدينتي نينوى شعب قوي الشكيمة. شعب أحب القوة. صنع الأسلحة وقدها. خاض كثيراً من الحروب. معركة تلو الأخرى. وكان النصر حليفه لفترة طويلة. أما أنا.. (أصوات أناشيد وطنية ومارشات عسكرية ترفع وتنخفض بالتداخل مع الحديث).. أما أنا فقد كنت مثلهم. كنت واحداً منهم. كنت فتى غراً طرياً أسكرتني البطولات التي سمعت عنها، وأكاليل الغار التي كانت توضع على رؤوس الأبطال، والنياشين التي كانت تعلق على صدورهم، وطريق المجد.. طريق المجد الذي حدثوني عنه.. والذي لا بد لمن يريد أن يسلكه أن تكون له قبضة قوية.. وسيف مسنون.</p>								
<p>TL (p.11)</p>	<table border="1"> <tr> <td data-bbox="284 1228 414 1438"> <p>Macro</p> </td> <td data-bbox="414 1228 1429 1438"> <p>In the middle of the stage, the actor stands, rises his sword, and kisses its handle and then he presents loudly the normal military solution...after a short time, he lowers it and speaks quickly and recklessly.</p> </td> </tr> <tr> <td data-bbox="284 1438 414 1648"> <p>Micro</p> </td> <td data-bbox="414 1438 1429 1648"> <p>In Nineveh, my city, there was once a strong nation that loved so much power, made arms, and sanctified them. This nation fought fiercely, battle after battle, achieving victory many times. But for me...</p> </td> </tr> <tr> <td data-bbox="284 1648 414 1753"> <p>Macro</p> </td> <td data-bbox="414 1648 1429 1753"> <p>Sounds of national military marches fall and rise through his speech</p> </td> </tr> <tr> <td data-bbox="284 1753 414 1883"></td> <td data-bbox="414 1753 1429 1883"> <p>I was like them...one of them. I was a young man who had been intoxicated by heroism, heroes, and by victory garlands that</p> </td> </tr> </table>	<p>Macro</p>	<p>In the middle of the stage, the actor stands, rises his sword, and kisses its handle and then he presents loudly the normal military solution...after a short time, he lowers it and speaks quickly and recklessly.</p>	<p>Micro</p>	<p>In Nineveh, my city, there was once a strong nation that loved so much power, made arms, and sanctified them. This nation fought fiercely, battle after battle, achieving victory many times. But for me...</p>	<p>Macro</p>	<p>Sounds of national military marches fall and rise through his speech</p>		<p>I was like them...one of them. I was a young man who had been intoxicated by heroism, heroes, and by victory garlands that</p>
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	<p>I was like them...one of them. I was a young man who had been intoxicated by heroism, heroes, and by victory garlands that</p>								

Micro | crowned their heads. Victory badges were put on their chests. It was the way of glory that they told me about. If anyone wanted to follow it, he should have a strong grip and a sharp sword.

1. Macro-Level Cognitive Efficacy:

- a. **Narrative Flow:** The actor's movements in the moment when he holds "the sword," "presents a military salute," and "speaks with fervor" are appropriately translated so that the reader may follow along with the action without any difficulty.
- b. **Emotional Impact and Tone:** TT maintains its "sense of pride, heroism, and nationalism" through expressions like "intoxicated by heroism, heroes, and by victory garlands," which encapsulate the emotional essence of the SL.

2. Micro-Level Cognitive Efficacy:

- a. **Lexical Choices and Precise Phrasing:** To accurately portray the desired meaning, the translator makes careful vocabulary decisions. For instance, the translation of " أصوات أناشيد وطنية ومارشاتٍ عسكرية ترفعُ وتتخفّض بالتداخل مع " الحديث" (Sounds of national military marches fall and increase via his voice) is done properly to preserve the auditory experience.
- b. **Maintaining Meaning and Intent:** The translator effectively maintains the meaning and intent of phrases like "شعب أحب القوة" (a nation that loved so much power) and "وسيف مسنون" (a sharp sword). These phrases retain the essence of power and strength.
- c. **Capturing Cultural References:** The translation preserves the cultural context and symbolism by capturing cultural allusions such as "نياشين التي كانت تعلق على صدورهم" The translator captures cultural references, such as "victory badges were put on their chests", preserving the cultural context and symbolism.

Case No. 3

SL (p. 13) | لم استمع لأوامر القادة، كسرت سيفي – يكسر السيف الصدى على ركبتيه – كسرت سيفي وتجردت من دروعي وسرت مبتعداً.. لكن روعي بقيت تسمع الأنين (يصم أذنيه بيده) أنين أمهات ودعن أبنائهن وهن يحملن بعودتهن ظافرين. أنين صبايا حملن بعودة عرساتهن ليضعن على رؤوسهن أكاليل الغار. كانت روعي تسمع صرخات الأطفال الذين فقدوا آبائهم. وبكاء قتيل.. وبكاء قتيل لم يجد من يبكيه لأنه كان وحيداً مثلي في هذه الحياة.. فبكي نفسه.. كان وحيداً.. كان وحيداً مثلي حينما تركت الجميع وسارت بي قدمي عائداً إلى نينوى.

TL (p.13)	Micro	I broke my sword and did not submit to my leaders
	Macro	He breaks his sword on his knee.
	Micro	I took my armor off and walked away but,
	Macro	He puts his hands on his ears
	Micro	Moans of those mothers were rising moans of mothers who were waiting victoriously for their sons. Moans of girls who were curiously dreaming of their bridegrooms coming back safely, and the deep cries of children who lost fathers. One of the killed cries alone me because he found no one lamenting him in his life...he wept alone like me when I left my all people to go back city of Nineveh.

1. Macro-Level Cognitive Efficacy:

- a. **Narrative Continuity:** The macro-level translation keeps the original text's narrative flow and coherence. It effectively portrays the scenario "يكسر السيف الصدى على ركبتيه" where the main character breaks his sword and flees while still being plagued by the sounds of mothers' weeping.
- b. **Emotional Resonance:** The translation maintains the resonance and emotional effect of the ST. To elicit a powerful emotional response, the "أنين صبايا حملن بعودة عرسانهن", "portrayal of the mothers' moans", "أنين أمهات", "the longing of girls for their bridegrooms," and "صرخات الأطفال", "the cries of the lonely killed child" are retained.

2. Micro-Level Cognitive Efficacy:

- a. **Precise Phrasing and Vocabulary:** To accurately portray the intended idea, the translator uses exact wording. For instance, the translation of "كسرت سيفي", "I broke my sword" effectively captures the acts and disobedience.
- c. **Maintaining Symbolism:** The translation maintains the symbolic meaning, preserving the visual and cultural implications, such as "وهن يحملن" (who were waiting victoriously for their sons) and "أكاليل الغار", "laurels of victory".
- d. **Preserving Emotional Nuances:** The translation successfully conveys the emotional overtones in phrases like "بكاء قتيل لم يجد من يبكيه", "One of the killed cries alone me because he found no one lamenting him in his life "

"He mourned alone like me when I left my all my people to go back to the city of Nineveh", "كان وحيداً مثلي حينما تركت الجميع وسارت بي قدماي عائداً إلى نينوى".

The translation successfully captures the original text's feeling of resistance, grief, and the echoes of emotional upheaval by taking into account both macro and micro cognitive effectiveness. It properly ensures that each piece conveys the desired meaning while capturing the emotional core of the story.

Case No. 4

SL (p. 13)	<p>جرجرت قدميَّ المتخننتين بالجراح وسرت مبتعداً عنك يا نينوى.. يا مدينة السكارى بخمرة النصر الدامية، مضيت الدامية، مضيت متحاملاً على جراحي والدم يغطي ثيابي، سرت هائماً في البراري مبتعداً عنك يا نينوى. يا مدينتي التي. يا!! سرت مبتعداً.. مشيت ومشيت حتى التقيت بك.. بك أنت. موسيقى كمان هادئة تصاحبها نبضات قلب ضخم... يلتفت شمالاً... يتحدث برقة شديدة وكأنه يناجي امرأة...</p>	
TL (p.14)	Micro	Nineveh, I walked far away from you with my bloody feet. I walked till I met you.

1. Macro-Level Cognitive Efficacy:

a. **Narrative Continuity:** By depicting the protagonist leaving Nineveh and finally coming across the City, the translator preserves the consistency of the plot. Distancing from Nineveh still has an emotional impact.

2. Micro-Level Cognitive Efficacy:

a. **Precise Conveyance of Actions:** The translator accurately renders the action of "جرجرت قدميَّ المتخننتين بالجراح وسرت مبتعداً عنك يا نينوى" "I dragged my swollen feet with wounds and walked away from you, O Nineveh", as the feet's condition and the motions appropriately described.

b. **Maintaining the Significance:** The meaning of the act of separating from Nineveh is maintained by the translation. The translation keeps the original phrase "مبتعداً", "walking away", which expresses the separation on an emotional and physical level.

c. **Preserving Ambiance:** Although "موسيقى كمان هادئة تصاحبها نبضات قلب ضخم", "soft violin music accompanied by loud heartbeats" is mentioned in the TT, it

is not translated in the presented extract. This feature could help to create the right environment and atmosphere for the setting.

The translation successfully depicts the protagonist's physical escape from Nineveh and reflects the emotional significance of this act by taking into account both macro and micro cognitive efficacy. The translation successfully conveys the main ideas of the story, although the atmosphere suggested by the melodic and cardiac nuances may suffer.

Case No. 5

SL (p. 14)	أتذكرين؟ كلماتك تلك؟ كم حاولت أن أنفذ وصاياك... لكنني، لكنني لم أستطع، فشلت، فشلت لأنني أنا من رأى كل شيء، أنا من رأى كل ذلك الهول. عرفت جميع الاسرار وكشفت عن الخفايا في لحظة تجلّ واحدة. وأنت.. أنتِ تطلبين مني أن أتجاهل ذلك كله وأمضي في حياتي لأملاً بطني وأقيم الأفراح.	
TL (p.15)	Micro	Do you remember your words to me? I tried many times to excuse your charges. But I couldn't. I failed because I was tired of that severity which I faced. I understood the deep secrets in moments of revelation ..then you asked me to be careless, to fill my stomach with food, celebrate and practice enjoyment with her?
	Macro	None

1. Macro-Level Cognitive Efficacy:

- a. **Focusing:** This component ensures that the translation's consistency, narrative flow, and emotional effect are all preserved. Although there are no obvious macro-level elements in this sample that considerably deviate from the ST, context and emotional resonance must be taken into account.
- b. **Balanced level:** The equilibrium between the micro and macro levels appears to be well maintained during translation. The extract is brief and keeps the general narrative flow and emotional tenor of the original book.

2. Micro-Level Cognitive Efficacy:

- c. **Linguistic Accuracy:** The linguistic components of the original text, like "أتذكرين؟", are faithfully translated "Do you remember?" and "كم حاولت أن أنفذ... وصاياك", "I tried many times to excuse your charges... but failed". Each

phrase's original meaning is accurately translated while grammatical precision is preserved.

- d. Conveying Nuances:** The protagonist attempt to justify himself, his feelings of failure, and the contradiction between his belief that he was watching everything and his plea to ignore it were all clearly there.

It seems that the translation successfully conveys the grammatical and thematic components of the original text, exhibiting effective micro-level cognitive effectiveness. By maintaining the entire narrative and emotional framework, the macro-level effectiveness is kept intact.

Case No. 6

<p>SL (p. 19)</p>	<p>صوت صراخ وعويل وسنابك خيول يمتزج مع قرع الطبل. ذُكت أسوارك الشامخة يا نينوى، أحرقت قلاعك المنيعة وحطمت جسورك جميعاً وأهلك ذاهلون. لم يصدق أحد منهم أن نينوى العظيمة قد سقطت بهذه السهولة، حتى الغزاة أنفسهم أدهشهم ذلك، ووجدوها فرصة سانحة للتمرين على القتال. هل قلت القتال؟ لا بل القتل! القتل ... القتل، وفي ذروة النصر، نصر الغزاة، وفي قاع الهزيمة، هزيمتنا، صرخت بكم نقرات الطبول تتسارع لا تستلموا! لا تستسلموا ... لا تياسوا.. لأن الطريق الذي يؤدي إلى الورااء يؤدي أيضا إلى الأمام... وأن عيون الغزاة المجنونة بنشوة النصر تخبرني أنهم سائرون على درب النهاية ... (٢٠٠٨:١٢)</p>	
<p>TL (p.21)</p>	<p>Macro</p>	<p>Sounds of cries and horse's hoofs are mixed with the sounds of drums.</p>
	<p>Micro</p>	<p>Nineveh, your high walls were destructed... your castles were burned, and your bridges were all destroyed while your people were shocked. Even the invaders themselves could not believe what they see, isn't a chance for them to train themselves on fighting! No, it is not fighting. It is rather killing, killing. It is the summit of their victorious moment .. victory of conquerors which lies at the bottom of defeat</p>
	<p>Macro</p>	<p>Quick strikes on drums</p>
	<p>Micro</p>	<p>I shouted to you: don't surrender! Don't be desperate</p>

Micro	The way which takes you backward leads you also forward. The eyes of invaders who were intoxicated with victory tell me that they are going to the end.
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1. Macro-Level Cognitive Efficacy:

- a. **Narrative Continuity:** The translator preserves the order of events and the cause-and-effect linkages mentioned in the original text, maintaining the overall narrative consistency.
- b. **Emotional Resonance:** The translation retains the emotional effect of the original material. Effectively depicted are the feelings of astonishment, incredulity, and the will to resist.
- c. **Cultural Sensitivity:** The historical and dramatic elements of Nineveh's collapse and the invaders' thinking are accurately captured by the translator, who also well depicts the cultural backdrop of the original work.
- d. **Maintaining Imagery:** The translator maintains the original text's rich picture, including the sounds of screams, hooves, and drums that add to the scene's sensory experience.

Micro-Level Cognitive Efficacy:

- a. **Linguistic Accuracy:** The phrase "صوت صراخ وعويل وسنابك خيول", "Sounds of cries and horse's hoofs are mixed ", "ولحطمت جسورك جميعاً وأهلك ذاهلون", "and your bridges were all destroyed while your people were shocked" are examples of phrases and expressions from ST that are faithfully translated in this translation to maintain linguistic accuracy.
- e. **Conveying Nuances:** The English translation accurately captures the subtleties of the original language. The impression of Nineveh's destruction, the invaders' astonishment, and the contrast between victory and disaster are all still very much present.

The translator successfully conveys the linguistic and thematic components of the original text, demonstrating excellent micro-level cognitive effectiveness. By retaining the overarching scene structure, emotional resonance, and cultural context, the macro-level cognitive effectiveness is preserved.

Case No. 7

SL (p. 22)	<p>يلتفت شمالاً وكأنه يخاطب المرأة الخفية. موسيقى كمان تصاحب نبضات القلب.. يتحدث إليها بركة.. وكنت أنت.. كنت تحثيني دوماً على الرحيل.. كنت تطلبين مني أن أرحم نفسي وأن أترك هذا العذاب وأرحل.. أرحل إلى مكان آخر وأبني لنفسي بيتاً دافئاً وأملأ بطني بطعام طيب وألاعب الصبي الذي يمسك بإصبعي وأن أسعدك... أية حياة وثيرة!! ما أشهى هذا الحلم! ما أشهى هذه الحياة! صوتك الناعم لم يفارق أذني.. سأكذب لو قلت بأنني قد نسيت بحة صوتك العذب يوماً واحداً.. لقد بنيت منزل أحلامي وأثنته بكل ما اشتهت نفسي ونفسك.. وسكنته، سكنته في مخيلتي وأحلامي. إذا لم يكن بإمكانني أن أبنيه في نينوى... مدينتي تحتضر.. والتي لم أتمكن في تركها وهي تعاني سكرات الهزيمة وليتني استطعت أن أغير شيئاً لها، ليتني استطعت... (الرمضاني، ٢٠٠٨: ١٣).</p>	
TL (p.23)	Micro	<p>He turns right as if he addresses a woman. Violin music goes with the animal's heart pulses. He speaks gently to her.</p>
	Macro	<p>You were encouraging me continually to migrate...to take care of myself...to leave this torture to any place. To build a warm house, to fill my stomach with delicious food, and to play with a baby who catches my finger and enjoys with you, what a beautiful life it would be! I tell you frankly that I couldn't once forget your sweet voice. In my imagination, I build my house and furnished it with everything we both wished. I resided in my dreams because I couldn't build it in Nineveh... my city which decaying, and which I couldn't leave in such a critical situation I wish I could have changed anything for its interest ... I wish I could.</p>

1. Macro-Level Cognitive Efficacy:

- a. **Narrative Continuity:** By concentrating on the guy speaking to the concealed lady and his desire for a better life, the translator successfully preserves the order of events and relationships that are depicted in the original text.
- b. **Emotional Resonance:** The character's longings and wishes, as well as his annoyance with the circumstances in Nineveh, are translated, preserving the emotional impact of the original text.
- c. **Cultural Sensitivity:** The translation accurately captures the cultural setting of the original text while underlining the speaker's sentimental attachment to his hometown and desire for a better way of life.

- d. Maintaining Imagery:** The translator retains the imagery of the original text, such as the violin music accompanying heartbeats and the speaker's dreams of building a warm house.

In summary, the translation effectively maintains both micro-level and macro-level cognitive efficacy by accurately conveying linguistic elements while preserving the emotional depth, narrative flow, and cultural nuances of the source text.

2. Micro-Level Cognitive Efficacy:

- a. Linguistic Accuracy:** The translator upholds linguistic correctness by translating idioms and expressions like "يلتفت شمالاً", "He turns right" and "صوتك الناعم لم يفارق أذني", "Your soft voice never left my ears".
- b. Conveying Nuances:** The translation accurately conveys the nuances of the ST, such as the speaker addressing a hidden woman and speaking gently to her.

Case No. 8

SL (p.18)	<p>أكلت الارضة العجلات الحربية، وصدئت دواليبها، وقايض المحاربون أسلحتهم بأرغفة من خبز ... وغطى الغبار كل شيء ... كل شيء.. (ينهض فجأةً وبصوت متهدج وخطوات سريعة على الخشبة) لم ينتج إلا الحكام، الحكام والعسس، كانوا قد احتكروا ما بقي من سلاح وغلل في صوامع محكمة. وعينوا عليها حراساً قساة لا يتورعون عن قتل أي كان لتقاضوا أجورهم التي لا تزيد عن حفنة شعير أسود كل يوم...كنت أدور في الطرقات. أطرق الأبواب ... أناديهم - أناديهم، يا أهالي نينوى، أما أن لكم أن تتجمعوا؟</p>	
TL (p.19)	Micro	<p>Termites, which were corroded, ate war wheels, warriors exchanged their weapons for only a piece of sour bead, whereas dust scattered and covered everywhere.</p>
	Macro	<p>He stands up suddenly, speaks excitedly, and steps quickly on the stage.</p>
	Micro	<p>Only rulers and night watchmen could escape because they monopolized what had remained of grain and arms. Such materials were well kept by cruel guards who might kill anybody soon. They were working all day in return for a handful of barely.</p>

1. Macro-Level Cognitive Efficacy:

- a. Narrative **Continuity**: The sequence of events is accurately conveyed, including the deterioration of "war wheels," the "exchange of weapons for bread," and "the widespread dust".
- b. Emotional **Resonance**: The character's "sudden rise," "excited tone," and "urgent call for the people of Nineveh" to assemble help to portray the emotional effect of the TT.
- c. Cultural **Sensitivity**: The speaker's "desperation and frustration" at the "rulers' behavior and the city's deterioration" is well conveyed in the translation, which also reflects the cultural background of the ST.
- d. **Maintaining Imagery**: The original text's image is carried over into the translation, including the notions of "termites eating war wheels" and "dust covering everything".

2. Micro-Level Cognitive Efficacy:

- a. Linguistic **Accuracy**: Translation of phrases like "أكلت الارضة العجلات الحربية", "termites ate war wheels" and "صدنت دواليبها", "wheels rusted" are accurate representations of the SL.
- b. **Conveying Details**: The translation accurately captures all of the original text's intricacies, down to the bartering of guns for bread and the oppressive living circumstances of the populace.
- c. **Transmitting grammatical correctness**: while maintaining the emotional depth, narrative coherence, and **cultural** subtleties of the source material, the translator successfully upholds both micro-level and macro-level cognitive efficacy.

Case No. 9

SL (p. 23)	يقولون أن بعض الكتب تسبب صداعاً للرأس. هذا الكتاب لم يسبب لي الصداع بل أوشك أن يقتلني ... (يفرك رأسه متوجعاً، ثم يخاطب الحوت) كتب في جوفك ... كم أنت مليء بالمفاجئات أيها الحوت، ترى ما الذي تضمه صفحاتك أيها السفر العتيق؟ (يقلب صفحات الكتاب المتهرى، وكلما قلب صفحة تمزقت دون صوت، يلقاها ويقلب صفحة أخرى، وأخرى حتى تنتثر كمية من الأوراق على الخشبة). حبر الحكمة قد سال (ص ١٤)	
TL	Micro	They say that some books cause a headache, but this book is about to kill me.
	Macro	Rubs his head and addresses the whale.

(p.23)		
	Micro	A book inside you. What other surprise do you hold on to your old pages?
	Macro	As he returns to its page, a large number of them which are scattered on the stage are torn one after the other.
	Micro	The ink of wisdom flows

1. Macro-Level Cognitive Efficacy:

- a. **Narrative Continuity:** The translator preserves the sequence of events while capturing the character's concern over the implications of the book's events and his subsequent actions.
- b. **Emotional Resonance:** The anguish of the speaker and the description of the "shredded pages" effectively capture the emotional impact of the original text.
- c. **Maintaining Engagement:** The link between the protagonist and the book, "his turning of the pages," and the "dispersion of shredded pages" are all depicted in the translation to hold the audience's attention.
- d. **Preserving Symbolism:** The translation has kept the "flowing ink of wisdom" symbolism, indicating that the poem has a deeper meaning.

A. Micro-Level Cognitive Efficacy:

- a. **Linguistic Accuracy:** Language details like "يقولون أن بعض الكتب تسبب صداعاً للرأس", "They say that some books cause a headache" are carefully translated into English.
- b. **Conveying Details:** Two examples of how the translation faithfully preserved the subtleties of the original language are the protagonist "rubbing his head" and "addressing the whale".
- c. **Preserving Meaning:** a. The translation faithfully conveys the speaker's feelings about how the book is disturbing him and perhaps even hurting him.

By communicating grammatical correctness while maintaining the emotional depth, narrative coherence, and symbolic features of the original text, the translation successfully upholds both micro-level and macro-level cognitive effectiveness.

Case No. 10

SL (p. 23)	يا بيوت مدينتي العتيقة.. يا شوارع نينوى ها أنا ذا ... عائد، عائد (صوت موسيقى).. هل ضاعت كلماتي؟؟ وما ضر ان يضيع صدى كلماتي بين وديانك ... هل ضاع عمري؟؟ وما ضر أن تضيع أيامي من أجل أهلي، أيها الحوت، أيها الحوت عد بي من حيث أتيت، لم أعد أحتمل... أيها الحوت.	
TL (p.23)	Micro	O houses and streets of my old city, I will come back.
	Macro	Music
	Micro	Are my words lost? It doesn't matter if their echoes are lost in your valleys... have I lost my age? Let it be lost .. it is for my people's interests.

1. Macro-Level Cognitive Efficacy:

- a. **Semantic Equivalence:** The ST is preserved by the translator, the main takeaway from going back to the ancient City has not changed " يا بيوت مدينتي " "O houses and streets of my old city, I will come back." The translation effectively conveys the author's desire to see their hometown.
- b. **Cultural Adaptation:** The use of "يا بيوت وشوارع", "O houses and streets" is translated into a culturally appropriate term. To ensure that the message is delivered organically to an Arabic-speaking audience, the Arabic version keeps the message while adopting a typical Arabic format.
- c. **Tone and Emotion:** The translator keeps the emotional tenor of the speaker's devotion to their city. The Arabic translation employs expressions like " بيوت العتيقة " "houses of my old city" and "عائد، عائد" to evoke a similar sense of desire and emotional connection. This guarantees that the reader's emotional response is unaffected.

2. Macro-Level Cognitive Efficacy:

- a. **Phrasing and Structure:** The language and organization of the source material are closely mirrored in the translation on a micro level. Without any substantial rearranging, the English sentence's components are correctly translated into their Arabic equivalents. The original message's flow and coherence are preserved by this strategy.
- b. **Rhetorical Questions:** The translation does a good job of handling rhetorical questions. "هل ضاعت كلماتي؟؟ وما ضر ان يضيع صدى كلماتي بين وديانك", "Are my words

lost? It doesn't matter if their echoes are lost in your valleys...". The parallel structure maintains the introspective tone of the questions.

- c. **Repetition for Emphasis:** To replicate the original, the translator uses repetition. The English translation of "ها أنا ذا ... عائد، عائد" is "I'll be back". The emphasis in the original line is successfully repeated by the word "عائد" underlining the promise to go back.

In this translation, both the macro and micro cognitive aspects are efficiently addressed. The overall message, emotional tone, and linguistic details are preserved, allowing the Arabic-speaking audience to experience the same sentiment and intention as the English source text.

6. Conclusions:

The conclusions highlight the importance of considering both micro- and macro-cognitive perspectives as the basic tenets in the translation process research. It suggests a more holistic approach to the translation process to interpret and understand the text. This happens through modeling cognitive processes that should involve integrating micro- and macro-cognitive functions to capture the cognitive modeling, mental architecture, and shared knowledge. The following conclusions:

6.1 Macro Cognitive Efficacy:

1. **Content Retention:** The translator successfully maintains the main ideas, themes, and messages of the ST, demonstrating a strong macro cognitive effectiveness. The TT effectively communicates the overall meaning and aim.
2. **Cultural Adaptation:** In order to make the work relatable to the Arabic-speaking audience while preserving the original context and emotional depth, the translator uses cultural allusions and idioms.

- 3. Coherence, continuity and Flow:** The text reads naturally in the target language (TL) without interruption or loss of comprehension since the translator maintains a consistent and fluid flow of ideas.

6.2 Micro Cognitive Efficacy:

- 1. Linguistic Detail:** By meticulously retaining language elements like sentence structure, vocabulary, and phrasing that help to maintain the integrity of the ST, the translator shines at the micro cognitive level.
- 2. Emotional Resonance:** By carefully choosing words and phrasing, the translator is able to accurately convey the emotional subtlety of the ST while maintaining the audience's emotional response.
- 3. Stylistic Elements:** The original text's rhetorical power and persuasive effect are enhanced by the successful preservation of stylistic characteristics like rhetorical questions, repetition, and parallelism in the translation.

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